

**ITAN**  
**Integrated Territorial Analysis of the**  
**Neighbourhoods**  
**Scientific Report - Annexes**

Applied Research 2013/1/22

Final Report | Version 11/03/2015



## ANNEXES

1. The ITAN Work Packages	622
2. Glossary: ITAN main notions	624
3. Data: List of indicators developed and dataset provided	630
4. Data: Harmonisation process: statistical treatments for proxies' identification	631
5. Data: Detailed figures on international flows between Europe and its Neighbourhoods	643
6. Maps: Mapping guide	657
7. Maps: Administrative maps of the ENCs (Oblasts, Governorates, Districts, Regions ...)	680
8. Country reports of the South-Eastern and Mediterranean Neighbourhoods	694
9. List of sources	1042
10. References	1046
11. Dissemination: List of the publications of the ITAN TPG members	1061
12. Dissemination: A territorial analysis of Ukraine	1063

## 1. The ITAN Work Packages

Work Packages	Contents	Team in charge	Other involved teams	Secondary participation	External experts
<b>WP<sup>74</sup> Networking and support</b>		<b>LP<sup>75</sup>-CIST<sup>76</sup></b>	<b>all</b>		
WP 0.1.	administrative & financial coordination	LP-CIST	all		
WP 0.2.	scientific coordination and support	LP-CIST	all		
WP 0.3.	reporting	LP-CIST	all		
WP 0.4.	communication and dissemination	LP-CIST	all		
<b>WP1 Data base &amp; overall analysis</b>		<b>IGEAT</b>	<b>LP-CIST</b>		
WP 1.1.	data harmonisation	IGEAT	all		all experts
WP 1.2.	data on territorial structures	IGEAT	all		
WP 1.3.	data on flows	IGEAT	all		
WP 1.4.	data on cooperation	IGEAT	all		
WP 1.5.	mapping and overall analysis	IGEAT	all		
<b>WP2 Networks, transports &amp; accessibility</b>		<b>MCRIT<sup>77</sup></b>			
WP 2.1.	networks infrastructures & mapping	MCRIT	LP-CIST	all	all experts
WP 2.2.	accessibility and connexity	MCRIT	LP-CIST		
<b>WP3 Northern Neighbourhood</b>		<b>Nordregio</b>			
WP 3.1.	territorial structures	Nordregio	IGEAT	LP-CIST	
WP 3.2.	flows	Nordregio	IGEAT	LP-CIST	
WP 3.3.	territorial cooperation	Nordregio	IGEAT		
WP 3.4.	case study - European Arctic	Nordregio			Eastern Neighbourhood Expert
WP 3.5.	recommendations	Nordregio			
<b>WP4 Eastern Neighbourhood (Ukraine incl.)</b>		<b>Nordregio</b>			
WP 3.1.	territorial structures	Nordregio	IGEAT	LP-CIST	Eastern Neighbourhood expert
WP 3.2.	flows	Nordregio	IGEAT	LP-CIST	Eastern Neighbourhood expert
WP 3.3.	territorial cooperation	Nordregio	IGEAT		Eastern Neighbourhood expert
WP 3.4.	case study - Baltic Sea	Nordregio			Eastern Neighbourhood expert
WP 3.5.	recommendations	Nordregio			
<b>WP5 South-Eastern Neighbourhood (incl. Albania)</b>		<b>LP-EVS<sup>78</sup></b>			
WP 4.1.	territorial structures	LP-EVS	IGEAT	LP-CIST	
WP 4.2.	flows	LP-EVS	IGEAT	LP-CIST	

<sup>74</sup> Work package

<sup>75</sup> Lead partner

<sup>76</sup> *Collège international des sciences du territoire*

<sup>77</sup> Multicriteria S.L.

<sup>78</sup> *Environnement, ville, société*

Work Packages	Contents	Team in charge	Other involved teams	Secondary participation	External experts
WP 4.3.	territorial cooperation	LP-EVS	IGEAT		
WP 4.4.	1) case study - Western Balkans	LP-EVS			Western Balkans expert
WP 4.5.	2) transversal case study - Black Sea*	LP-EVS	Nordregio	LP-CIST	Eastern Neighbourhood expert
WP 4.6.	recommendations	LP-EVS			

<b>WP6 Mediterranean Neighbourhood (incl. Turkey)</b>					
<b>LP-CIST</b>					
WP 5.1.	territorial structures	LP-CIST	IGEAT		Mediterranean countries experts
WP 5.2.	flows	LP-CIST	IGEAT		Mediterranean countries experts
WP 5.3.	territorial cooperation	LP-CIST	IGEAT		Mediterranean countries experts
WP 5.4.	case study - Gibraltar	MCRIT	LP-CIST		Mediterranean countries experts
WP 5.5.	recommendations	LP-CIST			

<b>WP7 Synthesis LP-A 4,2</b>					
WP 7.1.	synthesis of WP1-2, Neighbourhoods' analysis & case studies	LP-CIST	all		
WP 7.2.	policy recommendation (all Neighbourhoods)	LP-CIST	all		
WP 7.3.	towards a "Neighbourhood SPD"	LP-CIST	all		

\* case study coordinated by LP-EVS, involving the Eastern, Mediterranean and South-Eastern Neighbourhoods' teams.

## 2. Glossary: ITAN main notions

This section sums up the available definition of the main notions used in ITAN. It is not an academic discussion on the various meaning mobilised by the authors, but a simple description of the sense in which we use the term in the project to make it clear for the reader.

### 2.1. ITAN general key notions

#### *Region*

In the social sciences, a REGION is a cohesive area that is homogeneous in selected criteria, and is a part of a greater set (a part of the Earth, in geography). A region is distinguished from an area, which is usually a broader concept designating a portion of the surface of the Earth: area boundaries are arbitrary, established for convenience, whereas regional boundaries are determined by the cohesiveness of the section. The criteria can be related to the actual set and interaction of activities (“functional region”), or to the institutional boundaries (“institutional region”) or a mix. Defining functional region is controversial: how establishing where a region ends or what criteria (cultural, commercial, historical...) forms a region? For instance Samuel Huntington’s work dramatically divides Europe and the Arab-Muslim world, whereas many researches including former ESPON projects consider that the two sides of the Mediterranean belong to the same world region. In ITAN’s sense, a region is a grouping of countries sharing common stakes and projects in the same geographically specified area. The question raised is to know up to what neighbouring territories the “European region” goes. However the ITAN project also uses the term of region to speak of the infra-national subdivision of a country, which can be misleading.

#### *Regionalism*

REGIONALISM has several meanings in social sciences. It can be the system of dividing a city, a state or another territory into separate administrative regions. It can be the expression peculiar to an area, or even a devotion to the interests of one’s own region. In political science it means a political ideology that focuses on the interests of a particular region. The ITAN project uses it in the meaning of international relations, where it means a common purpose combined with the implementation of institutions that express a particular identity and shape collective action within a geographical region. In particular, we consider it through the Regional Trade Agreements that shape the world regions since the 1990s when there has been an surge of new and reinvigorated existing regional organisations (EU, NAFTA, Mercosur, the Arab League, ASEAN, many groupings within Africa and so on).

#### *Regionalisation*

Globalisation and REGIONALISATION are two key defining features of the contemporary world geography. They are not completely new processes, but it can be said there was a (re)emergence of both processes in relevance and intensity since the 1980s and especially during the 1990s after the end of the Cold War. Regionalisation is the tendency to form regions, due to the specific advantages of proximity. It is often used in opposition to globalisation, and then means a world that is less widely connected and homogenous, with a stronger regional focus.

#### *Regional integration*

REGIONAL INTEGRATION is a twofold process: (i) the process by which several countries get relatively more and more linked (culturally, commercially, financially...) to one another, compared to their relation with the rest of the world, that is to say the regionalisation process; (ii) the process in which States enter into a regional agreement in order to enhance cooperation through regional institutions and rules, that is to say regionalism. The key issue is to measure the degree of such integration, which is generally made according to three approaches: the measure of the structural likeness of the constituting areas (e.g. level of development); the geography of their interaction (to check their preferential connexion); the measure of how far the composing areas meet the nominal objectives of their political gathering.

Another key question is to qualify the regionalisation integration as a “shallow” or as a “deep” integration. SHALLOW REGIONAL INTEGRATION is the reduction or elimination of tariffs, quotas and other barriers to trade in goods and services at the border, such as trade-limiting customs procedures. By contrast, DEEP REGIONAL INTEGRATION refers to economic integration that goes well beyond removal of formal barriers to trade, and includes various ways of reducing the international burden of differing national regulations, such as mutual recognition and standards harmonisation.

### *Neighbourhoods*

In social sciences and in geography in particular, a NEIGHBOURHOOD is the area or region around some place, often with an idea of making an actual or potential community since neighbourhoods are often territories or social communities with considerable face-to-face interaction among members. The term has been highly enhanced since the rise of the regionalisation, generally speaking in the sense of the periphery of the prominent poles of the Triad (USA, western Europe, Japan). In each of these regions, the geographical definition of the region, thus of the neighbourhoods, is at stake; for instance in what is called the East Asian project, should Australia and New Zealand be considered as exterior to the region, as neighbours, or as a part of the industrialised pole along with Japan (and Korea, Taiwan and Singapore) surrounded by developing neighbour countries? The “ASEAN plus Five” process (that is, plus China, Korea, Japan, and now New Zealand and Australia) substantiate the last option.

Launched in 2007, the ENP seeks to tie developing surrounding countries who seek to become more closely integrated with the economy of the European Union. The official list of the European Neighbour Countries (from Russia to Morocco, Caucasian states included but Turkey excluded since it became officially a candidate country in 2005) is given on the European commission’s web site ([http://ec.europa.eu/world/enp/index\\_en.htm](http://ec.europa.eu/world/enp/index_en.htm)).

ITAN PROJECT’S NEIGHBOUR COUNTRIES differ slightly from the ENP’s list. The Caucasian countries are covered but only for basic data and only at national scale (Georgia is taken into account in the Black Sea case study), northern countries such as Faroe Islands are included (yet not analysed in the same way as Russia or South Mediterranean neighbour countries), Turkey is a part of the Mediterranean Neighbourhood, Western Balkans countries make up the South-Eastern Neighbourhood (yet they are actual or potential candidate countries). In the project we write Neighbourhood with a capital “N” when we consider ITAN’s geographical breakdown between Northern, Eastern, South-Eastern, and Southern (or Mediterranean) Neighbourhoods, and when we refer to the European Neighbourhood Policy; in all the other cases, we write the word without a capital letter. In the project, “ENCs” means European Neighbour Countries; “ENRs” means European Neighbour Regions (in the meaning of infra-national local territories).

### *Wider European region*

The wider European region is the region which encompasses the ESPON countries (see its definition in the Glossary) and their neighbourhoods. We call it “European” because (western) Europe is the major pole of this area. But indeed, the “neighbour” countries would not easily accept to be considered as simple neighbours, and to belong to a common region which would be called “European”. Thus, this notion of wider *European* region is centred in the mental framework of Europeans.

### *ESPO space*

It encompasses 27 EU Member States, Iceland, Liechtenstein, Norway and Switzerland, that is to say the countries which contributes financially and politically to the ESPON gathering. We say “UE27” because at the beginning of the ITAN project, Croatia was not yet EU member.

## 2.2. Main regional strategies and local institutional catchments used in the ITAN project

### *Oblast*

An OBLAST is a type of administrative division in some Slavic countries, often translated as "province" or "region". Oblasts were an administrative division of the Soviet Union and the Socialist Federal Republic of Yugoslavia. They nowadays are an administrative division of Belarus, Russia and Ukraine, as well as Kazakhstan and Kyrgyzstan. The subdivision of "oblast" is a "raion".

### *Wilayas and Gouvernorate*

A WILAYAH (velâyat in Persian, vilayet in Turkish or vilayat in Urdu) is an administrative division, usually translated as "province", The GOVERNORATE, also often translated as "province", is another administrative subdivision of the countries belonging to the muslim world. These two notions correspond to the state territorial organisation at the provincial scale, headed by a strong representative of the state often called "Wali".

### *Near East*

In the ITAN project, the NEAR EAST gathers Syria, Lebanon, Israel, the occupied Palestinian territory and Jordan.

### *Middle East*

The MIDDLE EAST is formally not a Neighbourhood of the ITAN. Nevertheless, in the comparative analyses of the projet it is studied as a more remote neighbourhood, partially in the area of influence of Europe. It gathers Irak, Iran and the Gulf states.

### *Western Balkans*

In the ITAN project, the South-Eastern Neighbourhood is synonymous with WESTERN BALKANS. It gathers the countries of the former Socialist Federal Republic of Yugoslavia, minus Slovenia, plus Albania. It encompasses Croatia since this country was not yet a EU member at the beginning of the project.

### *Organisation of the Black Sea Economic Cooperation (BSEC)*

In 1992, the heads of state and government of eleven countries signed in Istanbul the summit Declaration and the Bosphorus Statement giving birth to the BLACK SEA ECONOMIC COOPERATION (BSEC). It aims to ensure peace, stability and prosperity in the region. The headquarters were established in Istanbul. In 2004 Serbia (then Serbia and Montenegro) became a member of the BSEC.

### *EU Strategy for the Danube Region (EUSDR)*

The EU STRATEGY FOR THE DANUBE REGION (EUSDR) is a macro-regional strategy endorsed by the European Council in 2011. The Strategy was jointly developed by the Commission, together with the Danube Region countries and stakeholders, in order to address common challenges together. The Strategy seeks to create synergies and coordination between existing policies and initiatives taking place across the Danube Region.

### *Northern Dimension*

The NORTHERN DIMENSION (ND) is a joint policy between four equal partners – the European Union, Russia, Norway and Iceland – regarding the cross-border and external policies geographically

covering North-West Russia, the Baltic Sea and the Arctic regions, including the Barents region. The ND Policy was initiated in 1999. It aims to strengthen cooperation. A particular emphasis is placed on ensuring the active participation of all stakeholders in the North, including regional organisations, local and regional authorities, the academic and business communities, and civil society. ND cooperation takes place within four partnerships: Environmental Partnership (NDEP), Public Health and Social Well-being (NDPHS), Transport and Logistics (NDPTL) and Culture (NDPC).

#### *EU Strategy for the Baltic Sea Region (EUSBSR)*

The EUROPEAN UNION STRATEGY FOR THE BALTIC SEA REGION (EUSBSR) is the first macro-regional strategy in Europe. It was approved by the European Council in 2009. It aims at reinforcing cooperation in order to face several challenges by working together as well as promoting a more balanced development in the area. The Strategy also contributes to reinforces the integration within the area. The EU Baltic Sea region counts 85 million inhabitants and eight countries: Sweden, Denmark, Estonia, Finland, Germany, Latvia, Lithuania and Poland.

#### *Vasab*

VASAB is an intergovernmental network of eleven countries of the Baltic Sea Region (including Russia, Belarus and Norway) which was established in 1992. It promotes cooperation in the field of spatial planning and development in the region. VASAB is involved in a broad spectrum of activities, such as drafting of policies for the territorial development, organisation of regional conferences related to spatial planning issues, cooperation on maritime spatial planning and integrated coastal zone management in the BSR.

#### *Eastern Partnership*

The EASTERN PARTNERSHIP (EaP) is an initiative of the European Union governing its relationship with the post-Soviet states of Armenia, Azerbaijan, Belarus, Georgia, Moldova, and Ukraine, intended to provide a venue for discussions of trade, economic strategy, travel agreements, and other issues between the EU and its eastern neighbors. The project was initiated by Poland and a subsequent proposal was prepared in co-operation with Sweden. The Eastern Partnership was inaugurated by the European Union in 2009. Russia has voiced concerns over the Eastern Partnership, seeing it as an attempt to expand the European Union's "sphere of influence".

#### *Union for the Mediterranean*

The UNION FOR THE MEDITERRANEAN (UfM) is a multilateral partnership of 43 countries from Europe and the Mediterranean Basin: the 28 member states of the European Union and 15 Mediterranean partner countries from North Africa, the Middle East and Southeast Europe. It was created in July 2008 as a relaunched Euro-Mediterranean Partnership (the Barcelona Process). The Union has the aim of promoting stability and prosperity throughout the Mediterranean region, throughout concret projects. The Union for the Mediterranean is the southern regional cooperation branch, which works in parallel to the European Neighbourhood Policy. Its eastern counterpart is the Eastern Partnership.

#### *Union du Maghreb Arabe*

The idea for an economic union of the Maghreb began with the independence of Tunisia and Morocco in 1956. It was not until thirty years later, though, that five Maghreb states - Algeria, Libya, Mauritania, Morocco, and Tunisia - met for the first Maghreb summit. The ARAB MAGHREB UNION/ UNION DU MAGHREB ARABE is a trade agreement aiming for an economic and future political unity among Arab countries of the Maghreb in North Africa. The union is inactive due to deep political and economical disagreements between Morocco and Algeria regarding, among others, the issue of Western Sahara, and due to governance that implies that decision should be made by the gathering of the heads of state and government.



### 2.3. Indicators and indexes of the ITAN project

#### *SNUTS*

ITAN Neighbour countries have been subdivided following the same methodology as EU countries so as to perform comparable analyses of these territories. This methodology is called SNUTS for “Similar to NUTS”. In the framework of the ESPON M4D project, a territorial division had been created for the European Neighbour Countries (ENCs). It uses the same classification criteria than the NUTS, the Nomenclature of Territorial Units for Statistics, the Eurostat hierarchical system for dividing up the EU space. These seamless all-embracing geometries referred to as SNUTS has been built on existing administrative levels in the targeted countries. This choice ensures further updating phases of the database. The first duty of external experts hired within the ITAN project has been to assess and eventually adjust the territorial SNUTS subdivision proposed by M4D.

#### *Standardised mortality*

STANDARDISED MORTALITY is a proxy for life expectancy: we compare (i) the theoretical number of deaths according to the regional age structure of a local territory, multiplied by the deaths number by age provided by international database for the concerned country, and (ii) the actual local number of deaths provided by ITAN experts in the TPG’s database.

#### *Accessibility*

The ACCESSIBILITY in ITAN is defined as the population that can be reached in a certain amount of time from each location in the EU and the Neighbourhoods. This indicator measures both how the population is distributed geographically and the quality of the transport networks that link the regions. The indicator is calculated by measuring all the population that can be reached from each SNUTS capital at less than x hours, by using road and rail transport as represented on the GIS developed in the ITAN project. Calculations take into account the existence of delays in some border crossings due to administrative issues, by increasing the travel time from few up to several hours depending on the specific conditions of each border. The GIS also has some currently closed borders that effectively behave as missing links not allowing the pass of passengers nor freight.

#### *Connectivity*

TERRITORIAL CONNECTIVITY is derived from the accessing time from any point on the territory to the main transportation network. This indicator is called ICON (Indicator of Spatial Connection to Transport Networks, used in several ESPON projects). ITAN team has specifically calculated ICON by measuring the time needed to get to the main transport network (main roads, railway stations and airports), using the relative passenger traffic as weight (high passenger traffic tends to imply better transport performance). Thus as a location is much nearer to a road, station or airport with high passenger counts, its connectivity measured in time is much better. The ICON indicator is calculated for each one of the 5x5km cells of the grid.

#### *Local Human Development Index (HDI)*

The LOCAL HUMAN DEVELOPMENT INDEX (HDI) is compliant with the meaning of the national HDI calculated by the United Nations, which derives from economic values (income per capita), educational values (mean years of schooling), and standard of living (life expectancy at birth). The available data in the Neighbourhoods drove to the following choice: income for the first indicator, tertiary education for the second indicator (because it showed much steadier in the various Neighbour countries than the school enrolment which have very different meanings according to the considered neighbour country), life expectancy (or standardised mortality) for the third indicator.

### *International openness*

The local INTERNATIONAL OPENNESS addresses the key issue for countries which were recently highly protected from international exchanges in particular with Western countries. The index is based on three indicators of participation to international networks: (i) the number of *air seats available in international flights* from airport to airport; (ii) the volume of *international maritime flows* by port; (iii) the *FDI* inflows in dollars. The ITAN team also computed *weighted* indicators of maritime and air connections by considering the time-distance between any SNUTS 2-3 to port or airport infrastructures and taking into account the infrastructures located within the EU space. For the time-distance, real networks speeds have been considered as well as border delays.

### *Territorial potential*

In ITAN, the TERRITORIAL POTENTIAL is based on the social capital, the physical capital, and the economic capital of each ENR. The proxies used are:(i) for the social capital, the tertiary education, which proved to be very well correlated to general socio-economic performance in the Neighbour countries; (ii) for the physical capital, the transport accessibility (see its definition in the Glossary); (iii) for the economic capital the international openness. The economic development is correlated to many other factors than international openness, but the ITAN project dedicated to the interaction between Europe and its Neighbours stresses on the international stake. Accessibility and International openness are partially redundant because both of them are based on access to ports and airports.

### *Territorial dynamics*

The local TERRITORIAL DYNAMICS is based on the demographic and the economic evolutions during the 2000 decade. It says if a territory is dynamic or not, and rather demographically and/or economically. This indicator is a typology based on the combined standard deviation classes ranging from 'below -1' to 'above 1', each class of size 1. This gives for each component the four classes: below -1, from -1 to 0, from 0 to 1, above 1.

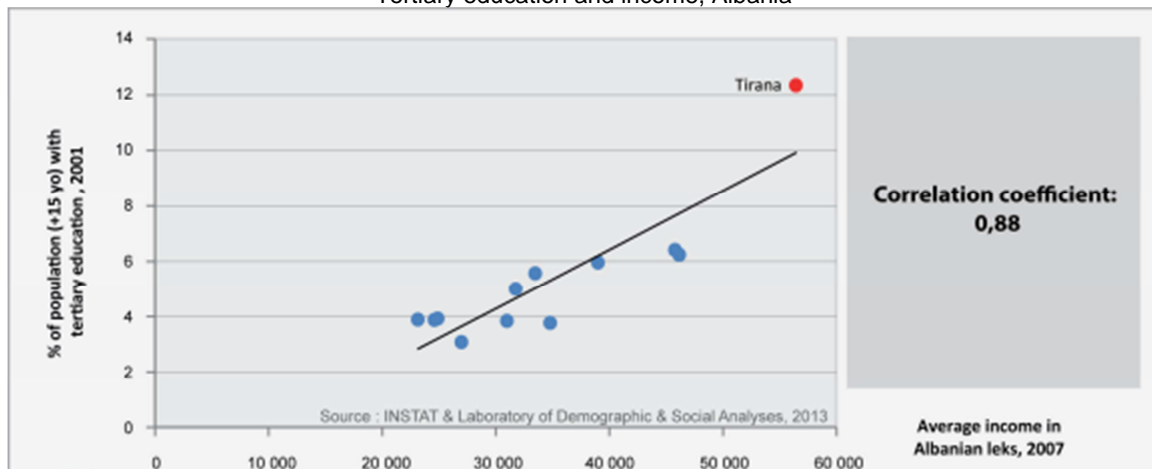
### 3. Data: List of ITAN indicators developed and dataset provided

I. TERRITORY	II. SOCIETY	III. ECONOMY	IV. MOBILITY	V. ENVIRONMENT
<b>Surface</b>	<b>Demographics</b>	<b>Active population</b>	<b>Domestic</b>	<b>Waste management</b>
1. A useful denominator for further indexes	1. Population, by sex and age (a basic denominator)	1. By age and sex	1. Population flows (transports, commuters data available?)	1. Any available data at local scale? (may be for large cities)
2. Will be given at bird's-eyes and not according to the real land (namely in mountainous areas)	2. Deaths and births (not always easy to collect). Data by sex and age could help us calculating local life expectancy	2. At working place (if possible)	2. Internal migration	<b>Arable land</b>
<b>Altitude</b>	<b>Health</b>	<b>Employment</b>	3. Domestic tourism (a good indicator of the national space integration and mobility)	1. Critical in the Mediterranean area, gorgeous in Ukraine and South Russia (possible complementarities). Sources: national census? FAO?
1. Useful information for environment (slopes, submersion risks...) and economic issues (difficulty for infrastructures)	1. Life expectancy, by sex	1. Employment (at working place if possible)	4. Trade (inter-regional trade matrices available? credible?)	<b>Water issue</b>
2. Only a methodological try, could be collected for some NUTS2 areas	2. Infant mortality (a synthetic data on the level of development)	2. Unemployment (pb of international definitions and comparison; pb of illegal jobs, which are very high in the ENFRs especially in the Mediterranean area)	<b>International</b>	1. A major stake of the region; actual and potential high conflicts; possible cooperation
<b>Infrastructures</b>	3. Fertility	<b>Production</b>	1. Passengers flows (network flows data; ports data; airports data; only seats and not actual flows unfortunately)	2. Resources (rainfall...)
1. Asphalted roads (is it really relevant?)	4. Main diseases	1. Turnover (GDP – are such data really reliable at local scale?)	2. International tourism (number of international tourists, if possible by country of origin)	3. Access to drinkable water
2. Structure of networks' data (transports, energy)	5. Number of medical staff	2. Employment by sectors	3. International trade (merchandises ; services ?), total, and by partner country (export and import)	4. Access to sanitation / to the sewage system
<b>Urbanisation</b>	<b>Education</b>	3. Agriculture output by sub-sector (we might look for this detail information because agriculture is a major stake of neighbouring countries from Georgia and Turkey to Morocco, and a key issue for the rural depopulation and a sustainable urban growth)	4. International transport flows of merchandises (network flows data)	<b>Climate</b>
1. Density (out of statistical data; better to calculate it ourselves)	1. Goals: a major information for the economic issue, but also for the social analysis namely the gender issue (female education is a key index of Mediterranean neighbours' social modernisation)	4. Tourism as an economic sector (very important in the Mediterranean neighbours): employment, beds, number of nights, turnover	5. International migration	1. Climate change scenarios in the Black sea region (out of "Envirogrid" FP7 project; methodological innovation to 50 km cells in the Danube basin and Black sea)
2. Cities over 1 million inhabitants (we need to build a specific data base on such cities)	2. Breakdown of the population by level of education, by sex and age	<b>Quality</b>	6. Energy, by source of energy, a major issue of the ESPON/ENFRs interaction (gas – liquefied and pipes; oil; electricity), origin / destination	2. Other item and sources?
3. "Urban" / "rural" population (administrative definition of the census)	3. School enrolment by sex and age	1. Productivity (better to calculate it ourselves out of production data and number of workers, but we could find directly calculated productivity data); by sector (agriculture...)	7. Foreigners or foreign born people (depend on available data), by nationalities and/or place of birth - remittances, by country of origin	
<b>Land</b>	<b>Social categories</b>	2. Mean salary by sector (available in Russia, where else?)	8. FDI by country of origin (an available data base for the Mediterranean neighbours; and in the East?)	 --> Core data
1. Land cover and use (wide categories: urban, rural, infrastructures...)	1. Breakdown of the population by social classes or categories	<b>Innovation</b>	9. International congresses and fairs (for large cities only?)	 --> Others data
	<b>Income</b>	1. Investment in R&D (available at local scale?)	10. Decentralised cooperation (with foreign local authorities)	
	1. Income (are these data available at local scale? reliable?); at international prices, and at PPP prices	2. Patents		
	2. Salaries (available for Russia, Where else?)	<b>Investment :</b>		
	3. Indirect estimation of incomes: retail trade turnover, number of cars by household... (available in Russian territories; in other countries?)	1. Local investment (total amount, and if possible breakdown by sector)		
		2. Foreign Direct Investment (total amount, and if possible breakdown by sector)		

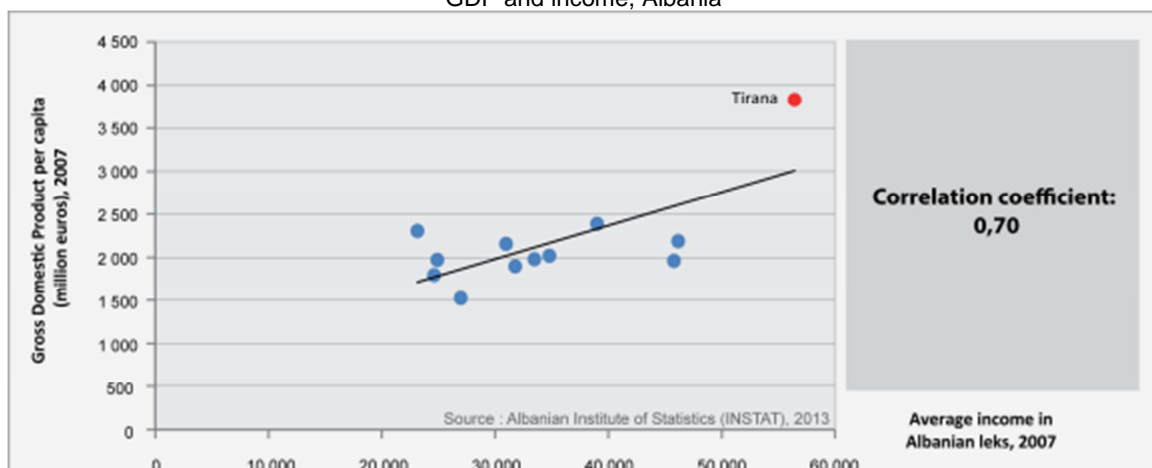
#### 4. Data: Harmonisation process: statistical treatments for proxies' identification

##### 4.1. Finding good proxies. The case of incomes

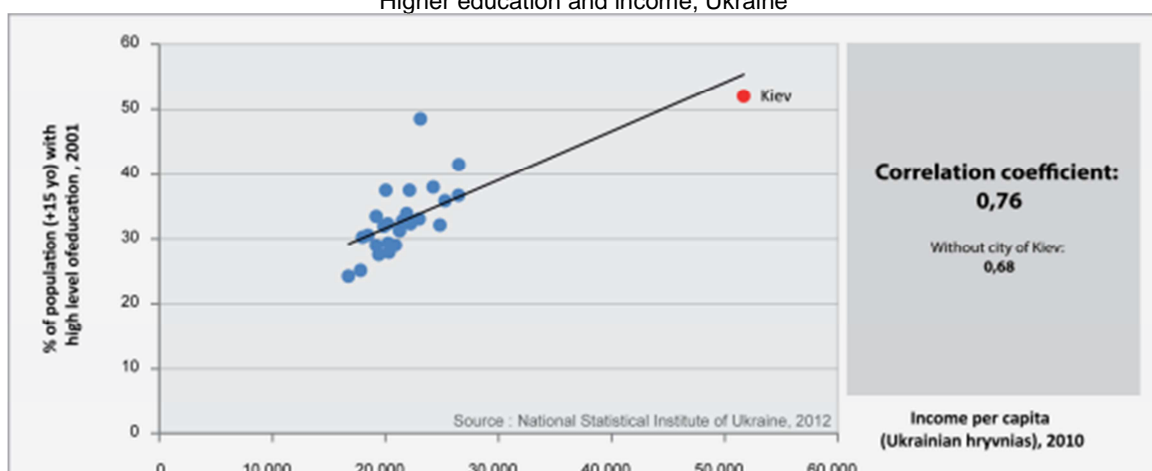
Tertiary education and income, Albania



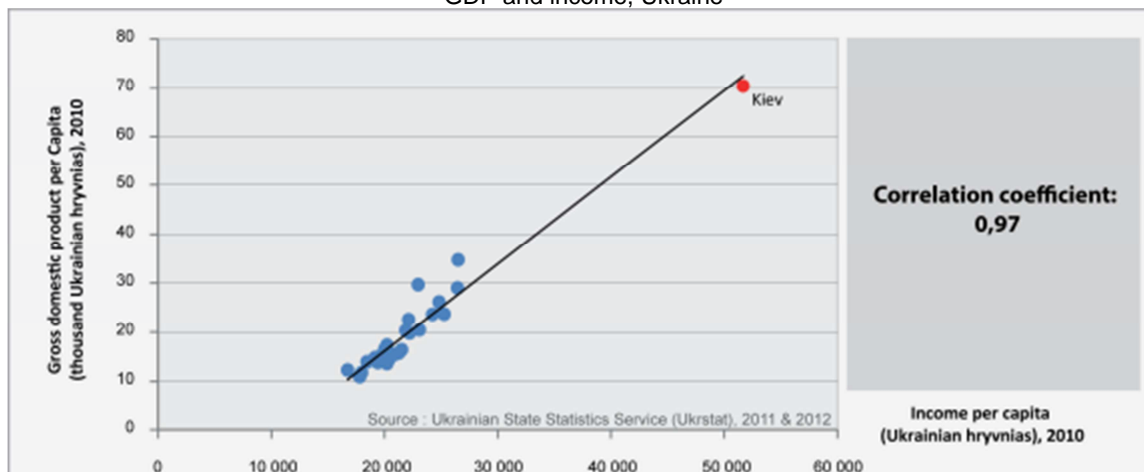
GDP and income, Albania



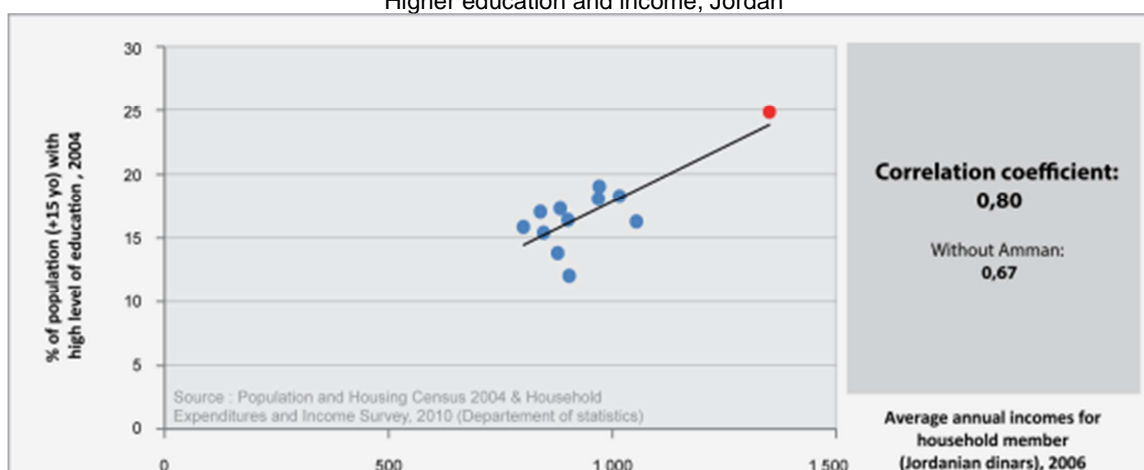
Higher education and income, Ukraine



GDP and income, Ukraine

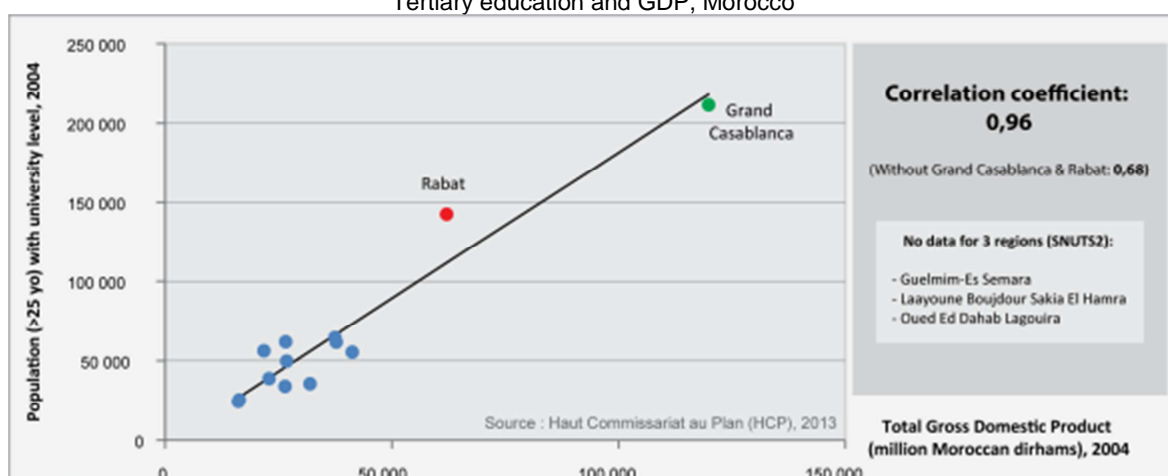


Higher education and income, Jordan

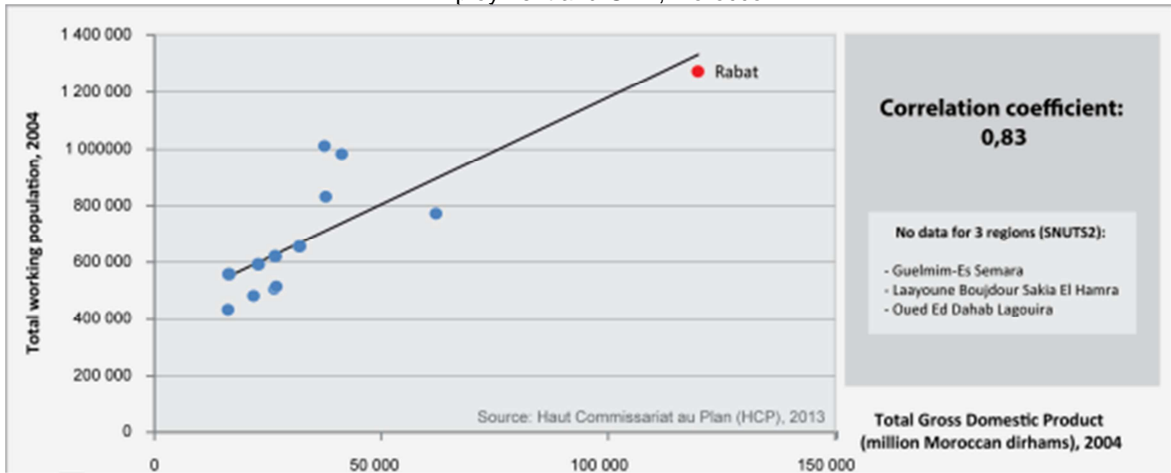


4.2. Finding good proxies. The case of GDP

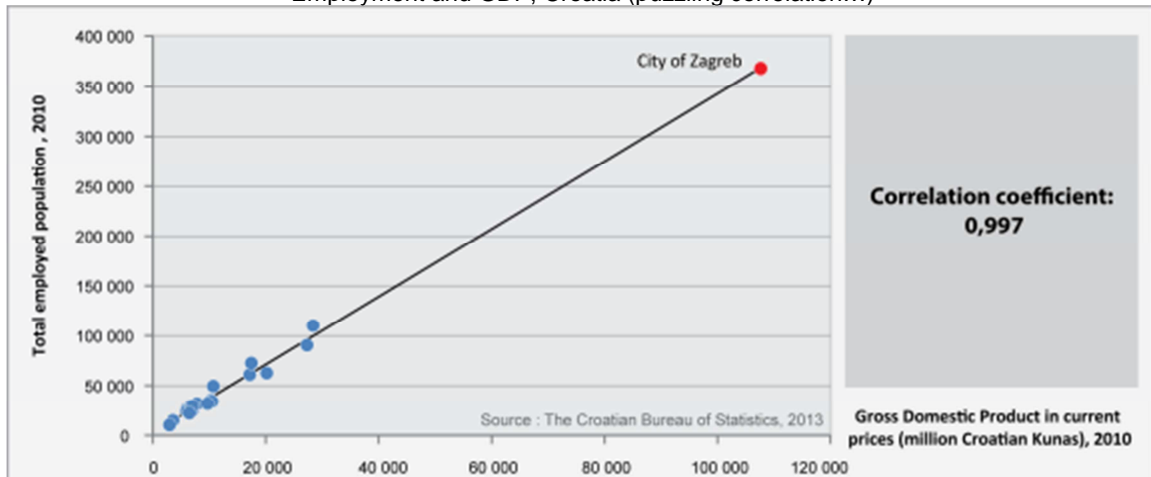
Tertiary education and GDP, Morocco



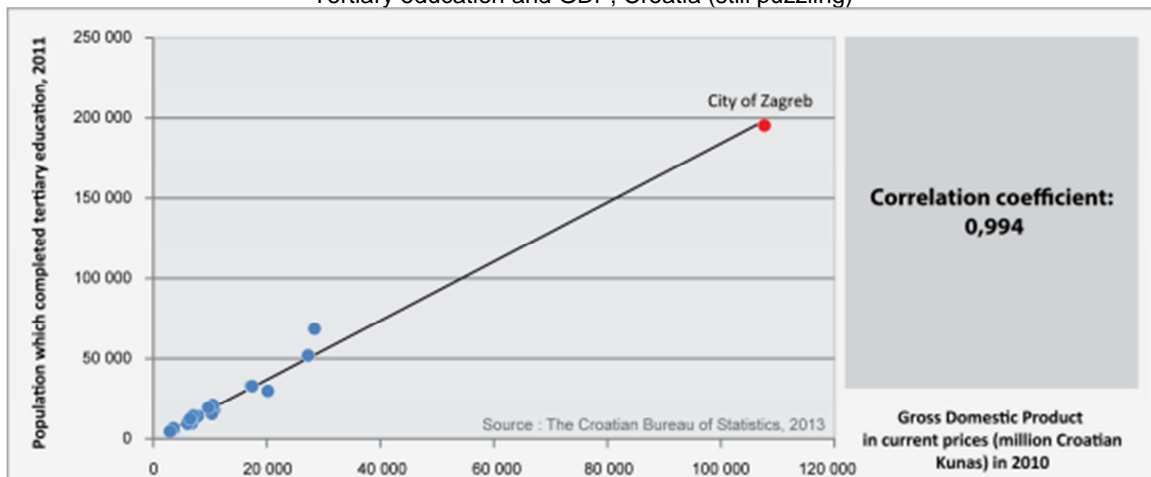
Employment and GDP, Morocco



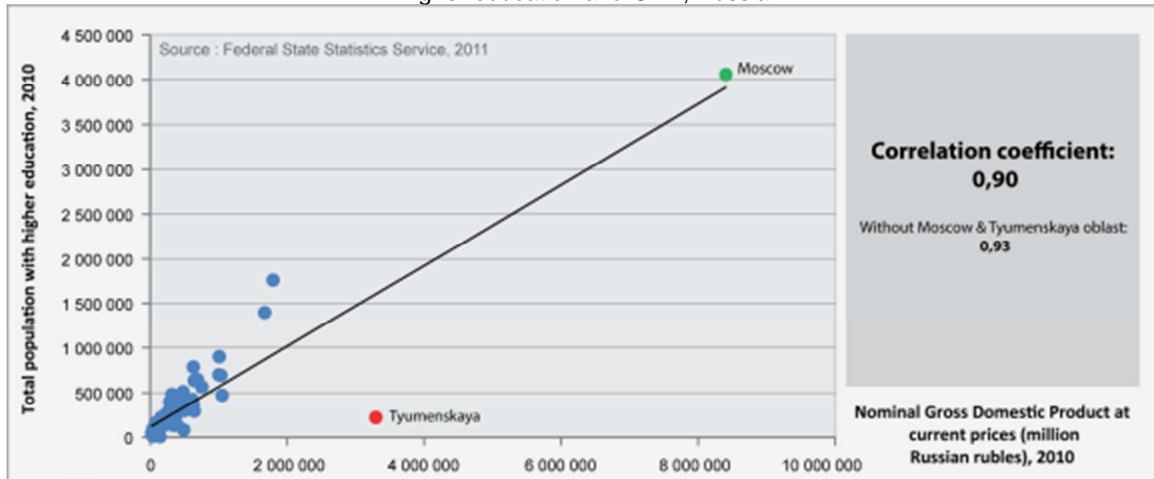
Employment and GDP, Croatia (puzzling correlation...)



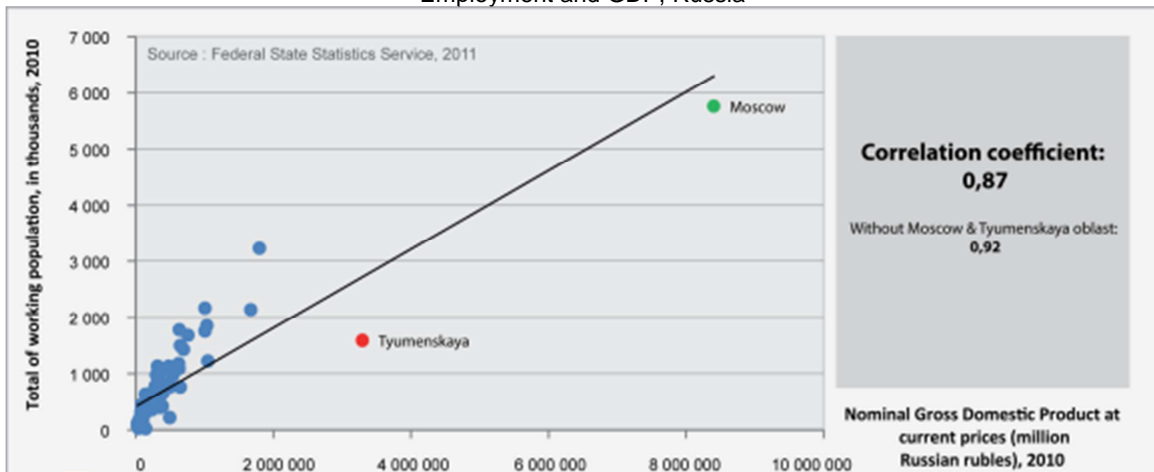
Tertiary education and GDP, Croatia (still puzzling)



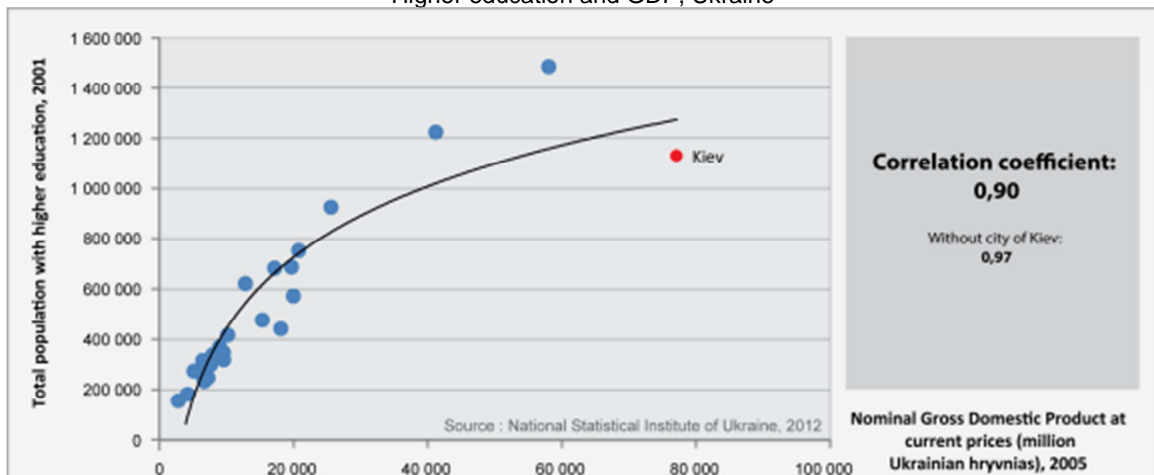
### Higher education and GDP, Russia



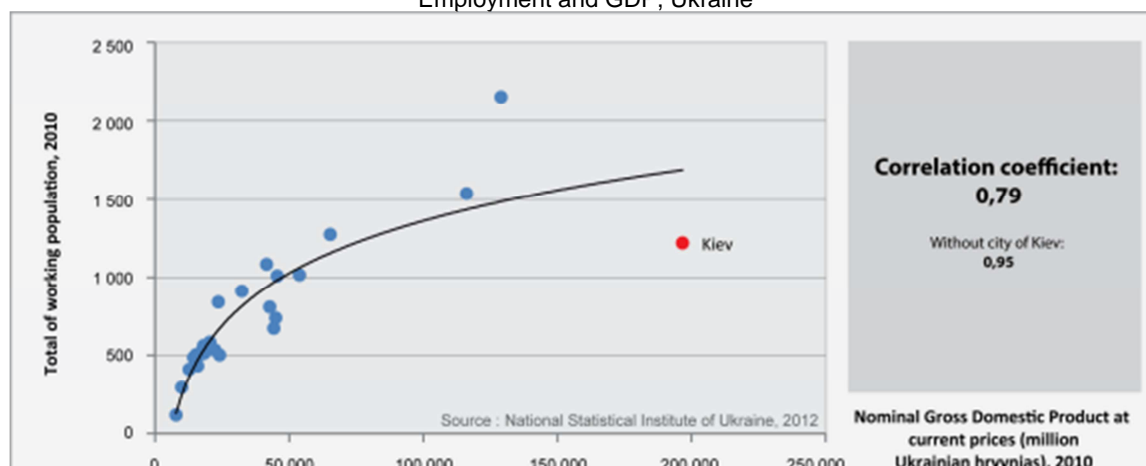
### Employment and GDP, Russia



### Higher education and GDP, Ukraine



Employment and GDP, Ukraine



#### 4.3. Human development Index: a technical note

Relying on the United Nations Human Development Index, the basic idea is to provide a synthetic index which does not only consider economic development but also other decisive dimensions of development, such as education and health. Hence the HDI is based on :

- incomes;
- life expectancy;
- the share of tertiary educated.

The last indicator is different from the UN official index; the reason is that in the European neighbourhood, alphabetisation and school enrolment are very high and do not indicate large national and regional differences.

However, we aim at providing such an index at regional level, for the whole neighbourhood, as thoroughly as possible.

All indicators have been harmonized through international statistics according to the methodology described in the final report.

The synthetic index is composed of those three indicators.



Date and indicator used for regional data for human development variables

		Life expectancy	Income	Share of active population with tertiary education
Albanie	AL	2010	2007	2001
Arménie	AM	2010	2010	2010
Azerb.	AZ	2010	2010	2010
Bosnia	BA	2010	Gross Domestic product per inhabitant 2009	2010
Belarus	BY	2011	2011	2009
Algeria	DZ	Standardized Mortality rate 2011	Number of cars per inhabitant 2008	2008
Egypt	EG	2007	Gross Domestic product per inhabitant 2008	2006
Feroe	FO	2010	2010	
Georgia	GE	2010	2010	2010
Greenland	GL	2010	2010	
Croatia	HR	2008	Gross Domestic product per inhabitant 2010	2011
Israel	IL	2005-2009	2010	2011
Jordan	JO	2010	2010	2004
Lebanon	LB	Standardized Mortality rate 2007	Average wage 2004	2009
Lybia	LY	2010	2010	
Morocco	MA	Standardized Mortality rate 2004	Gross Domestic product per inhabitant 2009	2010
Moldavia	MD	2010	2010	2010
Montenegro	ME	2010	2010	2010
Former Yugoslav Republic of Macedonia	MK	Standardized Mortality rate 2011	2010	2010
Palestine (oPt)	PS	2011	Average wage 2011	2007
Serbia	RS	2011	2010	2010
Russia	RU	2009	2010	2010
Syria	SY	2010	2010	2009
Tunisia	TN	Standardized Mortality rate 2010	Electric consumption per inhabitant 2009	2010
Turkey	TR	Standardized Mortality rate 2011	Gross Domestic product per inhabitant 2009	2010
Ukraine	UA	2010	2010	2010
Kosovo under UNSCR 1244/99	XK	2010	2010	
<b>International indicator used to calibrate regional data and sources</b>		<b>Life expectancy both sexes 2010; US census bureau</b>	<b>Gross national income in international current PPS 2010; World Bank</b>	<b>Share of active population with tertiary diploma; World Bank and Unctad</b>

Note: when only the date is written, the exact indicator is available and no proxy has been used.  
A full and detailed list of proxies is provided below.

### Indicator I: Regional income

At regional level, there are large differences between incomes and GDP per inhabitant because of the importance of income transfers between places of production and residence. We focus on incomes as a better indicator of economic well-being at regional level.

However, the indicator is not available for all countries. For some countries, we use proxies to assess incomes at regional level. The relevance of these approximations has been tested for countries where both incomes and its proxies were available.

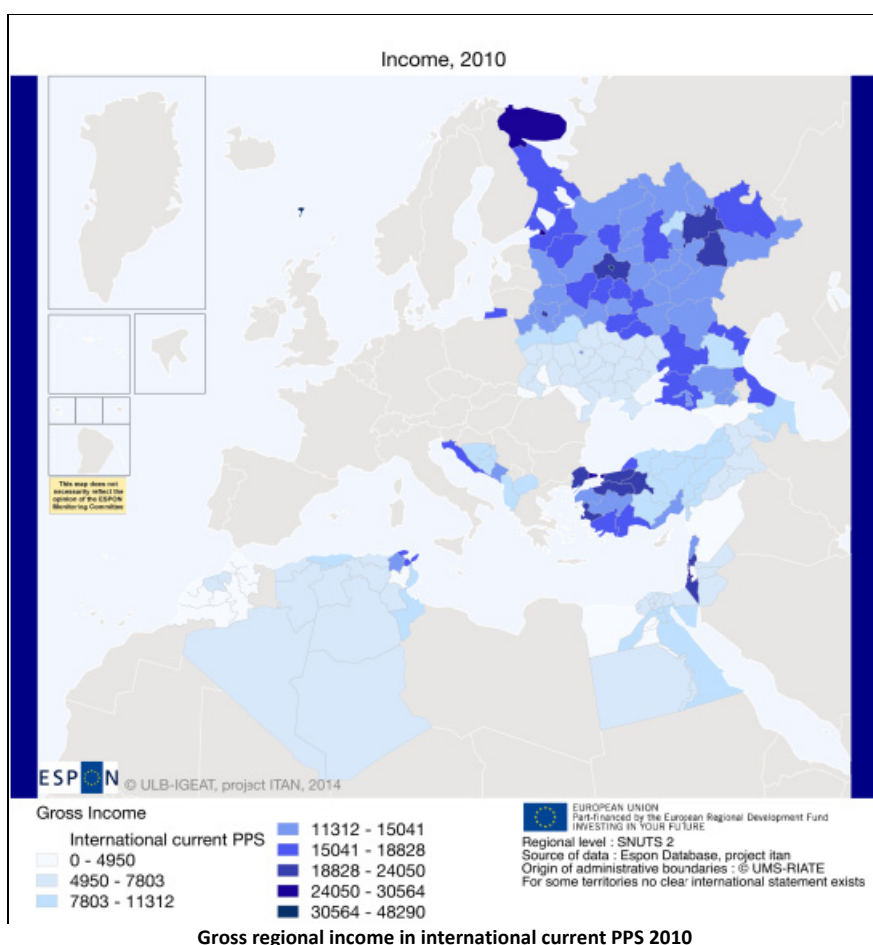
The following proxies have been used:

- average wages;
- GDP per inhabitant;
- Electricity consumption per inhabitant;
- Number of cars per inhabitant;

We can synthesize the steps to get regional indicators as follows:

- collection of income at regional level;
- if incomes are not available, a proxy is used;
- regional data are calibrated Gross national income in international current PPS 2010 provided by the World Bank.

The map below shows the geographical contrasts in incomes in the neighbouring regions. National contrasts are predominant, with much higher incomes in Russia, Belarus, Turkey, Israel and North Western Balkans. In contrast, incomes are weak in Caucasian Republics, the Near East and North Africa. Within countries, major contrasts are to be found between metropolitan areas and the rest of the country.



**Indicator II: Life expectancy**

For most countries, life expectancy is available at regional level. For these we only had to harmonize data with international dataset. For some countries however, life expectancy was not available and we opted for calculating standardized mortality rate, which is a mortality rate not impacted by the regional age structure:

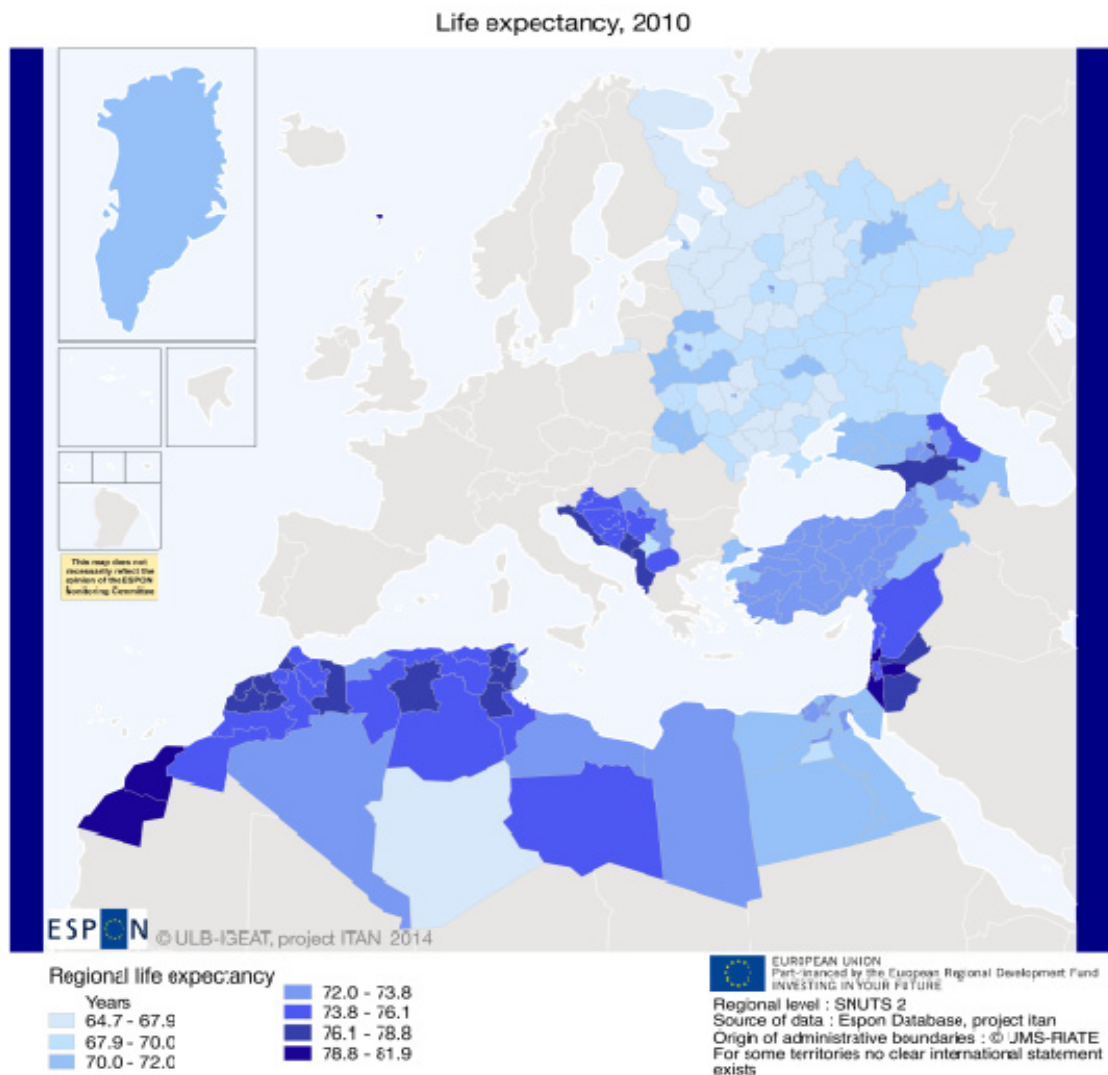
$$\text{Standardized mortality rate} = \text{Total deaths} / \text{Theoretical deaths}$$

Where  $\text{Theoretical deaths} = \sum P(i, \text{country}) * \text{Population}(i, \text{region})$

Where  $P(i, \text{country})$  is the probability of death by age at national level  
 $\text{Population}(i, \text{region})$  is the population by age for each region

This means we compare the real number of deaths with the number of deaths that would occur if the region had a probability of death equal to the probability of death at each age for the whole country.

Finally, standardized mortality rates are calibrated to the Life expectancy at national level as provided by International dataset.



Life expectancy in European neighbourhood, by region in 2010

The map above shows the geography of life expectancy in the European neighbourhood. We observe a huge difference with the geography of income: while Eastern neighbourhood has, in average, higher incomes, life expectancy is much lower than in Northern Africa and the Near East. Also, Caucasian

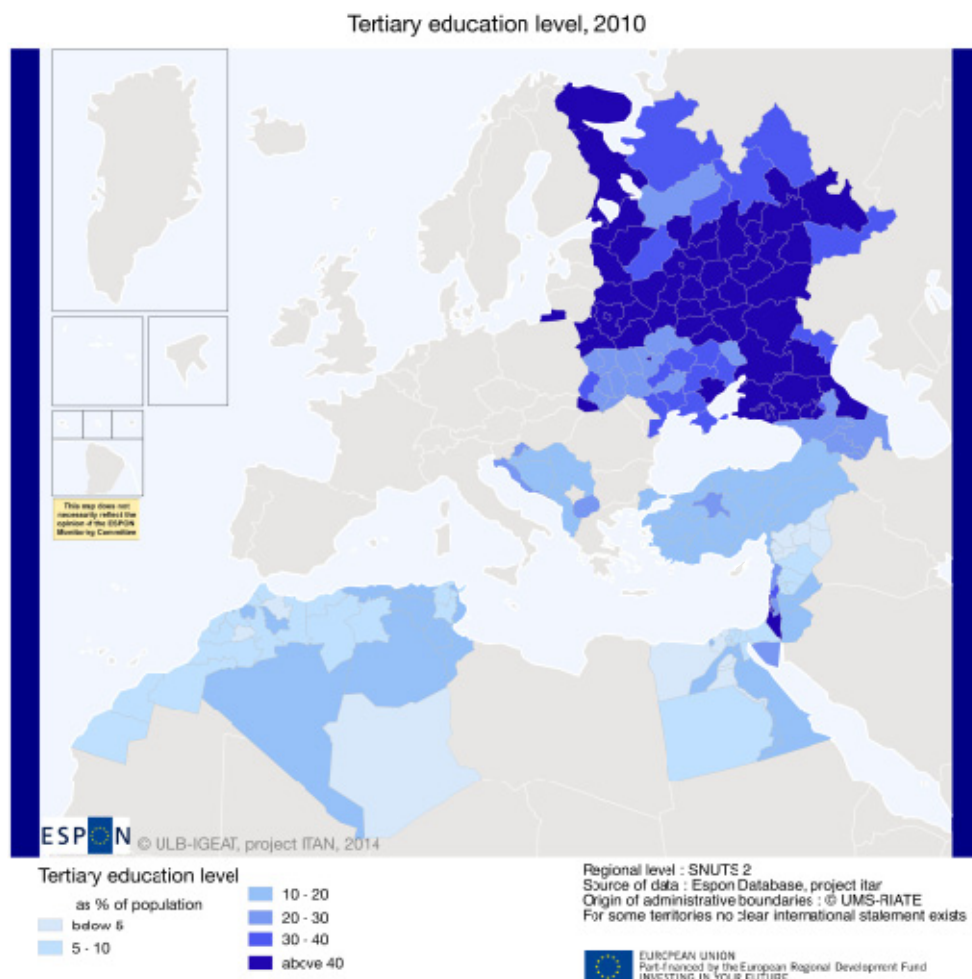
republics, characterized by low incomes, have high life expectancy. Such differences can be explained by contrasts in nutrition and other social behaviour such as consumption of alcohol rather than by contrasts in the quality of health system itself. Within countries also, regional contrasts cannot easily be interpreted: only in the Eastern neighbourhood, we observe higher life expectancy in metropolitan areas compared to the rest of the country.

**Indicator III: Share of active population with tertiary education**

For all countries, we had good proxies of this indicator though in detail, indicators are different (share of total population with university diploma, share of active population with tertiary diploma etc.).

In a second step, Regional data are calibrated to national average provided by the UNCTAD and the World Bank. We had to use two different sources because data are incomplete in, each of these sources. Hence, the harmonization appears to be less rigorous for this indicator than for the other two.

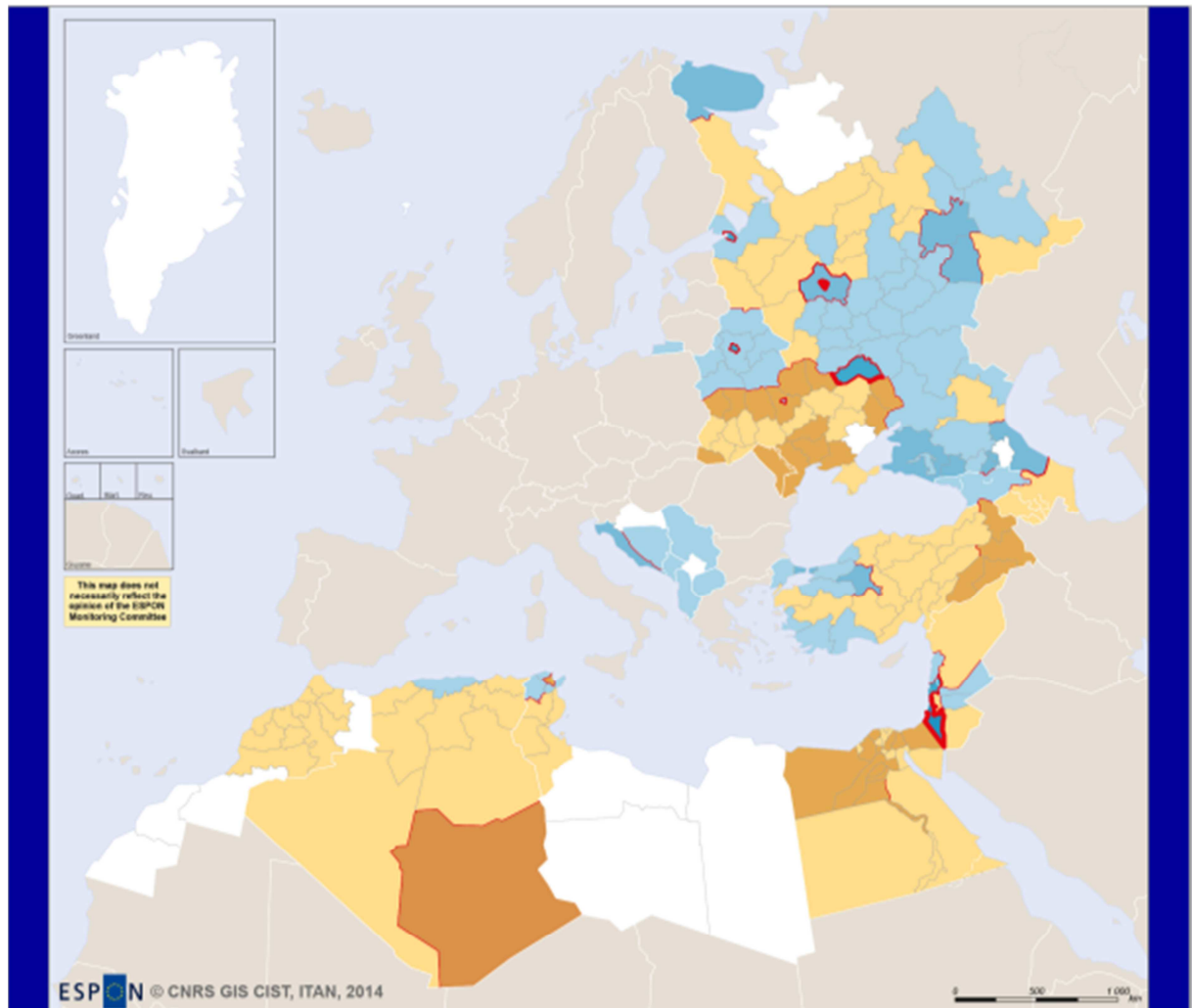
The map below shows the geography of tertiary educated. The map is more similar to the map of income, showing contrasts between Eastern neighbourhood and Israel, on the one hand, Northern Africa and the near east, on the other hand. Within countries, we observe higher level of education in metropolitan areas, though we also observe such high levels in other types of areas, such as Southern desert areas in Algeria and Tunisia, or in Eastern Ukraine compared to the Western part of the country.



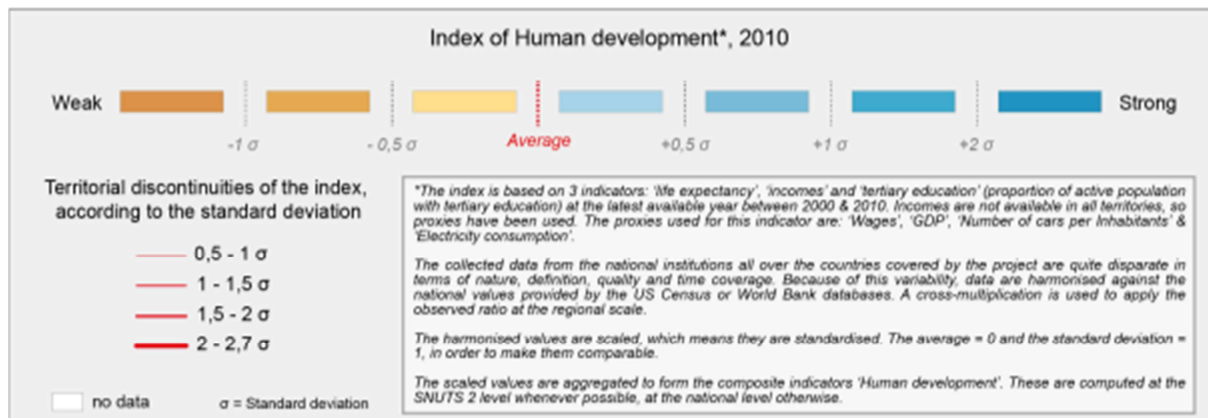
Level of education in the European neighbourhood, by region, in 2010

## The Human Development Index

Each of the three indicators has been standardized, with average equal to 0 and standard deviation to 1. The scaled values are then aggregated to form the composite indicators of Human development. As a result of the contradictory trends of the different indicators, the synthetic index of Human development show less contrasts between Eastern and Southern neighbourhood or at the country while it clearly points to the regional contrasts between, for example, metropolitan areas and the rest of the country.



Regional level: SNUITS 1-2  
 Source: ESPON project (ITAN), CNRS GIS CIST, Data harmonised by IGEAT, 2014  
 Origin of data: National statistical institutes, US Census, World Bank, 2013  
 © UMS RIAE for administrative boundaries  
 For some territories no clear international statement exists



Human development level in the Neighbourhoods, ca 2010

Years and proxies used in the construction of the indicators

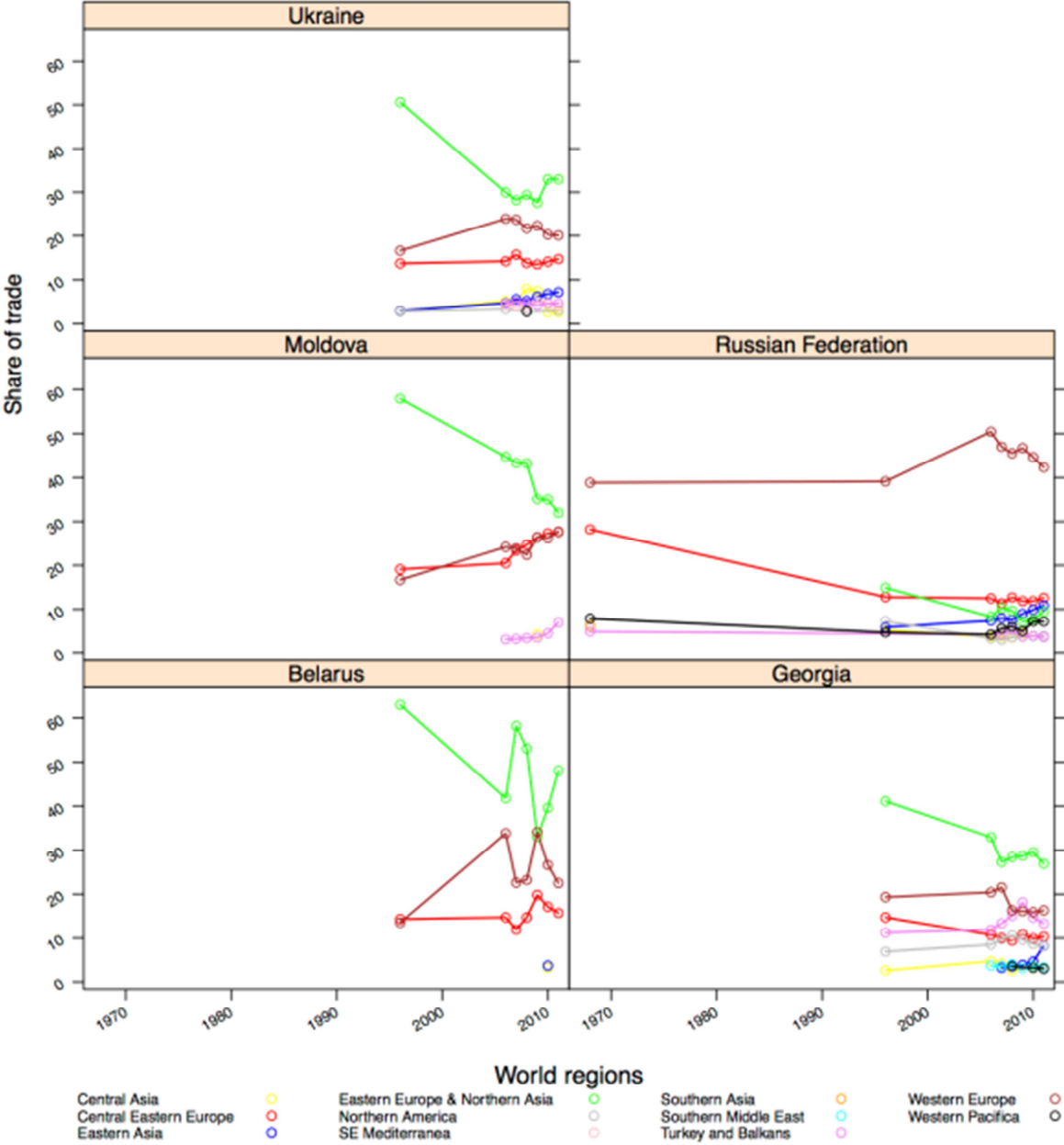
Co untr y	Life expe ctanc y	POP _star t	POP _en d	pop2000 _uscens us	pop2010 _uscens us	Evoluti on_00 -10	pop_0- 5_2010_ uscensu s	pop_15- 60_2010 _uscens us	pop_above_60_2 010_uscensus	Somtot_ag e_uscensu s	Incom e/inh	Men/ Wom en em plo ym ent	GDP _00- 10	Tert _2010
AL	2010	2001	2011	2000	2010	2001-2011	2011	2011	2011	2011	2007	2001	2000-2009 (GDP)	2001 (nb tertiary)
AM	2010	2000	2010	2000	2010	2000-2010	2010	2010	2010	2010	2010	2010	2000-2010	2010
AZ	2010	2000	2010	2000	2010	2000-2010	2010	2010	2010	2010	2010	2010	2000-2010	2010
BA	2010	2000	2010	2000	2010	2000-2010	2011	2011	2011	2011	2009 (GDP)	2012	2006-2012	2010
BY	2011	2000	2010	2000	2010	2000-2010	2010	2010	2010	2010	2011	2009	2000-2010	2009 (high education)
DZ	2012 (ICM)	1998	2008	2000	2010	1998-2008	2012	2012	2012	2012	2008 (cars/inhab)	2008	1998-2008	2008 (superior)
EG	2007	2001	2011	2000	2010	2001-2011	2006	2006	2006	2006	2008 (DIP)	2010	2000-2008 (RGDP)	2006 (nb of university graduates and +)
FO	2010	2000	2010	2000	2010	2000-2010	2010	2010	2010	2010	2010	2010	2000-2010	
GE	2010	2000	2010	2000	2010	2000-2010	2010	2010	2010	2010	2010	2010	2000-2010	2010
GL	2010	2000	2010	2000	2010	2000-2010	2010	2010	2010	2010	2010	2010	2000-2010	
HR	2008	2001	2011	2000	2010	2001-2011	2011	2011	2011	2011	2010 (GDP)	2010	2000-2010	2011 (nb tertiary)
IL	2005-2009	2000	2012	2000	2010	2000-2012	2012	2012	2012	2012	2010	2011	2000-2011	2011 (iscd 5a, 5b and 6)
JO	2010	1994	2012	2000	2010	1994-2012	2004	2004	2004	2004	2010	2004	1994-2004	2004 (magister, bachelor, doctorate, high diploma)
LB	2007 (ICM)	1996	2007	2000	2010	1996-2007	2007	2007	2007	2007	2004 (wage)	2007	2000-2010	2009 (university)
LY	2010	2000	2010	2000	2010	2000-2010	2010	2010	2010	2010	2010	2010	2000-2010	
MA	2004 (ICM)	2004	2011	2000	2010	2004-2011	2004	2004	2004	2004	2009 (GDP)	2011	2004-2011	2010
MD	2010	2000	2010	2000	2010	2000-2010	2010	2010	2010	2010	2010	2010	2000-2010	2010
ME	2010	2000	2010	2000	2010	2000-2010	2010	2010	2010	2010	2010	2010	2000-2010	2010
MK	2011 (ICM)	2002	2011	2000	2010	2002-2011	2002	2002	2002	2002	2010	2002	2000-2010	2010
PS	2011	2000	2010	2000	2010	2000-2010	2007	2007	2007	2007	2011 (wage)	2007	1997-2007	2007 (master, high education, doctorate, bachelor, associate diploma)
RS	2011	2002	2011	2000	2010	2002-2011	2011	2011	2011	2011	2010	2010	2000-2010	2010

RU	2009	2000	2010	2000	2010	2000-2010	2010	2010	2010	2010	2010	2010	2000-2010	2010 (high educ and +)
SY	2010	2004	2013	2000	2010	2004-2013	2004	2004	2004	2004	2010	2010	2000-2010	2009 (university)
TN	2010 (ICM)	2000	2010	2000	2010	2000-2010	2010	2010	2010	2010	2009 (electric consumption)	2010	1999-2010	2010 (university)
TR	2010 (ICM)	2000	2010	2000	2010	2000-2010	2010	2010	2010	2010	2006 (GDP)	2010	2000-2010	2010 (doctorat, tertiary, high school, master)
UA	2010	2000	2010	2000	2010	2000-2010					2010	2010	2000-2010	2010
XK	2010	1991	2011	2000	2010	1991-2011	2011	2011	2011	2011	2010	2011	2000-2010	

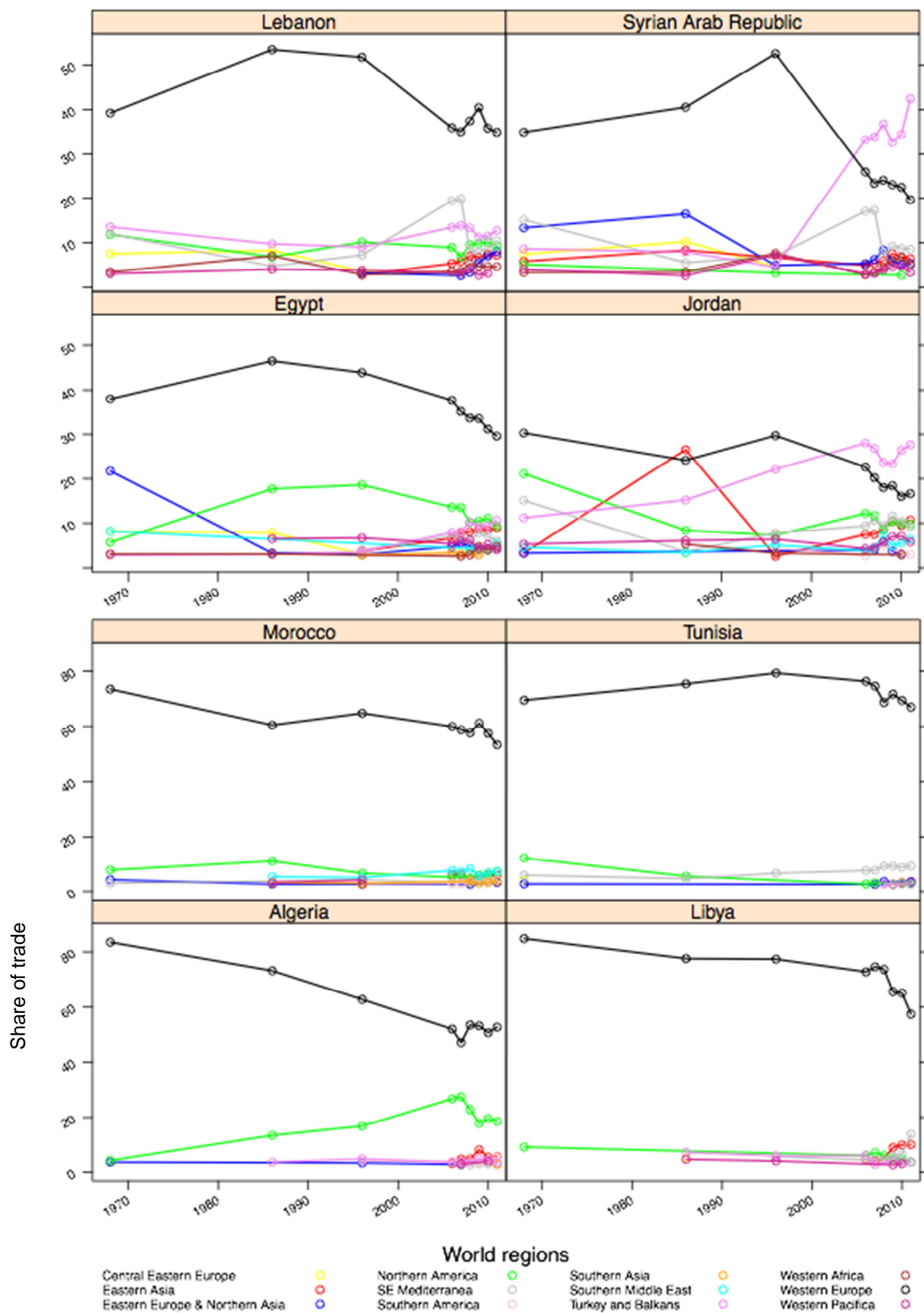
5. Data: Detailed figures on international flows between Europe and its Neighbourhoods

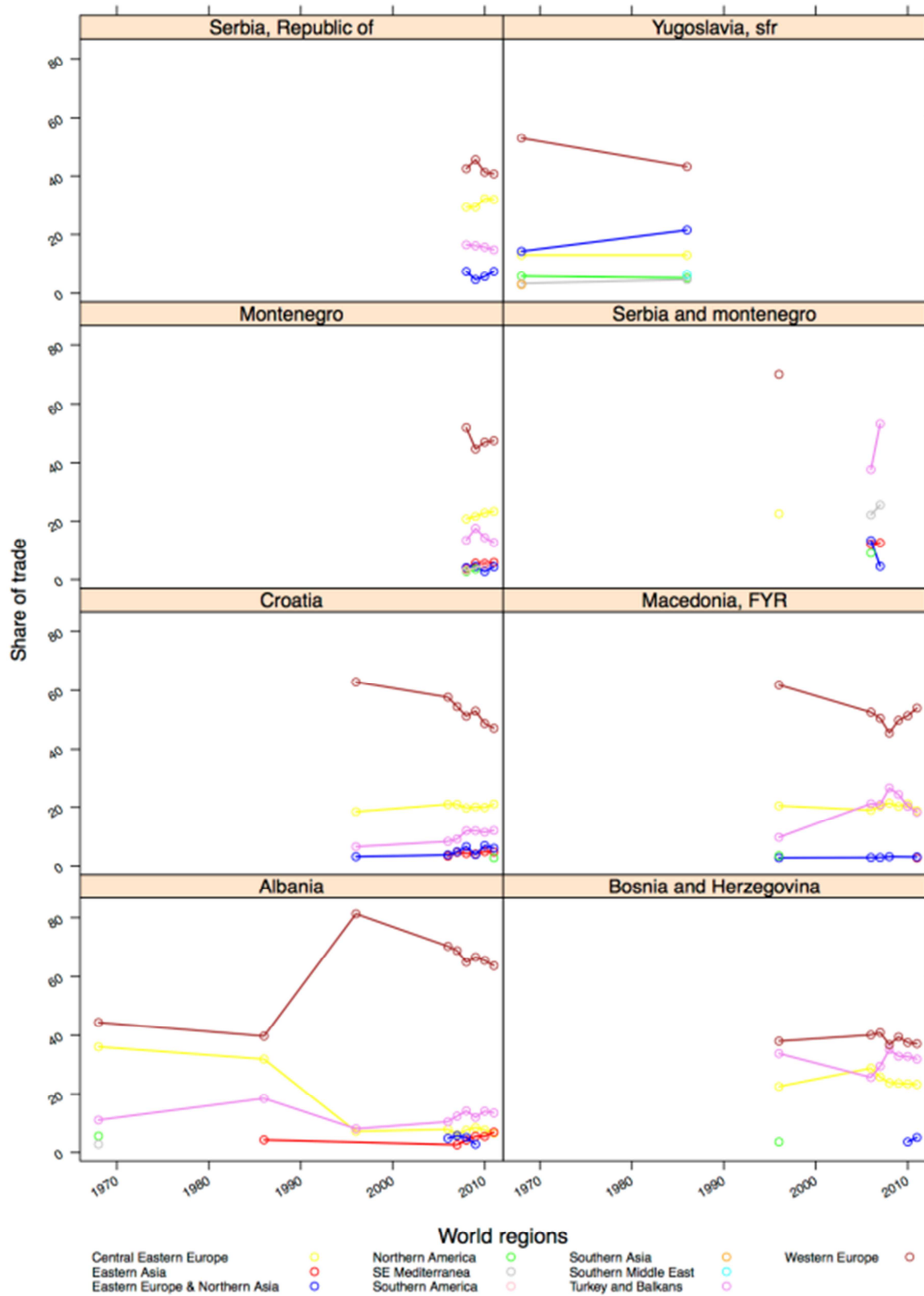
5.1. Trade of goods

Geography of trade of the countries neighbouring EU, by world regions, 1967 – 2011

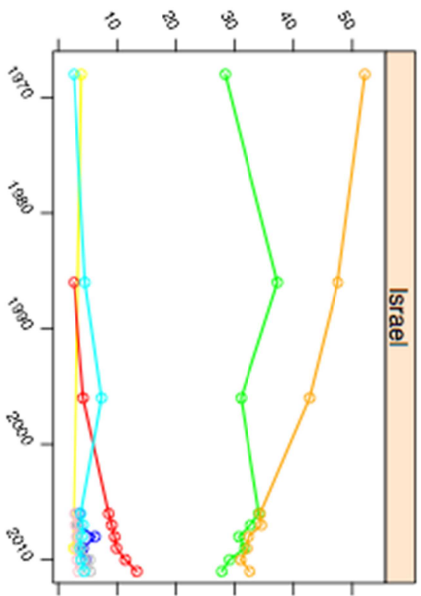




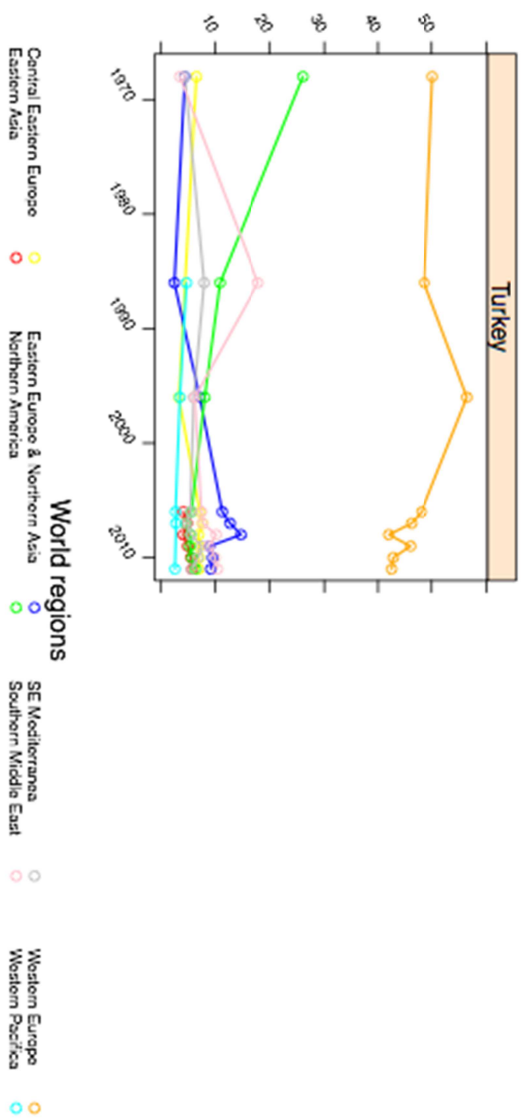




Share of trade



Share of trade

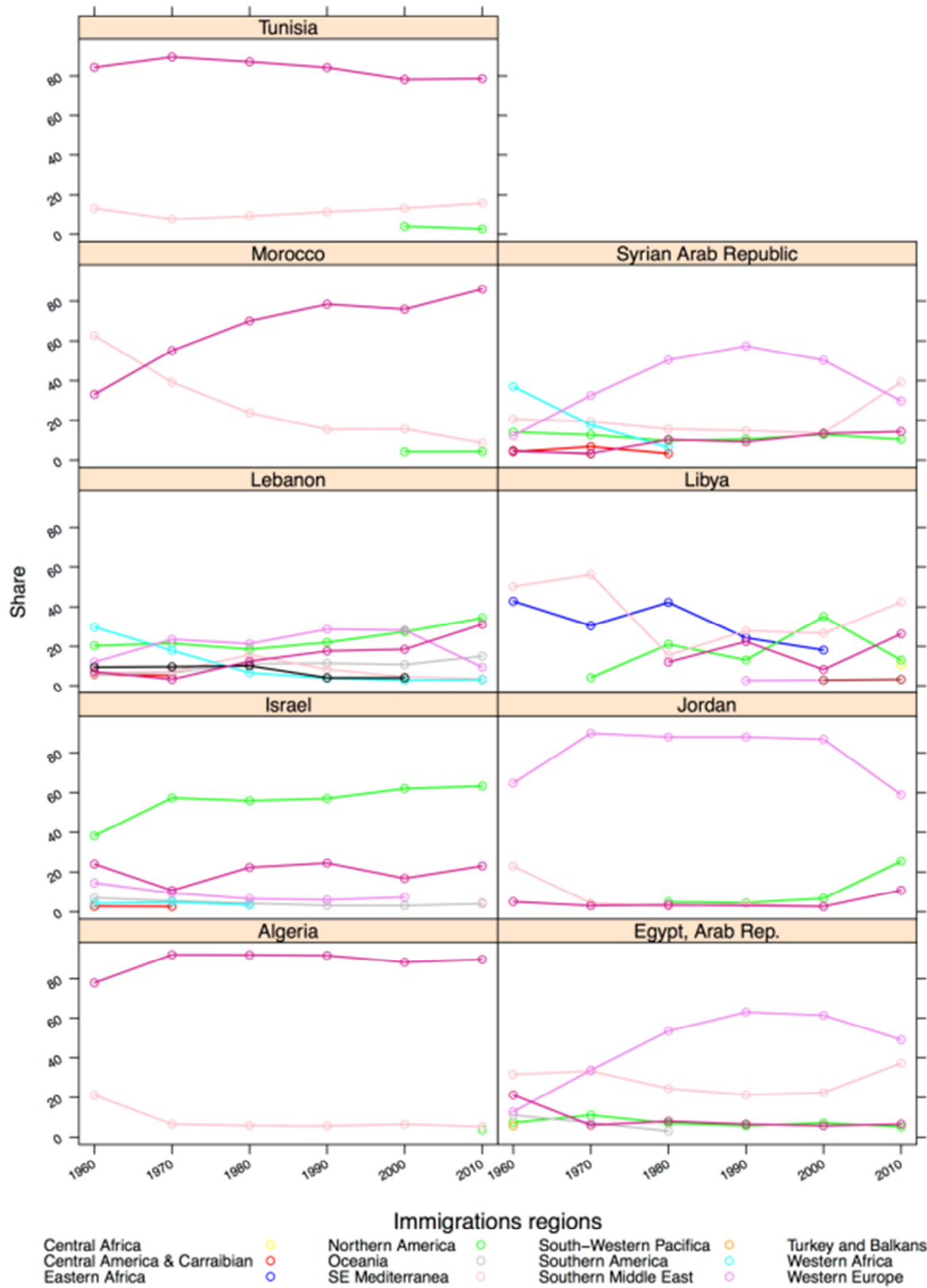


World regions

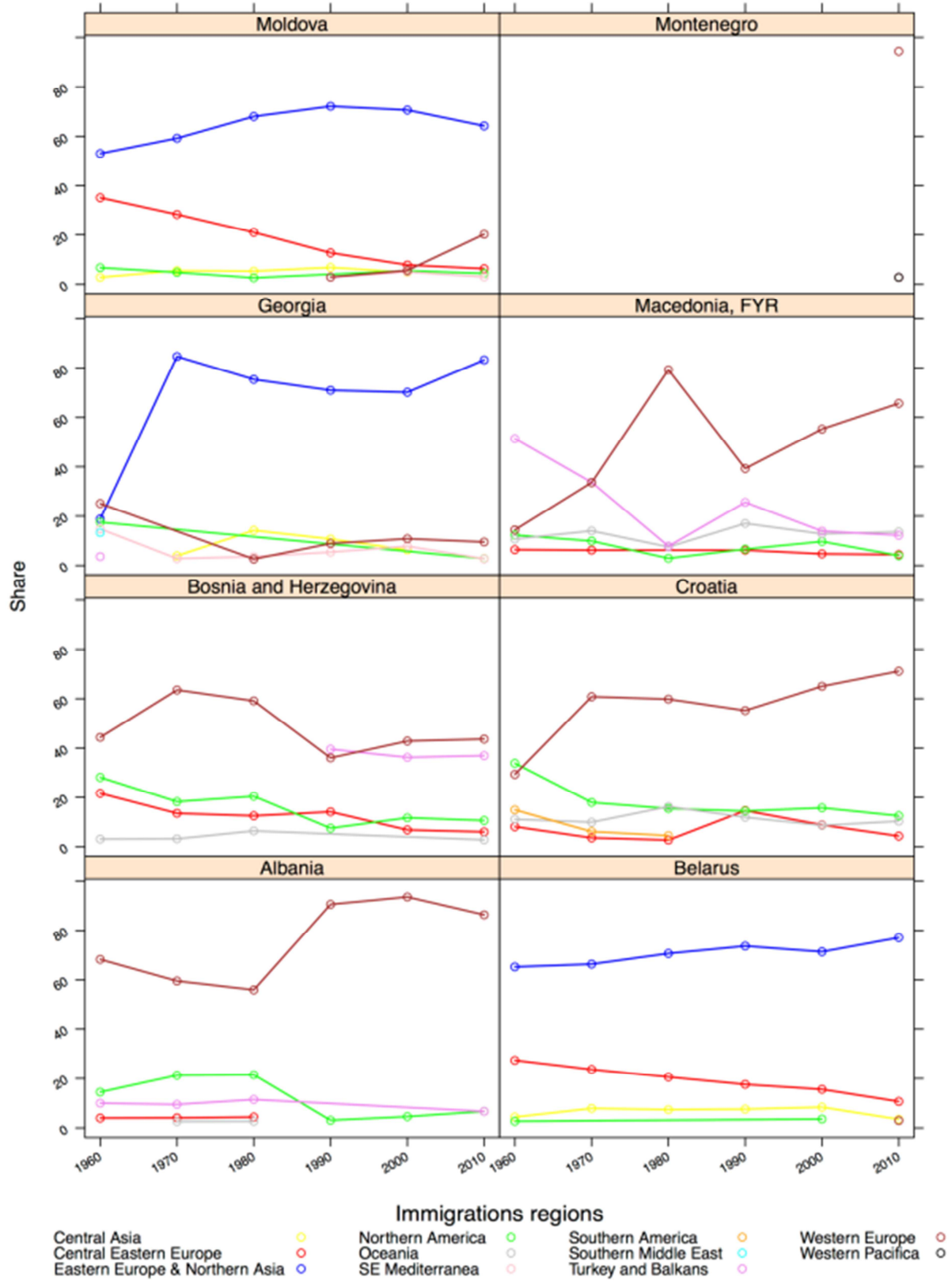
- Central Eastern Europe
- Eastern Asia
- Eastern Europe & Northern Asia
- Northern America
- SE Mediterranean
- Southern Middle East
- Western Europe
- Western Pacific

## 5.2. Migration stocks

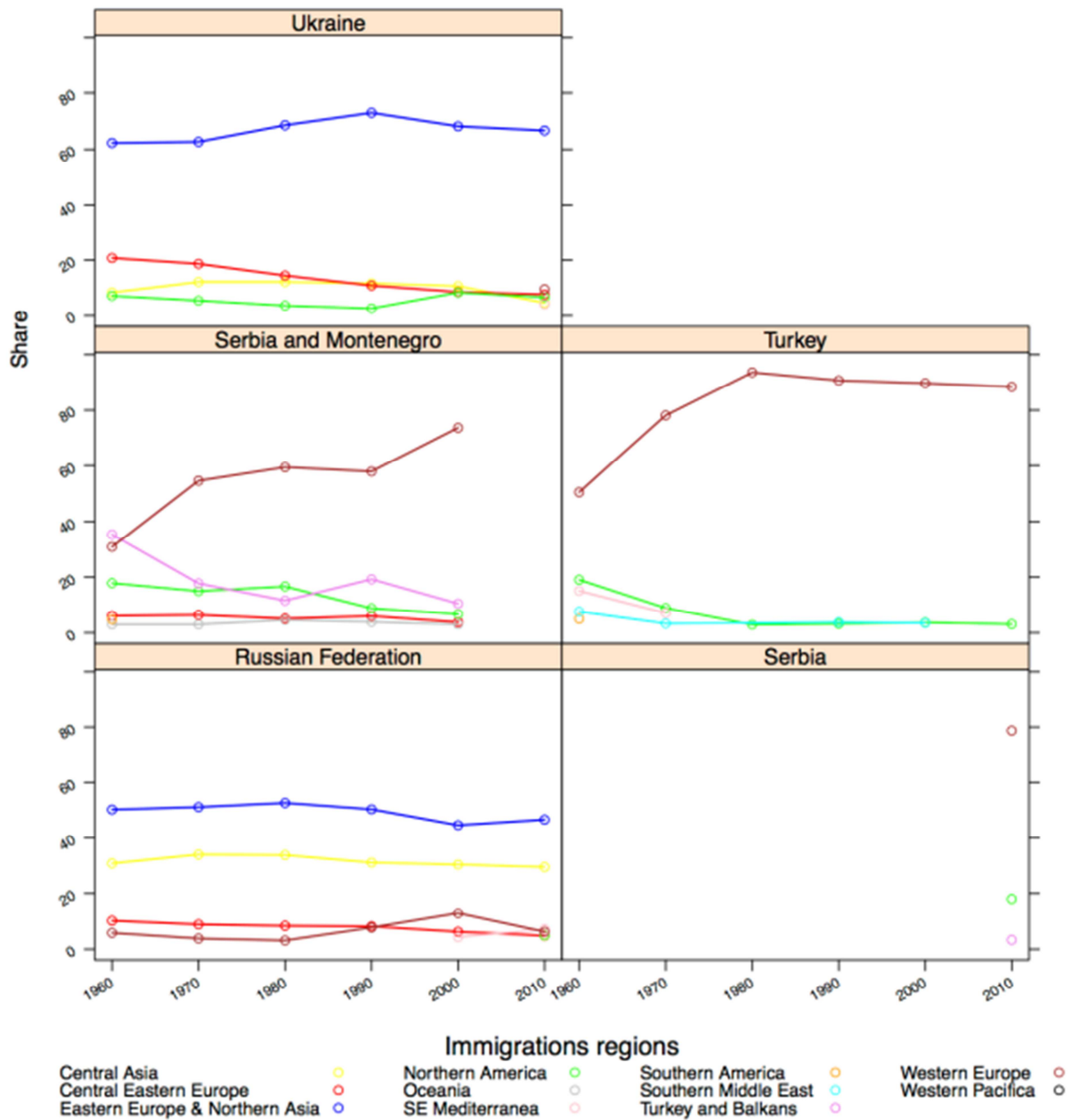
Evolution of the migrants stocks from countries neighbouring EU in SE Mediterranea



Evolution of the migrants stocks from countries neighbouring EU in Eastern Europe & Northern Asia

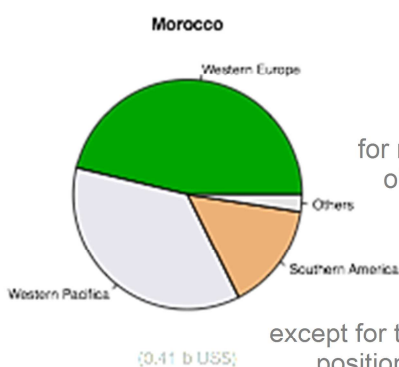
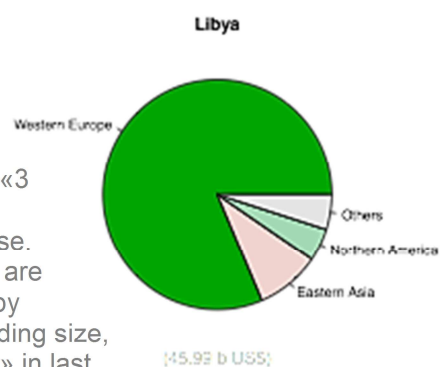
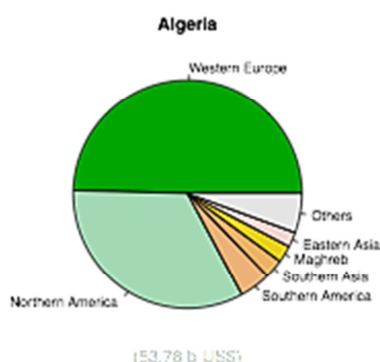
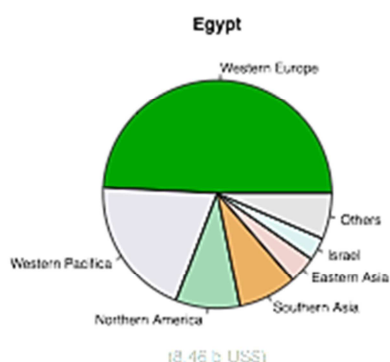


Evolution of the migrants stocks from countries neighbouring EU in Eastern Europe & Northern Asia



5.3. Energy

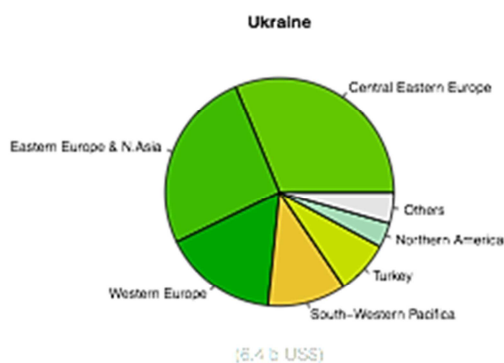
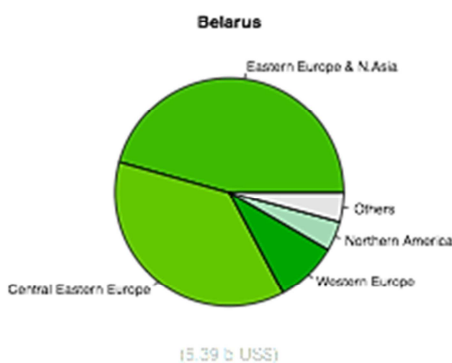
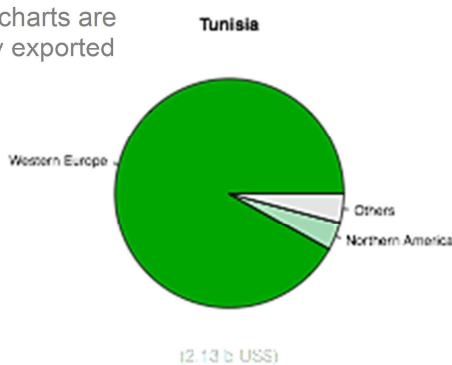
**Geography of energy export from the neighbours of EU, by world regions, 2010.**

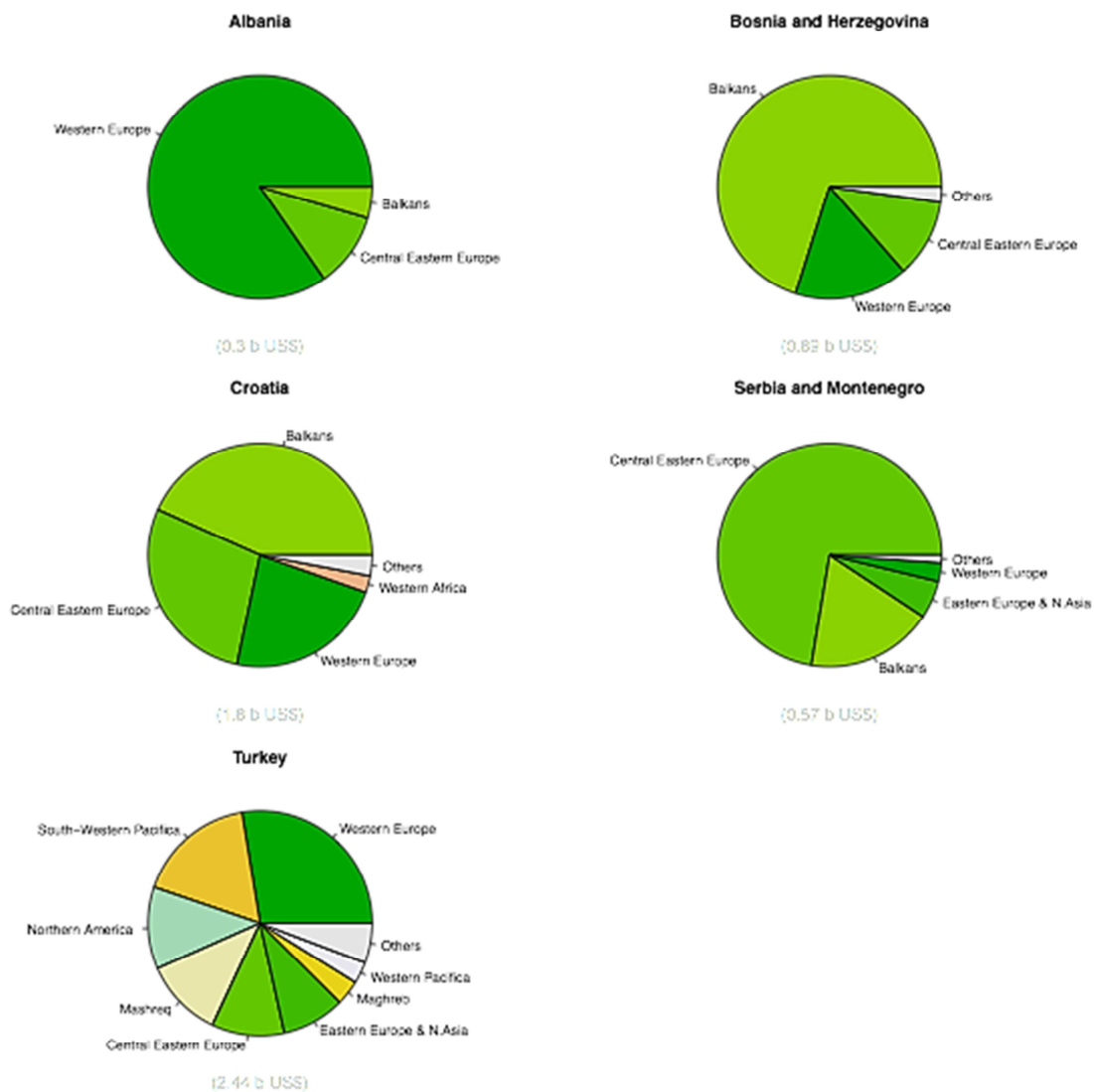


Tips start at «3 rotate clockwise. sectors are sorted by descending size, «others» in last under charts are energy exported

for reading : o'clock», counter The

except for the position. Values total value of by country.

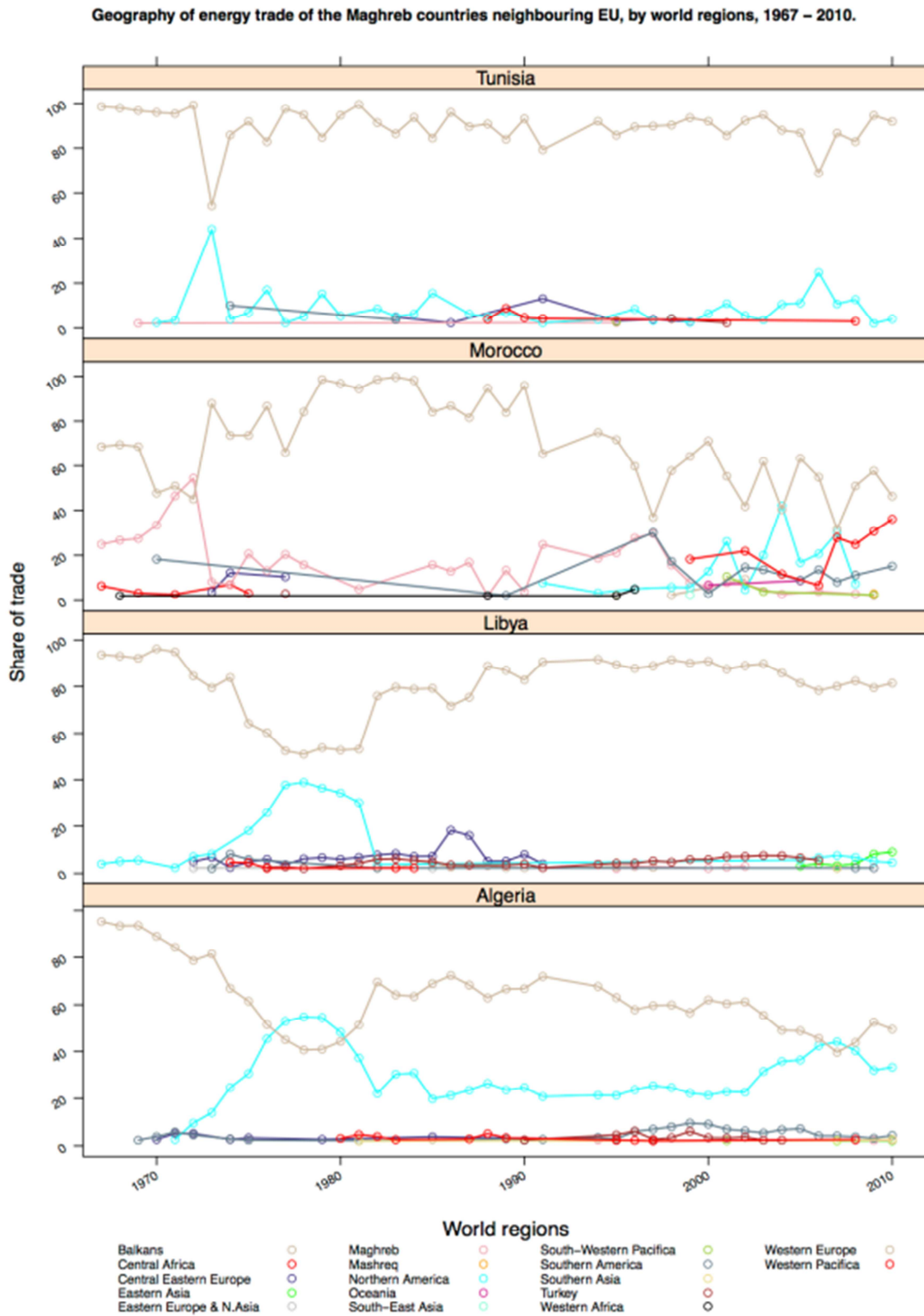


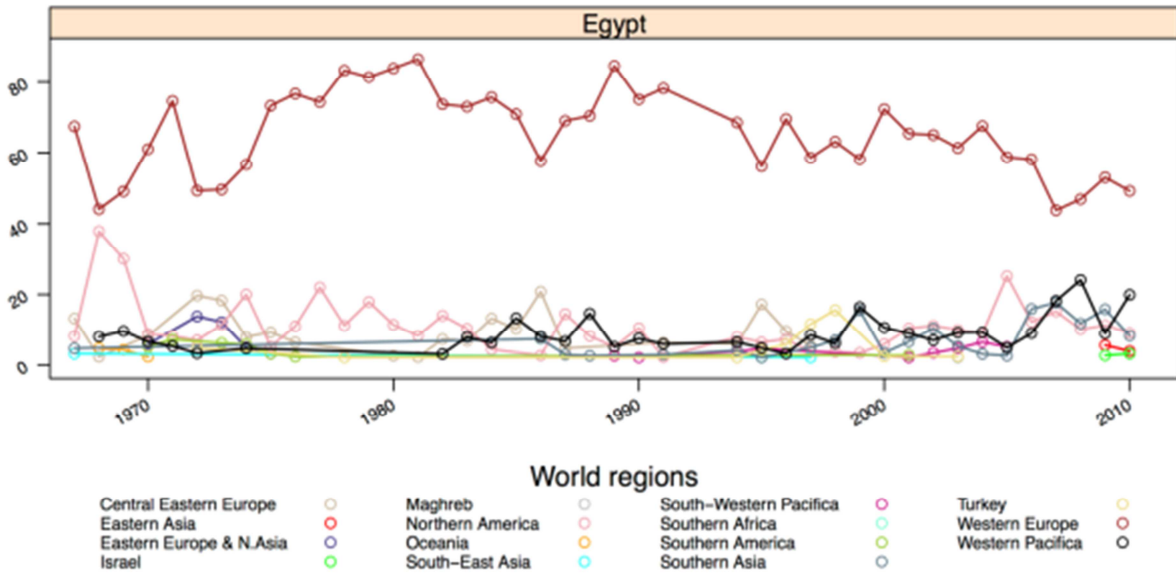


Tips for reading : start at «3 o'clock», rotate counter clockwise. The sectors are sorted by descending size, except for the «others» in last position. Values under charts are total value of energy exported by country.

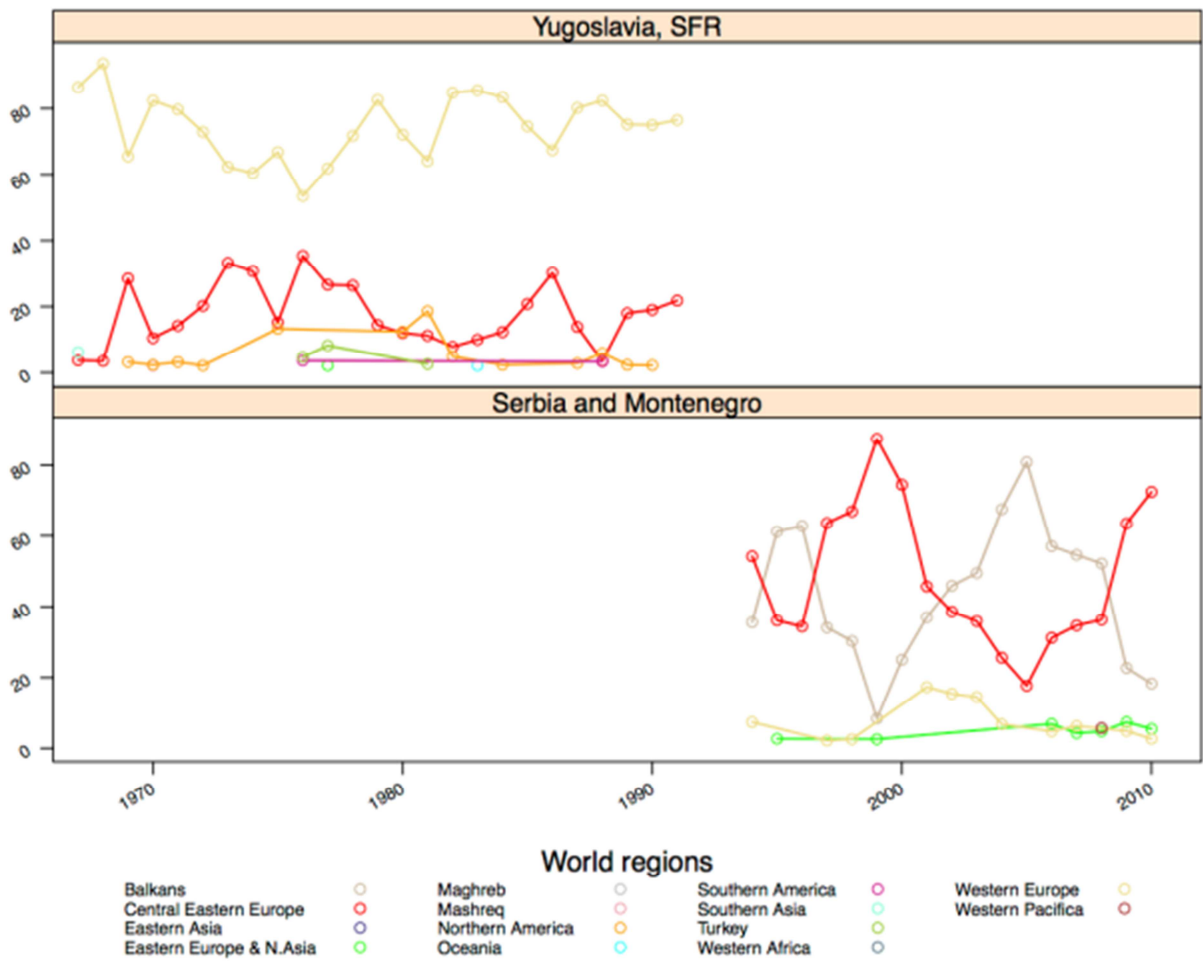


Evolution of energy trade from the neighbours of EU, by world regions, 1967 - 2010.

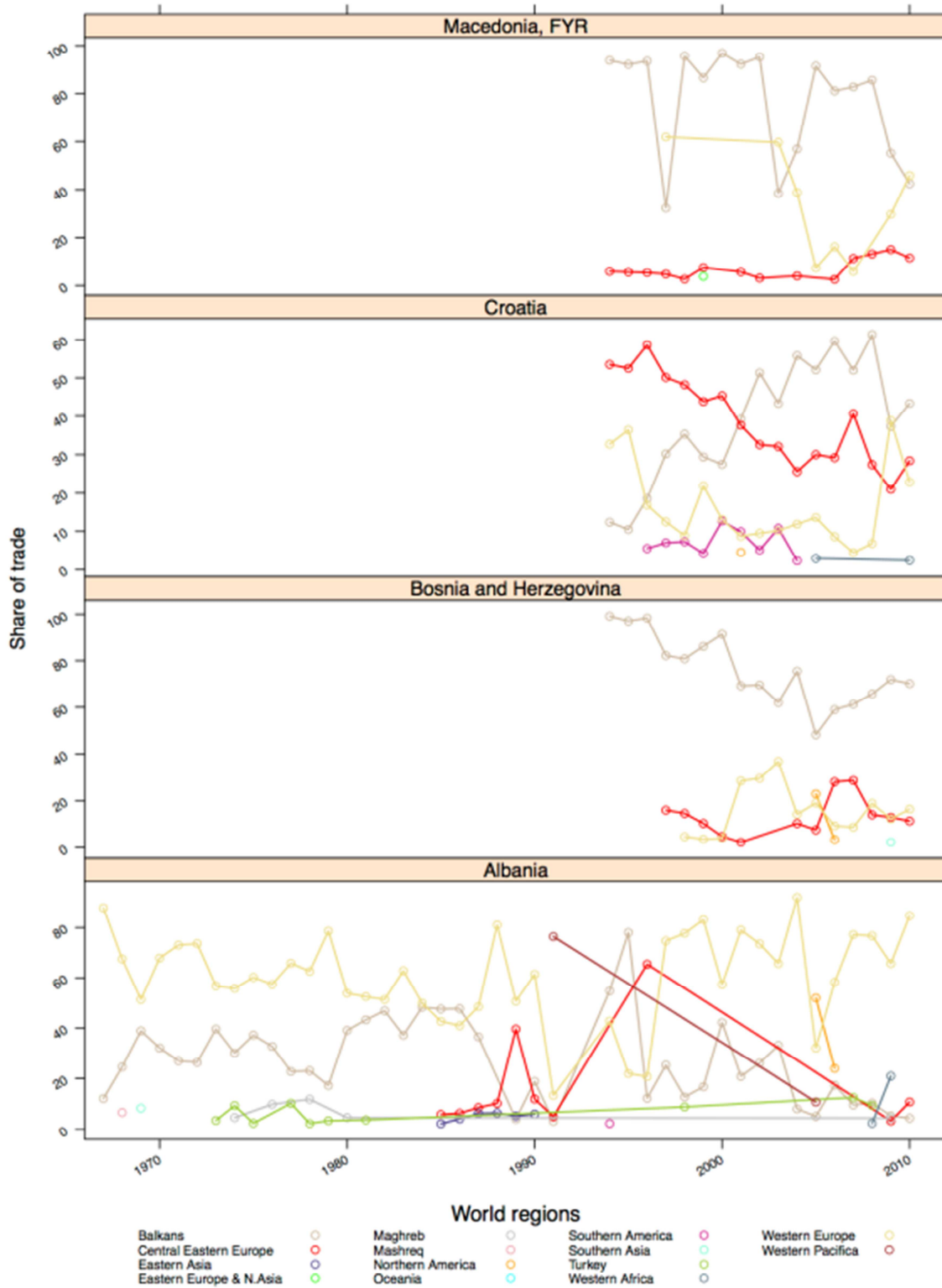




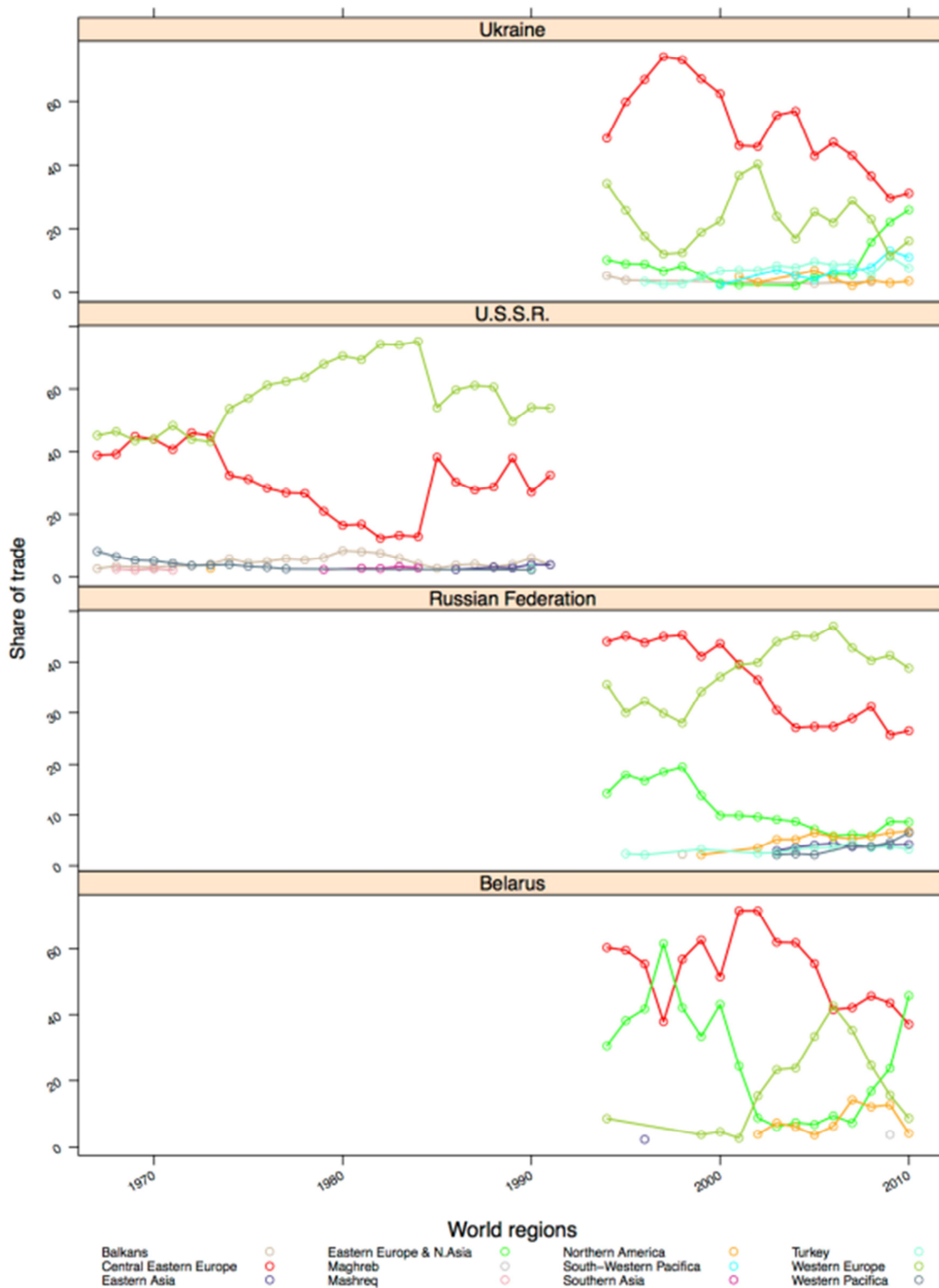
Geography of energy trade of the Balkans countries neighbouring EU, by world regions, 1967 – 2010



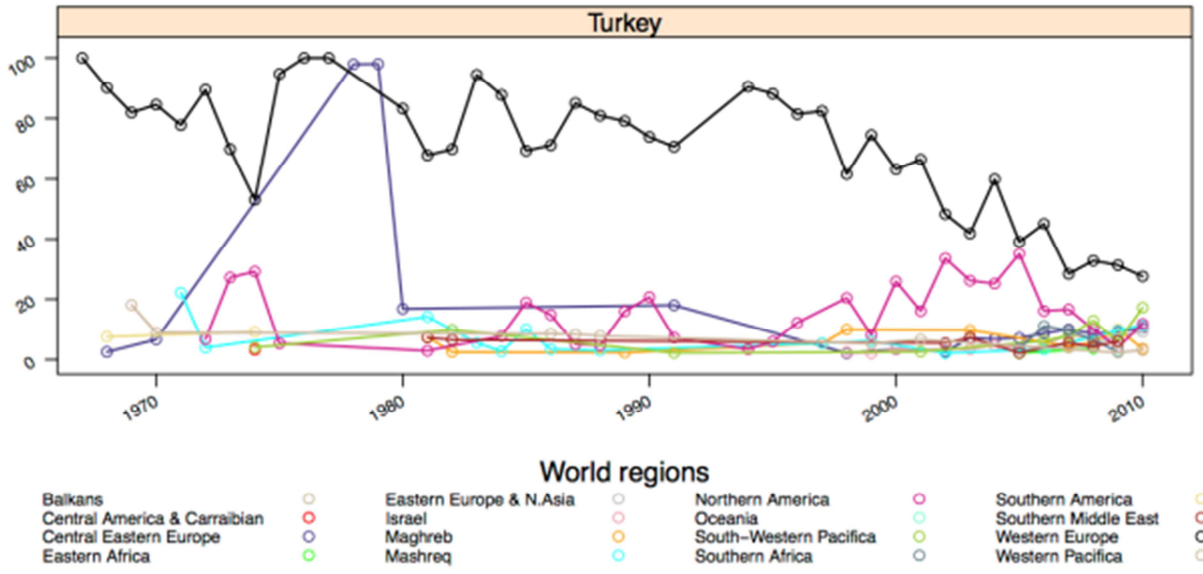
Geography of energy trade of the Balkans countries neighbouring EU, by world regions, 1967 – 2010.



Geography of energy trade of the Eastern Europe & N.Asia countries neighbouring EU, by world regions, 1967 – 2010.



**Geography of energy trade of the Turkey countries neighbouring EU, by world regions, 1967 – 2010**



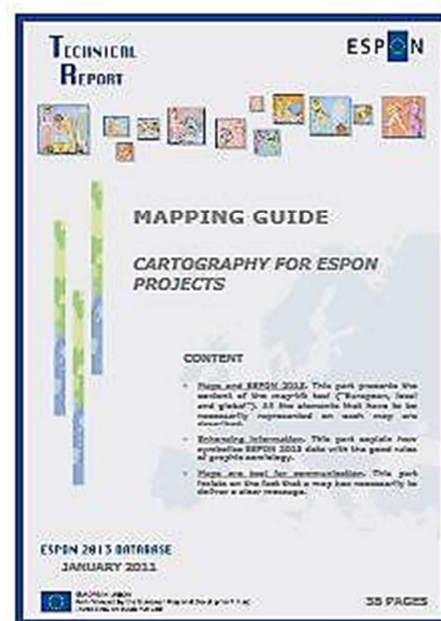
## 6. Maps: Mapping guide

### Introduction

This document presents all the mapping recommendation for the ITAN project. Adhere to these rules will allows to create coherence & harmonisation between all the cartographic production.

This guide also allows to be sure each members of the project respect the mapping recommendation of ESPON express in the response to the Interim Report.

This mapping guide presents only the mapping characteristics particular to ITAN project. Concerning all information or help about cartography method and general mapping rules of ESPON, refer to the ESPON mapping guide.



Link to download the ESPON mapping guide:

[http://w.espon.eu/export/sites/default/Documents/ToolsandMaps/ESPON2013Database/2.7a\\_TR\\_Map\\_ping\\_guide\\_internal.pdf](http://w.espon.eu/export/sites/default/Documents/ToolsandMaps/ESPON2013Database/2.7a_TR_Map_ping_guide_internal.pdf)

The mapping production will be certainly important and eclectic. We are aware that sometimes the rules can become difficult to follow. That's why you can transgress the rules if necessary.

### 6.1. MAPKIT

#### 6.1.1 General rules

ITAN project has 6 official MAPKIT. You have to use this MAPKIT and do not forget some details:

Do not use Old version of MAPKIT

All the MAPKIT should always display a localisation zoom (except for general MAPKIT). Ex:

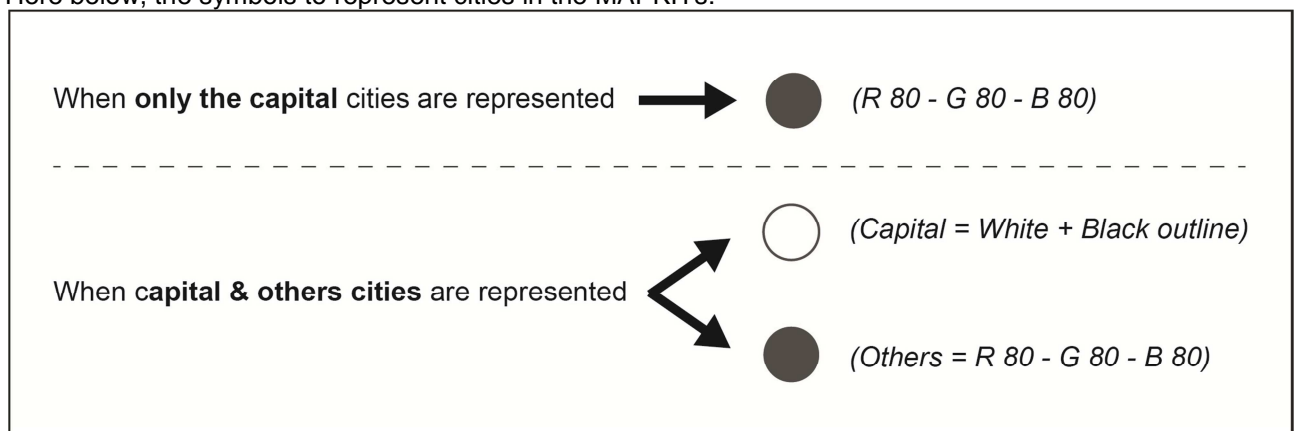


You can specify the analysed territories with a dark red as in this example.

You have to represent the fuzzy borders as they are described in this guide.

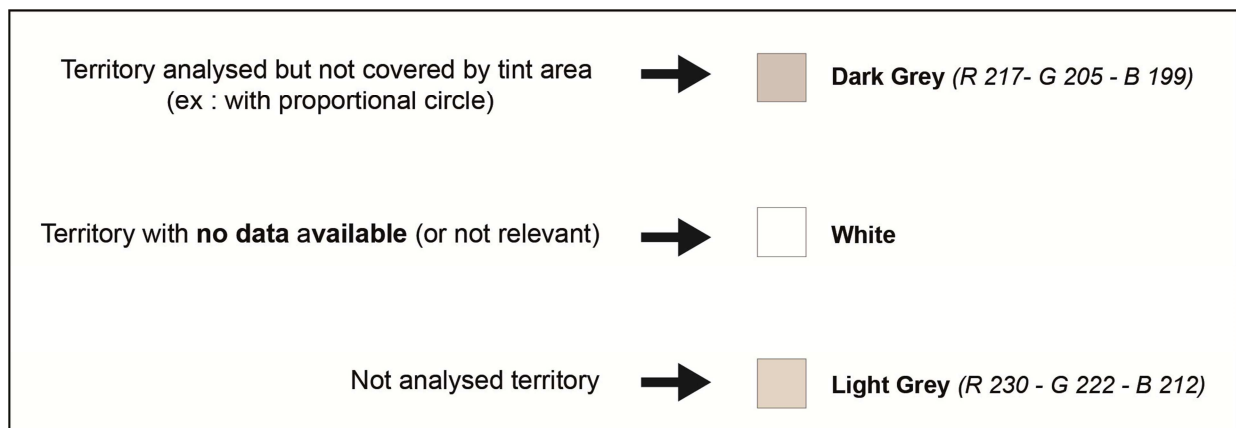
In the MAPKIT, we have added a base map of capital cities. Try most of the time to indicate the localisation of the capital cities in the maps, especially in the “neighbourhood” MAPKITs and the case study MAPKITs to help the readers.

Here below, the symbols to represent cities in the MAPKITs:

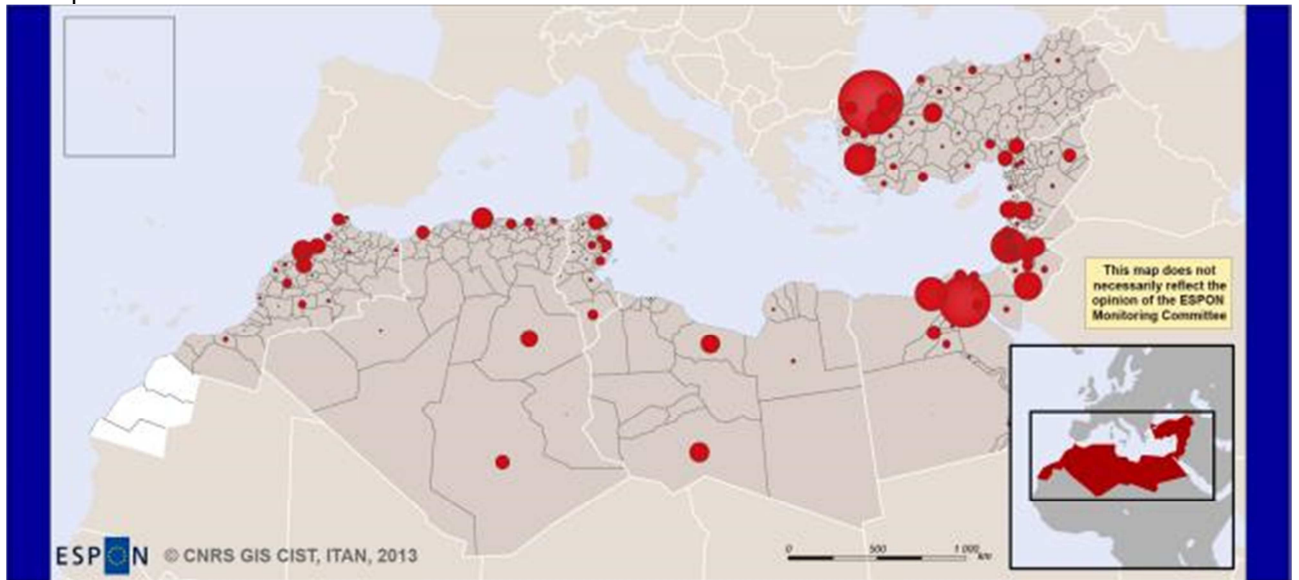


The circle size dependence, of course, of zoom level and represented data

The territories without colors graduation have to be represented as here below:



Example:

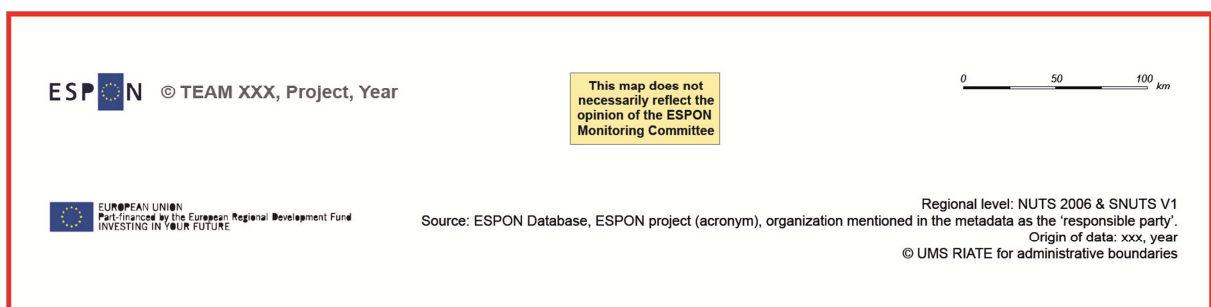


(This is only an example, that's why the fuzzy borders are not represented)



ITAN area - & other territories

All maps shall include information requested in the ESPON map templates (last version) :

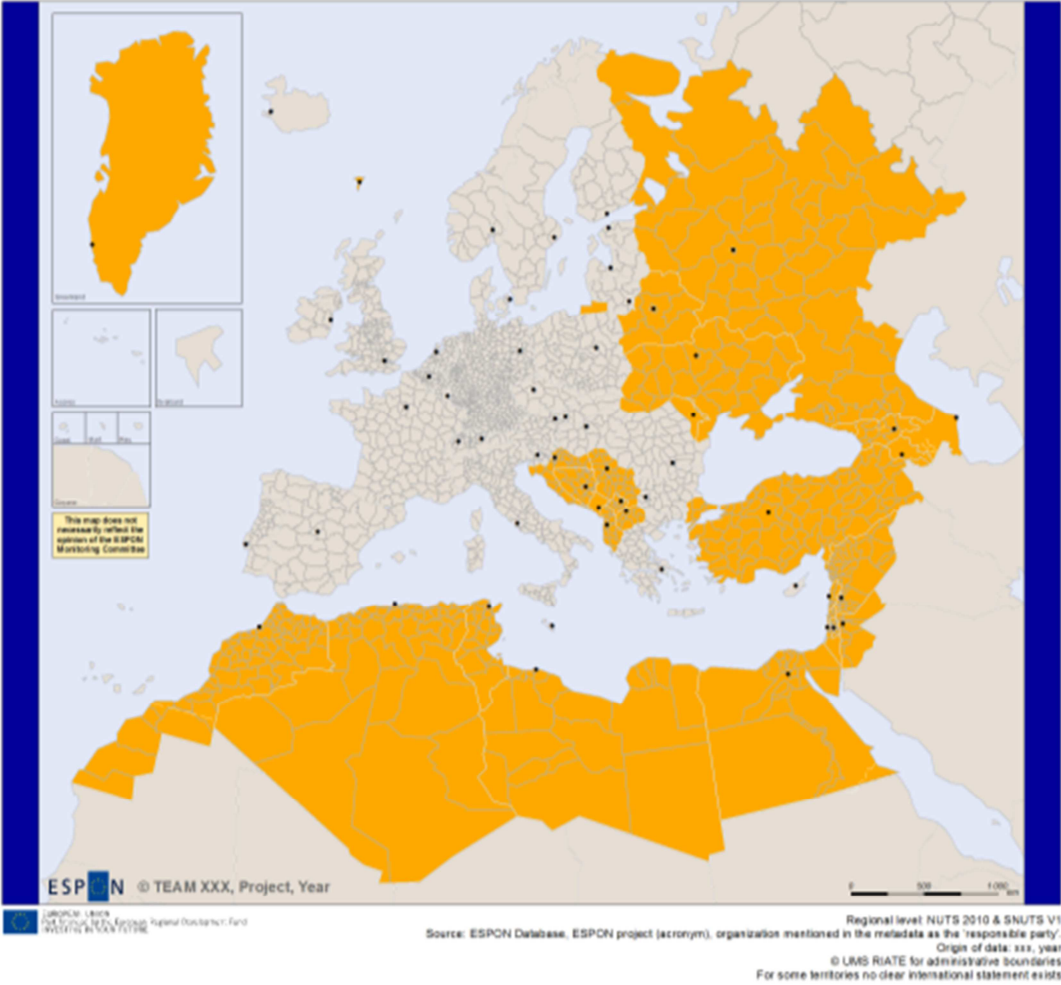




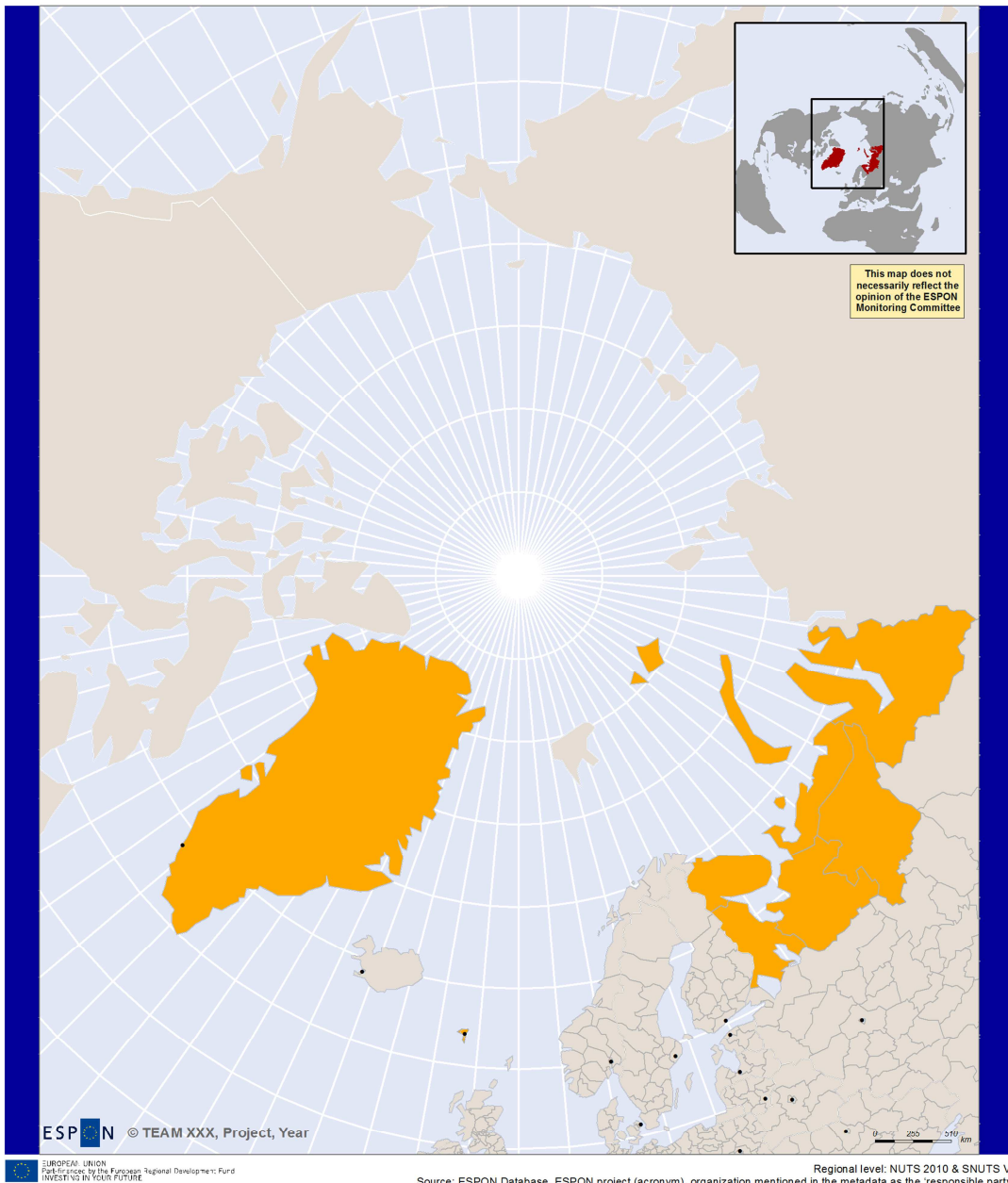
For the case studies or other zoom, you have to create your MAPKIT (see 1.8)

6.1.2 MAPKIT Overall

# Title



# Title



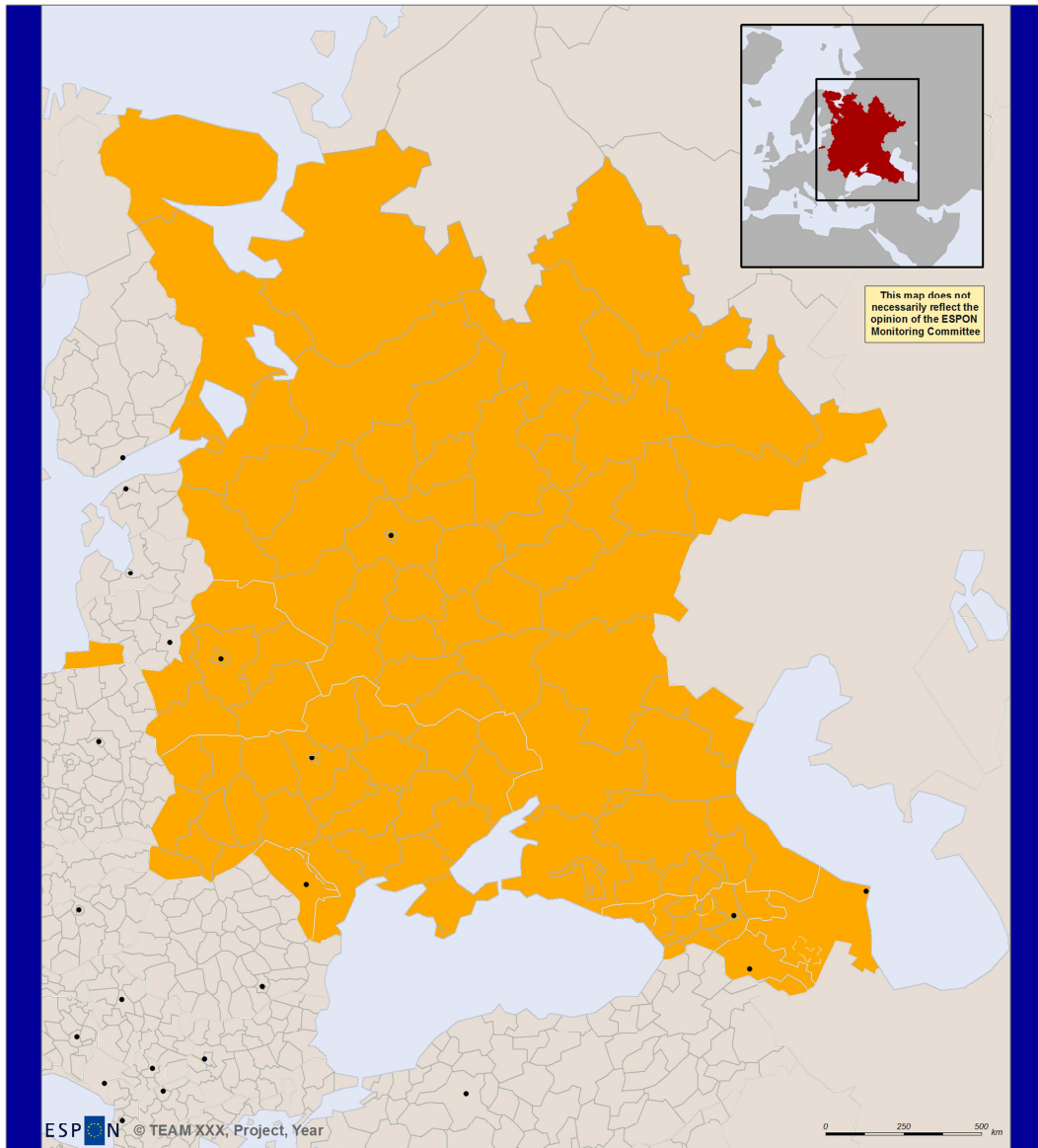
This map does not necessarily reflect the opinion of the ESPON Monitoring Committee

ESPON © TEAM XXX, Project, Year

EUROPEAN UNION  
Part-financed by the European Regional Development Fund  
INVESTING IN YOUR FUTURE

Regional level: NUTS 2010 & SNUTS V1  
Source: ESPON Database, ESPON project (acronym), organization mentioned in the metadata as the responsible party.  
Origin of data: xxx, year  
© UMS RIATE for administrative boundaries

# Title

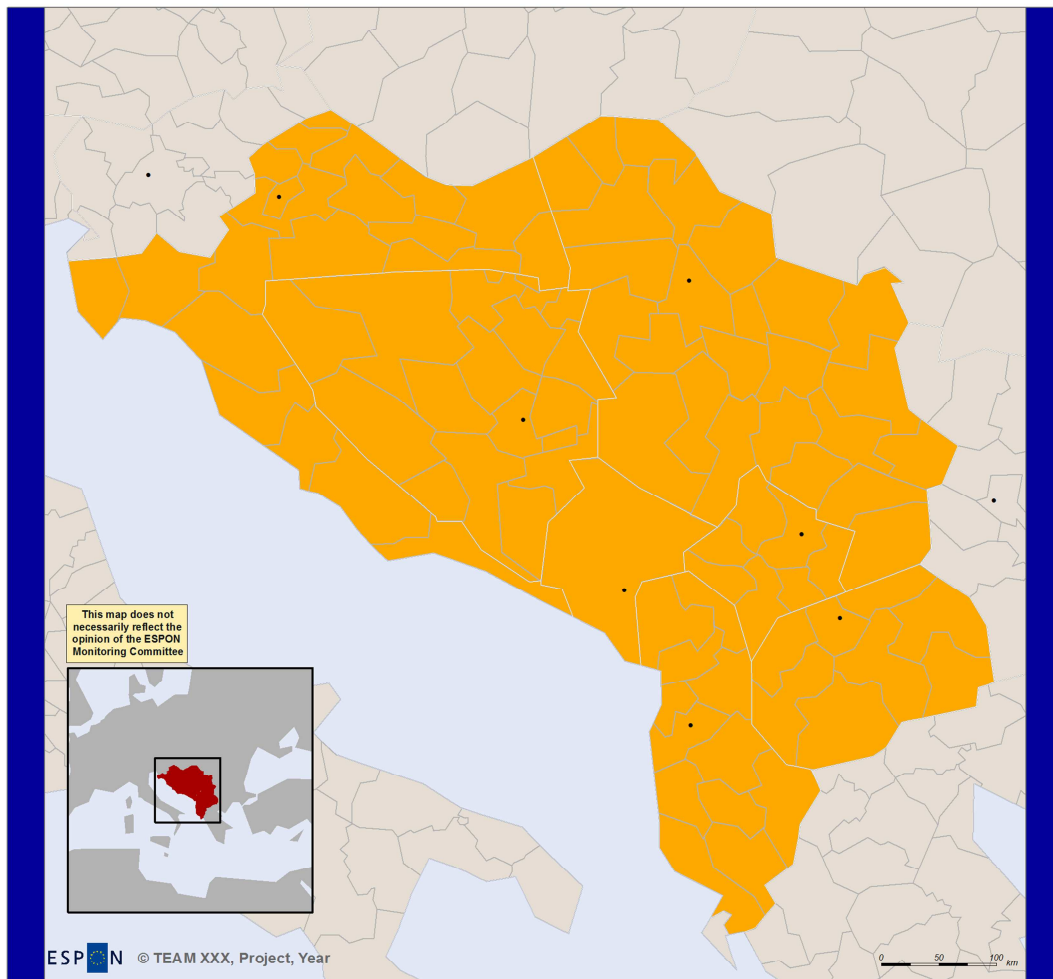


EUROPEAN UNION  
Partnership with the European Regional Development Fund  
INVESTING IN YOUR FUTURE

Regional level: NUTS 2010 & SNUTS V1  
Source: ESPON Database, ESPON project (acronym), organization mentioned in the metadata as the 'responsible party'.  
Origin of data: xxx, year  
© UMS RIATE for administrative boundaries

## 6.1.5 MAPKIT zoom Western Balkans

# Title

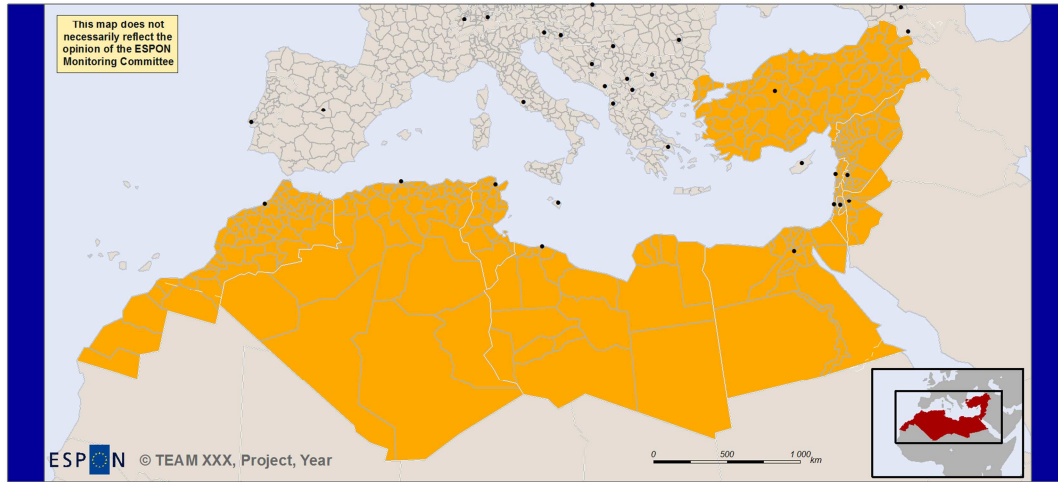


EUROPEAN UNION  
FOR GROWTH BY THE EUROPEAN REGIONAL DEVELOPMENT FUND  
INVESTING IN YOUR FUTURE

Regional level: NUTS 2010 & SNUTS V1  
Source: ESPON Database, ESPON project (acronym), organization mentioned in the metadata as the responsible party.  
Origin of data: xxx, year  
© UMS RIATE for administrative boundaries

### 6.1.6 MAPKIT zoom South-narrow

## Title

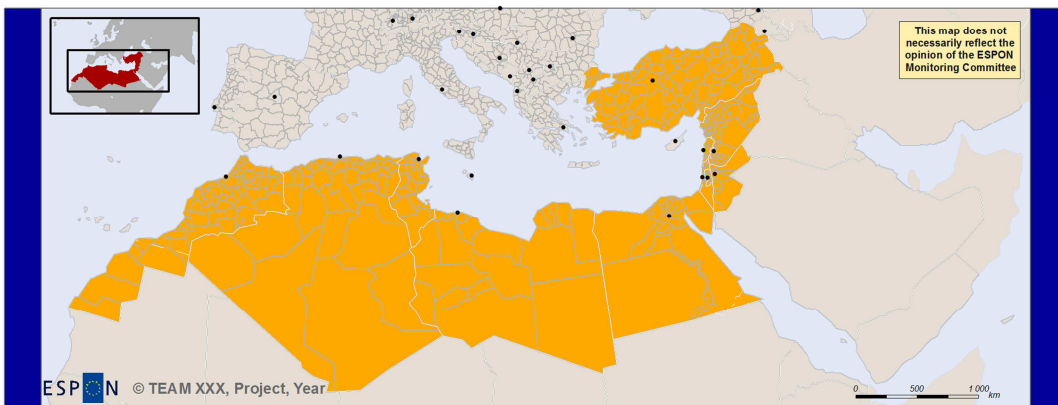


EUROPEAN UNION  
Part-financed by the European Regional Development Fund  
INVESTING IN YOUR FUTURE

Source: ESPON Database, ESPON project (acronym), organization mentioned in the metadata as the 'responsible party'.  
Origin of data: xxx, year  
© UMS RIATE for administrative boundaries  
For some territories no clear international statement exists

### 6.1.7 MAPKIT zoom Wide

## Title



EUROPEAN UNION  
Part-financed by the European Regional Development Fund  
INVESTING IN YOUR FUTURE

Source: ESPON Database, ESPON project (acronym), organization mentioned in the metadata as the 'responsible party'.  
Origin of data: xxx, year  
© UMS RIATE for administrative boundaries  
For some territories no clear international statement exists

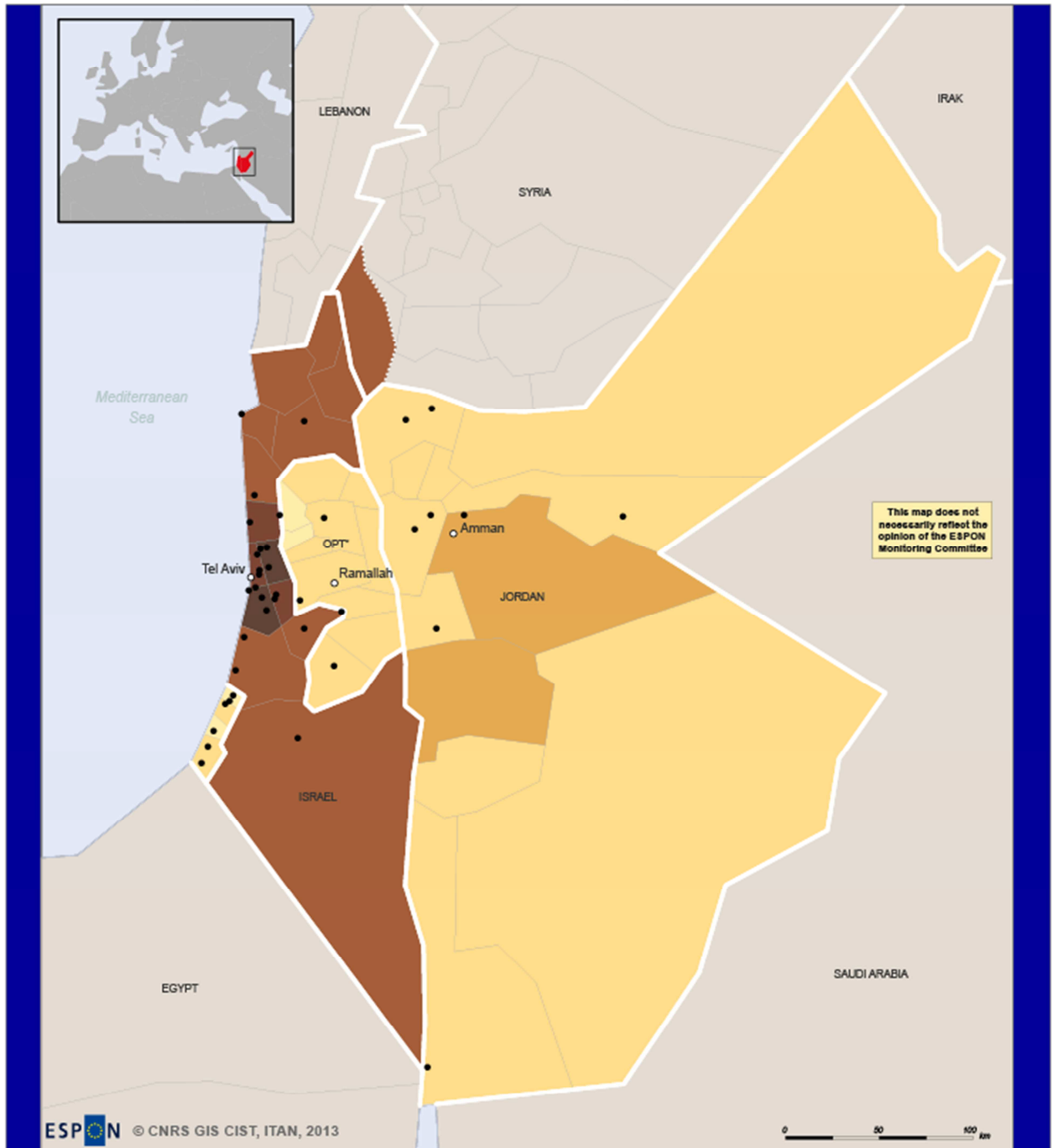
### 6.1.8 MAPKIT of case study (and other zoom)

For the case studies and other zoom map, you have to create your own MAPKIT.  
Here below, all the rules to make your own MAPKIT:

All the analyzed area has to be entirely represented in the MAPKIT, no more. Territory covered should never reach the map border (e.g. example here below)

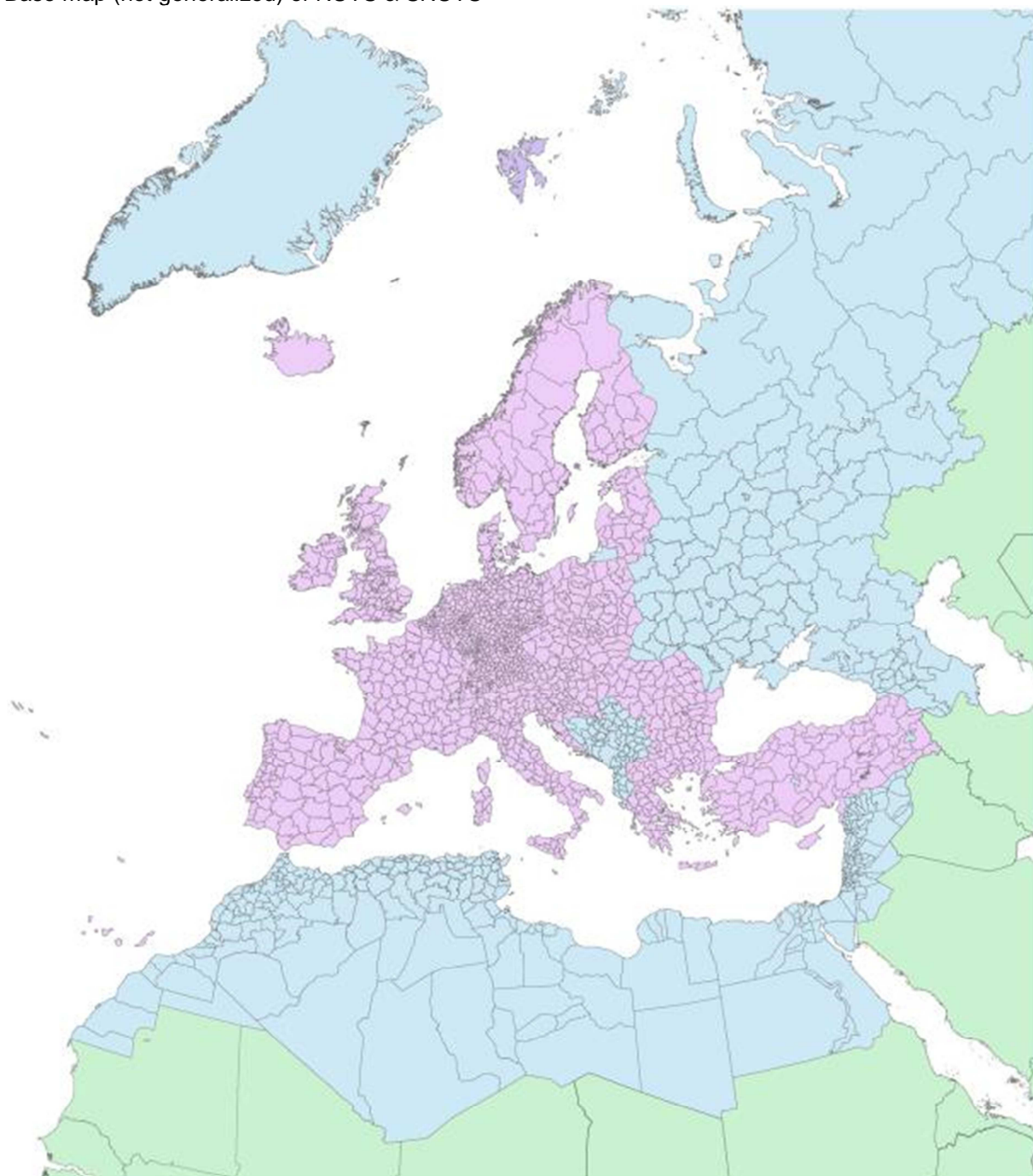
You have to add a localisation box (e.g. example here below) - It's mandatory

Add some geographic names in the map (cities, Countries, Sea...) to help the readers, because it's the first ESPON map on these areas. (e.g. example here below)



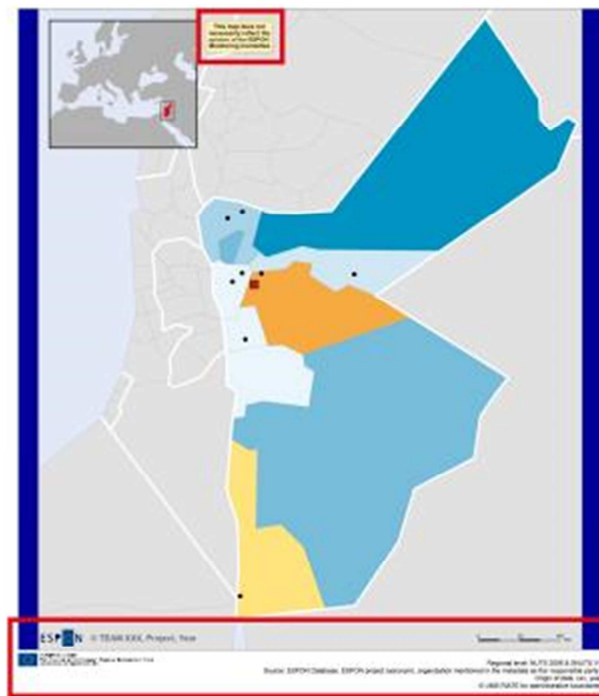
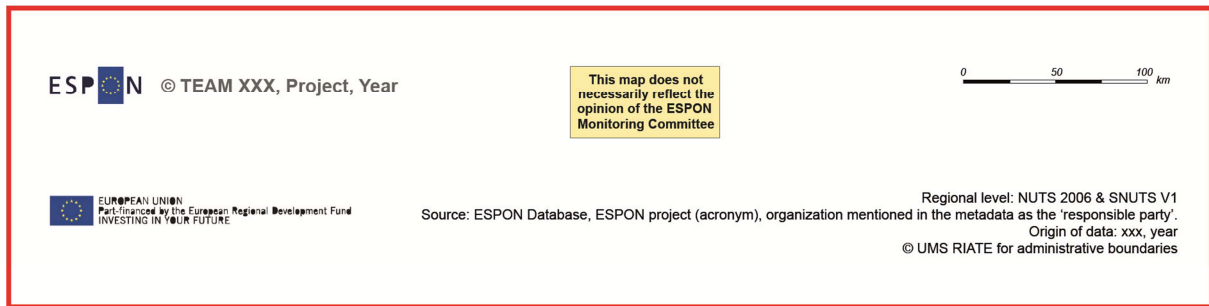
A base map of the NUTS, SNUTS and neighbourhood countries will be provided to all the ITAN team. If necessary, you can use this shape to make your own MAPKIT for case studies. But be careful, this base map is really not generalized, so you can't use it on a small scale.

Base map (not generalized) of NUTS & SNUTS



Both sources of the base map are: Eurogeographics & GADM (Global Administrative Boundary).

All your own MAPKITS have to include information requested in the ESPON map templates:



## 6.2. Specific ITAN mapping

### 6.2.1 Fuzzy borders

There are several kinds of fuzzy borders in the ITAN study area. In the following table, we have listed all the fuzzy borders in the ITAN area. We precise: who control the problematic territory? Who claim this territory? What kind of conflict is it? And the international position (EU or UN or International Court of Justice):

A base map of fuzzy borders (with the associated style) is including in the MAPKITS

Here below, the choices of fuzzy borders representation:



Fuzzy Border	Territory controlled by ...	Claim by...	Type of issue	International position :		Representation in ITAN maps		
<b>Kosovo</b>	Kosovo	Serbia	Secession	Kosovo	<b>ICJ</b>	<b>ESPON Rule</b>		<b>0,15 pts</b>
<b>Abkhazia</b>	Republic of Abkhazia	Georgia	Secession	Georgia	<b>EU</b>	White dotted line (long dash)		0,30 pts
<b>Nagorno-Karabakh</b>	Nagorno-Karabakh	Azerbaijan	Secession	Azerbaijan	<b>EU</b>	White dotted line (long dash)		0,30 pts
<b>South Ossetia</b>	Republic of South Ossetia	Georgia	Secession	Georgia	<b>EU</b>	White dotted line (long dash)		0,30 pts
<b>Transnistria</b>	Pridnestrovian Moldovan Rep.	Moldova	Secession	Moldova	<b>EU</b>	White dotted line (long dash)		0,30 pts
<b>Western Sahara</b>	Morocco	Sahrawi Arab Democratic Rep.	Secession claimed	"undetermined"		White dotted line (long dash)		0,30 pts
<b>Golan Heights</b>	Israel	Syria	Occupied territory	Syria	<b>UNO</b>	White, Thin, dotted line (dot)		0,20 pts
<b>Bir Tawil</b>	Not claimed	Not claimed	Countries conflict	"undetermined"		White dotted line (long dash, two dots...)		0,30 pts
<b>Hala'ib Triangle</b>	Egypt	Sudan	Countries conflict	"undetermined"		White dotted line (long dash, two dots...)		0,30 pts

Localisation of fuzzy borders & the different kinds of representation of the fuzzy borders



## 6.2.2 Typographic rules

To create a good coherence between the maps, we need to have typographic rules. Here below, all the characteristics to follow for the text that appears in the map:

Object	Font family	Size	Font type	Color
<b>Map Title</b>	<i>Not title inside the map - It has to be added in the report</i>			
<b>Countries name</b>	Arial	5 - 6 pts	Normal block letters	Black (80%)
<b>Sea Name</b>	Arial	7 - 8 pts	Italic	Blue (R=120 - V=170 - B=210)
<b>Capital Name</b>	Arial	6 pts	Normal	Black (80%)
<b>Other cities name</b>	Arial	6 pts	Italic	Black (80%)
<b>Other text in the map</b>	Arial	Free choice	Free choice	free
<b>Scale bar</b>	Arial	4 pts	Italic	Black (100%)
<b>Title legende</b>	Arial	9 - 10 pts	Bold	Black (100%)
<b>Subtitle legend</b>	Arial	8 pts	Normal	Black (100%)
<b>Other text in legend</b>	Arial	6 - 7 pts	Italic (Italic -Bold)	Black (100%) or free

It will be difficult to respect perfectly these topologic standards. So in term of the map, you can adapt as you want these characteristics. But please, respect as possible the ITAN standard (Font family, hierarchical size, color...), to keep coherence.

### 6.2.3 Capitals and towns representation

We delivered a base map with capital cities. But, we will provide also another base map with all cities of more than 10 000 peoples in some neighbourhood countries.

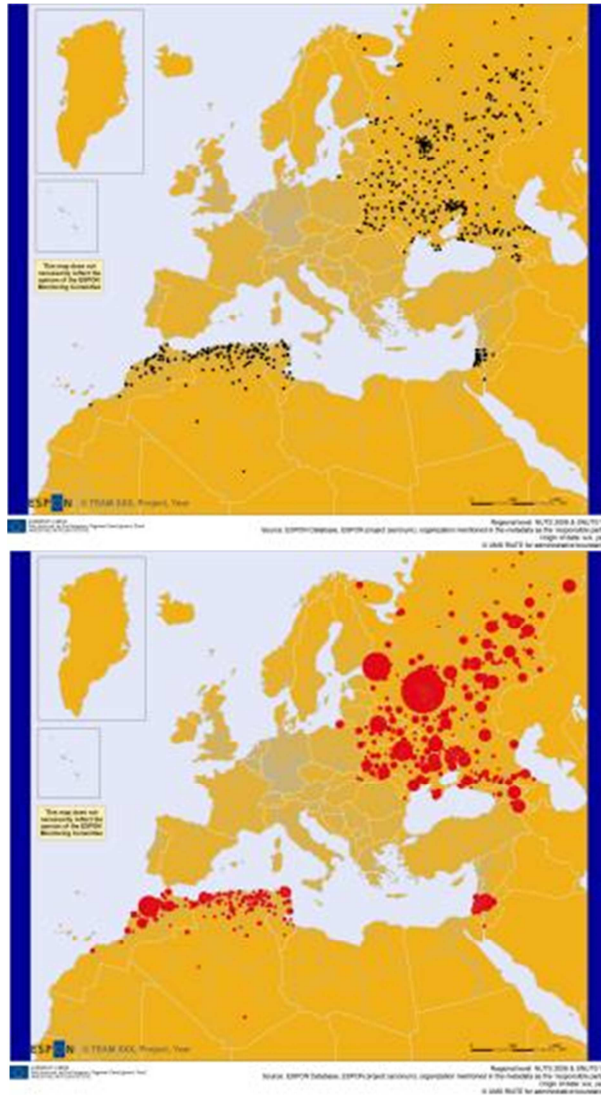
This shape file has been created in the framework of M4D ESPON project (realized by the research laboratory "Geographie Cités"). To know they built this database, refer to the report provided: "TR\_European\_Neighbouring-cities\_V10\_Draft.pdf"

In this database, each city of more than 10 000 had been named, localized, and have population mass. The countries covered by this database are:

REGION	COUNTRY	DATA
<b>MAGHREB</b>	<i>Algeria</i>	<i>2008</i>
	<i>Morocco</i>	<i>2004</i>
	<i>Tunisia</i>	<i>2004</i>
<b>Middle EAST</b>	<i>Armenia</i>	<i>2004</i>
	<i>Georgia</i>	<i>2002</i>
	<i>Israel</i>	<i>2004</i>
	<i>Jordan</i>	<i>2004</i>
	<i>Palestine</i>	<i>2007</i>
<b>Eastern Countries</b>	<i>Belarus</i>	<i>2009</i>
	<i>Russia</i>	<i>2010</i>
	<i>Ukraine</i>	<i>2001</i>

Coverage of the database    Cities localised in the database



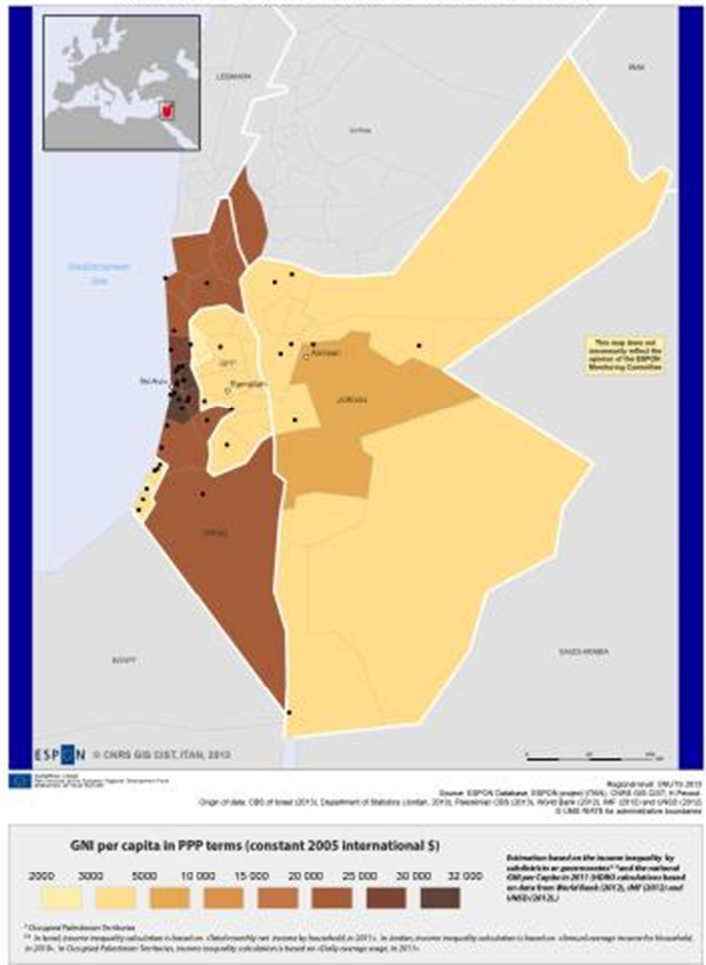


*So this shape file is uncompleted concerning the ITAN area. But it can be very interesting to make some regional analyses or simply interesting to enrich the map.*

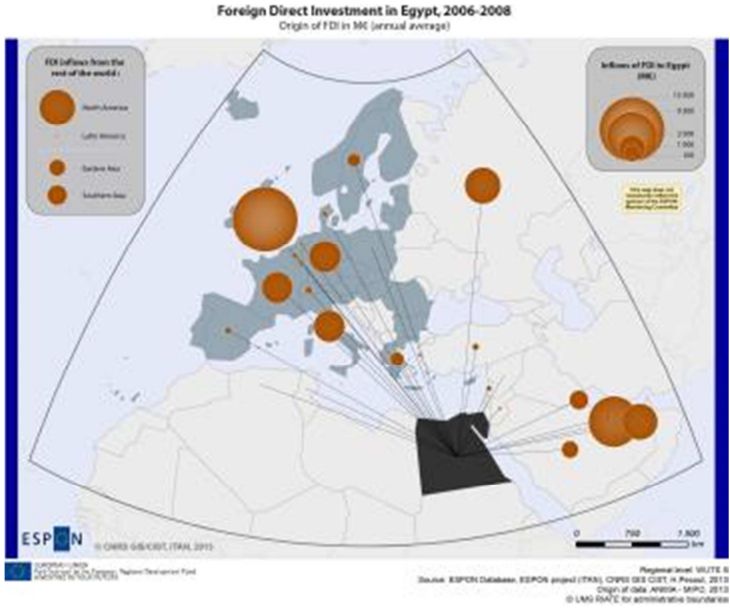
#### 6.2.4 Legend

There are two possibilities to make a legend:  
 Either, you indicate the legend below the map. Ex:

### Gross National Income per capita, in 2011 In Israel, Occupied Palestinian Territories & Jordan



Either, you indicate the legend on the map, but not on a mapped territory. Ex:



The background colours are predefined:

Outside emplate →

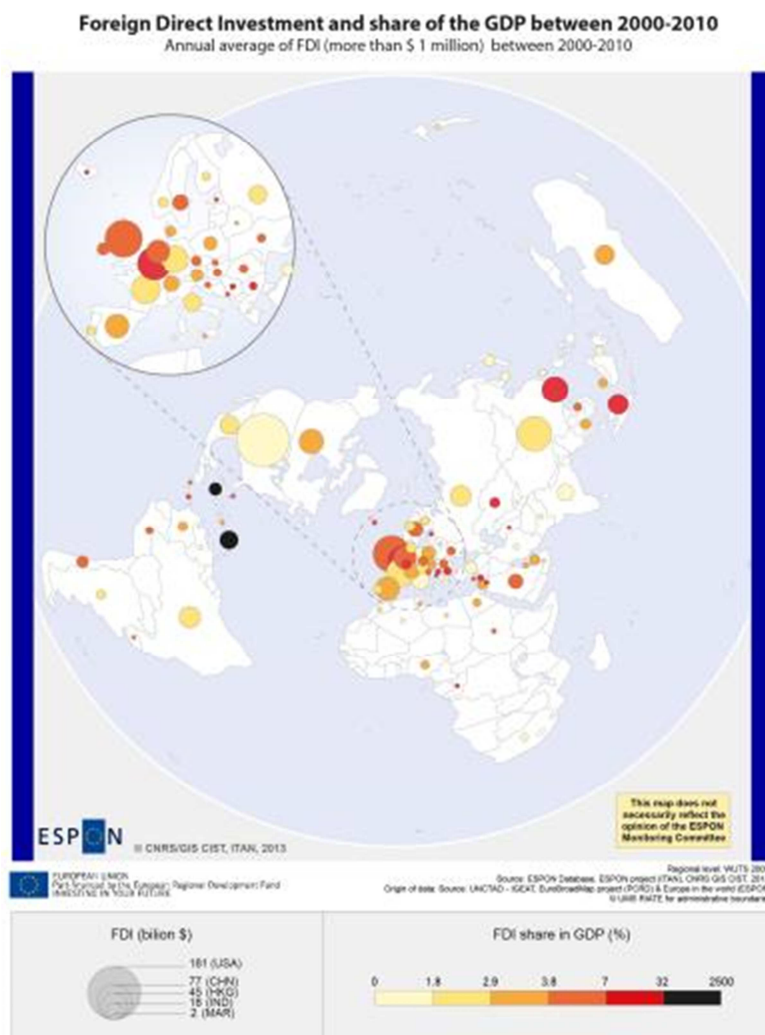
Background = Grey (R 239 - G 239 - B 239)  
 Outline = Grey (R 100 - G 100 - B 100)

*Thickness of the outline = 0,5 pts*

Inside template →

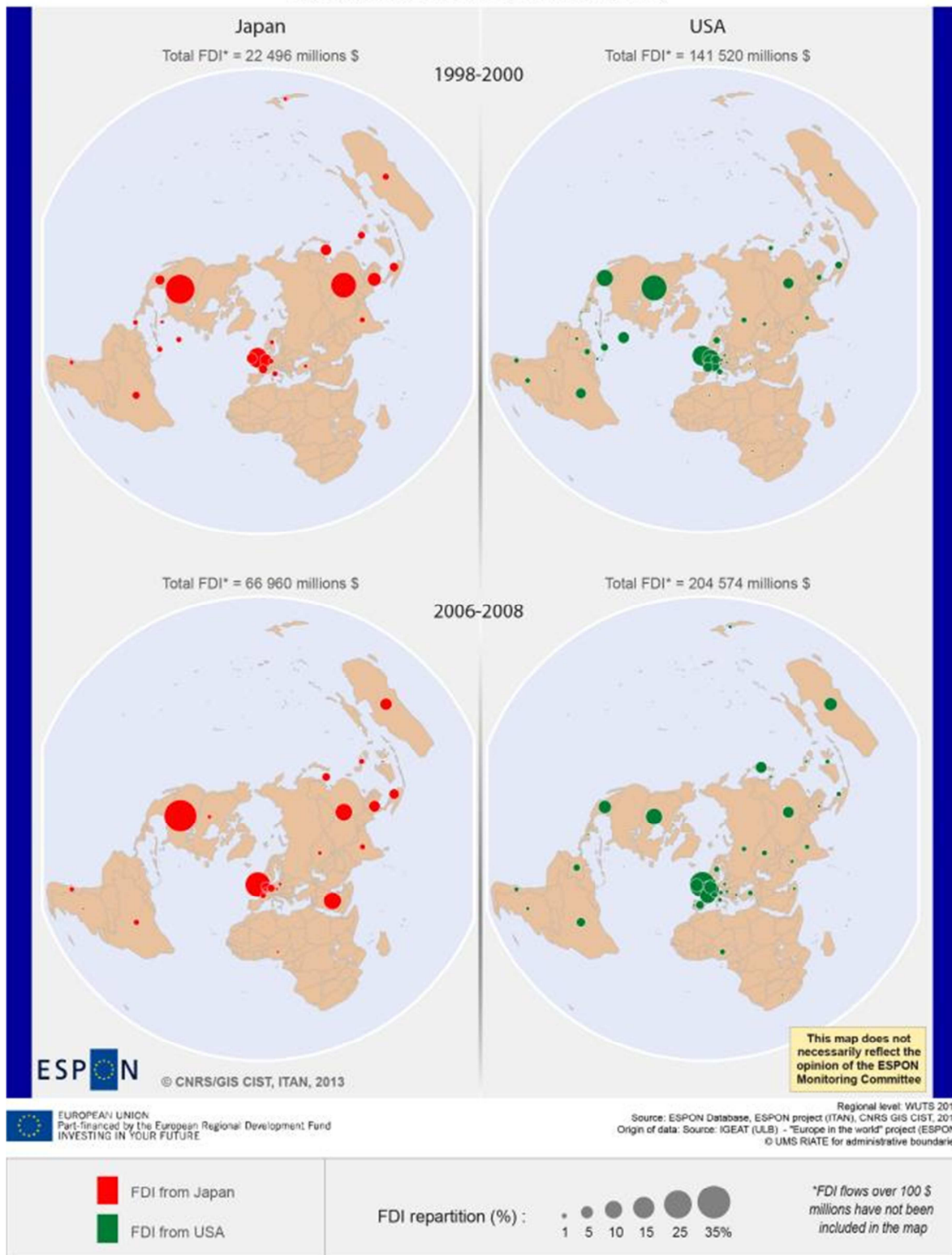
Background = Grey (R 190 - G 190 - B 190)  
 Outline = Black (R 0 - G 0 - B 0)

Some examples:



# Repartition of the Foreign Direct Investment between 1998-2008

Annual average of FDI (flows over 100 million \$)



### 6.2.5 Sources

ESPON made some recommendation about map sources in the response to the interim report:

The sources have to be really precise. You can't write a source as "various" or "diverse", but you have to enumerate all the sources.

You can't use general term like "ESPON SPACE", but you have to write : "EU 27, Iceland, Liechtenstein, Norway and Switzerland" "

If you use a region name as "USSR", you have to precise the list of the countries targeted

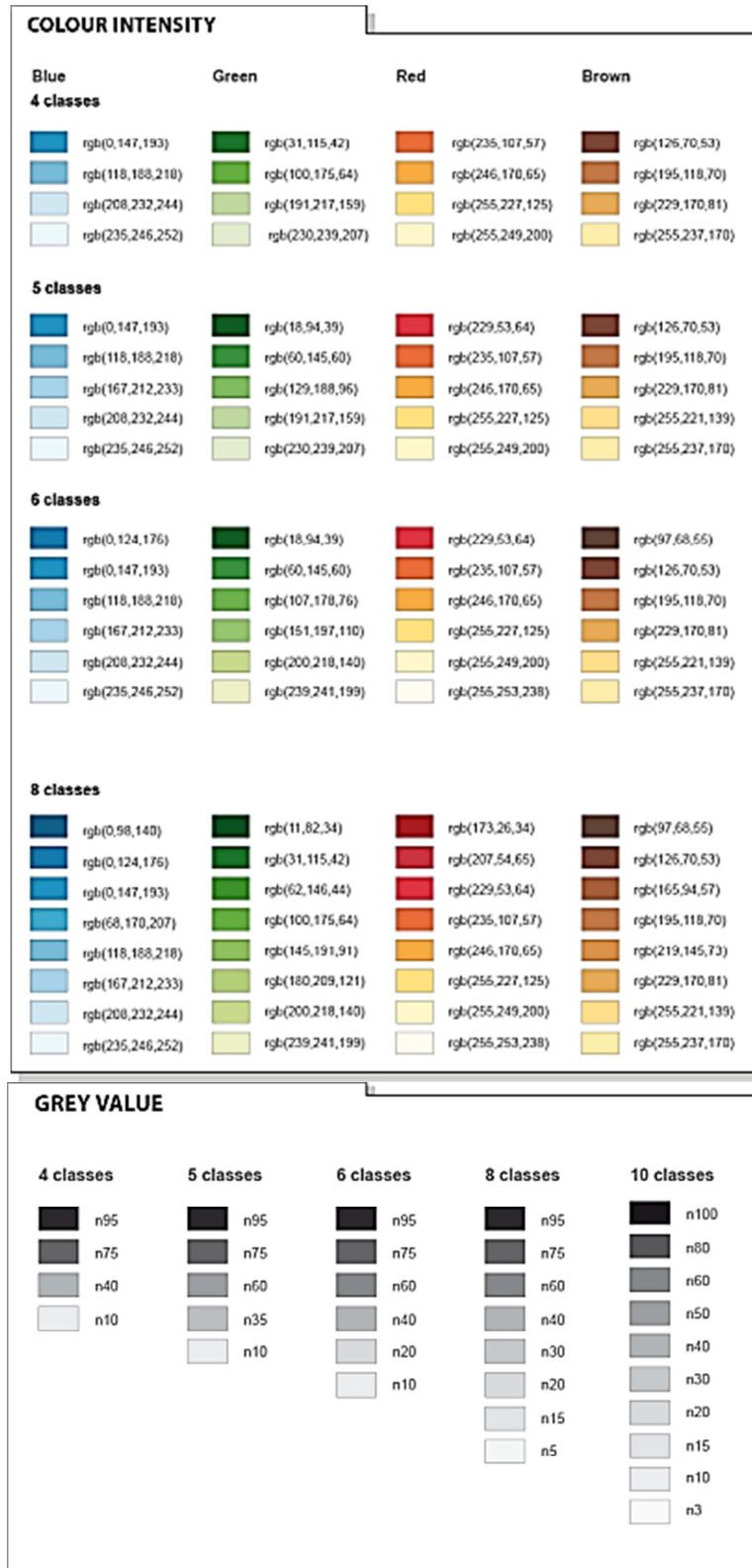
Do not forget to indicate which territorial subdivision is used in the map (ex : NUTS 2 2010 & SNUTS 2-3 2013)



























### 6.3. Colours, colour gradients and symbol predefined by ESPON

The colours intensity, colour gradients & symbol are provided by ESPON. We have to use it. Here below, the list of colour intensity, & colour gradient extract from the MAPPING GUIDE ESPON.

#### 6.3.1 Colours intensity to use

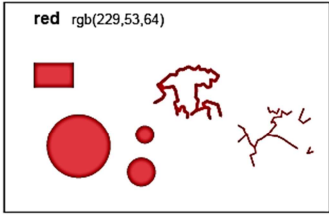
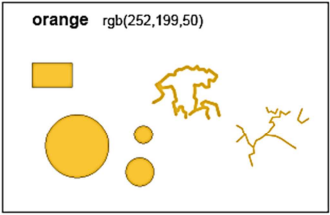
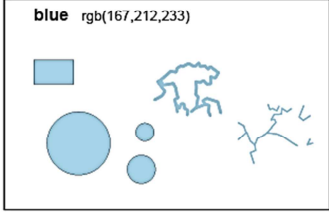
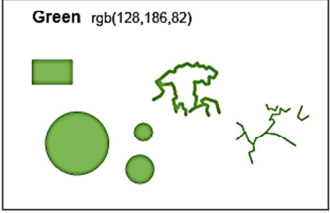


### 3.2 Opposite colours graduation to use

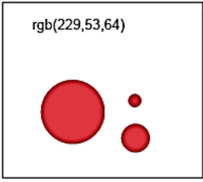
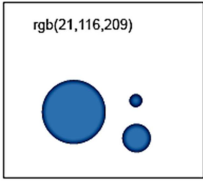
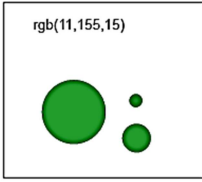
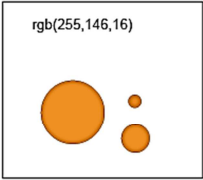
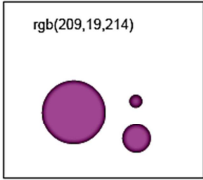
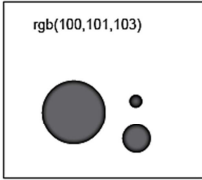
OPPOSITE COLOURS		
 rgb(0,98,140)	 rgb(90,93,122)	 rgb(32,115,43)
 rgb(0,147,193)	 rgb(114,118,159)	 rgb(66,145,44)
 rgb(118,188,218)	 rgb(147,153,199)	 rgb(145,191,92)
 rgb(235,246,252)	 rgb(196,200,226)	 rgb(222,229,157)
 rgb(252,208,211)	 rgb(249,230,239)	 rgb(247,229,196)
 rgb(234,122,133)	 rgb(240,184,210)	 rgb(250,210,147)
 rgb(196,55,79)	 rgb(236,141,181)	 rgb(244,171,42)
 rgb(142,3,17)	 rgb(226,2,128)	 rgb(175,110,22)

### 3.3 Colours & symbols to use for qualitative values

**QUALITATIVE VALUES**  
*(circles and discontinuities)*

<p><b>red</b> rgb(229,53,64)</p> 	<p><b>orange</b> rgb(252,199,50)</p> 
<p><b>blue</b> rgb(167,212,233)</p> 	<p><b>Green</b> rgb(128,186,82)</p> 

*(circles)*

rgb(229,53,64)	rgb(21,116,209)	rgb(11,155,15)
		
rgb(255,146,16)	rgb(209,19,214)	rgb(100,101,103)
		

Indicators to map & colours to use

To create coherence between the same kinds of map, you have to follow (as often as possible) the colour associated to each “family” of data: Never forget that in ESPON maps. **BLUE** means very much and/or Good & **RED** means low and/or not good. In terms of this rules, choose the good colour intensity.

TOPIC	FILE	DATASET	DATA NAME	Colors to use					
				Colors intensity		Opposite Colors graduation			
Demography D EMO	A	Population	Total population, by sex and age...	RED	or	RED	RED	BLUE	
			Urban population, by sex and age...	BROWN	or	GREEN	BROWN	GREEN	
			rural population, by sex and age...	GREEN	or	BROWN	BROWN	GREEN	
	B	Large cities	Major cities' population	BROWN	or	GREEN	RED	BLUE	
			Deaths	Death, by sex and age...	RED	or	BLUE	RED	BLUE
	C	Life expectancy	Human Life expectancy, by sex and age...	BLUE	or	RED	RED	BLUE	
			Births	Births, by sex and age...	BLUE	or	RED	RED	BLUE
			Fertility rate / Number of childbearing age...	RED	or	BLUE	RED	BLUE	
			Infant mortality	infant mortality, by sex and age...	RED	or	BLUE	RED	BLUE
	D	Migration	Domestic migration, by sex and age...	RED	or	BLUE	RED	BLUE	
International migration, by sex and age...			RED	or	BLUE	RED	BLUE		
Society SOC	E	Education	Education level, by sex and age...	RED	or	BLUE	RED	BLUE	
			School enrolment	Total School enrolment, by sex and age...	RED	or	BLUE	RED	BLUE
	F	Unemployment	Total number of unemployed, by sex and age...	RED	or	BLUE	RED	BLUE	
			household income (by quintiles or deciles...)	BLUE	or	RED	RED	BLUE	
			Gross or net salary by (quintiles or deciles...)	BLUE	or	RED	RED	BLUE	
			Number of cars	BLUE	or	RED	RED	BLUE	
			retail trade turnover	BLUE	or	RED	RED	BLUE	
G	Minorities	Total number of minority groups' population (for each minority)	BROWN	or	GREEN	BROWN	GREEN		
Economy ECO	H	Active population	Total number of active population	BLUE	or	RED	RED	BLUE	
	I	Employment	Total number of working population	BLUE	or	RED	RED	BLUE	
	J	GDP	GDP total	BLUE	or	RED	RED	BLUE	
Added Value			BLUE	or	RED	RED	BLUE		
Other data OTH		Environnement		GREEN	or	BROWN	BROWN	GREEN	
		Water		BLUE	or	RED	RED	BLUE	
		Waste		BROWN	or	GREEN	BROWN	GREEN	
		FDI		BLUE	or	RED	RED	BLUE	
		Tourisme		BLUE	or	RED	RED	BLUE	
		Agriculture		GREEN	or	BROWN	BROWN	GREEN	

In ESPON maps with opposite colours, it is decided to have the following principle as guideline:  
 When combining red (warm colours) and blue or green (cold colours), **BLUE** is 'very much' and/or 'good' and **RED** is 'low' and/or 'not good'.

#### 6.4. Final deliveries

You have to provide the maps in two formats:

Image (PNG, JPEG... in high resolution, 300 dpi minimum)

Vector (AI, PDF...)

It's really important to name correctly both files (and with the same name!). Please, name the image as in these examples:

ITAN\_WorkPackage\_Team\_Number OfTheMap\_TextDesc1\_ TextDesc2\_DateOfData

Ex : ITAN\_WP6\_CIST\_3\_FDI\_EGYPT\_2008-2012

ITAN\_WP5\_EVS\_6\_CaseStudy\_BoatFlows\_1995

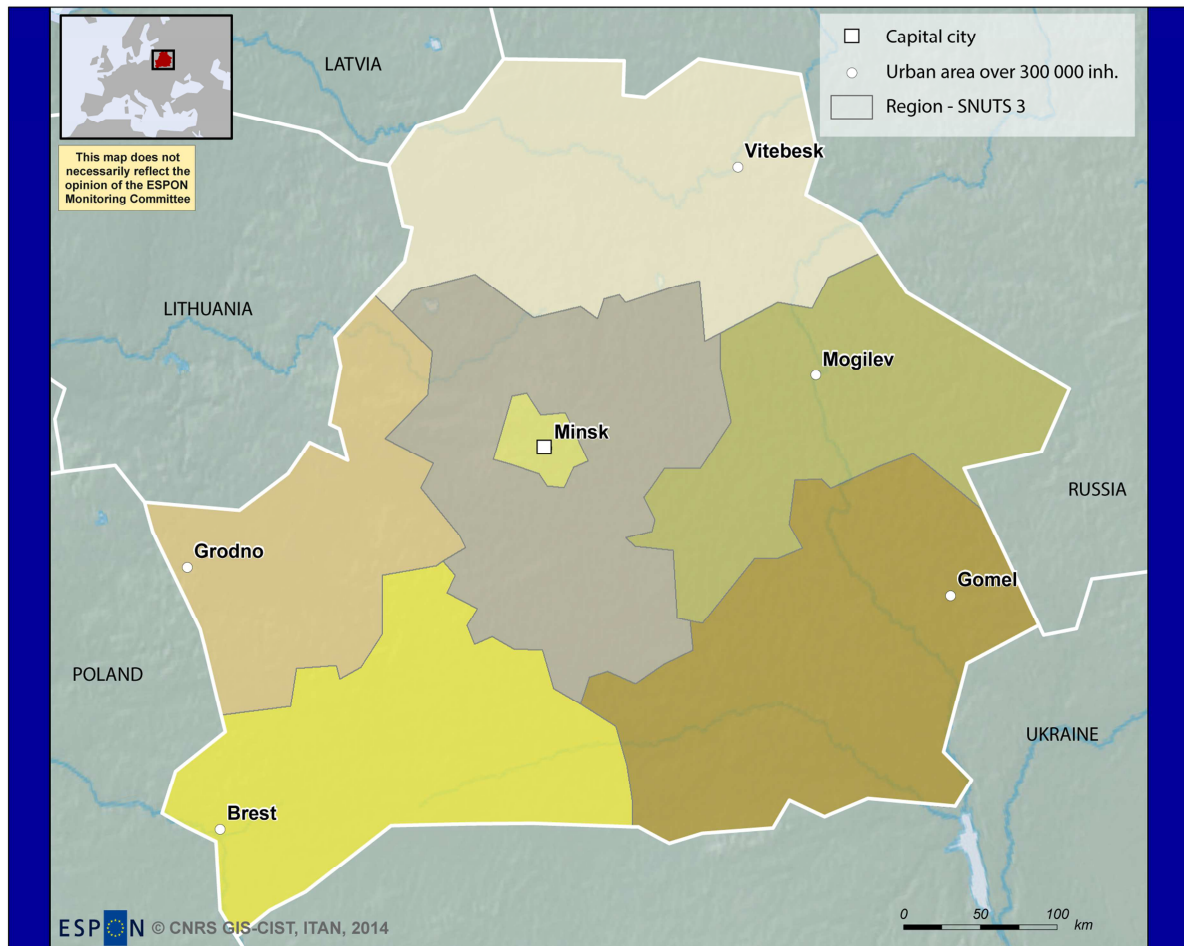
ITAN\_WP2\_MCRIT\_2\_Accessibility\_transport\_2013

If possible, every map shall be accompanied by a short description (3 to 4 lines), with the possibility of an additional longer description of app. 1500 characters. It's an ESPON recommendation.

## 7. Maps: Administrative maps of the ENC's (Oblasts, Governorates, Districts, Regions ...)

### 7.1. Eastern Neighbourhood

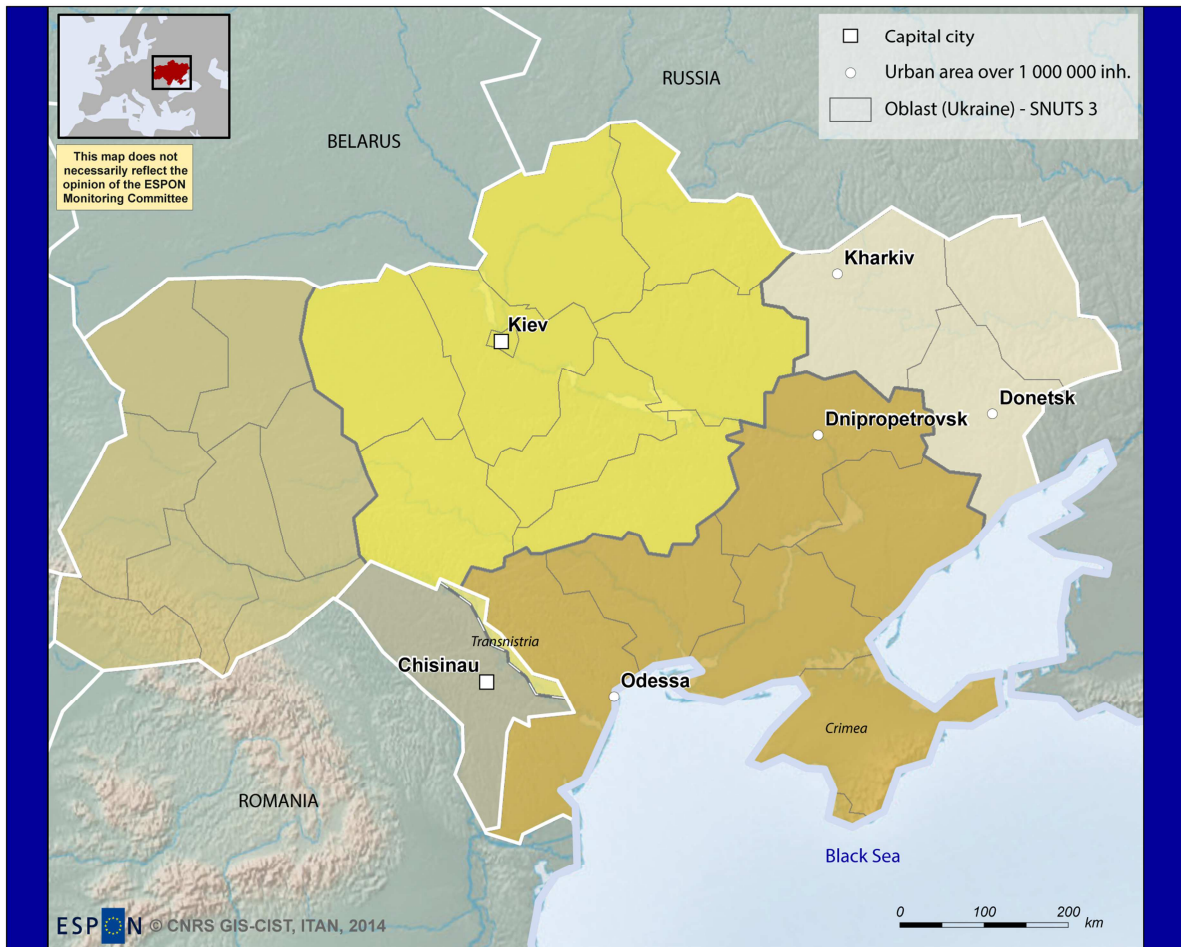
#### Belarus



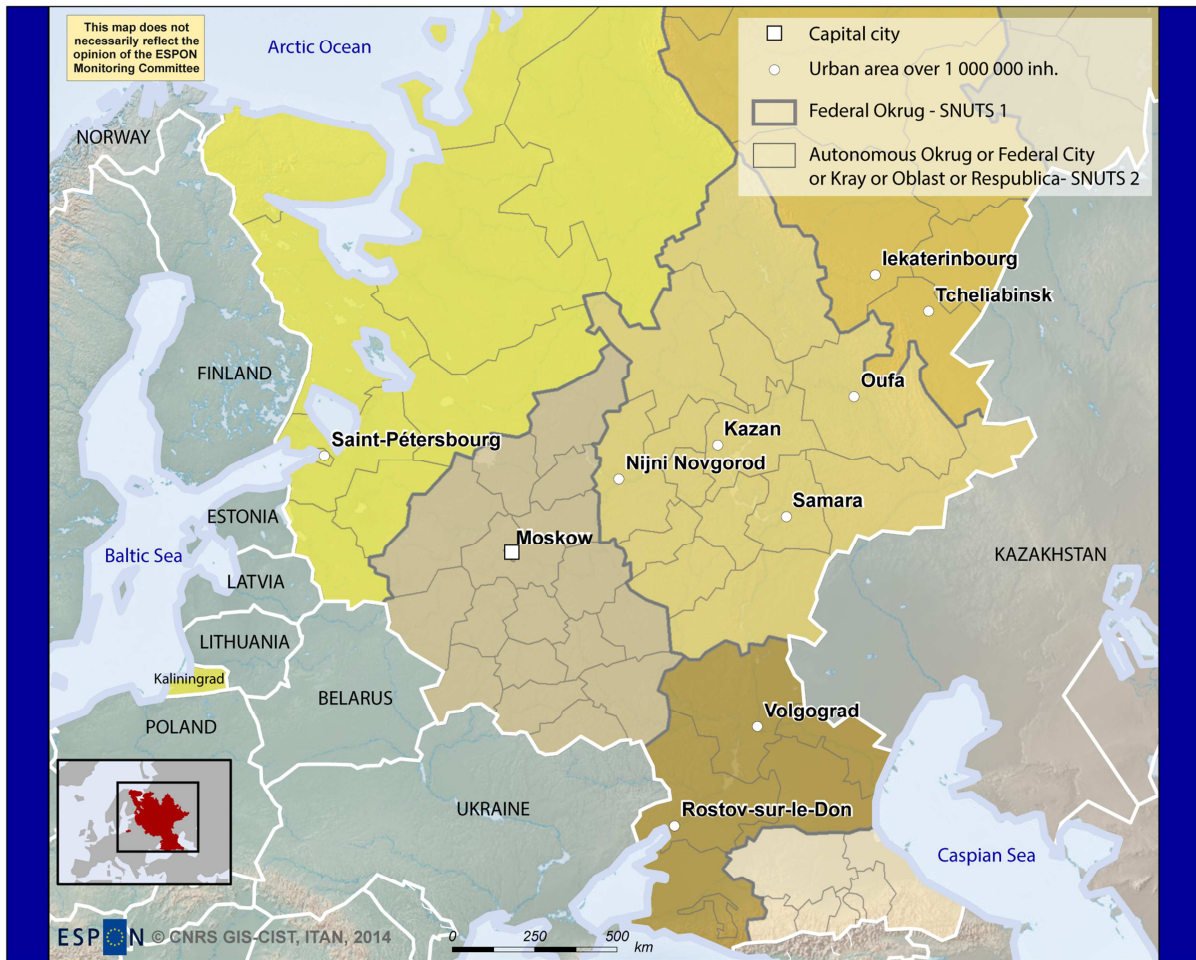
EUROPEAN UNION  
Part-financed by the European Regional Development Fund  
INVESTING IN YOUR FUTURE

Regional level: SNUTS3 V1  
Source: ESPON Database, ITAN, CNRS GIS-CIST, 2014  
Origin of data: Géographie-cités, 2013  
© UMS RIATE for administrative boundaries  
For some territories no clear international statement exists

## Moldova and Ukraine



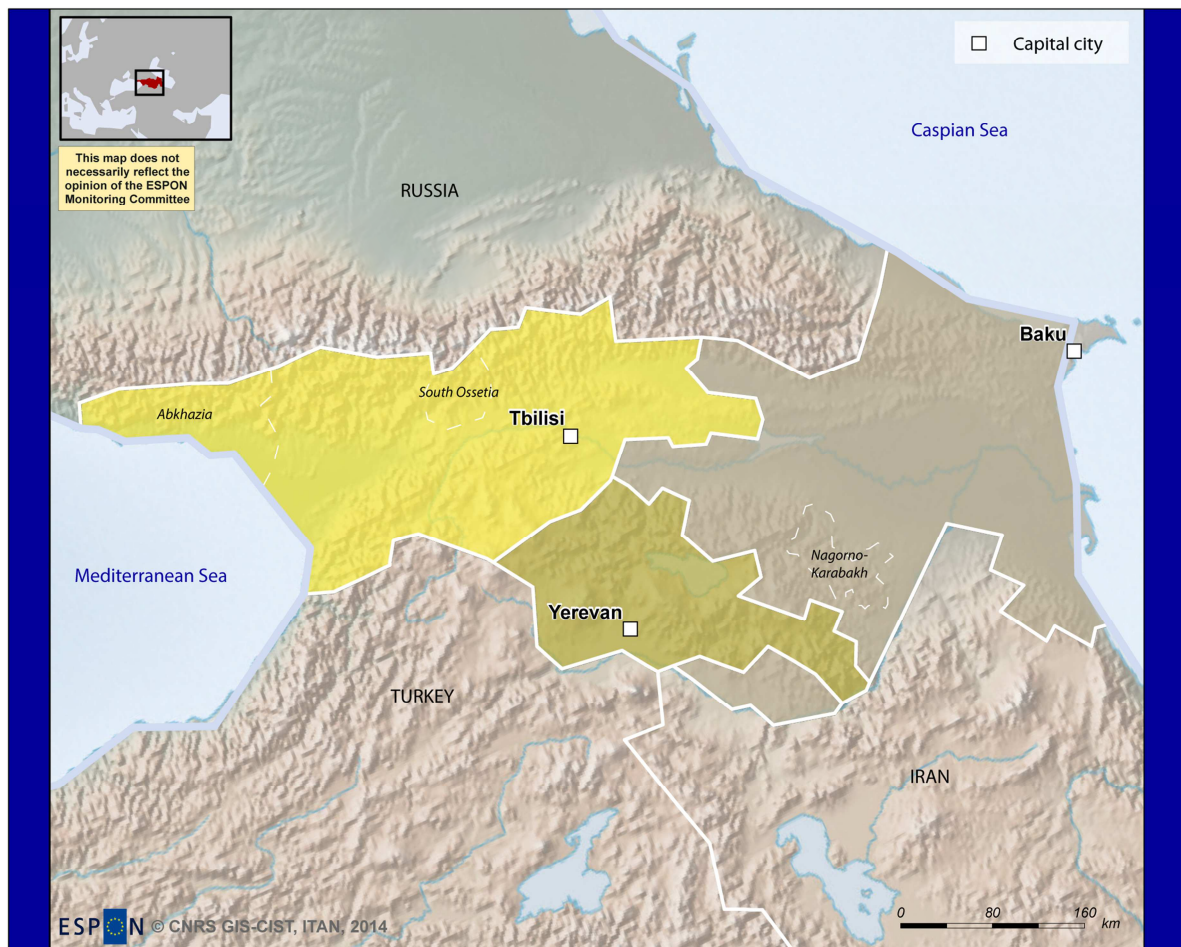
# Russia



EUROPEAN UNION  
Part-financed by the European Regional Development Fund  
INVESTING IN YOUR FUTURE

Regional level: SNUTS3 V1  
Source: ESPON Database, ITAN, CNRS GIS-CIST, 2014  
Origin of data: Géographie-cités, 2013  
© UMS RIATE for administrative boundaries  
For some territories no clear international statement exists

## Armenia, Azerbaijan and Georgia



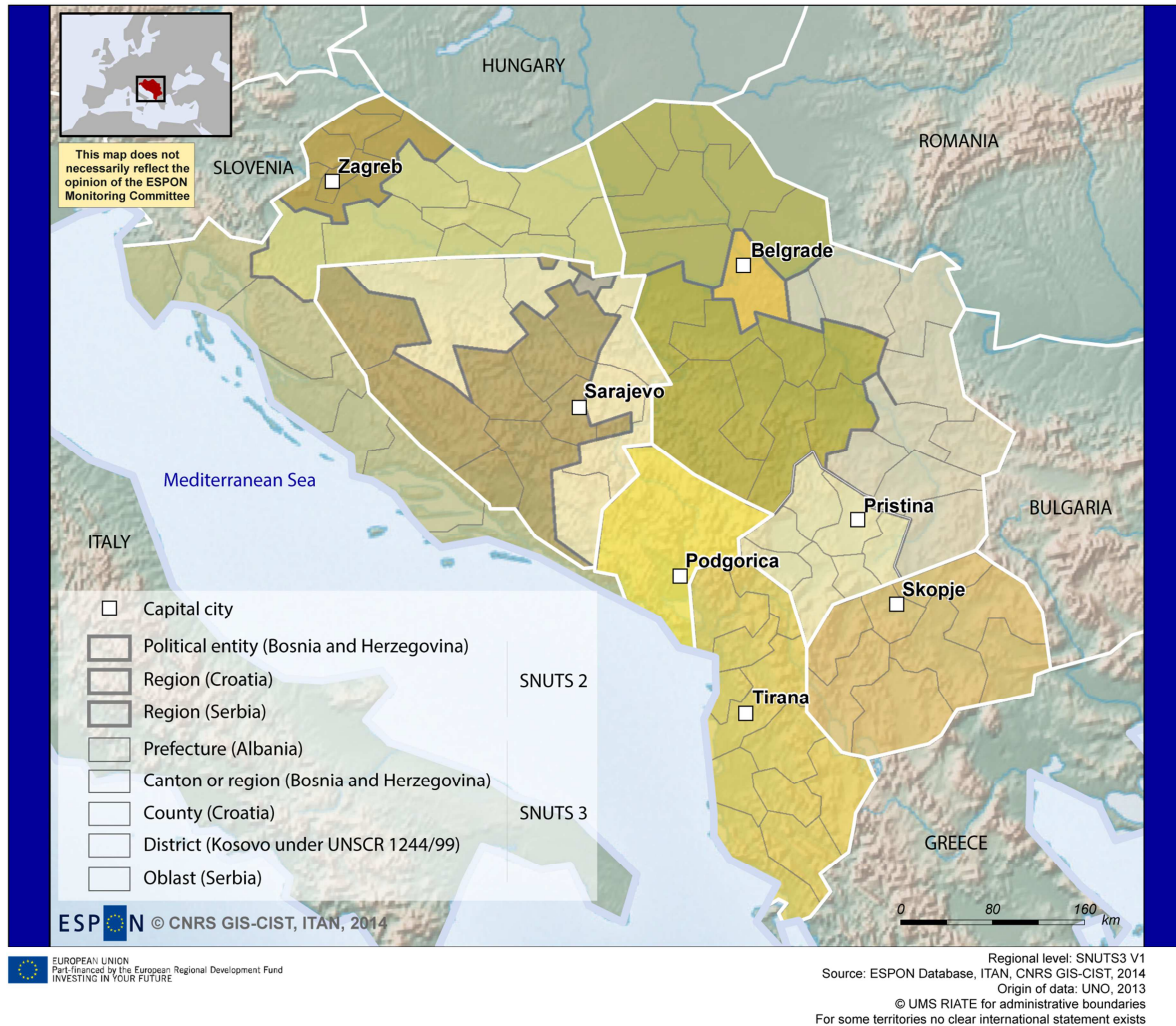
EUROPEAN UNION  
Part-financed by the European Regional Development Fund  
INVESTING IN YOUR FUTURE

Regional level: SNUTS3 V1  
Source: ESPON Database, ITAN, CNRS GIS-CIST, 2014  
Origin of data: UNO, 2013  
© UMS RIATE for administrative boundaries  
For some territories no clear international statement exists



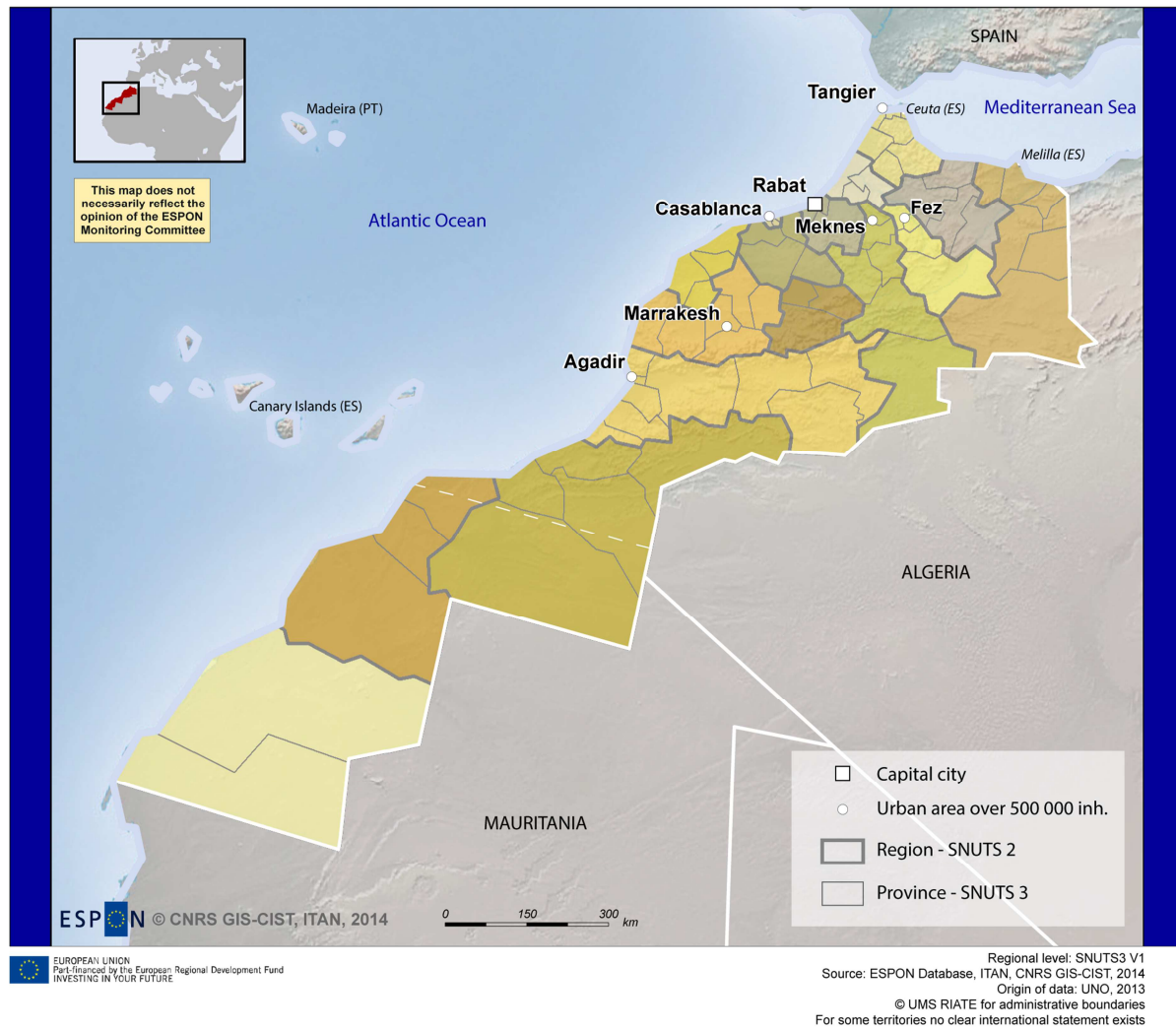
## 7.2. South-Eastern Neighbourhood

Western Balkans: **Albania, Bosnia and Herzegovina, Croatia, Former Yugoslav Republic of Macedonia, Kosovo under UNSCR 1244/99, Montenegro and Serbia**

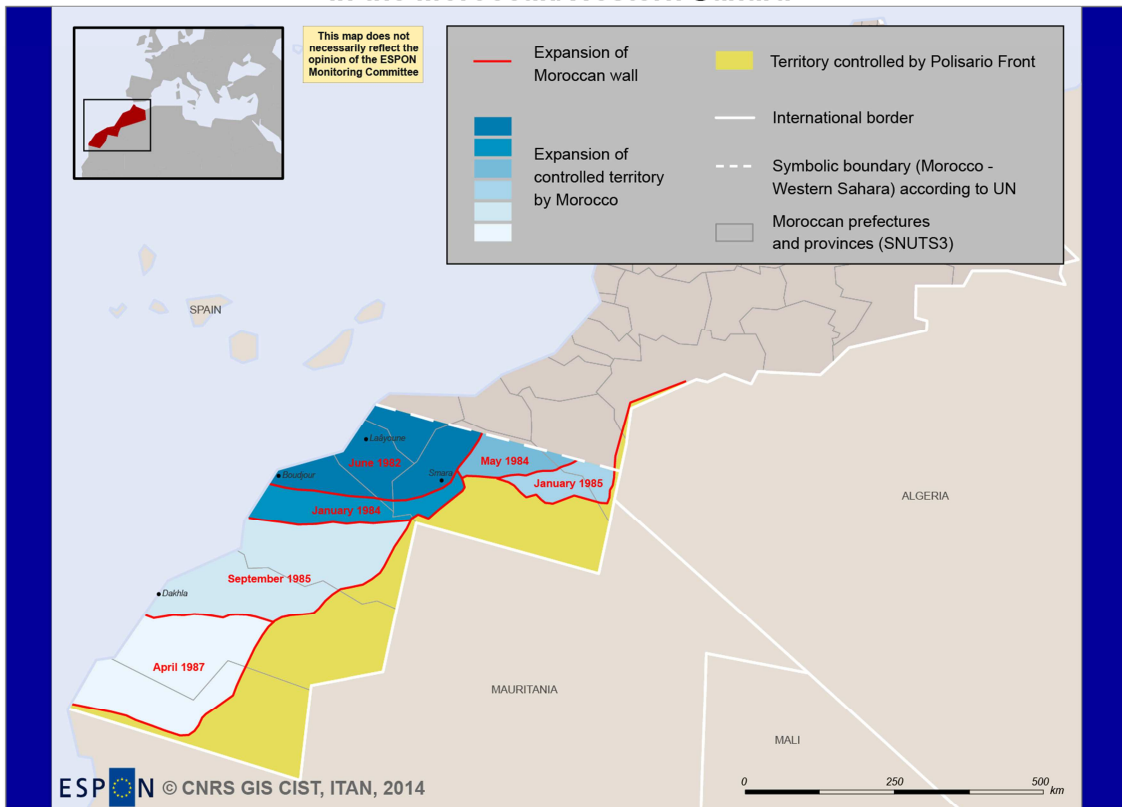


### 7.3. Mediterranean Neighbourhood

#### Morocco

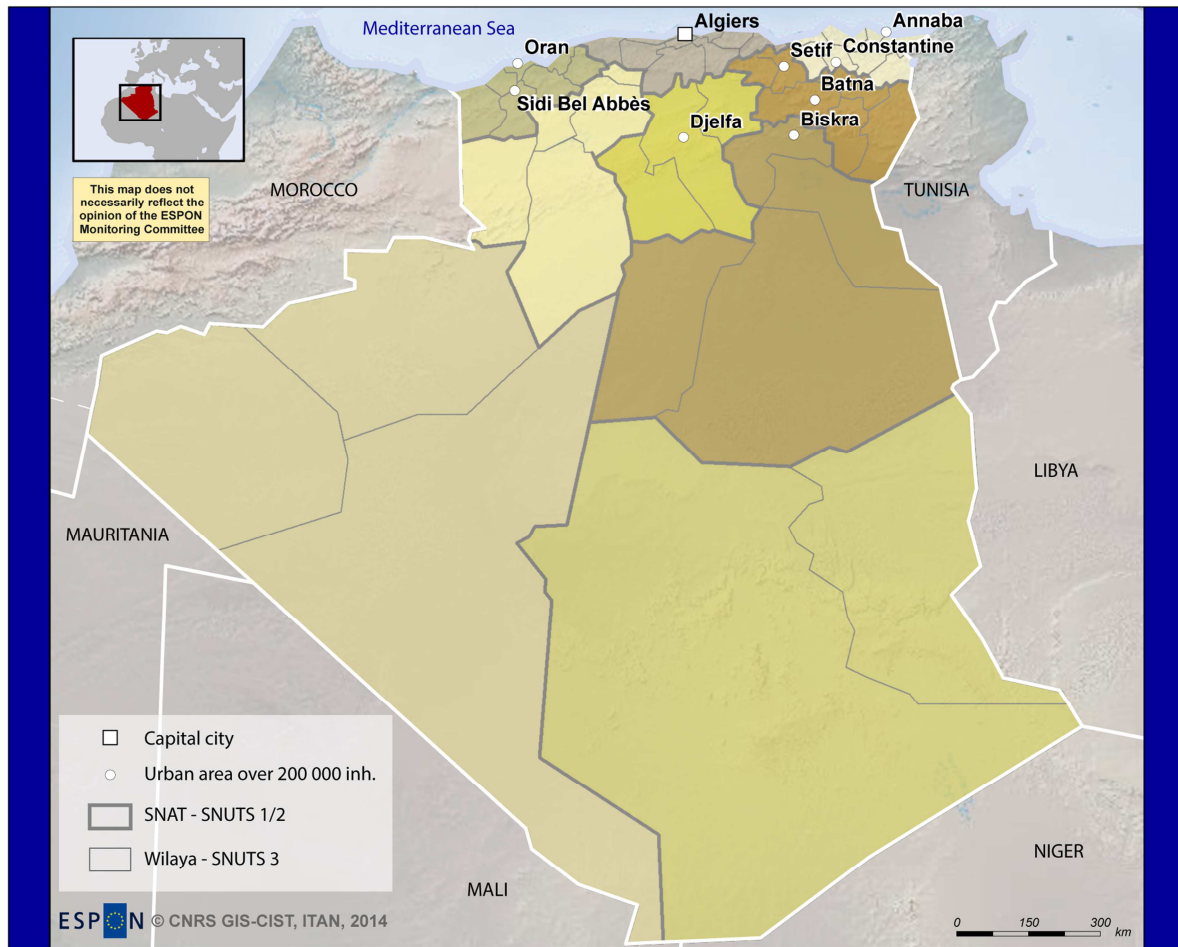


## Expansion of the controlled territory by Morocco in the Moroccan/Western Sahara



ESPON © CNRS GIS CIST, ITAN, 2014  
 EUROPEAN UNION  
 Part-financed by the European Regional Development Fund  
 INVESTING IN YOUR FUTURE

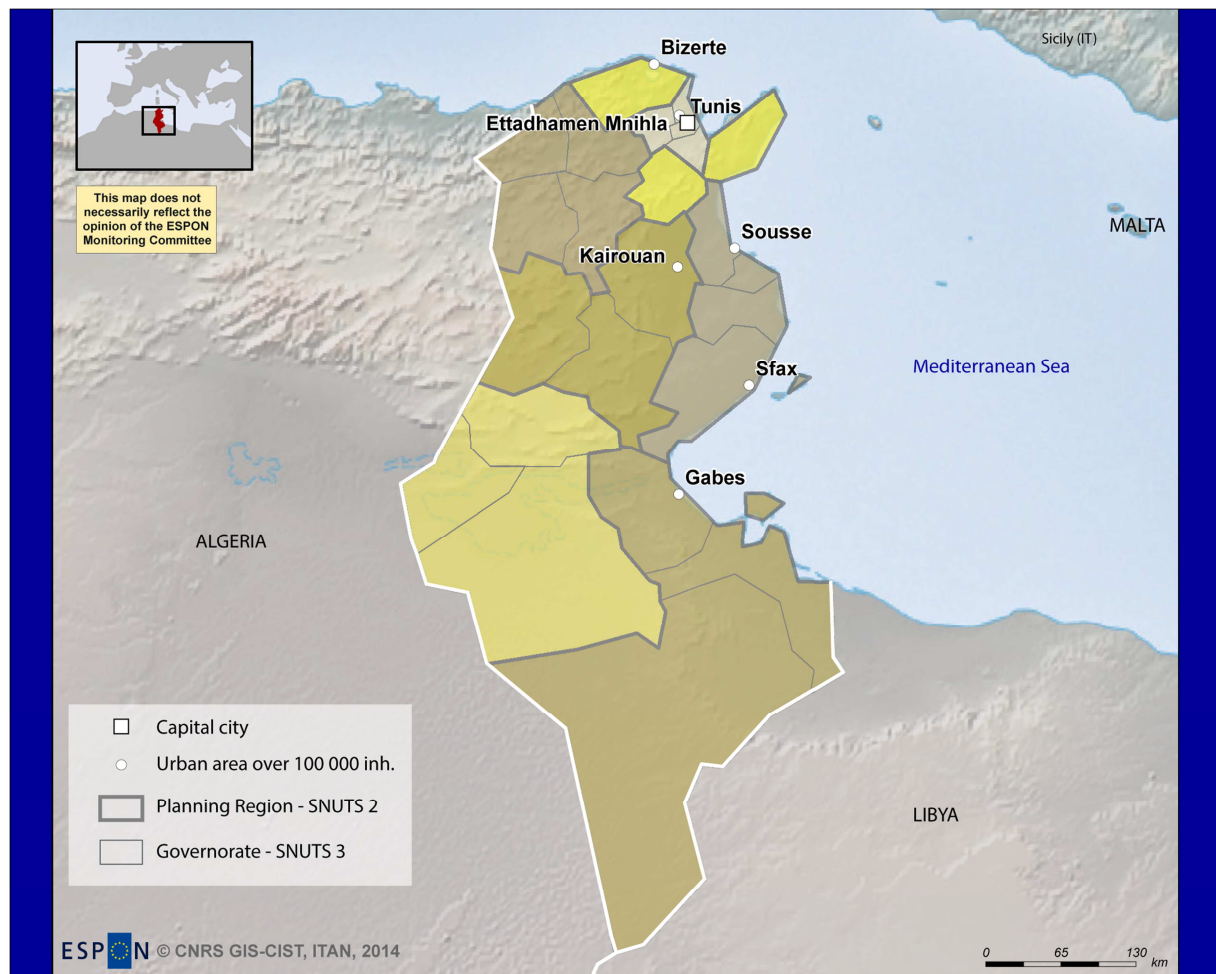
# Algeria



EUROPEAN UNION  
Part-financed by the European Regional Development Fund  
INVESTING IN YOUR FUTURE

Regional level: SNUTS3 V1  
Source: ESPON Database, ITAN, CNRS GIS-CIST, 2014  
Origin of data: Géographie-cités, 2013  
© UMS RIATE for administrative boundaries  
For some territories no clear international statement exists

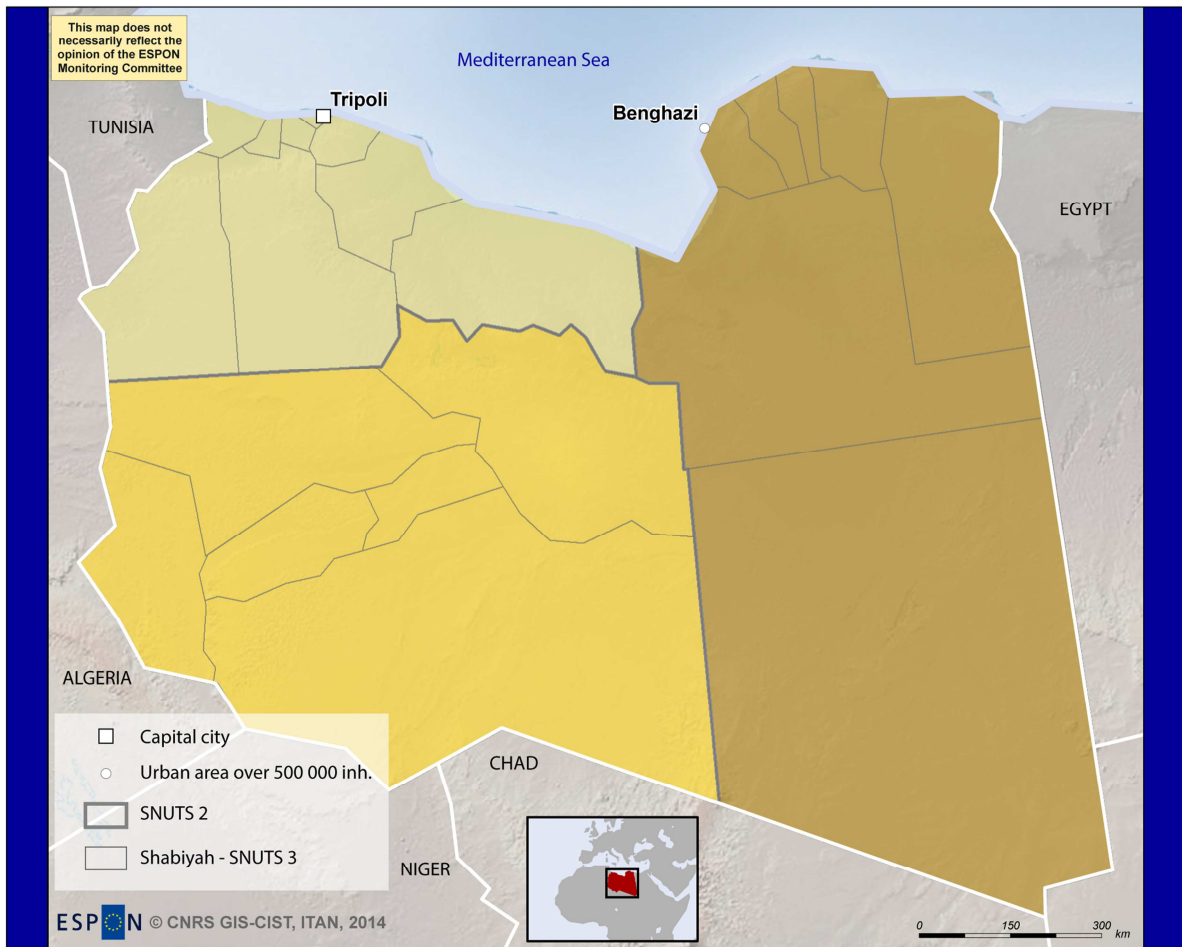
# Tunisia



EUROPEAN UNION  
Part-financed by the European Regional Development Fund  
INVESTING IN YOUR FUTURE

Regional level: SNUTS3 V1  
Source: ESPON Database, ITAN, CNRS GIS-CIST, 2014  
Origin of data: Géographie-cités, 2013  
© UMS RIATE for administrative boundaries  
For some territories no clear international statement exists

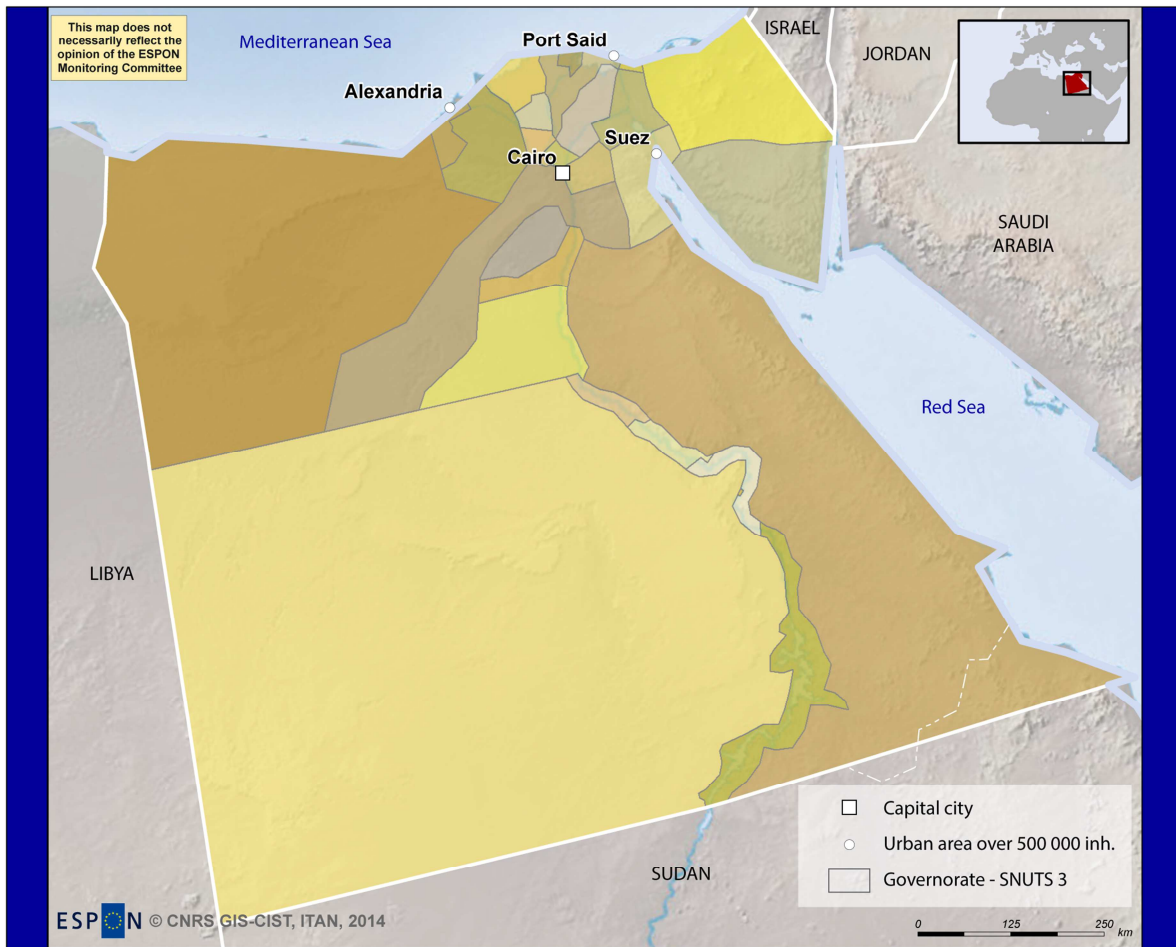
# Libya



EUROPEAN UNION  
Part-financed by the European Regional Development Fund  
INVESTING IN YOUR FUTURE

Regional level: SNUTS3 V1  
Source: ESPON Database, ITAN, CNRS GIS-CIST, 2014  
Origin of data: UNO, 2013  
© UMS RIATE for administrative boundaries  
For some territories no clear international statement exists

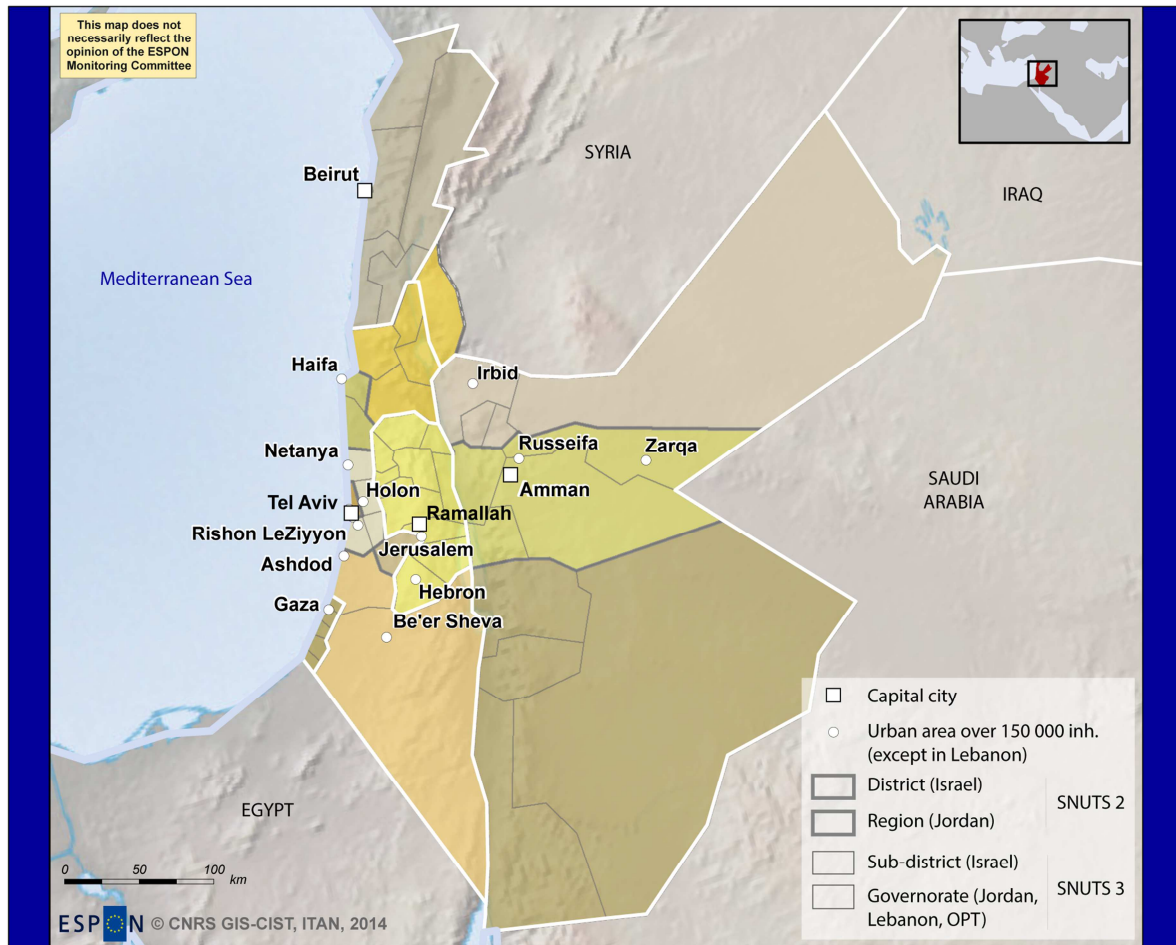
# Egypt



EUROPEAN UNION  
Part-financed by the European Regional Development Fund  
INVESTING IN YOUR FUTURE

Regional level: SNUTS3 V1  
Source: ESPON Database, ITAN, CNRS GIS-CIST, 2014  
Origin of data: UNO, 2013  
© UMS RIATE for administrative boundaries  
For some territories no clear international statement exists

Near East: *Israel, Jordan, Lebanon and Occupied Palestinian Territory*

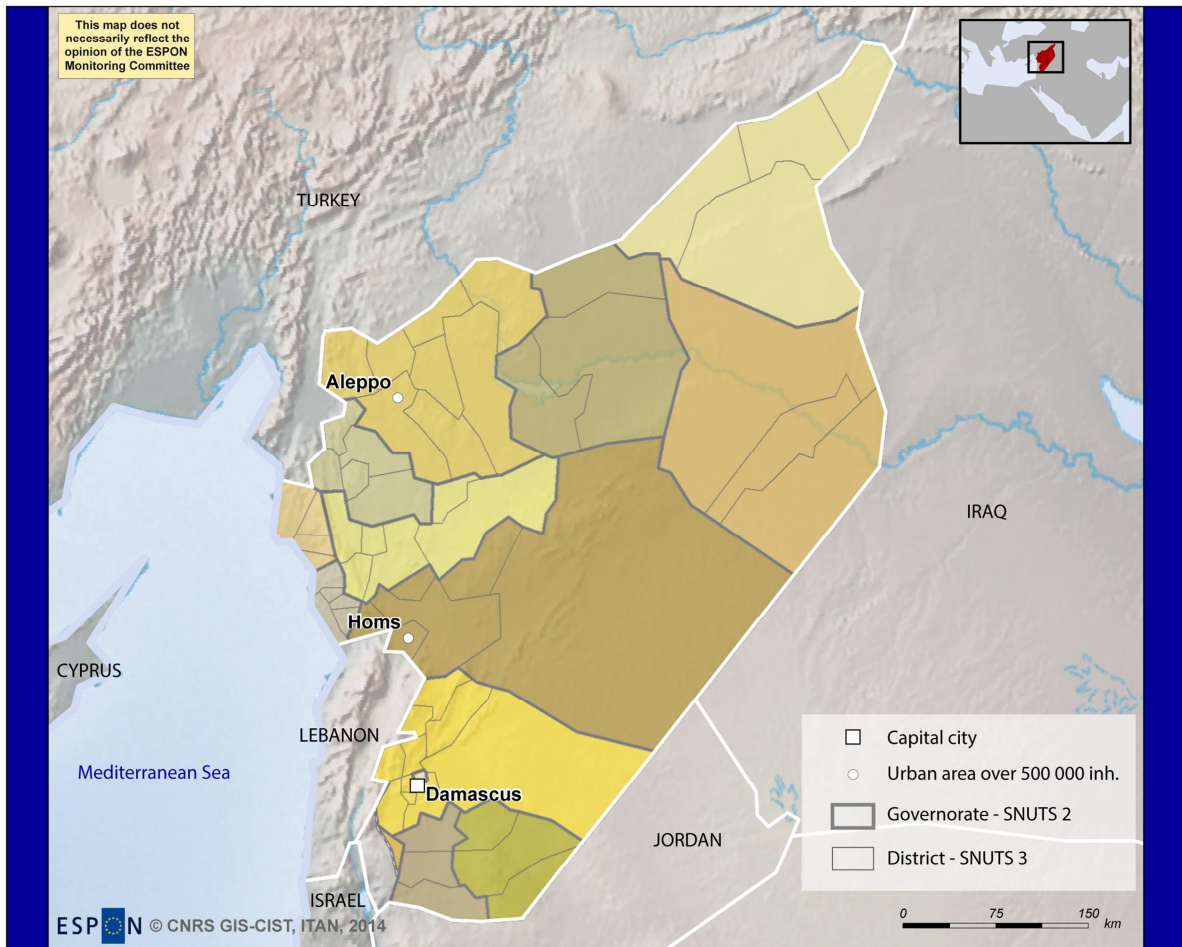


EUROPEAN UNION  
Part-financed by the European Regional Development Fund  
INVESTING IN YOUR FUTURE

Regional level: SNUTS3 V1  
Source: ESPON Database, ITAN, CNRS GIS-CIST, 2014  
Origin of data: Géographie-cités, UNO, 2013  
© UMS RIATE for administrative boundaries  
For some territories no clear international statement exists



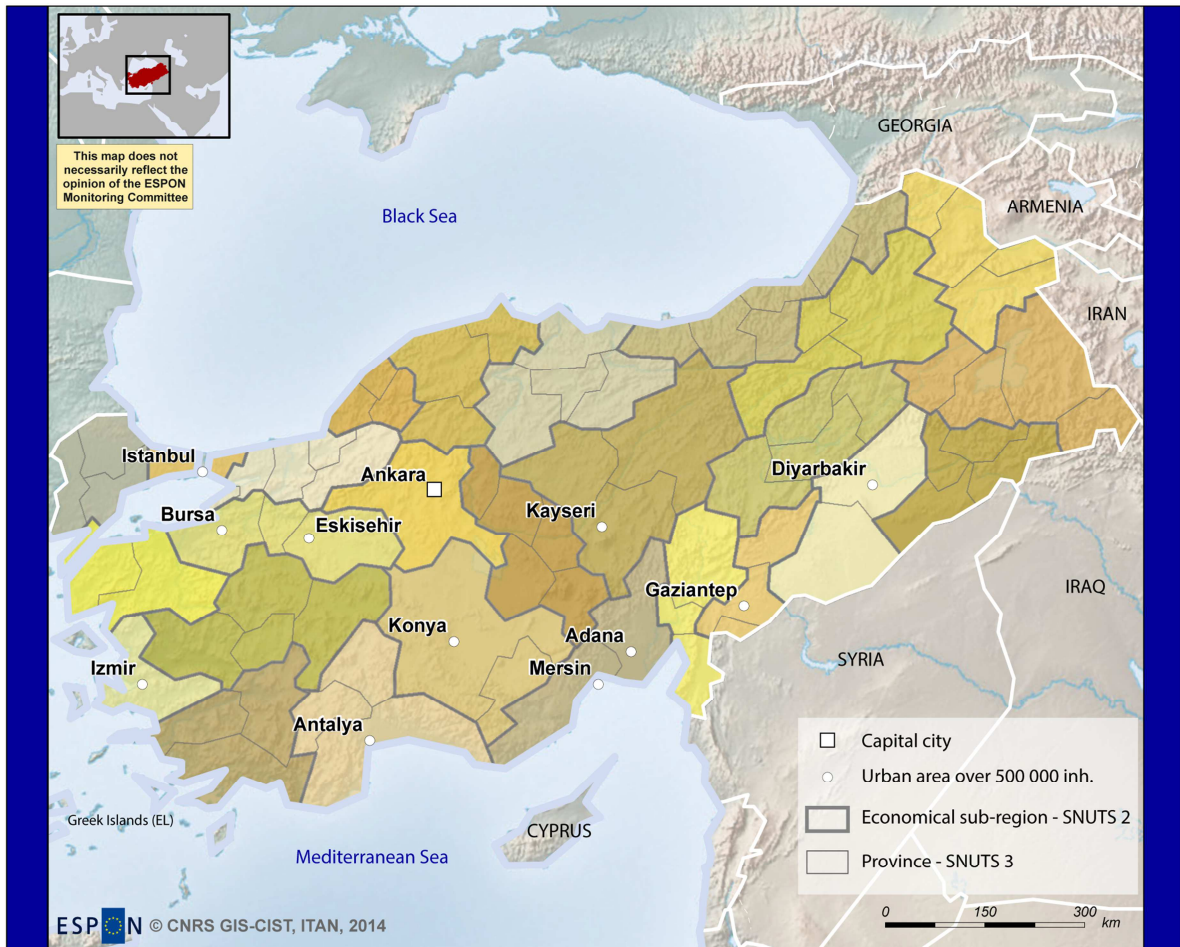
# Syria



EUROPEAN UNION  
Part-financed by the European Regional Development Fund  
INVESTING IN YOUR FUTURE

Regional level: SNUTS3 V1  
Source: ESPON Database, ITAN, CNRS GIS-CIST, 2014  
Origin of data: UNO, 2013  
© UMS RIATE for administrative boundaries  
For some territories no clear international statement exists

# Turkey



EUROPEAN UNION  
Part-financed by the European Regional Development Fund  
INVESTING IN YOUR FUTURE

Regional level: SNUTS3 V1  
Source: ESPON Database, ITAN, CNRS GIS-CIST, 2014  
Origin of data: UNO, 2013  
© UMS RIATE for administrative boundaries  
For some territories no clear international statement exists

## 8. Country reports of the South-Eastern and Mediterranean Neighbourhoods

### **Albania**

by Michail Agorastakis  
Revised by Byron Kotzamanis  
July 2013

#### ➤ **Technical and analytical report of Albanian demographic core data**

##### 1. Introduction

The country of Albania is located at the south-east part of Europe, in the western Balkan region covering an area of 278,48 km<sup>2</sup>, bordered by Greece, FYROM, Kosovo and Montenegro (figure 1, Annex). As an ex-communist country, Albania has sustained vast political, socio-economic and demographic changes from 1990 and onwards. During that period, the process of transition from a centralized economy to a market one was laid with economic hardship, political unrest and instability; however, Albania managed to avoid the large scale ethnic conflicts of its western Balkan neighbours.

Albania's past is strongly differentiated from any other ex-communist European country. Specifically after WWII, when the Communist party came on power, where it remained for almost half a century, adhered to a strict self-reliance policy under which led the country to international isolation after cutting ties with the Soviet Union, withdrawing from the Warsaw Pact in 1968 and alienating its final remaining ally, China, in 1978. So, the Albanian uniqueness regarding its political system had a direct impact on both Albania's population and its distribution as well as on demographic behaviour; namely, strict control on internal movement due to urban zero growth policy, ban on international migration, very high birth rates and high infant mortality, as well as, low life expectancy especially in mountainous rural areas leading to an overall high population growth due to natural increase. After the fall of Communism, the former "closed" rural Albania experienced intense and rapid demographic changes, specifically: i) large scale geographic mobility in the forms of internal and external migration, ii) rapid fertility drop, iii) gradual improvement of overall mortality and iv) population ageing. In this context, , on one hand the political and socio-economic instability which followed the first period of transition and on the other, the rapid demographic changes set challenges regarding the collection, availability and quality of Albanian demographic data as well as in nomenclatures related with population.

This report under the guidelines of ESPON-ITAN project will refer firstly, to the Albanian demographic data and corresponding sources, addressing directly main issues<sup>79</sup> concerning availability and quality and secondly to main population and demographic trends with emphasis on population redistribution from 1989 and onwards. Regarding the latter, so far, no data are available at low spatial scale as far as 2011 census is concerned. Therefore we are going to focus on the transitional years until 2001. We use the 1989 census data as a "snapshot" just before the collapse of the communist regime and corresponding data for 2001, in order to capture main aspects concerning population redistribution and change.

##### 2. Sources of demographic data

In Albania, we can identify the common sources of demographic data, namely, population censuses, civil status registration system and a range of household surveys (Table 1). The Institute of Statistics (INSTAT) is the main body responsible for population statistics in Albania, where demographic events and data are collected and recorded in collaboration with a network of regional civil status registration offices, (Lerch & Wanner, 2008).

---

<sup>79</sup> For a thorough and detailed analysis on Albanian Demographic Information System see Lerch & Wanner, (2008) & Wanner et. al. (2010).

Following the country's independence, the first population census was held in 1923. After the Second World War, 9 censuses were conducted; the first four at five-year intervals (1945,1950,1955,1960), the next three per decade (1969,1979,1989) followed by the 2001 & 2011 censuses, respectively. The census of 1989 was the first that approached the standards of the United Nations and included in addition to the population, characteristics of dwellings and households. After 1989, successive censuses in Albania followed the international standards of United Nations (INSTAT, 2002), where the most recent one, 2011, followed the European Statistical Office's (EUROSTAT) recommendations, as well (INSTAT, 2012).

Civil register produces civil acts and also collect vital statistics. It includes births, deaths and marriages and also a "Fundamental Register", legacy of the communist regime, a hand written book, recording information for each family residing legally in the corresponding administrative unit (Wanner et. al. 2010).

Table 1: Sources of demographic data

	Offices in charge	Date
Exhaustive information	Vital registration system & Civil population register	Department of Interior, Civil Status Offices and INSTAT Annually
	Censuses	INSTAT 1923,1930,1945,1950,1955,1960,1969,1979, <b>1989,2001,2011</b>
Household Surveys	Visa database	Albanina Consulate, Minis Ongoing
	Multiple Indicator Cluster Survey (MICS)	INSTAT, UNICEF 2000,2005
	Reproductive Health Survey (RHS)	Ministry of Public health and USAID, UNFPA, UNICEF, CDC 2002
	Living Standard Measurement Survey (LSMS)	INSTAT, World Bank 1996, 2002(-04), 2005, 2008
	Demographic Health Survey (DHS)	INSTAT, different donors 2008

Source: Lerch & Wanner op. cit. , updated by the authors

A significant number of household surveys were undertaken in Albania providing information about a variety of subjects such as child health, fertility determinants, reproductive health, internal and external migration, remittances etc. The common underlined factor to the aforementioned surveys was that their sampling strategy was based on the census, hence most of them were held after 2001. Another important aspect was regional representativeness; with regional strata including urban/rural areas, the capital Tirana, its peri-urban area and a geographical distinction of mountain, coastal and central areas.

### 3. Territorial & administrative changes

There were no territorial changes in contemporary Albania. However, there were changes to administrative/statistical divisions of the country which raise comparability issues between 1989 census and those of 2001 and 2011. In table 2, administrative divisions per census year are presented. In 1989 the administrative division of Albania was composed of 26 districts and 536 localities; in 2001 three administrative levels, prefectures communes and municipalities, were introduced and the 26 districts of 1989 were dissolved to 36 (figure 2, Annex). Between 2001 and 2011, no major changes in administrative levels are known to us, although minor changes within the communal level had taken place in 2008. In order to address the comparability issue the administrative division of 1989 has to be transformed to the corresponding one of 2001/2011, starting on the basis of settlements (villages) and aggregating up to prefectural level (Agorastakis, 2013). NUTS classification doesn't apply yet in Albania. INSTAT collects data in the lowest administrative level and publishes results in three major statistical regions similar to NUTS level classification (SNUTS) namely, SNUTS level 0 (or equivalent to 1): country, level 2: statistical regions (3): north-east, south-east and south-centre and level 3 (12): prefectures.

#### 4. Definitions & Nomenclatures

According to Lerch & Wanner (op. cit.), concepts and definitions of demographic events generally correspond to international standards. As far as population definitions (legal, de facto, usual resident), along with household (membership) definitions, were concerned, the authors stressed the fact that they vary among different sources. These variations are considerable among the census and vital statistics. Regarding the civil status registration system, there is a convergence among the corresponding definitions of family and household, while the families are defined through their legal residence, contrary to the census that uses “usual” residence concept. Differentiation among family and household definitions, which was evident particularly in 2001 census, was due to the extended family model in Albania.

Table 2: Administrative divisions per census year

#	Level	Census years										
		1923	1930	1945	1950	1955	1960	1969	1979	1989	2001	2011
(1)	Prefectures (SNUTS 3)	10	10	10	10	10	-	-	-	-	12	12
(2)	Sub-prefectures	30	30	30	39	-	-	-	-	-	-	-
(3)	Districts	-	-	-	-	-	26	26	26	26	36	36
(4)	Municipalities*	39	39	24	-	-	-	-	-	-	65	NA
(5)	Communes	181	160	187	116	-	-	-	-	-	309	NA
(6)	Localities	-	-	-	-	192	114	104	NA	536	-	NA
(7)	Villages***	2.584	2.551	2.551	2.551	2.551	2.195	2.860	3.071	2.845	3.020	NA

\*Urban centres of prefectures or centres of districts with population above 15.000 inhabitants.

\*\*\* Except those in (4) & (5)

Source: INSTAT (2002) & INSTAT (2012)

At this point we consider appropriate to refer to some main definitions (INSTAT, 2012) from the latest census, also applicable to the 2001 census:

- Household: “for census purposes, a household referred to a group of persons who reside together in a housing unit and who share a partially or fully joint economy”.
- Usual residents: “are all persons who are usually resident in Albania, regardless of their citizenship and whether or not they were present at their usual place of residence at the census moment or temporarily absent. Only persons: a) who had resided in the place of usual residence for a continuous period of at least 12 months prior to census moment; or b) who had arrived at their place of usual residence during the 12 months prior to census moment, with the intention of staying there for at least one year, c) who were usually resident at the place of enumeration, but who had been absent for less than 12 months at the census moment”.

Place of usual of residence: “the geographic location (district, commune/municipality and town/village) where a person usually lives”.

The official definition of urban and rural areas was adopted before the end of the communist period and still remains rather unclear and not updated until today. More specifically, United Nations (2008: table 6) defined as urban areas in Albania “Towns and other industrial centres of more than 400 inhabitants” and on the other, according to Schuler et al. (2010:130), the distinction between urban/rural areas involves size, structure and administrative divisions and boundaries of a given area. An update of the definition should be a priority since as Lerch & Wanner (op. cit.) note a fifth of the communes in 2001 were classified as urban, number fewer than 5.000 inhabitants.

#### 5. Population count data

Three population censuses (1989, 2001 and 2011) were conducted in Albania during the period of interest of the ESPON-ITAN project. According to Van der Pol (1999), quality of the first census, just before the collapse of the communist regime, was high, with very good age declaration but also highly probability of female under-enumeration. Data regarding population by age and sex were available<sup>80</sup>.

<sup>80</sup> Data were aggregated to 2001 administrative structure

The second census in 2001, almost 10 years after the collapse of the communist regime, was exhaustive and collected information for i) buildings, ii) dwellings, iii) household and iv) individuals (socio-economic and demographic information). INSTAT (Ekonomi et. al. 2003 cited in Lerch & Wanner op. cit.) assessed the quality of the census as "fairly good". Two major problems emerged concerning census quality. Firstly, the definition of the relationship between reference person and household members, due to extended Albanian families; resolved by INSTAT, using a deterministic approach during census data processing. Secondly, given the mass external migration flows mostly to Greece and Italy, the 2001 Census failed to reach any coherent conclusions or even to approximate the true extent of external migration. According to the aggregated results the number of individuals that were abroad at the time of the census was estimated at approximately 34.000 individuals and at the same time, in Greek Census of 2001 the estimated number of Albanians (usual residents) was almost 450.000 (Agorastakis & Sidiropoulos, 2007). Final results for the 2001 Census can be accessed through INSTAT's website.

The most recent census was exhaustive and a post enumeration survey was conducted, the main results and tables of which, are accessible through INSTAT's statistical database found in corresponding website. The survey revealed a population undercount of 3,7% and 1,7%, in urban and rural areas respectively (INSTAT, 2012: 25). The results also revealed a highly probable overestimation of resident population recorded in corresponding 2001 Census resulting to the aforementioned failure to capture external migration flows, but further analysis is needed. INSTAT produces official population estimates (as of January 1st, as well as mid-year) for the period of 1990-2007. The estimates are based on the censuses of 1989 and 2001. For the period of 1995-2000 estimates have been calculated only for the total population by sex and urban-rural areas. For the remaining of the period (2001-2007), population estimates are in fact projections based on 2001 census, due to the absence of accurate data for emigration according to sex and age group<sup>81</sup>.

#### Birth & Death count data

According to INSTAT, the period of 1990-2001 is characterized by lack of statistics both in the total number of demographic events and in their structure according to gender, age groups, residence, etc. Lack of accuracy of the filled forms by the civil registry offices and method of forwarding to INSTAT, were the main causes. The situation was improved for the period of 2004-2007. In order to overcome those difficulties, INSTAT adopted a stochastic approach for the given years and proceeded to necessary calculations.

#### Migration data

Data for internal migration can be derived mainly from the last two censuses. Specifically, from the 2001 census it is possible to collect data on migration flows and migrant stocks in different spatial scales (prefecture, district, and commune) from birth to 2001, from 1989 to 2001 and from 2000 to 2001, based on the questions of past place of residence and the hypothesis of only one migration in between the given dates. However two limitations should be highlighted, i) in order for an individual to be included to internal migrants, besides the change of place of residence, should have been alive and still residing somewhere within Albania in 1989 and in 2001 and ii) number of movements in-between the aforementioned points in time were unknown. Similarly, for the 2011 census, data on flows and migrant stocks in same spatial context, from birth to 2001 and from 2001 to 2011, could be derived given the previous limitations. In the last census' questionnaire, information about the year of arrival in current place of resident and reasons for changing usual residence, were also included. Last published results on internal migration were published from INSTAT in 2001.

Regarding external migration, up to our knowledge there are no data (flows and stocks) available from INSTAT. This gap was filled with estimates calculated directly from censuses and by indirect methods; additionally, data can be acquired by corresponding statistical offices of recipient countries, e.g. Greece, Italy etc. Moreover, we have already mentioned that the 2001 census failed to capture the true extent of external migration, while for 2011 further analyses is pending. INSTAT (2004) and other

---

<sup>81</sup> According to INSTAT's website, accessed on 29<sup>th</sup> March 2013.

studies (e.g. King & May 2003) estimated the number of external migrants for the period of 1989-2001 to 600.000 up to 800.000, 16% to 20% of the total enumerated population in 2001. An additional resource for internal and external migration is the Living Standards Measurement Survey (LSMS), although the information gathered differs through time. In LSMS of 2002, direct and indirect estimates of internal and external migration could be calculated (Lerch & Wanner op. cit.) in a broader spatial/geographical context. LSMS of 2005 and of 2008 include information about migration history per household member and migration determinants could be derived.

## 6. Demographic and population trends – A brief overview

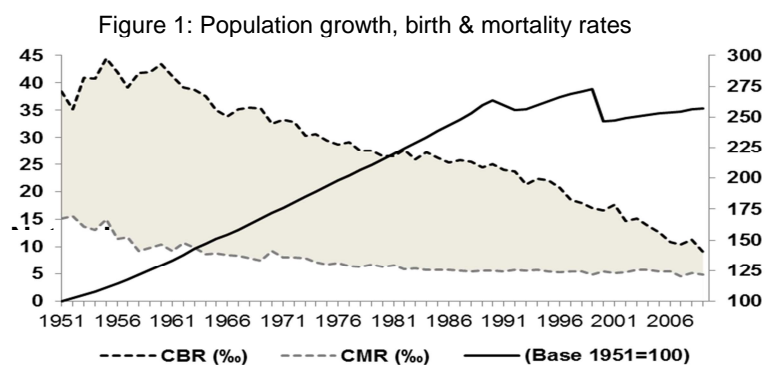
Albania completed its first demographic transition in the early beginning of the 21st century and currently is following the same path already set by other European countries towards lowest-low fertility levels (Lerch et. al. 2010); according to data provided by INSTAT. The interaction between, on one hand, policies and practices implemented during the 45 year communist rule and intense and rapid demographic changes that followed the collapse in the 1990s, on the other, resulted in present demographic and population situation in Albania. Below we present a brief overview of past and contemporary demographic trends.

Fertility in Albania, during the communist era, had undergone major changes that led to a late decline. In the early years after the Second World War, total fertility rose, as in other European countries, although in the Albanian case it started from a higher base (Gjonca et al., 2008), reaching a peak of almost seven children per woman by 1960. Since the beginning of the 70s, fertility followed a steady downward trend; from a little over five children per woman in 1970, to less than four in 1980 and just over 3 in 1990 (INSTAT, 2002). Fertility declined, in the absence of direct population policies and despite of pro-natalist forces (restriction in the availability of contraceptive methods, abortion was illegal, financial incentives, state support e.g. day care centres for employed women etc.) and cultural and traditional factors (patriarch extended family model, universal marriage); Falkingham & Gjonca (2001) argue that social and economic policies such as universal education, full employment, as well as reduced infant mortality had a direct effect on this reduction. During the period of transition, after 1990, reduction continued in a rapid pace to sub-replacement levels (a total fertility rate in 2001 of 2.2 children per woman compared to 3.3 in 1990 (INSTAT 2002) and 1.6 in 2006-2009 (Lerch op. cit.).

Mortality in Albania has greatly improved during the period of 1950-1960 due to reduction in mortality rates at all ages from infectious and parasitic diseases. After 1960, infant and child mortality have also greatly improved whereas adult mortality changed slightly downwards and gradually over the years. However, infant and child mortality still remained the highest in Europe in 1989 and in 2001. According to INSTAT's estimates a significant decrease in infant and child mortality took place within the transitional years of 1989 to 2001, while child mortality declined by half between 1989 and 2005-9. INSTAT (2002) also draws attention to quality and completeness issues regarding mortality data during the transitional years.

Population mobility before 1990 was characterized by strict control on internal movement and ban on international migration. However, internal mobility from highland towards the coastal lowlands, took place during the initial years of industrialization and reconstruction (1950-1960). Since then, domestic passports and residence permits limited internal migration flows (Lerch et al. op. cit.). Urbanization was retained by a zero urban growth policy followed by the communist regime, even though Sjøberg (1992) refers to uncontrolled migratory movements to agricultural areas surrounding urban centres. In the years followed the fall of communism, Albania experienced large scale geographic mobility in the forms of internal and external migration which led to intense and rapid demographic changes (fertility drop, demographic ageing), population re-distribution, depopulation of rural areas and rapid urbanization.

Given past demographic trends described previously, Albanian population until 1989 grew with an annually rate of approximate +2%, resulting in almost tripling its population in almost 50 years, figure 1. However, this trend was reversed on post-communism years. According to last three censuses, during intercensal periods of 1989-2001 and 2001-2011, the growth rate became negative, noting values of -3,5% and -8,7% respectively.



Source: Data for 1951-2001 originated from LDSA's Database on Western-Balkan countries. Data from 2002 and onwards, from INED, Database on developed countries; last accessed 15/02/2013

In table 3, the population changes at prefectural level are presented. Only in 2 out of 12 prefectures in total, the population presented a positive growth during the period 1989-2011; Tirana, prefecture which include the capital, with +64,5%(!) and Durres with +21,3%. Tirana and Durres include the major urban agglomerations in Albania. The share of urban<sup>82</sup> population is increasing during the intercensal years, even if the population growth is declining. Aside the issue of overestimation of usual resident population in 2001 (see population count data), population change among intercensal years, was a result of interplay of fertility decline and internal and external migrations flows.

In figure 2, population pyramids of successive censuses, are represented. The gradual narrowing of the base of the corresponding pyramids is attributed to fertility decline during intercensal years, while in 2001 and 2011 the widening of the population pyramid at lower ages reflects past regimes of higher fertility. We also observe a decline in mortality over the years as deaths are postponed to older ages, resulting to greater number of survivors at older ages. Hollows corresponding to absence of young emigrant male adults are visible in both pyramid of 2001 and 2011. Median age of the Albanian population raised almost 10 years, from 1989 (23,63 years) to 2011 (33,57 years), while the percentage of individuals aged above 65 years over the total population, doubled (from approximately 5% to 11%) during the same period; rapid population ageing.

Table 3: Population by prefecture, urban/rural and population change

Prefecture	Population									Population change (%)		
	1989			2001			2011			2001-1989	2011-2001	2011-1989
	Total	(% urban)	(% rural)	Total	(% urban)	(% rural)	Total	(% urban)	(% rural)			
BERAT	222.901	38,32	61,68	193.020	39,82	60,18	141.944	45,44	54,56	-13,41	-26,46	-36,32
DIBER	221.801	14,98	85,02	189.854	19,99	80,01	137.047	26,11	73,89	-14,40	-27,81	-38,21
DURRES	216.576	51,92	48,08	245.179	54,18	45,82	262.785	74,56	25,44	13,21	7,18	21,34
ELBASAN	361.352	31,54	68,46	362.736	34,43	65,57	295.827	39,08	60,92	0,38	-18,45	-18,13
FIER	379.208	26,39	73,61	382.544	32,32	67,68	310.331	39,77	60,23	0,88	-18,88	-18,16
GJIROKASTER	155.998	31,93	68,07	112.831	39,01	60,99	72.176	51,84	48,16	-27,67	-36,03	-53,73
KORCE	311.448	31,89	68,11	265.182	36,54	63,46	220.357	39,85	60,15	-14,86	-16,90	-29,25
KUKES	146.081	17,64	82,36	111.393	24,52	75,48	85.292	34,09	65,91	-23,75	-23,43	-41,61
LEZHE	161.694	24,97	75,03	159.182	30,96	69,04	134.027	53,82	46,18	-1,55	-15,80	-17,11
SHKODER	285.258	30,94	69,06	256.473	37,39	62,61	215.347	44,37	55,63	-10,09	-16,04	-24,51
TIRANE	455.402	60,81	39,19	597.899	63,68	36,32	749.365	70,20	29,80	31,29	25,33	64,55
VLORE	264.555	42,31	57,69	192.982	53,80	46,20	175.640	65,62	34,38	-27,05	-8,99	-33,61
<b>Albania</b>	<b>3.182.274</b>	<b>35,75</b>	<b>64,25</b>	<b>3.069.275</b>	<b>42,17</b>	<b>57,83</b>	<b>2.800.138</b>	<b>53,52</b>	<b>46,48</b>	<b>-3,55</b>	<b>-8,77</b>	<b>-12,01</b>

Source: INSTAT, Population Censuses 1989,2001,2011, own calculations

In 1989 Albanian population was concentrated, mostly, in the central and western (coastal) part of the country, figure 3a. Highest concentrations are observed in the urban areas of the cities of Tirana (capital), Durres, Shkoder, Elbasan, Vlore and Korce. Twelve years later, in 2001, figure 3b, the overall pattern remained unchanged; however we observe that population become more concentrated at plain areas, at the expense of remote mountainous ones. The number of units included to population bands, both in communal and district level, has remained more or less unchanged at the top and middle places, while the ones at lowest bands were increased; leading to lower population concentration of rural areas at the north and south parts of the country, compared to 1989. Part of the

<sup>82</sup> According to the definition followed by INSTAT

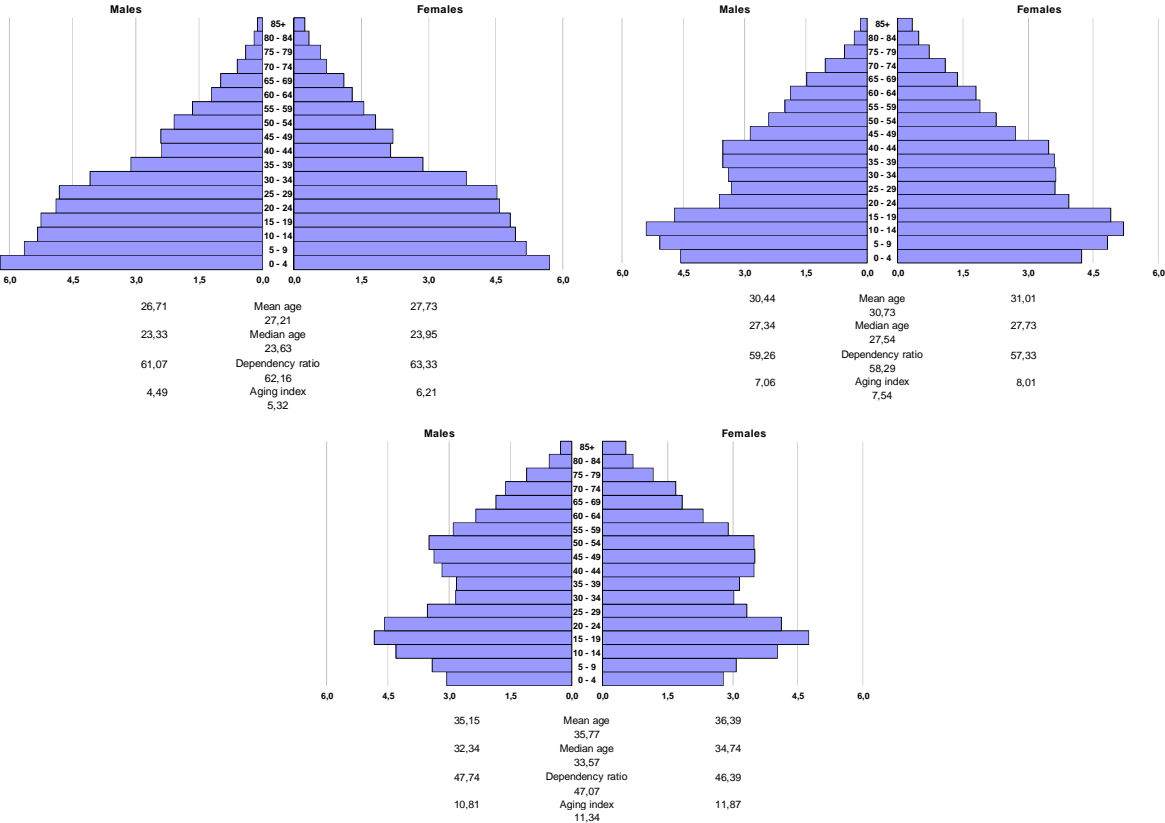


legacy of the communist era was medium-size densely populated urban centres, dispersed in Albanian territory, figure 4a, followed by their surrounding rural areas. These centres remained densely populated by increasing their population in 2001, while areas mostly at the south part of the country become less populated, figure 4b. Population change between 1989 and 2001, revealed a distinct spatial pattern, figure 5. The majority of Albanian communes and districts are presenting population loss, with the exception of an intermediate zone in the centre of the country, urban/district centers and the west coastal and central areas.

Main component of population change is due to migration flows, more specifically: i) an exodus (external migration) of significant proportion of the population abroad (estimated 600.000 – 800.000 individuals, corresponding to 20%-25% of the population enumerated in 2001); from coastal Albania towards Italy and from the south to Greece and ii) a rural exodus (internal migration) towards major urban centers and from mountainous towards plain areas. Specifically, coastal and centre regions recorded large inflows towards Tirana-Durres, main dipole of attraction of internal migrants, contrary to north-east and south-west mountainous regions which fuelled internal migration. An additional aspect is internal mobility as a prelude to external migration (either long-term or short-term).

Large scale population mobility which led to population redistribution had a direct impact on regional population structures, figures 6 & 7. In 1989, urban centers and south-east region divert from the pyramid shape age structure, evidence that remaining regions were lagging behind regarding fertility decline. Additionally, the age structure of urban centers provides evidence of early internal migration for both sexes at ages 20-39. Spatial patterns, change considerably in the next census. Hollows in the shape of the population pyramids of coastal areas, urban centers and south regions, represent absence of males attributed to external migration, while in mountainous areas the pyramid shape age structure remained with evidence of fertility decline.

Figure 2: Population pyramid per census year



## ➤ **Socio-economic analysis, an overview**

### 1. An overview of socio-economic core data

Albania has sustained vast political, socio-economic and demographic changes from 1990 and onwards. During that period, the process of transition from a centralized economy to a market one was laid with economic hardship, political unrest and instability. In this context, on one hand the political and socio-economic instability followed the first period of transition and on the other the rapid demographic changes, set challenges regarding the collection, availability and quality of Albanian socio-economic data.

The Institute of Statistics (INSTAT) is the main body responsible for collection and dissemination of socio-economic statistics and indicators in Albania. Under the framework of the ESPON-ITAN project, data regarding Albanian society, economy and other topics were collected. Specifically, in the core dataset the following data per corresponding topic were collected:

- society: i) total population by educational level (highest diploma obtained) per age and sex, at prefectural level in 2001 (census) and country level in 2011 (latest census), ii) school enrolment by sex and age in 2011 (census) at country level, iii) total unemployed population per sex based on administrative data on registered unemployment for the period 2001-2011, available only at country level and total unemployed population by educational attainment, by sex and age in 2001 (census), iv) monthly household income in 2007 by prefecture and urban/rural areas, estimated from Household Budget Survey, conducted in the period of October 2006 - November 2007 and v) population by religious affiliation at country level from 2011 census.
- economy: i) total economically active population (i.e. employed plus unemployed population) by sex and age and prefectural level from 2001 census, ii) total employed population by sex, age, educational attainment and economic activity at prefectural level from 2001 census; and total employed population at country level for the period of 2001-2011 from Labour Force survey, iii) gross domestic product per capita and gross value added for the period 2000-2009.
- other: i) number of farms by way of plowing by prefecture for the period 2008-2011 and irrigated area by prefecture for the period 2001-2011, ii) urban solid waste and inert by prefecture for the period 2003-2011, iii) total number of inhabited dwellings per prefecture including number of dwellings with different kinds of water, toilet and heating facilities; data originating from 2001 and 2011 censuses, iv) total number of households and household members by urban/rural areas and prefectures, including households per amenities (e.g. refrigerator, TV, computer, etc.) and type of energy used for heating; data are again originated from the last two censuses of 2001 and 2011.

The above datasets do not cover the initial transitional years (1990 to 2001). During that period as we have already mentioned, the capacity of Albanian statistical information collection system was limited due to political unrest and successive socio-economic crises (e.g. in 1997 with the collapse of the pyramid scheme). After 2001, when political and social conditions begun to stabilise, the statistical information system, with the assistance of various international donors, has experienced a considerable development in the last few years. Albanian statistics approximate greatly to international standards (comparability) and their quality is improving; however issues of collection and availability, especially under a spatial context still persist. Dissemination of statistical data has also improved; through INSTAT's website and corresponding bilingual publications (in Albanian and English), potential users can browse and download in tabular form a variety of data, including latest publications.

### 2. Economy

The fall of communism, in the early 1990s was accompanied with collapse of centralized economy structures leading to very high unemployment, due to the shutdown of state-run organizations and enterprises, and impoverishment of the Albanian people. During the first transitional years, Albania's rural economy was transformed slowly but with satisfactory pace towards an open market one.

Remittances from the Albanian immigrants played a crucial role, especially since along with emigration, managed to reduce poverty. In 1997, the collapse of the pyramid schemes in Albania was the main cause of socio-economic instability and unrest. The outcome of this crisis was another migration flow towards abroad, reduction in remittances and significant income as well as savings loss. According to the World Bank (2010) and data provided by INSTAT, after the end of the pyramid crisis, Albania noted fast growth averaged more than 6 per cent per year between 1998-2010 and has entered the ranks of upper middle income countries. Rapid growth was due to the shift of resources from agriculture to construction and services. Increase in domestic demand and investment were the main driven factors of this growth. Positive growth was persevered even in the initial years of global economic crisis; however unfavourable economic environment in European countries, especially in Italy and Greece where the majority of emigrant Albanians reside, will have several implications in Albanian economy regarding firstly, remittances and secondly, exports through bilateral trade. Potential impact should be documented and analyzed further.

In 2010, the national average Gross Domestic Product (GDP) per capita was approximate 3 thousand Euros (INSTAT, 2011a). The prefecture of Tirana noted GDP per capita almost 45 per cent more than national average, followed by Durres which was close to national average. The remaining prefectures had values below the country's average, ranging from Gjirokaster (95 per cent) to Diber (60%), found at the last places.

Based on the findings of Living Standards Measurement Surveys of 2002, 2005 and 2008; World Bank et. al. (2009) concluded that poverty is reducing both at national and regional level; however, regional disparities persist. From 2005 to 2008, central areas noted the largest reduction in poverty, from 21 per cent of the total population being poor to 11 per cent, followed by coastal areas noting a reduction of almost 3 per cent. In mountainous areas, one out of four individuals was recorded as poor; ratio that remained unchanged both in 2005 and 2008. These areas were lagging behind due to increased levels of rural poverty.

Regarding employment, there are two main sources of data; Labour Force Survey (LFS) and administrative sources. Censuses also provide a "snapshot" of the economic status of the population of the corresponding year. Since 2007, INSTAT in its publications include employment data and estimations that are based on the most current LFS. Held in an annual base<sup>83</sup>, LFS data allow for a quantitative assessment of labour market. The results of the latest LFS (INSTAT, 2011b) revealed that the percentage of economically active over the total population was almost 70 per cent. The unstandardized unemployment rate, in percentage, was at the same level for males and females (13,4 and 13,8 respectively); similarly for long term unemployment rate (9,7 for males and 10,2 for females). According to INSTAT, based on administrative data the number of registered unemployed has a decreasing trend over the years of 2000-2011.

Another aspect is informal employment. According to ILO (2011) the level of informal employment is higher in Albania than in its neighbouring countries. It is also noted that despite data unavailability, Albanian government identified as major causes of informal employment regarding informal employment, the following: "uncontrolled population movements from rural to urban areas, high poverty rates among the rural population prompting those movements, transactions being paid in cash rather than through banking, insufficient computerisation and networks among actors, and institutional cooperation in the labour market not being implemented adequately enough".

Data on income were collected from Household Budget Survey, conducted in the period October 2006 - November 2007. Income from paid employment represented the main source, followed by income from other sectors of economic activity. Remittances covered only for almost one tenth of total income; similarly for pensions. Average income of households was differentiated among Albanian territory reflecting regional disparities. Urban areas noted higher average income than rural areas. Main revenue in urban areas was from paid work contrary to rural areas that privet sector and remittances, were the main sources of income.

---

<sup>83</sup> Currently, main results from the 2008, 2009 and 2010 LFSs, are available at INSTAT's website

### 3. Education

According to INSTAT<sup>84</sup>, education in Albania is regulated under the framework of the “National Program of Education” by the Ministry of Science and Education. This program includes all systematic activities and predefined aiming at fulfilling the educational needs. It includes a variety of programs and types of education compiled basing itself in national tradition. In addition, it includes a statistical indices system compiled based on the requests of the educational process, direction and management of schools and state administration. Since 1997, Albanian educational system structure is following UNESCO recommendations on classification of schools and fields of study defined by “ISCED-97”. The educational system is subdivided as follows:

- Pre-university education, which includes: i) pre-primary school, starting at the age of three years and completed at the age of six, non compulsory. (level 0 of ISCED-97), ii) basic education, compulsory for children aged between 6 and 15 years, divided in lower secondary level (ISCED level 1 ) and upper secondary level (ISCED level 2); upper secondary education includes two major orientations, general secondary education and technical-vocational. Post-secondary educational level is not applicable until now in Albanian educational system (ISCED level 4).
- Tertiary education (ISCED level 5 and 6), which after adopting Bologna Declaration, includes three stages corresponding to Bachelor, Master and Doctoral degree.

The main characteristics of Albanian education system, according to Ministry of Science and Education and INSTAT can be summarised, during the last years, as following: i) improvement of schools and corresponding curriculum, ii) decrease in the number of pupils in basic education, attributed to fertility decline and mass emigration and an increase of the number of pupils enrolled in upper secondary level of education, iii) significant growth in the number and enrolments of non-public universities, iv) problems regarding acknowledgment and evaluation of Albanian university diplomas under the Bologna process and v) increased number of new enrolments to tertiary education.

Data from the latest census of 2011 provided a “snapshot” of Albanian population regarding educational attainment and attendance. Illiterate rate for the population aged above 10 years was 2,8 per cent, 3,7 for females and 1,7 for males, where individuals aged above 75 years constitute about 50 per cent of total illiterates. Lowest rates were noted to the prefecture of the capital, Tirana, followed by Durres and Kukes, contrary to Lezha and Elbasan that noted the highest values. Approximately 96,2 per cent of the total population aged above 10 years enumerated in 2011, were attending or have completed school; nearly 15 per cent had primary school as the highest educational level completed, while 40,9 and 28,4 per cent had completed lower secondary and upper secondary , respectively. Compared to men, women were overrepresented among the individuals that had completed only primary school. Reversed representations were observed at the upper secondary education, where the majority of individuals who completed this educational level, was male (INSTAT, 2012).

Gabhadino et. al. (2010), by using data of educational attainment and participation from LSMS of 2005 and 2008 rounds, argue that “while literacy and completion of basic education is almost universal, an important proportion of population does not complete a second degree”. They also observe significant regional variations, with the capital of Tirana noting a clear advantage regarding education over the mountain and central regions, where the coastal regions presented an intermediate profile.

In overall, the educational system in Albania is improving; however, it still lags behind other European countries. Increased funding, building capacities (especially regarding availability of schools in remote mountainous areas) and development of human resources should remain priorities.

---

<sup>84</sup> [www.instat.gov.al](http://www.instat.gov.al), last accessed on 29/05/2013

Annexes of the Albania report

Figure 3: Physical map of Albania



Figure 4: Administrative structure 1989 & 2001

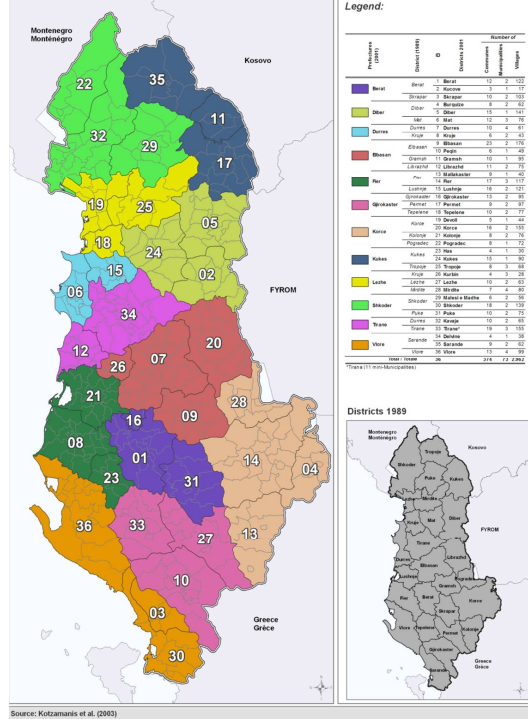


Figure 5a: Population distribution 1989

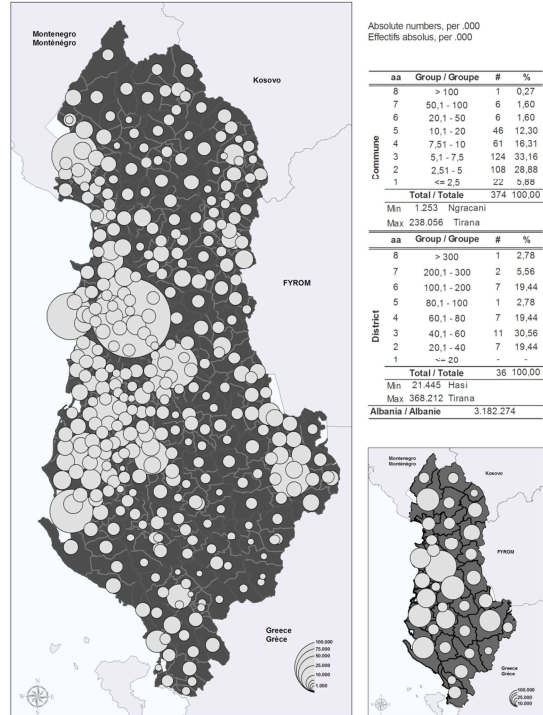


Figure 5b: Population distribution 2001

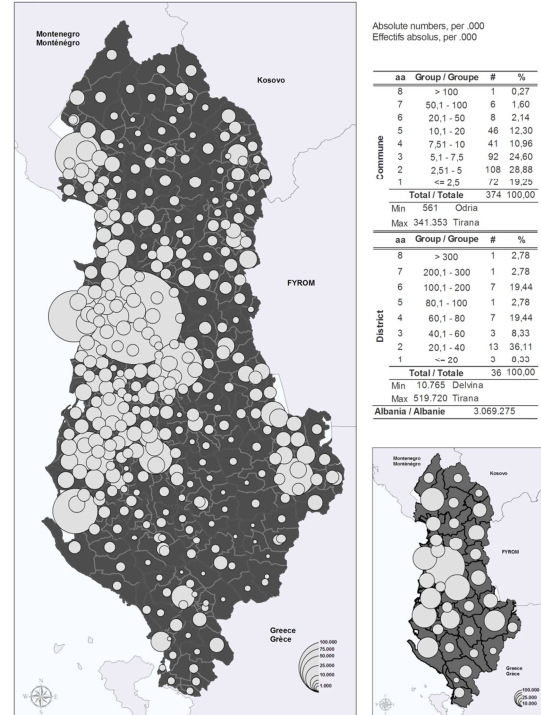
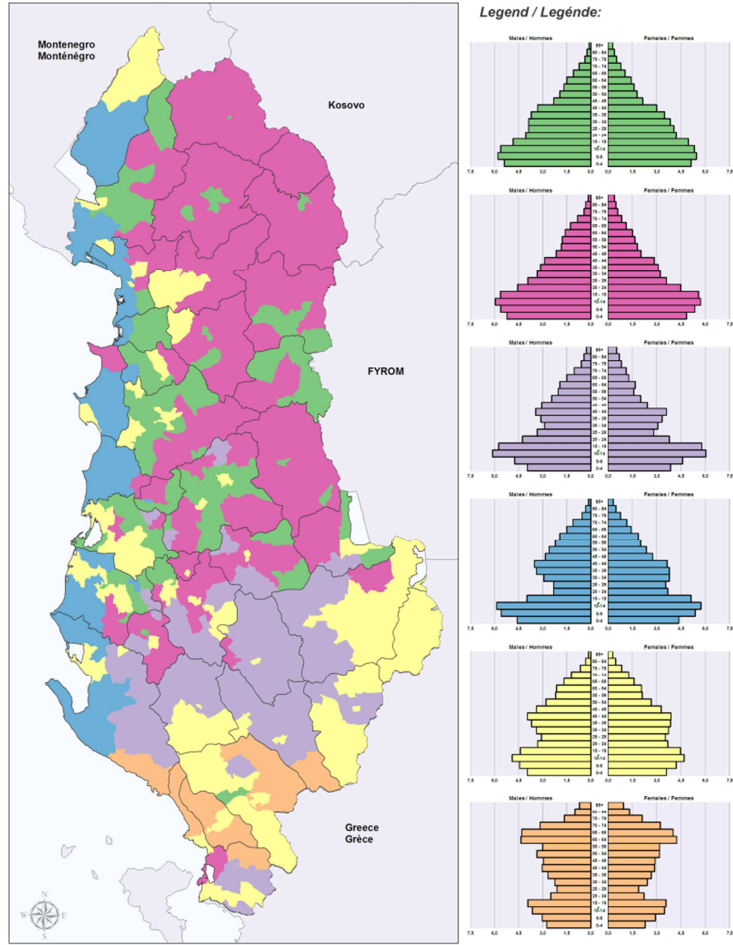




Figure 9: Population change (%), 1989-2001



## References

- . 2002. *The Population of Albania in 2001*. Tirana: INSTAT-REPOBA.
- . 2004. *Migration in Albania*. Tirana: INSTAT-REPOBA.
- \_\_\_\_\_. 2011b. *Regional Accounts in Albania*. Tirana.
- \_\_\_\_\_. 2012. *Population and Housing Census 2011-Main Results*. Tirana.
- Agorastakis M. 2013. *Reconstruction of the population map of western Balkans: Crises and population mobility during 1991-2001. The case of Albania*. PhD Thesis. Laboratory of Demographic & Social Analysis, Department of Planning and Regional Development, School of Engineering, University of Thessaly (forthcoming)
- Agorastakis, M. and G. Sidiropoulos. 2007. *Population Change due to Geographic Mobility in Albania, 1989–2001, and the Repercussions of Internal Migration for the Enlargement of Tirana*. *Population, Space and Place* 13:471-481.
- Ekonomi, M. 2003. *The Implementation of the 2001 Population Census in Albania: Main Lessons from an International Cooperation Experience*, Working Paper No. 13, UN Statistical Commission and UN Economic Commission for Europe, Conference of European Statisticians, Ohrid, The Former Yugoslav Republic of Macedonia, 21-23 May 2003.
- Falkingham, J., and A. Gjonca. 2001. *Fertility Transition in Communist Albania, 1950–90*. *Population Studies* 55(3): 309–318.
- Gabhadino, A., Kasneci, A., B. Toro. 2010. *Insights into Albanian education system: trends in attainment and participation* Pp. 59-101 in *Socio-demographic statistics in Albania: selected topics and future developments*. Tirana: INSTAT, Swiss Federal Statistical Office, Swiss Cooperation Office Albania.
- Gjonca, A., Aassve A., and L. Mencarini. 2008. *Albania: Trends and patterns, proximate determinants and policies of fertility change*. *Demographic Research* 91(11): 261–292.
- ILO. 2011. *A comparative Overview of Informal Employment in Albania, Bosnia and Herzegovina, Moldova and Montenegro*. ILO Country Office for Central and Eastern Europe.
- INSTAT. 2011a. *Labour Force Survey*. Tirana.
- INSTAT. 2012. *Population and Housing Census 2011-Main Results*. Tirana.
- King, R. and J. Vullnetari. 2003. *Migration and Development in Albania*. Sussex Centre for Migration Research: Sussex Centre for Migration Research Development Research Centre on Migration, Globalisation and Poverty.
- Kotzamanis, B., M.N. Duquenne, V. Pappas, and S. Kaklamani. 2003. *Consultant on GIS & Thematic Mapping on Non-income Dimensions of Poverty in Albania*. Volos: Laboratory of Demographic & Social Analyses, Department of Urban and Regional Planning - University of Thessaly.
- Lerch M., Subashi B., Nesturi, M., Galanxi E. and P. Wanner. 2010. *Regional demographic dynamics in Albania*. Pp. 29-58 in *Socio-demographic statistics in Albania: selected topics and future developments*. Tirana: INSTAT, Swiss Federal Statistical Office, Swiss Cooperation Office Albania.
- Lerch, M. and P. Wanner. 2008. *Demographic data in Albania - Results of an assessment*. Geneva: Laboratory of Demography - University of Geneva.
- Schuler, M., Jarne, A., Shameti, E. and L. Seferkolli. 2010. *Typology of Communes and Definition of Agglomerations in Albania*. Pp. 129-159 in *Socio-demographic statistics in Albania: selected topics and future developments*. Tirana: INSTAT, Swiss Federal Statistical Office, Swiss Cooperation Office Albania.
- Sjöberg, O. (1992): *Underurbanisation and the Zero Urban Growth Hypothesis: Diverted Migration in Albania*. in *Geografiska Annaler. Series B, Human Geography* 74(1):3-19.
- United Nations. 2008. *Demographic Yearbook 2005*. New York.
- Van der Pol, H. 1999. *Population Projection 1995-2010*. Tirana: INSTAT and UNFPA.
- Wanner, P., Lerch, M. and E. Galanxi. 2010. *Albanian Demographic Information System: A description*. pp. 15-27 in *Socio-demographic statistics in Albania: selected topics and future developments*. Tirana: INSTAT, Swiss Federal Statistical Office, Swiss Cooperation Office Albania.
- World Bank, INSTAT, UNDP, 2009. *Albania: Trends in poverty 2002-2005-2008*.
- World Bank. 2010. *Albania, the new growth agenda – A country economic memorandum*. Report No. 53599-AL. Available at [www.worldbank.org](http://www.worldbank.org) last accessed 28/05/2013



## ***Bosnia and Herzegovina***

by Goran Penev  
November 2013

### ➤ **Technical report - Demography**

#### METHODOLOGY

##### 1 – Territory – administrative division

Bosnia and Herzegovina (BiH) is one of the seven states emerged after the breakup of the former SFR Yugoslavia. Following the dissolution of the former Yugoslavia, the country proclaimed independence in 1992, but against the political will of the ethnic Serbs (by the 1991 Census 31% of total population of BiH). The independence was followed by the Bosnian War, lasting until late 1995. According to the General Framework Agreement for Peace in Bosnia and Herzegovina (Dayton Agreement), Bosnia and Herzegovina comprises of two autonomous entities – Federation of Bosnia and Herzegovina (FBiH) and Republika Srpska (RS). In March 2000 was added a third constitutive region – the Brčko District.

Bosnia and Herzegovina is divided into 141 municipalities (79 in FBiH and 61 + the city of Banja Luka in RS). The municipality is defined as a basic local self-government unit. By to the law of the federal units, FBiH is consisting of 10 cantons. A canton's area is composed of the municipalities (from 4 to 13).

Until 2013 Bosnia and Herzegovina hasn't adopted the EU NUTS system. In ESPON-ITAN project BiH is divided in three SNUTS-2 level units (FBiH, RS and the Brčko District) and 15 SNUTS-3 level units. In FBiH there are 10 SNUTS-3 units composed by 10 cantons, in the Brčko District is one unit (whole District) and in RS there are 7 SNUTS-3 units. These 7 areas in RS aren't established by law, but are formed for the purpose of some statistical surveys.

##### 2 – Definition – total population

The 1991 Census was the last census of population conducted in the former SFR Yugoslavia and carried only one year before civil war in Bosnia and Herzegovina. The 1991 Census data refer to the concept of permanent residents. By the methodology of 1991 Census, the total population of a certain place included persons who resided in that place permanently, regardless of whether they were in that place at the critical census moment or they were temporarily absent for any reason whatsoever (work, education, travel, ... etc.). Around the mid-1960s there was a more significant departure of the citizens of the ex-Yugoslavia aimed at working abroad. According to the methodologies of the 1971, 1981 and 1991 censuses, regardless of their absence, Yugoslav and BiH's citizens who were "temporarily" away on account of their work abroad, as well as the members of the family who resided with them abroad, were included in the total population of Yugoslavia as well as in the total population of Bosnia and Herzegovina).

The 2013 Census was carried 22 years after the previous census, and it is the first census of population of BiH after the end of the 1992-1995 civil war.

For the purpose of determining the total number of population of a given area, it was in the 2013 Census that the concept of the "usual population" was used for the first time. By the Law on Census, "usual residents" are those persons: (1) who has lived in their place of usual residence for a continuous period of at least 12 months before the reference date; or (2) who arrived in their place of usual residence during the 12 months before the reference date with the intention of staying there for at least one year.

Persons encompassed by the Census are: a) Citizens of Bosnia and Herzegovina with place of usual residence in Bosnia and Herzegovina, regardless of whether, at the time of the Census, they are present in Bosnia and Herzegovina, or absent from Bosnia and Herzegovina; b) Foreign citizens who have residence permit for permanent or temporary residence in Bosnia and Herzegovina, regardless of whether, at the time of the Census, they are in Bosnia and Herzegovina or not; c) Persons without citizenship.

Person not encompassed by the Census are: a) Diplomatic-consular staff of foreign diplomatic bodies and consulates in Bosnia and Herzegovina, as well as their family members; b) Foreign military staff and members of their families located in Bosnia and Herzegovina.

### *Coverage*

The census moment for 1991 was 31 March at 24.00 hours. The 2013 Census day was 30 September.

Both censuses of population, households and dwellings organised in 1991 and 2013 was completely carried on the whole territory of Bosnia and Herzegovina.

Immediately after censuses were finished quality control was made on representative sample of enumeration areas in order to evaluate coverage and quality of data collected by census. The results of the quality control of all three censuses are pointing out full coverage of census units.

Processing of the 1991 Census data was carried without participation of statistical institutions of Bosnian Serbs, and this version of the final results wasn't recognised by the authorities of the Republika Srpska.

In November 2013, the BiH Agency for statistics published the preliminary results of the 2013 Census. The final results of the Census shall be published successively after completed data processing that is, in the period from 1 July 2014 to 1 July 2016.

### 3 – Population estimates

Statistical Offices of the BiH entities regularly prepare the annual estimates of the total mid-year population. These estimates are available since 1996. The estimated population of Bosnia and Herzegovina are the sum of the estimated population of the Federation of Bosnia and Herzegovina, Republika Srpska and Brčko District.

Since 2008, the Institute of Statistics of the Republika Srpska calculated mid-year population on the base of vital statistics data and data on internal migration. Estimated population refer to population whose established place of residence is in Republika Srpska, and only for the total population by sex (not by age).

For the Federation of BiH, the estimated mid-year present population (total „permanent” population excluding the number of refugees and IDPs from the FBiH) is calculated on the base of the results of 1991 Census, yearly natural increase, data on IDPs and refugees and data on returns in the pre-war residence and data on internal migration in the FBiH. The population estimates are available at the canton level and by sex and large age groups,

### 4 – Data on vital statistics (births and deaths)

#### Vital statistics sources

Data on births, deaths and marriages are collected from registry offices.

## Coverage

Vital statistics data until 2003 were presented according to place of residence (of the mother of a newborn child or of the deceased person). Since 2003, data were presented according to the definition of permanent residency. Since 2008, additional entries have been excluded from vital statistics.

The data for the period of the 1992-1995 War are not available. For the period 1996-2001, data on births and deaths for the Republika Srpska are including data for the territory of the Brčko District. Since 2002, data on vital events for the Brčko District are presented separately.

## Definitions and explanations

A live-born child (live birth) is every child who exhibits signs of life at birth, such as breathing, beating of the heart, pulsation of the umbilical cord or definite movements of voluntary muscles. If a child dies soon after birth, it is first registered as a live-born and then as dead infant. In this project data on births in Bosnia and Herzegovina means data on live births.

A deceased person (death) is every live-born person in whom there is a permanent disappearance of all evidence of life.

Infant death (infant mortality) is considered death of a child less than one year of age.

Age is expressed according to completed years of age. It is calculated on the basis of the date of birth of a respective person and the date of event occurrence. If the Age is expressed in age intervals i.e. of five years, each group includes persons who turned the years put as the limits of one interval.

## 5 – Migration

Internal migration is relocation of persons within the territory of Bosnia and Herzegovina, thus considering the place of deregistration as well as new place of residence. Immigrants are those whose reported place of residence in a settlement in the Republika Srpska, Federation of Bosnia and Herzegovina or Brčko District, while their previous place of residence was some other settlement in the Republika Srpska, Federation of Bosnia and Herzegovina or Brčko District. Emigrants are those who unreported their place of residence from a settlement in Republika Srpska, Federation of Bosnia and Herzegovina or Brčko District, with intention to report it in another settlement in Republika Srpska, Federation of Bosnia and Herzegovina or Brčko District.

Net migration is the difference between number of immigrants and emigrants in the observed area, in a given period of time.

Statistical coverage of international migrant stocks is additional complicated after the dissolution of the former Yugoslavia (definition of immigrants from former Yugoslav republics before and after the break-up of the joint country) and especially after very intense forced migration of the population of Bosnia and Herzegovina provoked by the 1992-1995 War.

The most reliable data on international immigrant stocks in Bosnia and Herzegovina can be obtained from population censuses (on the basis of immigration from abroad). The same is more complicated with BiH's emigrant stocks because huge number of refugees. The actual real number of BiH citizens abroad is difficult to determine, but it is certainly greater than recorded in the two last censuses and (1991 and 2013).

## ANALYSE

In the late 20th and early 21st century, the demographic development of Bosnia and Herzegovina, as in other Western Balkan countries, was conducted under exceptional historic (independence, 1992-1995 War, Dayton Peace Agreement and new political composition of the country) and socio-economic circumstances (transition to market economy). The vital statistics data and the results of some statistical surveys show that the last two decades have been an extraordinary period for Bosnia and Herzegovina in demographic terms.

Due to the extraordinary circumstances present in the 1990s is not possible to accurately determine the population dynamics of BiH in the period between 1991 and 2011. The 1991 Census was carried just one year before the civil war and tectonic demographic changes that occurred during the war and after its end (forced migration and mass emigration, great demographic war losses, changing in the fertility pattern). Consequently, these census results aren't good statistical base for the estimates of the population of Bosnia and Herzegovina. Additionally, the next census was organised after 22 years (in October 2013), and until now, the BiH Agency for statistics published only the preliminary results.

However, based on the relevant assessment may be concluded with certainty that the 1990s and the 2000s are the decades when was stopped previous population growth, and it was also a period of very significant decrease in population of Bosnia and Herzegovina.

### 1. Population growth

According to the "final" results of last population census in ex-Yugoslavia (not recognised by the authorities of the RS) on 31 March 1991, Bosnia and Herzegovina had 4,377,033 inhabitants. Compared with the preliminary results of the next 2013 Census, the population decreased by around 600,000 persons. According to the preliminary results of the 2013 Census in BiH, the total number of enumerated persons on 30 September is 3.791.622, out of which: in the Federation of Bosnia and Herzegovina 2,371,603 persons; in the Republika Srpska 1, 326, .991 persons, and in the Brčko district 93,028 persons.

Since the results of both last censuses aren't final and without same definition of total population, the calculation of population growth of BiH and particularly of population growth of BiH entities is practically impossible and, at the very least, methodologically incorrect.

### 2. Natural increase

Bosnia and Herzegovina had a positive population growth over the entire post-war period (1996-2011). In the first two years after the end of the war, natural increase was over 20,000 persons. But, the decreasing trend starts in 1998 and, since 2007 (excluding 2008), the natural growth was always negative (-3,217 in 2011). War period (1992-1995) a lack of data, but it is assumed that in some years, due to the large increase in deaths and a sharp decrease in births has been reached a negative population growth.

By entities, the very significant differences in the natural population growth occur. In the FBiH the natural growth is positive during the whole post-war period, but with a clear decreasing trend (from 20,110 in 1996 to 1,020 in 2011). On the other side, in the RS natural growth is negative since 2003 (-4,097 in 2011). In the Brčko District, the natural increase is present since 1996, but with decreasing trend resulting by negative natural growth in 2011.

- Births. Generally speaking, with regard to births in Bosnia and Herzegovina, the second part of the 1990s (since 1996), and the 2000s do not deviate from the general declining trend manifest during last five decades. Even so, last decade (2000-2011) has been made different by the fact that the yearly number of live births has always been under 40,000 and with the lowest yearly number of live births (31.8 thousand) since 1950s. Just before the 1992-1995 War, the annual number of live births was more than double in size (67 thousand in 1990 and 65 thousand in 1991).

- Mortality. Unlike the trends in births, deaths for the same period showed an increasing trend. From 1996 to 2011, the number of deaths increased from 25 thousands to 35 thousand. A sudden increase in the number of deaths is in the 1992-1995 War period. According to the recent (and very reliable) estimates, 100 thousand deaths in the total population could be attributed to war.
- Infant mortality. In Bosnia and Herzegovina the fastest decrease of mortality achieved among children younger than one year. The infant mortality rate decreased in the period 1991-2011 by more than 3 times, from a high level (16.4 per 1000 in 1991) to a moderate level (of 5.8 per 1000 in 2011).

### 3. Migration

Intensified migratory movements were one of the main characteristics of the demographic changes taking place in the past two decades, especially in the 1990s. War in the period 1992-1995 were the main causes of the very intense migration, which, in the end of 20th century, largely had the nature of forced migration.

In the 1990s the forced migration of more than 3.5 million people began. Citizens from Bosnia and Herzegovina have been by far the most affected by displacement. During 1993-1998, over 70 per cent of all refugees and internally displaced persons (IDPs) in former Yugoslavia were citizens from Bosnia and Herzegovina. At the end of the war (in 1996), the UNHCR estimated the total number of refugees from BiH at 776 thousand, and at December 1996 at 994 thousand persons. The proportion of total displaced citizens from Bosnia and Herzegovina who are displaced within their own country has ranged from 70 to 80 per cent. And now, already 20 years after the war, the durable solutions for IDPs in Bosnia and Herzegovina are very difficult to implement.

#### ➤ **Technical report – Society and economy**

#### METHODOLOGY

##### 1 – Territory – administrative division

Bosnia and Herzegovina (BiH) is one of the seven states emerged after the breakup of the former SFR Yugoslavia. Following the dissolution of the former Yugoslavia, the country proclaimed independence in 1992, but against the political will of the ethnic Serbs (by the 1991 Census 31 % of total population of BiH). The independence was followed by the Bosnian War, lasting until late 1995. According to the General Framework Agreement for Peace in Bosnia and Herzegovina (Dayton Agreement), Bosnia and Herzegovina comprises of two autonomous entities – Federation of Bosnia and Herzegovina (FBiH) and Republika Srpska (RS). In March 2000 was added a third constitutive region – the Brčko District.

Bosnia and Herzegovina is divided into 141 municipalities (79 in FBiH and 61+the city of Banja Luka in RS). The municipality is defined as a basic local self-government unit. By to the law of the federal units, FBiH is consisting of 10 cantons. A canton's area is composed of the municipalities (from 4 to 13).

Until 2013 Bosnia and Herzegovina hasn't adopted the EU NUTS system. In ESPON-ITAN project BiH is divided in three SNUTS-2 level units (FBiH, RS and the Brčko District) and 15 SNUTS-3 level units. In FBiH there are 10 SNUTS-3 units composed by 10 cantons, in the Brčko District is one unit (whole District) and in RS there are 7 SNUTS-3 units. These 7 areas in RS aren't established by law, but are formed for the purpose of some statistical surveys.

## 2 – Society and Economy

### Education

Two main indicators of educational structure of the population, educational attainment and literacy, present the level of population education, also involving the achieved level of socio-economic development of the country. Data on educational attainment and literacy are significant for versatile socio-economic, sociological and demographic researches, as well as for defining and realizing state strategies and policies for education system improvement. International recommendations do not classify the questions on literacy in the group of so-called "core topics", thus enabling each country to independently decide whether to collect the related data in the census or not. Therefore, the two mentioned characteristics were included in the content of all censuses of the population of Bosnia and Herzegovina from 1948 to 2013. Data on literacy have been collected for the persons aged 10 and over, and those on educational attainment for the persons aged 15 or more.

Because the 1991 Census data are not verified by the authorities of the Republika Srpska, they can not be used as official. Because census data are not verified by the authorities of the Republic of Serbia, they can not be used as official. In addition, the final results of the 2013 Census are not always available. Under these conditions in the ESPON ITAN project we only use data from the annual educational statistics.

#### Data on educational attainment of population

Educational level. In Bosnia and Herzegovina is accepted the ISCED-97 classification (the International Standard Classification of Education used in international statistics, and it allows for comparability of data both within a particular country and internationally). Educational programmes are classified into levels and fields of education.

In ISCED there are two crossed variables: the level of education and field of study.

Levels (degrees) of education in the system of education of both BiH entities are:

- ISCED 0 corresponding to pre-school education of children from the age of three to starting basic school;
- ISCED 1 covers elementary (primary) education (first four - eight year school programme or first five - nine year school programme);
- ISCED 2 covers lower secondary education (last four years of basic education)
- ISCED 3 level of education usually begins after completion of full-time compulsory education. The entrance age to this level is typically 15 or 16 years. This level of education is divided into two groups, depending on duration of education, as well as on possibility of direct entry to a higher level of education.
- ISCED 3A includes secondary schools of four years duration, and it allows for direct entry to the next higher level of education. This level covers all secondary schools of four years duration, such as grammar schools, art schools, religious schools and vocational technical schools.
- ISCED 3C covers all secondary vocational schools of two or three years duration. This level leads directly to labour market or to other ISCED 3 level programmes.
- ISCED 5 covers higher education, including postgraduate and masters studies.
- ISCED 6 covers doctors of science.

Pre-school education involves children aged at least 6 months until their entry into primary education, and it is realised through the programme of pre-school education.

Elementary education lasts eight years and nine years after educational reform (since 2003/2004 in RS and since 2004/2005 in FBiH). Primary education is compulsory and free of charge for all children aged six or seven years to 15 years, according to the unique plan and programme.

Secondary education lasts from 2 to 4 years, and it covers different types and forms of education through which, after completion of primary school, knowledge and skills necessary for work or further education are obtained. Secondary education is not compulsory.

Tertiary education is education which follows secondary education, and it leads to an internationally recognised level of higher education. Higher education is organised in three cycles.

School enrolment. Data on pupils in regular primary (basic) and secondary schools are gathered by annual reports at the beginning and end of each school year.

Data on students enrolled in institutions of tertiary (post-secondary) education are gathered by individual questionnaire at the beginning of the winter semester of each school year.

Data on graduated students and on masters and doctors of science refer to the calendar year and are collected by individual questionnaires filled in by students or candidates, respectively, who are about to graduate or acquire a title of a master or a doctor.

Data on doctors of science refer to the calendar year of defending a dissertation and not on the year in which they enter the Register of Doctors of Science.

### Employment and unemployment

Data on employment and unemployed rates presents in the ESPON ITAN project data base have been collected through the Labour Force Survey (LFS). Statistical institutions in Bosnia and Herzegovina carried out (for the first time) the LFS in April 2006 in the FBiH, RS and in the Brčko District. Methodological principles behind the Survey are based on the methodological recommendations and definitions of the ILO and requirements of the EUROSTAT, which set the standards for the international comparability of data in area of labour statistics. The LFS measures the economic activity of population in short period of one week. Until 2006, the Survey was conducted annually. The LFS in 2011 were covered 10.463 households, including 5897 in the Federation of Bosnia and Herzegovina, 3.564 in the Republika Srpska, and 1002 in the Brčko District.

According to the LFS methodology the working age population comprises all persons aged at least 15 years of age. The economically active population (labour force) includes the employed and the unemployed persons aged 15 years or more.

The employed persons are persons who are at least 15 years of age and who, in the reference week:

- worked at least one hour for salary or fee, irrespective of their formal status, or
- did not work, but had a job to which they would return.

The group of employed persons covers:

- Employees (persons in employment who receive salary or fee for their work);
- Self-employed persons (employers who manage a business entity and employ one or more employees, and persons who work for their own account and do not employ employees);
- Unpaid supporting household members (members of a household who work in a family business).

Persons are considered as unemployed if:

- a) In the reference period, did not engage in any activities for which they received a salary or fee;
- b) During four weeks (the reference and three preceding weeks) actively looking for employment or found a job and were about to start work in near future.
- c) They are available to start to work during two weeks following the reference week should they be offered employment.

The inactive persons are all persons of 15 years of age or older who were not employed during the reference week and who during the four weeks (the reference and three previous weeks) did not take

any activity to look for employment, as well as persons who were not ready to start work in two subsequent weeks should they be offered employment.

Activity rate represents the labour force as a percentage of the working age population.

The employment rate (in percentages) is the share of the number of employed in the working age population aged 15 years and over. The unemployment rate (in percentages) is the part of the number of unemployed persons in the total labour force.

#### Minorities (population by ethnic affiliation)

The data on the ethnic composition of the population are relevant for the understanding of the cultural diversity of the population, position of the ethnic groups in the society, monitoring of the migratory flows and other characteristics of the ethnic communities, as well as for the defining and implementation of numerous strategies and policies aimed at enhancing the position of the members of the ethnic groups. For this reason, the official Yugoslav and especially BiH statistics has, in all of the post-Second World War censuses, paid particular attention to the ethnic features of the population, in terms their demographic, educational, socio-economic and other characteristics.

The international recommendations do not put the question of the ethnicity among the so-called core topics and thus each country decides independently whether it will collect this kind of data during the census. If this question is included in the contents of the basic census forms, its formulation ought to be as clear and as precise as possible and the respondent must have a possibility to declare completely independently and freely, as well as the right not to declare his ethnic affiliation. The question on the ethnicity in the enumeration form for a person (Personal questionnaire) in all Yugoslav censuses was formulated as an open-type. In the recent 2013 Census of population of Bosnia and Herzegovina this question was formulated like semi-open (every person can choose only one answer: Bosniak, Croat, Serb and "not declared" or can declare other ethnic affiliation). According to the article number 12 of the Law on census in BiH, citizens are not obliged to declare themselves on the question concerning ethnic affiliation. If person did not want to declare themselves on their ethnicity, it was filled in answer "Not declared".

For children under 15 an answer to this question shall be provided by one of the parents, adoptive parent or custodian. The answer to this question for absent household members over 15 can be given only by present adult person, if willing to answer. The space for the answer in the P-1 forms to this question cannot remain empty – there must be an answer. If no answer can be obtained, the enumerator shall write down "Unknown".

#### Gross domestic product (GDP)

In calculating the gross domestic product for Bosnia and Herzegovina and the entities the methodology of United Nations "System of National Accounts 1993"– SNA93 and its European version "European System of national accounts 1995"– ESA95 is used.

In order to determine the gross domestic product for BiH and the entities, all available statistical data of the businesses (enterprises, banks, insurance societies, institutions, authority bodies and other subjects), which are residents in the territory of BiH, as well as data regarding agricultural and non-agricultural production (holdings and shops) done within the household, are used.

The calculation is based on the data of business enterprises registered and allocated according to the Classification of activities, which has been harmonized with the European classification NACE – Rev.1.1. The business enterprises are at present, for the gross domestic product (GDP) calculation, grouped, as institutional units, according to the areas of activities, according to the headquarters and main activity, and not according to the units of homogenous activity.

The calculation of the gross domestic product has been determined based on the existing data sources, as well as based on official statistical surveys, which had been done in the statistical



institutions. The number of and the content of the surveys do not yet satisfy the needs of the national accounts statisticians in order to meet the demands of full implementation of the international methodologies.

Non observed economy (NOE) estimations are included in calculation of GDP. Illegal activities are not included.

The estimate of imputed rental of owner-occupied dwellings is included in the GDP. Brčko District exists as a separate administrative unit since 2000, estimate of gross domestic product for 2000 and next years are made on the basis of available.

Agency for Statistics of Bosnia and Herzegovina (BHAS) calculates components of production account and income account for the Institutions of General Government of Bosnia and Herzegovina and the Central Bank of BiH. The components of the production account compiled by BHAS are allocated to the entities and the Brčko District using the coefficients of the distribution of indirect taxes from single account of Indirect Tax Authorities of BiH to the entities.

The main and the most important macroeconomic aggregates in the system of national accounts is the gross domestic product. GDP is the indicator of economic activity in the whole country. There are three methods of calculating gross domestic product: production, cost and income methods.

According to the production approach, gross domestic product is the sum of gross value added generated in all activities, calculated according to basic prices and corrected for net taxes on products and for the Financial Intermediation Services Indirectly Measured (FISIM). Gross value added, as the output value increase equals to the difference between gross output and intermediate consumption.

The basic items in the production account are: the gross output, intermediate consumption and gross value added as their derivation and result of the production activities. The gross value added consists of: compensation of employees, gross operating surplus or mixed income and other taxes on production.

The gross output is defined as the market value of all produced goods and services that are generated by resident producers during an accounting period. There are three categories of production: a) market production; b) production for own final use and c) other non-market production. Intermediate consumption, according to purchaser's prices, is the value of products and services that are transformed, used and spent in the production process. Intermediate consumption includes: costs of raw material and equipment, energy costs and spare parts, costs of services, other business costs. Value added, as the increase in the value of production is equal to the difference between gross output and intermediate consumption. Value added for institutional units is expressed according to basic prices that are prices that do not include taxes on products, but also include subsidies on products. Gross domestic product is a measure of the total value added generated by all resident producer units plus net taxes on products (not included in value added) during the reference period.

## ANALYSE

### 1. Education / Attending school

According to the local experts estimates, the primary and lower secondary education covers more than 97% of relevant population.

The number of pupils in primary and secondary schools shows a slight decrease (from 533 thousand in 2001/2002 to 474 thousand in 2010/2011), which is a common trend in recent years, mainly because decreasing number of births in the country. At the same time, the number of graduated students in tertiary education rapid increased (from 6039 in 2003 to 17822 in 2011), because significant rising of share of persons who continue the education after secondary school (especially for females students, who share with more than 60% in total number of graduated students in 2011).

## 2. GDP

Total gross domestic product (GDP) of Bosnia and Herzegovina is significantly increased. Between 2000 and 2011, the GDP in current prices is increased from 11.820 million KM in 2000 to 25.666 million KM in 2011. For this period, it is difficult to calculate the GDP per capita (because unavailable population census data), but an increase is evident.

## 3. Minorities – ethnic structure

Bosnia and Herzegovina was the only former Yugoslav republic without an absolute majority ethnic. According to the last census carried in 1991, one year before the dissolution of the SFR of Yugoslavia, the population of BiH consisted of 43% Muslims, 31% Serbs, 17% Croats and 5.5% of ethnically declared Yugoslavs.

This ethnic composition, and especially its territorial distribution, has undergone a very important modification during the 1992-1995 War. Forced migration, several million of refugees and IDPs and 100 thousand civilians and militaries war deaths (66% of the Muslim nationality) determined a new ethnic structure of the country.

After two decades without census (the last one was finished in October 2013), there are many uncertainties about the ethnic composition of Bosnia and Herzegovina. Nevertheless, it is hollowing out the ethnic structure is very complex. First, all entities (the Federation BiH, the Republika Srpska and the Brčko District) are composed on the ethnic principle and with a homogeneous ethnic structure. And secondly, it can be assumed that at the national level is still no absolute ethnic majority.

## **Croatia**

by Snjezana Mrdjen  
October 2013

### ➤ **Demographic analysis – Methodology report**

#### 1 – Territory – administrative division

Croatia is divided into twenty županije (sing. županija: counties) and one grad (city). This administrative division were formed on 29 December 1992 when the Home of Representatives of the Croatian Parliament adopted the Act on the Territories of Counties, Towns and Municipalities in the Republic of Croatia (NN, No. 90/92), according to which 21 counties.

County is a unit of regional self-government according to the Regulation Book on the Register of Territorial Units (NN, No. 37/08). A territory of a county results from historical, transportation and economic elements. It represents a natural, self-government unity and, as a rule, it comprises a number of towns and municipalities. Borders of a county are determined by borders of marginal municipalities and towns, respectively.

On 22 September 1995 was the first change on the administrative division (NN, No. 69/95) there were 20 counties. The second change was on 7 February 1997, there were 21 counties.

The most important change in the period 1990 - 1997 is:

1. County of Zadar-Knin and County of Šibenik had changed the name (to Zadar-county, Šibenik-Knin County) and territory; in that case the data from 1990-1997 to 1998-2011 are not comparable.
2. City of Zagreb with special administrative status similar to a county's was merged with Zagreb County from 1995 to 1997. Therefore, in some tables no data for the City of Zagreb.

Regions NUTS2 - During the Accession of Croatia to the European Union, the regions of NUTS2 (North-West Croatia, Central and East (Panonian) Croatia, Adriatic Croatia) were defined and codified by the Croatian Bureau of Statistics in early 2007. The regions were last revised in 2012 and entered into force on 1 January 2013.

#### 2 – Definition – total population

When comparing data of the Census from 1991, 2001, 2011 the change of total population definition should be taken in consideration. The Census moment for 1991, 2001 and 2011 during the enumeration was 31 March at 24.00 hours; or, at midnight between 31 March and 1 April 2001.

Data of Census 1991 concern permanent residents, that is, population whose place of usual residence was on the territory of the Republic of Croatia, irrespective of whether persons were present in or, for one reason or another, absent from the place of the Census at the census moment (31st March at midnight).

The place of usual residence, according to the legal definition (Narodne novine, official gazette of the Republic of Croatia, No. 53/91), is "a place where a person settled with the intention of permanently living there...". This legal definition of the term "place of usual residence" is determined by two facts: residence in a particular place and intention of permanent living there.

In the Census 2001 a new definition of total usual resident population is applied. The UN Economic Commission for Europe and Eurostat use the term "usual resident population" for "total usual resident population" The criterion used is the so-called "place of usual residence" with the time limit of absence up to 12 months. Their aim is to "facilitate and improve the international comparability of data through the harmonization of data, definitions and classification of topics". According to them, total population

should include persons who have place of usual residence on the Croatian territory, with time limit of absence not longer than 12 months.

In addition to the time limit of 12 months for measuring temporary absence or presence and in line with the international recommendations and the stated methodological material, the total usual resident population of the Republic of Croatia also includes persons who maintain a close economic, transport and frequent connections with a household and family in the Republic of Croatia (frequent or rare visits, supporting of family members, constant communication etc.).

In addition to the international recommendations concerning censuses and migrations, the definition of the total usual resident population was also based on standards that exist for all economic statistics, given in the SNA (the System of National Accounts) as well as in its European version (ESA-95).

According to the above mentioned international recommendations and the in-house methodological material of the Croatian Bureau of Statistics for the Census 2001, the total usual resident population includes:

1. persons whose place of usual residence is in the Republic of Croatia and who were present at the Census moment (31 March 2001);
2. persons whose place of usual residence is in the Republic of Croatia and who are absent from the Republic of Croatia for less than one year;
3. persons who are temporarily present in the Republic of Croatia for a year or longer;
4. citizens of the Republic of Croatia – employees in diplomatic bodies and members of their families, representatives in international organizations as well as citizens of the Republic of Croatia who are permanently employed in the Republic of Croatia and are sent to work abroad by their employers. They are deemed to be present in the country at the time of the Census, i.e. they are included in the total usual resident population of the Republic of Croatia irrespective how long they may be absent from the country;

According to the Recommendations for Censuses, the total usual resident population also includes the following groups of persons; a) nomads b) vagrants c) persons living in remote areas d) military, naval and diplomatic personnel and their families, located outside the country e) merchant seamen and fishermen resident in the country but at sea at the time of the Census (including those who have no place of residence other than their quarters aboard ships) f) civilian residents temporarily working in another country g) civilian residents who cross a frontier daily to work in another country h) refugees (as defined under the Geneva convention) in the country.

Persons temporarily present in the place of the Census (for a year or longer), who come to their place of usual residence less frequently, are included in the total usual resident population. In order to achieve the international comparability of data, the methodology used in the Census 2011 is in line with the Conference of European Statisticians Recommendations for the 2010 Censuses of Population and Housing as well as with the regulations (EC) Nos 763/2008 and 1201/2009 of the European Parliament and the Council, which regulate censuses of population and housing in the European Union.

In the 2011 Census, according to the international statistical standards, the concept of place of usual residence is used in defining of the total population. According to this concept, the total population of the census settlement, or a country respectively, consists of all persons whose place of usual residence is located in that settlement or country. The place of usual residence is considered a place where a person spends most of his/her daily time, irrespective of a short-term absence from it (e.g. due to going to vacation, trip, medical treatment, visit etc.). In line with the definition of the place of usual residence, the total population includes the following persons:

- Those that have lived in their place of usual residence for a continuous period of at least 12 months before the census moment
- Those that arrived in their place of usual residence during the 12 months before the census moment with the intention of staying there for at least one year.

Therefore, the period of one year or longer and the intention of staying of at least one year are the basic criteria for the inclusion or exclusion of persons in/from the total population of the country, that is, the census settlements.

### *Comparability of census data*

2011 Census data are not directly comparable with the 2001 Census data, or with the earlier censuses' data due to the different statistical definition of the total population used in the 2011 Census. Data of the Census 1991 concern permanent residents, that is, the persons with the permanent residence in the Republic of Croatia, irrespective of their actual presence/absence at the time of the census and irrespective of the period of absence.

In the 2001 Census, the concept "place of usual residence" was used for the first time in defining the total population, and the period of one year and more was introduced as a basic criterion in including/excluding a person from the total population.

The 2011 Census also used the concept "place of usual residence", but an intention of staying has been introduced for the first time as an additional criterion in including/excluding a person from the total population.

Although the data of both censuses, in 2001 and 2011, are based on the "place of usual residence" concept, the two cannot be directly compared. Firstly because the intention of staying was not taken into account in the 2001 Census, and, secondly, due to the fact that the 2001 Census included in the total population persons absent for longer than a year who returned to their residence on a seasonal or monthly basis (these persons are not included in the total population in the 2011 Census).

### 3 – Estimation of population

Population estimates for the years from 1991 to 1999 refer to the total population whose permanent residence is in the Republic of Croatia, irrespective of the citizenship, and who were either not absent from the Republic of Croatia or were absent for less than a year as well as persons whose permanent residence is not in the Republic of Croatia but were continuously present on the territory of the Republic of Croatia for at least a year, irrespective of the citizenship. They were calculated on the basis of the 1991 Census data, natural growth, net migration and data on refugees and displaced persons taken over from the Government Office for Displaced Persons and Refugees.

The population estimate in the period from 2000 to 2011 was calculated on the basis of the Census 2001 data, natural change and net migration.

### 4 – Data on vital statistic

Vital statistics data are based on the systematic collection of information related to records on births, deaths and marriages entered into state registries of births, deaths and marriages.

The vital statistics data are collected and processed in concordance with the definition of total population according to international recommendations (UN, Eurostat, ESA and SNA).

While comparing the vital statistics data, it is necessary to bear in mind that the definition of the total population that has been applied in statistical surveys on births and deaths since 1998 was changed. Until 1997, data on live born children and deaths were processed according to a mother's or deceased person's permanent residence respectively. Since 1998, data on births and deaths have been collected and processed in line with the definition of the usual residence.

Data on vital statistic in the period from 1991 to 1997 could not be collected for the territory of the Republic of Croatia occupied at that period, so total number of births and deaths refer only to the corresponding population.

The statistical surveys on deaths in the period from 1995 to 2010 collected the data on 11891 persons who died in the period from 1991 to 1995, but were registered in the death registers in the period from

1995 to 2010. This number of deaths is not included in the total number of deaths in particular years, so it should be taken into account in the analyses of the natural growth of population.

#### Definitions and explanations

A live-born child (live birth) is every child who exhibits signs of life at birth, such as breathing, beating of the heart, pulsation of the umbilical cord or definite movements of voluntary muscles. If a child dies soon after birth, it is first registered as a live-born and then as dead infant.

A deceased person (death) is every live-born person in whom there is a permanent disappearance of all evidence of life.

Infant death is considered death of a child less than one year of age.

Age is expressed according to completed years of age as a statistical characteristic of population. Age is most often expressed in intervals of five years. Each group includes persons who turned the years put as the limits of one interval. For example, the 15 – 19 age groups include all persons who reached 15 and more but have not turned 20 yet.

Total fertility rate is the average number of children that would be born alive to a woman during her lifetime if she were to pass through her childbearing years (15 – 49) conforming to the age specific fertility rates of a given year.

Life expectancy data show the average number of additional years a person born in selected years would live if current mortality trends were to continue, taking into account the probability of dying at each age for a given population according to the age-specific death rates prevailing at a given period.

## 5 – Migration

#### Data source

Surveys on internal and international migration of population of the Republic of Croatia are carried out based on data collected by the Department for Administrative Affairs of the Ministry of Interior. Persons' legal duty to register changes of their place of permanent residence is based on the Act on Permanent and Temporary Residence of Citizens (NN, Nos. 53/91, 26/93 and 11/00). The Aliens Act (NN, No. 130/11) regulates conditions for the entry, movement, stay and work of aliens in the Republic of Croatia.

#### Coverage and comparability

Data on migration of population in the period 1993 - 1997 have not been collected for the territory of the Republic of Croatia occupied at that time, that is, area under the control of the UNTAES.

Data comprise all Croatian citizens and permanently resident foreigners who reported/unreported their place of permanent residence in the Republic of Croatia at the Registration Department of the Ministry of Interior. In order to harmonise the international migration statistics with international standards and the *acquis communautaire*, the data for 2011 have been processed according to a new methodology, which is based on the concept of usual residence. This new methodology based on the UN Recommendations on Statistics of International Migration and the Regulation (EC) No 862/2007 of the European Parliament and of the Council of 11 July 2007 on Community statistics on migration and international protection.

#### Definitions and explanations

A migrant is a person who changed a place of residence (immigrant, emigrant).

Internal migration is the change of permanent residence of population on the territory of the Republic of Croatia, that is, both place of the previous residence and the place of destination are situated within the Republic of Croatia. Place of permanent residence, according to Article 2 of the Act on Permanent and Temporary Residence of Citizens, is "a place where a person settled with an intention of staying permanently".

A statistical definition of international migrant is based on the concept of usual residence. According to this concept, immigrants from abroad and emigrants to foreign countries are persons who have changed their country of usual residence for a period that is, or is expected to be, of at least one year. According to methodology that was used up to 2011, international migration statistics included Croatian citizens and aliens who have been granted permanent stay in the Republic of Croatia who registered or cancelled their place of permanent residence in the Republic of Croatia. Age of migrants is presented as an age reached at the moment of migration. Each age group includes persons who reached age within limits of an interval. For example, the age group from 15 to 19 years includes all persons who have reached 15 years and more, but have not yet turned 20.

### ➤ **Socio-economic analysis – Methodology report**

#### 1 – Territory – administrative division

The same as written in the rapport for demographic data.

Concerning socio-economic data there is one problem of compatibility data – is a missing data for the City of Zagreb for -1996- 1997, because the City of Zagreb was included in Zagreb County between 29 of September 1995 and 15 January 1997 Zagreb. Since 1997, Zagreb County is a separate administrative unit encompassing territory outside the city of Zagreb.

#### 2 - Methodology

Society :

#### EDUCATION, SCHOOL ENROLMENT (E)

The National Standard Classification of Education at the national level is comparable with the International Standard Classification of Education (ISCED 97).

#### *Level of completed education*

*"Highest level of completed education"*. It includes the type of school that a person completed and thus achieved the highest level of education.

Courses organised in public universities, various agencies etc., that are not included in the educational system of the Republic of Croatia (various courses) were not taken into account as answers to this question in the Questionnaire. The answer recorded referred to a previously completed school included in the educational system.

Presented data on the highest level of completed education is for population aged 15 and over.

"No schooling" - data in this group refer to persons who never attended any school or to those who did not complete the first grade of the basic education respectively.

*Basic education* - refers to all persons who completed one of those grades:

- "1 – 3 grades of basic school" refer to all persons who completed one of those grades as well as to pupils in the first, second and third grade of the basic school. (ISCED 97 level1)
- "4 – 7 grades of basic education" refers to all persons who completed one of those grades (ISCED 97 level 2).

- “Elementary (basic) education” refers to persons who completed the eight-grade elementary school, the former eight-grade or seven-grade school, the former lower grammar school or lower grades of the grammar school respectively, the former civil school and other schools at the level of a “junior-level secondary school certificate”. (ISCED 97 level 3).

*Secondary education* - (the data corresponding to level 3 ISCED 97) are divided into three basic groups:

- vocational schools lasting 1 – 3 years and schools for skilled and high skilled workers
- vocational schools lasting 4 or more years
- Grammar school.

“Vocational schools lasting 1 – 3 years and for skilled and high skilled workers” refer to all persons who completed school of commerce, schools providing practical training, schools of industry or crafts, school for high skilled workers, secondary vocational education lasting less than 4 years, apprentice school etc.

“Vocational schools lasting four or more years” refer to all persons who completed a secondary technical or similar school (for example, economic, medicine, art school etc.) as well as the former so-called secondary vocational education lasting four or more years.

“Grammar school” refers to all persons who gained a senior-level secondary school certificate in a school of any kind of vocation, including religious ones.

*Tertiary education* -(the data corresponding to level 5 and 6 ISCED 97)

It is data about persons who completed:

- “non-university colleges, polytechnics and professional study at schools of higher learning” and professional study lasting 2 – 4 years, or former level of education that lasted 2 – 3 years, a non-university college, school of higher learning (after 1991), polytechnics or faculty (in the past, this also included teacher training and art academies).
- University or art study at a faculty, art academy or schools of higher learning (before 1990) lasting 4 or more years.
- Post-graduate study and acquired a title “master”.
- Doctorate and acquired a title “doctor of science”.

For persons who completed any kind of school abroad, the answer recorded in the Questionnaire included the same school level in Croatia and data on such persons were classified into the adequate school group.

### *School attendance*

Data on school attendance refer to all persons who, either regularly or part-time, attended school: basic, secondary or tertiary, in the country or abroad.

Data on basic and secondary schools are gathered by annual reports at the beginning and end of each school year. Data on students enrolled in institutions of higher education are gathered by individual questionnaires at the beginning of the winter semester of each academic year.

Coverage and comparability - Data for the school years 1993/1994 and 1994/1995 on pre-school, basic and secondary education include kindergartens and schools on the territory of the Republic of Croatia, with the exception of the areas struck by the war; for the school years 1995/1996 and 1996/1997 only the parts of the Counties of Osijek-Baranja and Vukovar-Sirmium, which were under the control of UNTAES, were not included.



## UNEMPLOYED POPULATION (F)

### *Sources and methods of data collection*

Data on unemployment and employment are obtained from the Croatian Employment Service. It is based on records kept by the Croatian Employment Service in line with current regulations. An unemployed person is considered a person registered with the Croatian Employment Service. An unemployed person enters the register on the day of reporting to the Croatian Employment Service and is cleared from it when employed, unregistered, cleared from the records for legal reasons or dead. Data on unemployed persons are presented with the situation as on the last day of the month in a given year.

### *Definitions*

An unemployed person, according to the Employment Mediation Act and Unemployment Rights), is a person between 15 and 65 years of age, fully or partly capable of working, registered with the Croatian Employment Service as an unemployed person, having no regular job and reporting regularly, who is not in employment and under the following conditions:

- he/she does not make monthly earnings for providing a service in accordance with special regulations or gain income from other private activity in accordance with the income tax regulations and the amount of income is higher than the lowest basis for the calculation of contributions for compulsory insurances according to special regulations.
- he/she is not the owner of a registered trade company or other legal entity, that is, does not own more than 25% of shares in a trade company or other legal entity;
- he/she is not the owner of a registered craft, free-lance, farming or forestry business;
- he/she is not a private insured person in agriculture according to the pension regulations;
- he/she is not employed according to special regulations;
- he/she is not a pensioner (the disability pension beneficiaries due to professional disablement are excluded);
- he/she is not a regular pupil or student;
- he/she has not conditions for an early retirement or retirement;
- he/she is an active job seeker and available for employment

## RETAIL TRADE TURNOVER (F)

Total retail trade turnover is presented in 000 kuna, including VAT. Retail trade is the sale of goods to final consumers for personal consumption or use in household.

## MAIN SOURCE OF LIVELIHOOD (F)

For every person the Census collected data on main sources of livelihood used for basic needs. Sources of livelihood are all kinds of revenues that a person earned during 12 months prior to the Population Census.

Revenues include income from regular and occasional work, pensions and benefits of all types, regular and occasional social welfare payments, income from all types of property rights as well as occasional income from natural persons and legal entities in the kind of gifts, presents or any kind of relief in both cash or kind.

## MINORITIES (G)

Nationality is a characteristic that denotes a person's affiliation to a nation or an ethnic group. Nationality is also defined as a feeling of belonging to a society (people) characterised by an ethnical,

lingual and probably cultural affinity of its members as well as a consciousness of the integrity of their own community and its special character in relation to other such communities.

The term ethnical entity includes one or more groups of people, a community whose members share a common identity based on the same culture, religion, language, tradition and other elements. According to Article 15 of the Constitutional Law on Human Rights and Freedoms and on Rights of Ethnic and National Communities or Minorities in the Republic of Croatia, the Republic of Croatia has to ensure to members of all ethnic and national communities and minorities the right to decide which ethnic and national community or minority a citizen wants to belong to.

Regarding national affiliation, the enumerator was obliged to record exactly the answer that a person provided on that matter. On behalf of children up to 15 years of age, the answer was provided by one of the parents, adoptive parent or guardian.

On the basis of the Law on Census of Population, Households and Dwellings, Article 5, Paragraph 2, persons were not obliged to commit themselves about their national affiliation. In that case, the enumerator recorded the answer: "Uncommitted".

In the case a person committed himself or herself in the sense of regional affiliation (for example, Slavonian, Dalmatian, Istrian etc.), the enumerator was obliged to warn a person that it was not commitment about nationality and that, during data processing, that answer would be presented under the modality "uncommitted". If a person, in spite of the warning, insisted on such answer, the enumerator was obliged to record it in the Questionnaire.

On the basis of the list of national minorities stated in the regulations of the Constitutional Law on Human Rights and Freedoms and on Rights of Ethnic and National Communities or Minorities in the Republic of Croatia, data on those minorities as well as the information on the number of persons who were uncommitted were presented. The number of persons, who committed themselves about their regional affiliation – total number, without stating affiliation to a particular region, was also included in the latter.

Economy :

#### ACTIVE POPULATION (H)

Active population includes persons aged 15 (full) and over who has a job in order to earn sources of livelihood.

#### EMPLOYMENT (I)

This chapter contains data on persons in employment collected through regular statistical reports and those from the Labour Force Survey that was for the first time carried out in Croatia in November 1996.

#### *Sources and methods of data collection*

Data on persons in employment, expressed as an annual average with the situation as on 31 March, have been collected from the results of monthly surveys and the annual survey carried out once a year with the situation as on 31 March. Until the end of 1995 this survey was carried out twice a year, with the situation as on 31 March and 30 September.

The survey collects data from legal entities regardless of ownership, government bodies as well as bodies of local and regional self-government units on the territory of the Republic of Croatia. Data are collected through reports filled in by legal entities according to records of persons in employment.

Beginning with 1991, data on persons in employment in crafts and trades and free lances were collected by regular quarterly surveys submitted by the Health Insurance Institute branch offices with the situation as on 31 March, 30 June, 30 September and 31 December. Since March 1998, these data have been collected monthly and carried out on the basis of the Register of Active Beneficiaries of the Pension Insurance.

#### *Coverage and comparability*

Data on persons in paid employment in legal entities include those in permanent employment, irrespective of the kind of employment and number of working hours.

Data on persons in employment in crafts and trades and free lances cover owners and employees registered with the Croatian Institute for Pension Insurance branch offices.

Until 1991, the data were collected in a half-year dynamics, not including owners in crafts and trades and free lances.

The above-mentioned surveys do not include persons in employment in the defence and police, nor persons performing their activity at private farms. Since 1998, the number of persons in paid employment has contained estimated data on persons in employment in the defence and police, while, since 2004, these data have been included on the basis of reports submitted by competent ministries. Since 1996, data have contained the estimate of the number of persons in employment in legal entities with up to 10 employees for whom reports were not submitted. The estimate was done on the basis of statistical financial reports collected and processed by the Financial Agency.

#### *Data Series and the NCEA application*

Until 1997, data on the number of persons in employment in legal entities were surveyed by the regular statistical survey only according to the UCEA, and since then, they were surveyed according to the National Classification of Economic Activities (NCEA). As these classifications are incomparable, data before 1997 cannot be recalculated according to the NCEA.

Until 1998 the statistical survey of data on persons in employment in crafts and trades and free lances was conducted by taking over the data on users of health insurance from the Register of the Croatian Institute for Health Insurance.

Since March 1998 these data have been taken over from the Croatian Institute for Pension Insurance on the monthly basis. In order to ensure the presentation of these data according to the National Classification of Economic Activities, the matching of types of occupations and professions with an adequate activity have been done.

#### *Definitions*

Persons in employment are persons in paid employment, which includes persons who have signed a work contract with the employer for a fixed or unspecified period of time, irrespective of type of ownership and of whether they work full time or less than full time. Included in persons in paid employment are trainees, persons on maternity leave, on sick leave or absent from work for other reasons, until cessation of employment. Also counted as persons in employment are self-employed persons in own trade company, enterprise, craft or free lances.

Working age population comprises all persons aged 15 years and over.

#### *Classifications used*

- a) The National Classification of Activities, 2007 version, comparable to the international classification of activities NACE Rev. 2, was used in economic activity coding. That means

that the data for the previous years (1990, 1995, 2005) concerning economic activity coding is not comparable to the international classification of activities NACE Rev. 2.

- b) Also, it is not possible to compare the data between presented years, because in 1990 and 1995 were presented 14 economic activities, in 2000 and 2005, tri activities more (17), and in 2010, 19 activities.

## GROSS DOMESTIC PRODUCT (J)

Data sources for the calculation of GVA and GDP are the national accounts data, annual business statistics surveys, the annual reports on agriculture production, annual data on persons in employment and earnings and various other statistical data.

The GDP data for the Republic of Croatia and for spatial units for statistics of 2nd and 3rd level are based on the final annual GDP data for the period from 2000 to 2010

GDP per capita at the level of spatial units measures the production rather than the living standard.

### *Coverage*

The calculation covers all activities, following the concept of the 1993 System of National Accounts (SNA 93) and the 1995 European System of Accounts (ESA 95). In accordance with ESA 95, gross value added includes corrections for the estimation of the non-observed economy. The calculation of imputed dwelling rents and financial intermediation services indirectly measured (FISIM) is also harmonized with the international standards.

### *Sources and methods of data collection*

Data sources for the calculation of GVA and GDP are the national accounts data, annual business statistics surveys, annual reports on agriculture production, annual data on persons in employment and earnings, annual data of the Croatian Institute for Pension Insurance on the number of insured persons and various other statistical data.

### *Definitions*

Regional accounts are a subsystem of national accounts in which specified spatial units for statistics are the main objects of observation. The concepts used in the regional accounts are the same as those used in the national accounts. GDP at market prices is the sum of values added by activities, including items at the level of the national economy that are not classified by activities, such as taxes on products less subsidies on products.

Other Data: Data on living conditions and other data:

## NUMBER OF DOCTORS

### *Sources and methods of data collection*

Collection of statistical data on health care is the responsibility of the Croatian National Institute of Public Health and of county offices of public health. Data are entered into basic medical documentation (obligatory individual and summary forms) and are referred to as a source for statistical surveys at all three levels of health care: primary, secondary and tertiary.

The data are supplied to public health county offices in periods of time as established by the Statistical Surveys Program, usually once a year for the previous year for summary reports and continuously for individual forms.

### *Coverage and comparability*

In order to make the system of statistical surveys unique in record keeping, the uniform methodological principles and statistical standards (definitions, classifications, nomenclatures) are used at the state level.

Data are regularly gathered and published in international health publications in accordance with the recommendations and definitions by the World Health Organization. Since 1995, data on private practice workers have been presented separately. It means that in this data is information about only doctors in public health institutions.

### FOREST COVER (AREA)

The statistics on forestry comprises data on state-owned and privately-owned forests. Data on forests in state and private ownership are collected in the public company Croatian Woods and in offices engaged in agriculture in counties, towns and municipalities.

### *Definition*

Forest is considered any area larger than 10 acres that is covered with forest trees, intended for commercial exploitation of timber or for protection purposes or special purposes, irrespective of the height and growth of timber.

### ARABLE LAND

Data on arable land comprise data of arable land and gardens for all years presented. In 2005, the Central Bureau of Statistics has for the first time gathered data concerning private family farms by using the interview method done by interviewers on a selected sample. This meant abandoning a long lasting method of collecting data by using the estimation method done by agricultural estimators on the basis of cadastre data.

For each county, the criterion for sample selection was based on seven sizes: the total used agricultural land area, size of arable land, size of garden area. All obtained data were expanded, compared to data from previous years, to data from the 2003 Agricultural Census and available administrative sources (the Register of Agricultural Holdings of the Ministry of Agriculture, Forestry and Water Management etc.). If necessary, corrections have been made on the basis of all available data.

Due to abandoning of a long-standing method of compiling data through estimates done by agricultural estimators on the basis of cadastral data, there emerged significant differences in data on land areas of some crops, vineyards and orchards. They are mostly demonstrated as the reduction of land areas, which could have been caused by the tardiness of the cadastre. Therefore, 2005 data refer to land areas that are actually used, according to data obtained through the interview method on private family farms, which means the break in the long-lasting series. Data on land areas refer to 31 May each year, and represent land areas used in respective year, that is, own and rented areas minus areas hired out.

### TOURISM: NUMBER OF BEDS

Data source on accommodation capacities is the Monthly Report on Tourist Arrivals and Tourist Nights (TU-11 form), which is carried out by using the reporting method.

Beds in accommodation facilities include permanent and temporary beds, with the situation as on 31 August. The number of permanent beds includes beds permanently ready for renting. The number of temporary beds includes beds prepared according to needs and demand, as well as beds extending the accommodation capacity during the full season.

## **Former Yugoslav Republic of Macedonia (FYROM)**

by Goran Penev  
November 2013

### ➤ **Technical report – Demography**

#### METHODOLOGY

##### 1 – Territory – administrative division

Macedonia<sup>85</sup> or officially Republic of Macedonia is an independent state (since 1991), and one of successor states of former SFR Yugoslavia. Macedonia is a member of the United Nations since 1993. As a result of a dispute with Greece over its name, it was admitted under the provisional name of the former Yugoslav Republic of Macedonia (usually abbreviated as FYROM).

The Republic of Macedonia is a unitary state. In September 1996 Macedonia is divided into 123 municipalities. In 2004, Macedonia was reorganised into 84 municipalities (10 of the municipalities constitute the City of Skopje, the capital city and a distinct unit of local self-government. In February 2013, the Republic of Macedonia was reorganised again, and the number of municipality was to 80.

In 2007 the Macedonian Government adopted the Nomenclature of Territorial Units for Statistics (NUTS). The NUTS of 2007 consists of 5 levels: NUTS level 1 and NUTS level 2 represent the whole territory of the Republic of Macedonia as an administrative unit, NUTS level 3 consists of 8 non-administrative units – statistical regions that are formed by grouping the municipalities as administrative units of lower level, NUTS level 4 consists of 84 municipalities as administrative units, and NUTS level 5 consists of 1 776 settlements.

##### 2 – Definition – total population

In Macedonia, between 1991 and 2011, four censuses of population are organized, but only two are carried out successfully. The 1991 Census was boycotted by the ethnic Albanian community, while the last one is from 2011 stopped four days prior to the census' scheduled ending date because the political motivated resignations of State Census Commission members.

The 1991 Census data refer to the concept of permanent residents. The data from the 1994 and 2002 Censuses refer to the concept of legal (usual) residents.

In the 1994 Census the total population includes:

1. Persons who have an official (legal) place of residence in the Republic of Macedonia, regardless of whether at the time of the Census they are present in their official (legal) place of residence or elsewhere in the Republic of Macedonia;
2. Persons who have a residence permit in the Republic of Macedonia and have been temporarily present in the Republic of Macedonia for at least one year, but have an official (legal) place of residence outside the Republic of Macedonia, with the exception of refugees and persons under humanitarian care;
3. Persons who have an official (legal) place of residence in the Republic of Macedonia, who at the time of the Census and for a maximum of one year prior to its execution are temporarily working abroad, and members of their families; and
4. Persons who have an official (legal) place of residence in the Republic of Macedonia and who at the time of the Census are working in diplomatic and consular representative offices of the Republic of Macedonia abroad, at the UN and its organizations, representative offices or

---

<sup>85</sup> In this annex, the name « Macedonia » or « Republic of Macedonia » is used by the author of the report. The ITAN TPG has dully used the official name « Former Yugoslav Republic of Macedonia » in the Executive Summary, the Main Report and the Scientific Report.

representatives of the Chamber of Economy abroad, business offices abroad, military personnel of the Republic of Macedonia abroad and also citizens engaged in international, technical and other kinds cooperation and education and members of households who are staying temporarily abroad with aforesaid persons.

In the 1994 Census are covered (but not included in total population) citizens of the Republic of Macedonia absent abroad for a year and more. The data are based on the census forms filled by Macedonian citizens in the country and abroad.

In the 2002 Census the total population includes:

1. Persons who have place of usual residence in the Republic of Macedonia, regardless of whether at the time of the Census they are present at their place of usual residence or elsewhere in the country;
2. Foreigners who have a residence permit in Macedonia and who are temporarily present in the country for at least 12 months (one year), but who have a place of usual residence outside of the Republic of Macedonia;
3. Persons who have place of usual residence in the Republic of Macedonia, who at the time of the Census, and for a maximum of 12 months (one year) prior to its execution, are working abroad, as well as the members of their households;
4. Persons who have place of usual residence in the Republic of Macedonia, and during the time of the Census are working abroad at the representative offices of the Republic of Macedonia, citizens engaged on the bases of international co-operation and students attend school/faculty, as well as the members of their households that are staying abroad with the aforesaid persons.

### Coverage

All censuses of population, households and dwellings organised in 1991, 1994, 2002 and 2011 was completely carried on the whole territory of Macedonia. The census moments were 31 March 1991, 20 June 1994, 31 October 2002, and 30 September 2011 at 24.00 hours.

The 1991 Census was boycotted by the majority of ethnic Albanians, while the 2011 Census was stopped four days prior to the official end.

Immediately after censuses were finished quality control was made on representative sample of enumeration areas in order to evaluate coverage and quality of data collected by census. The results of the quality control of the 1994 and 2002 censuses are pointing out full coverage of census units.

### 3 – Population estimates

Estimated mid-year population is based on Census results, data on natural population increase and net migration.

Up to 1993, the estimates were done on the basis of total population by the definition used in the 1991 Census (includes all persons with permanent place of residence in the Republic of Macedonia, regardless if they are absent abroad, and regardless of the duration of absence). Starting from 1994, the estimations have been done on the basis of the total population according to the definition used in the 1994 Census and 2002 Census, the data on live births and deaths in the country and net migration (domestic and international migration).



#### 4 – Data on vital statistics (births and deaths)

##### Vital statistics sources

Sources of data on births, live births, deaths and marriages are the relevant registers, while for divorces, the registers and records of the relevant courts.

##### Coverage

Statistics on births comprise live births and stillbirths, and statistics on deaths comprise all cases of death. Legal marriages, i.e. marriages registered in the Record of Marriages compose the statistics on marriages. Statistics on divorces refer to divorces in the relevant court.

Statistics on migration of population comprise those persons migrating within the country, emigrating from Macedonia to other countries or arriving from other countries into the Republic of Macedonia. Taking into consideration the international recommendations, and in order to reflect the situation more objectively, the State Statistical Office changed the methodology of presenting data on vital events. Starting from 2004, the total number of vital events includes only events which have occurred in the Republic of Macedonia. All indicators related to vital events were calculated on the basis of this methodology.

##### Definitions and explanations

A live-born child (live birth) is every child who exhibits signs of life at birth, such as breathing, beating of the heart, pulsation of the umbilical cord or definite movements of voluntary muscles. If a child dies soon after birth, it is first registered as a live-born and then as dead infant. In this project data on births in the Republic of Macedonia means data on live births.

A deceased person (death) is every live-born person in whom there is a permanent disappearance of all evidence of life.

Infant death (infant mortality) is considered death of a child less than one year of age.

Age is expressed according to completed years of age. It is calculated on the basis of the date of birth of a respective person and the date of event occurrence. If the age is expressed in age intervals i.e. of five years, each group includes persons who turned the years put as the limits of one interval. For example, the 15–19 age groups include all persons who reached 15 and more but have not turned 20 yet.

Total fertility rate is the average number of children that would be born alive to a woman during her lifetime if she were to pass through her childbearing years (15–49) conforming to the age specific fertility rates of a given year.

Life expectancy shows how long a person of a certain age (0, 1, 5 .. 85 + years) will live in average (in additional years of life) if in terms of mortality (age-specific mortality rates) there will be conditions as in the given year (period). In this ESPON ITAN project LE is cited as life expectancy at birth (by sex).

#### 5 – Migration

Sources of data on migratory flows are the forms registering or notifying resettlement or removal, which are completed by competent clerks in the Ministry of Interior. Since 2009, the State Statistical Office monitors the movement and residence of foreigners in the Republic of Macedonia by electronically obtaining data from the records of the Ministry of Interior.

Immigrant-emigrant is considered to be any person who is moving from one to another settlement of the same municipality; from one to another settlement of another municipality, as well as moving from the Republic of Macedonia to another country and vice versa.

A foreigner is a person with foreign citizenship, who stays in the Republic of Macedonia temporarily or permanently, depending on the type of permit he has been issued.

Internal (domestic) migration covers the changes of the place of residence on the territory of the Republic of Macedonia. International migration covers the migration of citizens of the Republic of Macedonia from Macedonia to another country and vice versa, as well as the migration of foreigners.

Net migration is the difference between the number of immigrants and emigrants of in a given period of time. Net migration is positive when the number of immigrants exceeds the number of emigrants, or net migration is negative when the number of emigrants exceeds the number of immigrants.

## ANALYSE

In the late 20th and early 21st century, the demographic development of the Republic of Macedonia, as in other Western Balkan countries, was conducted under exceptional historic (independence) and socio-economic circumstances (transition to market economy, Euro-Atlantic integration). The vital statistics data and the results of the population censuses show that the last two decades have been an extraordinary period for Macedonia also in demographic terms.

### 1. Population growth

In the transition from the 20th to the 21st century the Republic of Macedonia has around 2 million people. Beside Montenegro, Macedonia is the only Western Balkans country with clear population growth. So, according to the 1994 and 2002 censuses the population of this country increased from 1,945,932 to 2,022,547 inhabitants, or by 77 thousand. In 2011 the population of the Republic of Macedonia is estimated to 2,060 thousand people.

In Macedonia, there are distinctive regional differences in terms of population growth in the period 1994-2011. Regions can be classified into three groups: 1) the regions with moderate or high population growth (more than 10%) - Vardarski, Skopski and Pološki; 2) Regions with a low population growth (about 5%) – Jugozapaden, Jugoistočen and Severnoistočen; 3) Regions with population in decrease – Istočen and Pelagoniski.

### 2. Natural increase

In Macedonia, the yearly number of live births is still larger than the number of deaths, but changes are taking place towards bringing them into balance and most likely leading to the natural decrease. The natural growth decreased from more than 20,041 in 1991 to 3,305 in 2011. This was also paralleled by a declining natural growth rate, so that in 2011, it was more than six times lower than that registered in 1991 (a decrease from 9.8 per 1000 to 1.6 per 1000).

In 2011, the natural increase is present in five regions. The highest one is in Vardarski region with 4.3 per 1000. In 2011, deaths exceeded births in the Vardarski, Istočen and Pelagoniski regions.

Births. Generally speaking, with regard to births in the Republic of Macedonia, the 1990s do not deviate from the general declining trend manifest in the latter half of the 20th century. Even so, last decade has been made different by the fact that the yearly number of live births has always been under 35,000 and that the lowest average yearly number of live births and the lowest yearly number of live-born children (27,309 in 1999) was registered in it.

The same tendencies were put to the beginning of the 21st century, but this trend was not so accentuated, and moreover, a slight increase in their number was also registered in the second half of the first decade of 2000s. But, in 2011, the life births reached one of the lowest annual numbers (22,770), not only in 21st century, but in whole period after the Second World War.

**Fertility.** In Macedonia, since 1996, the total fertility rate (the average number of children per woman) is constantly below replacement level. These trends have continued lying down during the first decade of 21st century. In 2011, the total fertility rate is 1.46, i.e. significantly less than at the beginning of the 1990s (2.06 in 1990). Fertility below the replacement level is present in all regions and that during the entire period since 2000. However, there are notable regional differences. In 2011, the TFR ranged from 1.2 (in the Jugozapaden Region and in Istočen Region) to 1.7 (Skopje Region).

**Mortality.** Unlike the trends in births, deaths for the period 1991-2011 showed an increasing trend. The annual number of deaths has fluctuated, but it was reached the highest number of deaths in 2007 (19.6 thousand), and in 2011 (19.5 thousand). The most important cause should be finding in the aging of population, but also in a slight decrease in mortality by age.

**Infant mortality.** In Macedonia, the fastest decrease of mortality achieved among children younger than 10 years, particularly to infants under one year of age, which led directly to a modern mortality pattern by age. The infant mortality rate in the period 1991-2011, decreased nearly by four times - from high 28.2 per 1000 in 1991 to a moderate, and for Macedonia the lowest level of 7.6 per 1000 in 2011.

The infant mortality rate was reduced in all regions, but regional differences are still present. In 2011, the infant mortality rate in all regions is below of 10 at 1,000. The highest value of the indicator is in Polog Region (10.0 per 1,000) and lowest in the Jugoistočen Region (1.7 per 1,000). Normally, because small population size, the great annual fluctuations are often present. But, if these differences are observed for the three-year periods, they are much less pronounced.

**Life expectancy.** Change in the intensity and direction of mortality by age and sex directly determine the dynamics of the number of years of life expectancy (LE). The changes of this indicator that occurred in Macedonia between 1991 and 2011 were much more moderate compared to the trends of infant mortality. In addition, changes in LE is not taking place in the same direction for both male and female population. Life expectancy at birth for males is slightly risen (from 69.4 years in 1994 to 73.4 in 2011). At the same time, LE for females also was in increase, but slower than for man (from 74.1 to 77.2 years). This has reduced the differences in male and female life expectancy at birth (from 4.7 to 3.8 years).

### 3. Migration

The Republic of Macedonia is one traditional emigrant country. Net migration between 1994 and 2002 censuses calculated according census and vital statistics data is negative (number of emigrants exceeds the number of immigrants by 30.0 thousand people). Reasons for leaving Macedonia were mainly economic. The State Statistical Office of the Republic of Macedonia (SSO) monitors annually the international and domestic migration, but we estimate huge under coverage of migration flows, especially of international emigration. For example according to the SSO data, in 2011, the number of emigrants from Vardar Region was 0, and from Pelagonia Region was only one.

### 4. Population by Sex and Age

In Macedonia, the female population was more numerous than the male one. Looking only by the results of the 1994 Census and the next ones, conducted in 2002, it can be seen a small and nearly stable difference between the shares of males and females in the total population has nearly stable. In the intercensal period 1994-2002, the share of male population in the total one increased only by 0.1 percentage point (from 50.1% to 50.2%) and the sex ratio from 1003 to 1008.

There is a striking difference between the structures of various age groups by sex, which are reflected in the first place by the numeric predominance of males in younger and adult age groups, and larger share of females into older adult age groups (50-64) and elderly people (65 or more).

The results of the latest censuses indicate an accelerated aging of the population of Macedonia. The share of young people decreasing, while the proportion of old people increase continuously.

The demographic ageing was intensified in Macedonia in the last two decades. Namely, the share of young population kept decreasing continuously, while that of old population kept growing. In 1994, the number of young people (up to 15) was three times bigger that of the old ones (65 or more), i.e. 484 thousand vs. 165 thousand. According to the 2002 Census, the young population was still more numerous than elderly, but in this year "only" by double (426 thousand and 214 thousand). The results of recent demographic estimates confirm the continuity of aging of population of Macedonia. In 2011 the number of population aged up to 15 decreased to 356 thousand and number aged 65 or more reached 242 thousand.

### ➤ **Technical report – Society and economy**

#### METHODOLOGY

##### 1 – Territory – administrative division

Macedonia or officially Republic of Macedonia is an independent state (since 1991), and one of successor states of former SFR Yugoslavia. Macedonia is a member of the United Nations since 1993. As a result of a dispute with Greece over its name, it was admitted under the provisional name of the former Yugoslav Republic of Macedonia (usually abbreviated as FYROM).

The Republic of Macedonia is a unitary state. In September 1996 Macedonia is divided into 123 municipalities. In 2004, Macedonia was reorganised into 84 municipalities (10 of the municipalities constitute the City of Skopje, the capital city and a distinct unit of local self-government. In February 2013, the Republic of Macedonia was reorganised again, and the number of municipality was to 80.

In 2007 the Macedonian Government adopted the Nomenclature of Territorial Units for Statistics (NUTS). The NUTS of 2007 consists of 5 levels: NUTS level 1 and NUTS level 2 represent the whole territory of the Republic of Macedonia as an administrative unit, NUTS level 3 consists of 8 non-administrative units – statistical regions that are formed by grouping the municipalities as administrative units of lower level, NUTS level 4 consists of 84 municipalities as administrative units, and NUTS level 5 consists of 1776 settlements

##### 2 – Society

###### Education

Two main indicators of educational structure of the population, educational attainment and literacy, present the level of population education, also involving the achieved level of socio-economic development of the country. Data on educational attainment and literacy are significant for versatile socio-economic, sociological and demographic researches, as well as for defining and realizing state strategies and policies for education system improvement. International recommendations do not classify the questions on literacy in the group of so-called "core topics", thus enabling each country to independently decide whether to collect the related data in the census or not. Therefore, the two mentioned characteristics were included in the content of all censuses of the population of the Republic of Macedonia from 1948 to 2011. Data on literacy have been collected for the persons aged 10 and over, and those on educational attainment for the persons aged 15 or more.

Literacy. Each person having completed more than three grades of primary school shall be considered literate. In addition literate will be considered a person without school qualification and with 1-3 grades

of primary school if he can read and write a composition (text) in relation to everyday life, i.e. read and write a letter regardless of the language and alphabet he can read, i.e. write.

Educational attainment. Highest completed school means the type of school where the person has acquired the highest level of education. No difference should be made between acquiring education at a regular school or a school that replaces the regular one (example: school for education of adults), respectively acquired by exams taken in a regular school or some program of abbreviated education.

School enrolment. Data on primary and lower secondary schools, upper secondary schools, higher education institutions and faculties are collected by means of regular annual statistical surveys.

The annual statistical reports on education cover all types of schools. The data on primary, lower secondary and upper secondary schools refer to the end of the school year, while the data on the higher education institutions – advanced vocational schools and faculties, refer to the winter semester when the students enrolled.

The term school shall mean any educational institution or other educational unit which provides instruction of a particular type, under a specific curriculum and syllabus, irrespective of whether the organization has an independent administration or is operating under the management of another administration. Each separate geographical unit shall also be deemed a school unit.

Primary and lower secondary education covers the following types of schools:

- Regular primary and lower secondary schools.
- Special primary and lower secondary schools for children with special educational needs.
- Adult primary and lower secondary schools which enable persons over 15 years of age to complete primary education.
- Supplementary education schools refer to the primary music and ballet schools which are attended by pupils in addition to their regular primary education.

Upper secondary education covers:

- Regular upper secondary schools, where the pupils select one of the 30 vocational training courses or general high schools (existing since the beginning of the school year 1991/92). The data on graduated pupils refer to the total number of graduated pupils (full-time and part-time).
- Special upper secondary schools for persons with special educational needs provide the students with an opportunity to receive a specific type of vocational training.
- Religious upper secondary schools.

The tertiary education covers higher education and faculties. Tertiary education institutions are: university, faculties and higher education institutions. Schools of arts that pursue fine arts activities may also have the title of an Art Academy. Instruction at faculties lasts from 6 to 12 semesters. Instruction in higher education institutions lasts 6 semesters.

### Employment and unemployment rates

Data on employment and unemployed rates presents in the ESPON ITAN project data base have been collected through the Labour Force Survey (LFS). The LFS was carried out for the first time in the Republic of Macedonia in April 1996. Until 2003, the LFS was conducted annually, and since 2004, it is conducted as a continuous survey throughout the year, with quarterly processing of results. The Labour Force Survey is conducted in accordance with the methodological recommendations of the International Labour Organization (ILO), as well as the Eurostat. The final concept of the LFS was established bearing in mind the specifics of the Republic of Macedonia.

According to the LFS methodology the economically active population includes the employed and the unemployed persons (labour force).

The persons deemed as employed shall be all persons at the age of 15-79, who:

- worked for money or income at least one hour during the reference week;

- during the reference week were temporarily absent from work (due to illness, leave, training, etc.) but had a job;
- were helping on the family property or enterprise without pay.

Persons aged between 15 and 74 shall be considered as unemployed if:

- they were without work during the reference week;
- they were active job seekers or have taken concrete activities to find a job;
- they were prepared to start to work in the week of interview or in the following week.

The employment rate (in percentages) is the share of the number of employed in the working age population aged 15 years and over. The unemployment rate (in percentages) is the part of the number of unemployed persons in the total labour force.

#### Minorities (population by ethnic affiliation).

The data on the ethnic composition of the population are relevant for the understanding of the cultural diversity of the population, position of the ethnic groups in the society, monitoring of the migratory flows and other characteristics of the ethnic communities, as well as for the defining and implementation of numerous strategies and policies aimed at enhancing the position of the members of the ethnic groups. For this reason, the official Yugoslav, i.e. Macedonian statistics has, in all of the post-Second World War censuses, paid particular attention to the ethnic features of the population, in terms their demographic, educational, socio-economic and other characteristics.

The international recommendations do not put the question of the ethnicity among the so-called core topics and thus each country decides independently whether it will collect this kind of data during the census. If this question is included in the contents of the basic census forms, its formulation ought to be as clear and as precise as possible and the respondent must have a possibility to declare completely independently and freely, as well as the right not to declare his ethnic affiliation. The question on the ethnicity in the form for a person (Enumeration form) is formulated as an open-type. If person did not want to declare themselves on their ethnicity, it was filled in answer "does not want to declare". For the children younger than 15, the response was provided by the parent, adoptive parent or the caregiver.

### 3 – Economy

The questions that relate to the economic activity of the population were included into the contents of all censuses carried out in the Republic of Macedonia in the period after Second World War. In the four last censuses, the data on economic activity were collected for the persons aged 15 years and over.

#### Active population

According to the 2002 Census methodology, the data of the economic activity refer to the week preceding the census day (from 25th to 31st October 2002).

By economic activity, the population is grouped on two basic groups: active population and non-active population

The active population consists of persons aged 15 years or more:

- Employed persons - persons that perform an activity as employees or independently;
- Unemployed persons - persons that have interrupted their employment because of bankrupt of employer/own enterprise, seasonal character of the work, persons that are waiting to start a new job, pupils, students, pensioners, housewives, unemployed and other persons that are looking for a job.

Non-active population consist persons that are not employed, that are not looking for a job and persons that have interrupted their employment:

- Housewives (engaged on duties within the household in their own house)
- Persons that serving a sentence in a prison;
- Persons that serving in military service;
- Permanently incapable to work;
- Pupils and students;
- Pensioners and others.

An employment, according to the international standards, means every economic activity for salary or other type of compensation, in duration of at least one hour in the reference week.

According to the status in employment, economically active population is classified on:

- Employed person;
- Employer;
- Own account worker;
- Contributing family worker.

Employed person is:

- an employed person (full-time or part-time) in enterprises (of public, private, mixed, common and state ownership) and other associations of enterprises, in banks, insurance companies, other financial organizations; agricultural and other cooperatives, state bodies, funds; other organizations, associations, political parties and civil associations;
- a person working in private shops or agricultural holdings, but not owning them (including the members of the household) and receiving salary for their work or a recovery in cash or in kind regardless being socially and pension insured or not;
- a person having established an employment: in private enterprises and shops; diplomatic, trade and other country representative offices and representatives from abroad in the Republic of Macedonia; in joint enterprises, banks etc. in Republic of Macedonia, as well as in their representative offices abroad, etc.;
- a person serving in religious organizations;
- a person-maids for whom the regular work in somebody else's houses is basic occupation by which they provide livelihood, or
- a person that is not formally employed, but who perform seasonal, agricultural and other temporary works by which they provide livelihood.

Employer is:

- a person managing their own enterprise (registered as a legal entity);
- a person who is owner and participate in the management, i.e. administration of enterprise's affairs and employ one or more workers;
- a person working in its own shop (craft, trade, catering or other type), or
- a person who perform free-lance activity: (lawyer, dentist, filmmaking worker, sculptor etc.).

Own account worker is a person who have its own enterprise, business, perform independent activity, and work on an agricultural property with a purpose to obtain income, without employing other persons.

Contributing (unpaid) family worker is encircled a persons working for no salary in the enterprise, shop or agricultural property owned by other member of the household, without payment or recovery.

Working population (employed persons). See the paragraph II.2.

#### 4 – Gross domestic product (GDP)

The most common and the most important aggregate in the system of national accounts is the gross domestic product (GDP). It is an indicator of economic activities on the level of a whole country and

presents the result of production activities of resident institutional units, and it equals the sum of values added that are calculated for all institutional sectors.

Data sources used for GDP calculations are the annual financial accounts from the Central Register, data from the regular statistical surveys in the State Statistical Office, data from the Ministry of Finance, the Public Revenue Office, the National Bank and additional data from relevant institutions.

The GDP calculation includes all activities within the production frame defined by SNA'93 and ESA'95 methodologies and covers the whole territory of the Republic of Macedonia. The classification of economic units by activity is in line with the National Classification of Activities (NKD Rev.2) that is harmonized with the Classification of Economic Activities in the European Community (NACE Rev.2)

Because of data confidentiality, the data on the Financial Sector by institutional sectors and sub-sectors are shown only at the sector level. Distribution by sub-sectors for the Sector S.14 Households is not made because the sub-sectors cannot be defined due to lack of data. Sector S.15 Non-profit institutions serving households, according to ESA 95, cannot be divided into sub-sectors.

The State Statistical Office compiles GDP by production and expenditure approaches which are mutually independent. The basic categories for GDP compilation by production approach are gross output, gross value added and gross domestic product.

Gross output is considered to be the value of goods and services produced in the course of one year, regardless of whether or not the whole quantity is sold or partially added to stocks. It consists of three kinds of output: market output, output for own final use and non-market output. Due to the specifics of some activities, various definitions of gross output exist. Gross value added at basic prices is the basic category of GDP and it's defined as value of gross output minus intermediate consumption. Gross domestic product (GDP) at market prices is the final result of the production activity of the resident producer units and it is the sum of gross value added of the various institutional sectors or the various activities at basic prices plus value added tax and import duties less subsidies on products (which are not allocated by activities).

The regional accounts are a set of data on value added by regions and the gross domestic product as an economic aggregate.

The largest source of data for calculating the gross domestic product by regions is the data warehouse in the State Statistical Office, where data on annual accounts of the business entities in all institutional sectors can be found. Besides that, data from the surveys of the State Statistical Office are also used.

The preparation of the regional accounts is essentially based on the concept of national accounts. The gross value added is disaggregated by sectors of economic activity according to the National Classification of Activities (NKD Rev. 2), i.e. the gross domestic product, by using the available indicators for distribution of the total value, such as wages, employees, indicators of built apartments, etc.

## ANALYSE

### 1 – Education

The educational attainment of the population was being improved continuously: in the total population aged 15 years or more, the share of people having a higher educational attainment (secondary and tertiary) has been increasing and that of people having a lower attainment, decreasing.

According to the 2002 Census, in the Republic of Macedonia there were 1,757 thousand persons of age 10 years and over, of which 63.6 thousand were illiterate persons, i.e. 3.6%. Illiteracy rate among males is 1.7%, and among females 5.5%. The average age of illiterate person is 61 years (56 for males, and 63 years for females).



The share of people without any education in the total population kept decreasing continuously and the share of those with higher educational attainments kept growing.

According to the 2002 Census results, 286.9 thousand people in Macedonia or 18.0% of the total population aged 15 years or more had not received the full eight-year elementary school education. By the 1994 Census data, this group was larger – 363.3 thousand or every fourth inhabitant of Macedonia aged 15 or more. In the same period was decreased also the number and share of population with completely eight-year elementary school education. In the same period were increased the number and the percentage of population with whatever educational degree. In 2002 the largest number of inhabitants had received secondary school education (589 thousand), but the largest increase was among people with tertiary education (by 30%). Despite an improvement in the educational structure of population, because the lack of more recent census data we estimate that the percentage of highly educated persons is even low, especially in comparison with other European countries.

The 2002 Census data on the educational attainment of the population by sex are indicative of a lower educational attainment of females than that of males: the percentage of females without any education or having incomplete elementary education is much larger, the share of them with secondary education is smaller than among males, but the proportion of those with tertiary educational attainment is approximately the same as with males.

The educational attainment varies by population age, which results from the development of education system in the period after Second World War, particularly from the introduction of obligatory elementary education, as well as the continuously growing number of those who carry on receiving education after finishing the elementary school. Recent data also shows that over the years, there has been an increase in the number of women enrolling at the third educational level. Also, there are more women enrolling in the second and third cycle of studies and graduating from the first, second and third cycles of higher education.

The level of education is the highest in the Region of Skopje. This region is more developed and with larger network of higher educational institutions. By the 2002 Census data, in Skopje Region is the lowest percentage of population without completely primary school (11%) and highest proportions of population with secondary (45%) or tertiary education (15%).

#### Attending school

In 2011/2012 eight-year elementary school education covers 92% of total population aged 6-14 years. The generation coverage in secondary education is around 80%.

The number of pupils in primary and secondary schools shows a slight decrease, which is a common trend in recent years, mainly because decreasing number of births in the country. The number of students in higher education quickly increased, but only until mid-2000s. In last five years number of third level students was fluctuated around 60 thousand.

## 2. Active population

#### Unemployed and employed population

Between 1996 and 2011 the number of unemployed has slowly increased (from 251 thousand to 295 thousand). However, the increase of unemployment was only to the middle of 2000. According to the LFS, in 2005, were the largest number of unemployed persons (324 thousand) and the highest unemployment rate (37.3%). After 2005, the number of unemployed steadily is declining as well as the rate of unemployment. In 2011, the unemployment rate was 31.4% and it was almost the same as in 1996 (31.9%).

The reasons of so high unemployment rate are many. The most important are the very long and deep economic crisis, economic transition and one more or less unsuccessful privatisation process.

In Macedonia, in terms of unemployment present huge regional differences. The unemployment rate is much higher in Severnoistočen Region (60% in 2011) and in Jugozapaden Region (43%). In the same year, the lowest unemployment rates are in Istočen Region (16%) and Jugoistočen Region (9%).

### 3. GDP

In Macedonia the biggest share in the gross domestic product (GDP) belongs to the Skopje Region, with 43.7% in 2010, while the smallest share belongs to the Severnoistočen Region, with only 4.4%.

Compared to the average of the Republic of Macedonia the high GDP per capita belongs only to the Skopje Region with an index of 149. The Pelagonia Region and Jugoistočen Region are around national average (indexes of 107 and 104). All other regions had an average GDP per capita, below the average of the Republic of Macedonia. The smallest was recorded in the Pološki Region with an index of 46.8 and the Severnoistočen Region with an index of 51.4.

### 4. Minorities – ethnic structure

The Republic of Macedonia is a bi-ethnic country. As the 1991 census was boycotted by ethnic Albanians population, the share of this community was estimated at 22% of the total population of Macedonia. Three years later, in the 1994 Census supervised by the Council of Europe and the European Union, the ethnic Macedonians appeared large majority (67%) and the proportion of Albanians was at 23% of the total population. The 2002 Census confirms the dominance of ethnic Macedonians (65%), despite an increase of the Albanian community (25%).

The contrasting Macedonians and Albanians demographic trends can be largely explained by differences in natural growth. Natural increase rate is much higher among ethnic Albanians than in ethnic Macedonian population, who have more demographically older age structure, moreover higher mortality rate. However, significant differences in migration patterns (higher net emigration rate among ethnic Albanians) contributed to the reduction of differences in the population growth rates of these two communities.

The country is separated into several clearly visible parts. According to the 2002 Census, in four regions (Vardarski, Istočen, Jugoistočen and Pelagoniski) ethnic Macedonians have a very large majority (from 86% to 92%). In Pološki Region, second more peopled region, the share of ethnic Albanians is 73%. In two other regions (Jugozapaden and Severoistočen), the share of ethnic Albanians is below national average (37% and 31%). In Skopje Region the percentages of two largest ethnic groups are around national average (64% are the ethnic Macedonians, and 23% are Albanians).

## **Kosovo under UNSCR 1244/99**

by Goran Penev  
November 2013

### ➤ **Technical report – Demography**

#### METHODOLOGY

##### 1 – Territory – administrative division

In 2008, Kosovo declared itself an independent state under official name the Republic of Kosovo. In this way, Kosovo became the seventh state emerged after the breakup of the former Yugoslavia. Its independence has partial international recognition. The Republic of Serbia does not recognise the independence of Kosovo and considers it as one of their two autonomous provinces (the other is Vojvodina). According to the Constitution of Serbia the official name of Kosovo is the Autonomous Province of Kosovo and Metohija.

According to the current legal regulation there is no administrative division of the regions in the Republic of Kosovo. By the existing Law on Administrative Municipal Boundaries (2008), the territory of Kosovo was divided in 30 municipalities and three pilot municipalities (Hani i Elezit, Junik and Mamusha). In 2009 four new municipalities were established, (Gračanica, Partesh, Killokot and Ranilug). Until 2013 the Republic of Kosovo hasn't adopted the EU NUTS system. In ESPON-ITAN project Kosovo is divided in seven districts, and data at the district level are considered as data at the similar NUTS 3 level.

##### 2 – Definition – total population

In Kosovo, between 1991 and 2011, only two censuses of population are organized. The first one was carried by the Yugoslav Federal Statistical Office. The second one was carried by the Kosovo Agency of Statistics (ASK). The Census process in Kosovo during all its stages has been monitored by an International Monitoring Operation (IMO) consisting of the Council of Europe, of Europe, the European Commission, United Nations Economic Commission for Europe (UNECE) and United Nations Statistics Division (UNSD).

The 1991 Census was boycotted by the ethnic Albanian community. For AP Kosovo and Metohija the estimates have been obtained, so that 1991 Census results, being reported in this project are in fact sum of 1991 Census data and the estimated number of population who refused to take part in the Census (at the census day).

The 2011 Census was not conducted on whole territory of the Republic of Kosovo. Due to the boycott of the ethnic Serbs, the enumeration could not be carried out in the northern Kosovo municipalities, and was under coverage in the same municipalities in the other parts of Kosovo because of boycott of an important share of the Serbian ethnic community. The 2011 Census final results published by ASK are without the estimated number of population who refused to take part in the Census.

The 1991 Census data (estimates) refer to the concept of permanent residents. The data from the 2011 Census refer to the concept of legal (usual) residents.

The census moment for both censuses was 31 March at 24.00 hours.

In the 1991 Census, the total population of a certain place included persons who resided in that place permanently, regardless of whether they were in that place at the critical census moment or they were temporarily absent for any reason whatsoever (work, education, travel, ... etc.).

In compliance with the international recommendations, in the 2011 Census, for the purpose of determining the total number of population of a given area, the concept of the "usual population" was

used. Population corresponds to all persons who usually resided in Kosovo for at least 12 months at the census date, or had the intention to reside in Kosovo for at least 12 months at that date; persons with diplomatic status, foreign military personnel and persons who have their usual residence out of Kosovo are excluded.

### Coverage

All censuses of population, households and dwellings organised in 1991 and 2011 was not completely carried on the whole territory of Kosovo. The first one was boycotted by the ethnic Albanians, and the second by the ethnic Serbs. The boycott of the 2011 Census was especially in the Northern part of Kosovo.

Immediately after 2011 Census were finished quality control was made on representative sample of enumeration areas in order to evaluate coverage and quality of data collected by census. The ones applied to Kosovo census are two: the post enumeration survey (called PES) and demographic techniques.

### Comparability of census data

When using census results, it should be kept in mind that definitions of permanent, that is total population in 1991 and 2011 censuses, are not completely comparable. The 1991 Census on the resident population, by definition, included, besides the population in the country, the population temporarily working abroad as well as their family members living with them abroad.

In order to achieve the international comparability of data, the methodology used in the 2011 Census is in line with the Conference of European Statisticians Recommendations for the 2010 Censuses of Population and Housing. In the 2011 Census, according to the international statistical standards, the concept of place of usual residence is used in defining of the total population, but an intention of staying has been introduced for the first time as an additional criterion in including/excluding a person from the total population.

## 3 – Population estimates

Federal Statistical Office of FR Yugoslavia regularly was prepared the annual estimates of the population of republics and autonomous provinces (Kosovo-Metohija and Vojvodina), to provide up-to-date information for years in which there is no census. After 1991 the estimates are based on observed data about natural population changes (births, deaths) and on data about internal migration (on the territory of former FR Yugoslavia). The estimates of population of Kosovo by sex and age for the postcensal period after 1991 have been corrected on until 1997 on the basis of the 1991 Census (estimations) results.

The postcensal population estimates (by sex and age) for the years since 2011, have been calculated on the basis of census data on 1 April 2011. "The update 2008-2009" was used as the key basis of estimation for the municipalities Leposavić, Zvečan, Zubin Potok and for Severna Mitrovica with Serb ethnic majority. The estimates was calculated according to the census data on sex and age, and on the number of live births, deaths, immigrants and emigrants (internal and international migration), distributed by the calendar year of birth and sex at the municipality level. The total estimated population of Kosovo represents the sum of the total estimated population of respective municipalities.

## 4 – Population by type of settlement

In order to present data by type of settlement, in all three censuses is used the so-called administrative-legal criteria, according to which settlements are divided into "urban" (those that have

obtained this status through a legal act of the respective local self-government unit) and into "other" (1991) or "rural" (2011).

## 5 – Data on vital statistics (births and deaths)

### Vital statistics sources

Source of data of vital statistics, are register books for births and books for deaths, while reported units are the Civil Status offices of Kosovo (registrars). Collection of data is done through special statistical instruments: statistical questionnaire DEM-1 for births and DEM-2 for deaths.

Cases of births are mandatory to be registered (recorded) in the registry books, for births and deaths, of the settlement (municipality) where it occurred, regardless if the persons related to the event, have permanent residence in that place or in any other place.

The results of demographic statistics are processed and published according to the permanent/usual residence principle of the related person (mother of child or dead person) that, according to the international rules, it is adapted to the concept of permanent population (usual population). This principal is applied also in 2011 Census of population of Kosovo.

### Coverage

Statistics of births cover all births (live births and stillborns) in the respective year. Statistics of deaths include every death case.

During the 1990s, the vital statistics data are available only for the period 1990-1997, and for the 2000s since 2002. In the last two decades in Kosovo is present a problem of significant under-registration of vital events (especially of live births). During the 1990s (1990-1997) under- registration is mostly related to the ethnic Albanians and in the 2000s to the ethnic Serbs. The main reason for low coverage in the 1990's was the boycott of institutions of the Republic of Serbia by the Albanian ethnic community. In the 2000s it is the boycott of institutions of the Republic of Kosovo by the members of the Serbian ethnic community (especially in the municipalities with Serbian majority).

According to an ASK's evaluation, after the war in 1999, the under-registration of live births was around 15% and of deaths around 25%. After 2009 the coverage of vital events is around 90%.

### Definitions and explanations

A live-born child (live birth) is every child who exhibits signs of life at birth, such as breathing, beating of the heart, pulsation of the umbilical cord or definite movements of voluntary muscles. If a child dies soon after birth, it is first registered as a live-born and then as dead infant. In this ESPON-ITAN project, data on births in Kosovo means data on live births.

A deceased person (death) is every live-born person in whom there is a permanent disappearance of all evidence of life.

Infant death (infant mortality) is considered death of a child less than one year of age.

Age is expressed according to completed years of age. It is calculated on the basis of the date of birth of a respective person and the date of event occurrence. If the Age is expressed in age intervals i.e. of five years, each group includes persons who turned the years put as the limits of one interval. For example, the 15–19 age groups include all persons who reached 15 and more but have not turned 20 yet.

Total fertility rate is the average number of children that would be born alive to a woman during her lifetime if she were to pass through her childbearing years (15–49) conforming to the age specific fertility rates of a given year.

## 6 – Migration

Statistical monitoring of migration, especially international migration, is considerably less developed. Dispute Kosovo Agency of Statistics (ASK) provides information for a large range of demographic data, including data on immigration and emigration, so far, the ASK has not published detailed data on migration of population of Kosovo.

### ANALYSE

In the late 20th and early 21st century, the demographic development of Kosovo, as in other Western Balkan countries, was conducted under exceptional historic (armed rebellion, NATO military campaign, transitional UN administration /UNMIK/, independence) and socio-economic circumstances (transition to market economy). Vital statistics and the 2011 Census data show that the last two decades have been an extraordinary period for Kosovo also in demographic terms.

Due to the extraordinary circumstances present in the 1990s and early 2000s is not possible to accurately determine the population dynamics of Kosovo in the period between 1991 and 2011. The 1991 Census was boycotted by the majoritarian ethnic Albanians, census about 2000 was not carried, and the 2011 Census largely boycotted by the ethnic Serb minority.

As for the vital statistics data from the first half of the 1990s, its coverage was reduced due to a smaller or larger boycott of ethnic Albanians. From 1998 to 2002, there was no vital statistics data. After reconstitution of vital statistics by the ASK, data on births and deaths are available again, but the coverage of births and deaths was reduced due to the boycott of mostly part of the ethnic Serbs.

Determining the number of population of Kosovo was aggravated due to mass emigration and forced migration during the NATO military campaign. However, based on the relevant assessment may be concluded with certainty that the 1990s are the years when was stopped very intensive population growth, and in some years, especially immediately before and after the war of 1999, it was also a period of very significant decrease in population Kosovo.

#### 1. Population growth

According to the final results of last population census, on 31 March 2011, Kosovo had 1,780,021 inhabitants. Compared with the final results of the previous 1991 Census, the population increased by 1,380,479 persons. Since both censuses were boycotted, the first one by the ethnic Albanians and the other by the ethnic Serbs, the comparison makes sense only if we compare the results of official population estimates. According to estimates prepared by the ASK, on 31 March 2011, Kosovo had 1,780,021 inhabitants (40 thousand more than according to the final Census results). According to the estimates made by the Yugoslav Federal Statistical Office, the total population of Kosovo on 31 March 1991 was 1,956,196 (1,892,327 in the country). Therefore, it can be estimated that between censuses of 1991 and 2011, total population of Kosovo decreased by 112.3 thousand inhabitants.

#### 2. Natural increase

In Kosovo, the yearly number of live births is larger than the number of deaths, but changes are taking place towards reducing the difference. The natural growth decreased from more than 43,700 in 1991 to 26,700 in 2011. The real decrease in natural growth is larger because an under-coverage of vital events in 1990s (mainly of ethnic Albanians), but also in 2000s (mainly of ethnic Serbs). This was also

paralleled by a declining natural growth rate from 24 per 1000 in 1991 to 15 per 1000 in 2011. Despite the significant decline in natural growth, Kosovo had the highest natural increase rate in the Western Balkans, as well as in Europe. It was as at the beginning of the period (1991) as well as at the end (2011).

**Births.** Generally speaking, with regard to births in Kosovo, the 1990s (1990-1997), and 2000s do not deviate from the general declining trend manifest from the beginning of the 1980s. Even so, last decade (2002-2011) has been made different by the fact that the yearly number of live births has always been under 40,000 and that the lowest average yearly number of live births (34.4 thousand) since 1950s.

Dispute not availability of data on live births between 1998 and 2001, according to the 2011 census data on age structure of population it is evident one short baby-boom period in 2000 and 2001, i.e. immediately after the Kosovo War of 1999.

**Fertility.** In Kosovo, in the period after Second World War, the total fertility rate is very high, always above replacement level, and with clear declining tendency. This indicator has continued lying down during the second half of the 20th century, and especially during the last decade of 20th century, but also during the 2000s. In 2011, the total fertility rate was 2,5 i.e. significantly less than at the beginning of the 1990s (3.5 in 1991).

**Mortality.** Unlike the trends in births, deaths for the period 1991-2011 showed a stable trend. From 1991 to 2011, the number of deaths decreased from 8526 to 7556. From 2008 to 2011, the annual number of deaths has fluctuated, but it was still below 6000 (5847 in 2011). A sudden increase in the number of deaths is in 1999, which can be explained by the war. The authors of the report of a household survey carried on several months after the war estimate that around 13,000 deaths in the total population could be attributed to war.

**Infant mortality.** In Kosovo, the fastest decrease of mortality achieved among children younger than 10 years, particularly to infants under one year of age, which led directly to a modern mortality pattern by age. The infant mortality rate in the period 1991-2011, decreased by more than 3 times - from very high level of 33.6 per 1000 in 1991 to (by European standards) still high level of 9.8 per 1000 in 2011.

### 3. Migration

Intensified migratory movements were one of the main characteristics of the demographic changes taking place in the past two decades, especially in the 1990s. That was not the case in Kosovo only, but also in the majority of the former socialist countries of Europe, as well as in the former Yugoslav republics. In Kosovo, the disintegration of the former SFR of Yugoslavia, so-called Kosovo crises during 1990s and especially the Kosovo War in 1999 were the main causes of the very intense migration, which, in the end of 20th century, largely had the nature of forced migration.

In the 1990s the forced migration of more than one million people began. During the winter of 1998 clash between Albanian separatists and Serbian forces, the number of people who have deserted their homes estimated to 100,000. During the NATO military campaign in 1999 are undoubtedly hundreds of thousands more ethnic Albanians were forced into exodus. At the end of the war, the UNHCR estimated that a million people have left Kosovo from the beginning of the conflict. With the arrival of international troops, the return of Albanians began, resulting in the same time a new exodus of ethnic Serbs. If the Albanian refugees have mostly returned to Kosovo, UNHCR puts the figure at 180,000 Serbs and other "non-Albanians" leaving Kosovo.

According to the 2002 Census data in the Central Serbia and Vojvodina was registered around 150,000 internally displaced persons (IDPs) from Kosovo. Despite the end of hostilities, the emigration of Albanians from Kosovo continues. This emigration of purely economic nature is even more important in the days of the former Yugoslavia. For the period 1991-2011, it would have affected around 450,000 people.

#### 4. Population by Sex and Age

In Kosovo, the male population was more numerous than the female one. Looking only by the results of estimates for 1991 and the 2011 Census data, it can be seen that the difference between the shares of males and females in the total population became less. In the period 1991-2011, the share of male population decreased from 51.6% to 50.3% and the sex ratio from 1066 to 1014.

The results of the last two censuses indicate that the population of Kosovo is the youngest in the Western Balkans as well as in Europe, but also indicate an accelerated demographic aging. The share of young population is high but kept decreasing continuously (from 37.3% in 1991 to 28.0% in 2011), while that of old population is yet low but growing (from 6.2% in 1991 to 6.7% in 2011). In 1991, the number of young people (up to 15) was six times bigger than that of the old ones (65 or more), i.e. 730.5 thousand vs. 120.9 thousand. In 2011, the young population is still more numerous than elderly, but in this year "only" by four times (487.6 thousand relative to 116.8 thousand).

#### ➤ **Technical report – Society and economy**

#### METHODOLOGY

##### 1 – Territory – administrative division

In 2008, Kosovo declared itself an independent state under official name the Republic of Kosovo. In this way, Kosovo became the seventh state emerged after the breakup of the former Yugoslavia. Its independence has partial international recognition. The Republic of Serbia does not recognise the independence of Kosovo and considers it as one of their two autonomous provinces (the other is Vojvodina). According to the Constitution of Serbia the official name of Kosovo is the Autonomous Province of Kosovo and Metohija.

According to the current legal regulation there is no administrative division of the regions in the Republic of Kosovo. By the existing Law on Administrative Municipal Boundaries (2008), the territory of Kosovo was divided in 30 municipalities and three pilot municipalities (Hani i Elezit, Junik and Mamusha). In 2009 four new municipalities were established, (Gračanica, Partesh, Killokot and Ranilug). Until 2013 the Republic of Kosovo hasn't adopted the EU NUTS system. In ESPON-ITAN project Kosovo is divided in seven districts, and data at the district level are considered as data at the similar NUTS 3 level.

##### 2 – Society and economy

#### Education

Two main indicators of educational structure of the population, educational attainment and literacy, present the level of population education, also involving the achieved level of socio-economic development of the country. Data on educational attainment and literacy are significant for versatile socio-economic, sociological and demographic researches, as well as for defining and realizing state strategies and policies for education system improvement. International recommendations do not classify the questions on literacy in the group of so-called "core topics", thus enabling each country to independently decide whether to collect the related data in the census or not. Therefore, the two mentioned characteristics were included in the content of all censuses of the population of Kosovo from 1948 to 2011. Data on literacy have been collected for the persons aged 10 and over, and those on educational attainment for the persons aged 15 or more.

*Method of collecting the data on educational attainment of population in the 2011 Census*



International recommendations classify the question on educational attainment (the highest school completed) in the group of so-called "core topics", i.e. the characteristics that should be included in the basic census forms. Data on the highest school completed have been collected for the persons aged 15 and over.

Educational level. The Census collected the data on "Educational attainment" for any person, except for pre-school children and primary school pupils. Educational attainment refers to the highest level successfully completed in the educational system of the country. It is the education providing degrees, diplomas, certificates, etc. which have been conferred on a person by regular school, school for adult education or special school. The courses which do not provide certificates as a part of regular school are not considered to be "the highest level successfully completed" (e.g. typing courses, accounting course, etc.), but the data on previously completed school are collected.

In all six censuses of population of Kosovo carried in 20th century (after World War II) by the Yugoslav Federal Statistical Office, the issue of educational attainment exclusively related to education gained within the official educational system. The same approach was adopted by Statistical Office of the Republic of Serbia. In the 2011 Census of population of Kosovo, the issue of educational attainment related to all education gained within the official and so called the parallel shadow education system of ethnic Albanians (1991-1996).

The long tradition of collecting the data on educational attainment has been followed by changes regarding methodology approaches and classifications.

Data on educational attainment in the census was collected for the level of old and new systems (since 2000) of education. On the other hand, Demographic, Social and Reproductive Health Survey in Kosovo (KDHS-2009) uses 4 categories of educational attainment. In order to compare two sources, the categories used in the 2011 Census are re-grouped to provide harmonised data with the DHS-2009 as follows:

- No schooling: No schooling + No completed level of education
- Primary: Primary (4 years) + Primary (5 years)
- Lower secondary: Lower secondary (8 grades) + Lower secondary (9 grades)
- Higher secondary: Upper secondary (12 grades) + upper secondary (13 grades)
- University: Post-secondary vocational + bachelor + postgraduate degree + doctorate

School enrolment. The Census collected the data on "School attendance". School attendance is defined as regular attendance at any accredited educational institution or programme, public or private, for organised learning at any level of education. The data on school attendance refer to the Census day, i.e. 31 March 2011.

The concept of school attendance is different from, but complementary to, that of enrolment as normally covered by school statistics. Regular annual statistical surveys conducted by the ASK, covers public and, recently, some private institutions from preschool to tertiary education

Primary education lasts five years and is compulsory for all pupils under the rule of six years up to eleven years of age. Lower secondary education lasts four years and is compulsory for all pupils under the rule of twelve years up to fifteen years of age. Type of upper secondary schools is divided into gymnasiums, vocational schools and art schools.

Data on post-secondary education come from the University of Priština.

Source of data on education statistics are: kindergartens, public schools and some private, Administration of the University of Priština, Ministry of Education, Science and Technology.

Data on kindergartens, preschool, primary, lower secondary education, upper secondary education, special schools with disabilities, faculties as well as teachers at all levels of education according to international standards ISCED 1997 are aggregated in ASK.

### Levels of education system in Kosovo classified by - ISCED 97

Description of ISCED 97 categories	ISCED 97 Categories	Levels of education system in Kosovo (selected)
Pre-primary education	0	Pre-elementary, kindergarten, 3 up to 6 years of age
Elementary education	1	Elementary education, 5 years (6 to 11 years of age)
Lower secondary education	2	Lower secondary education, 4 years (12 to 15 years of age)
Upper secondary education	3	Upper secondary education, gymnasium and vocational schools 3 and 4 years (15 to 18 years of age)
Post-secondary education non tertiary	4	Higher level of professional education post secondary (19 to 24 years of age)
First phase of tertiary education	5	To define this level is used the definition of ISCD 97 (19 to 26 years of age)
Second phase of tertiary education	6	To define this level is used the definition of ISCD 97 (22 to 26 years of age)

### Economically active population (employed and unemployed persons)

The questions that relate to the economic activity of the population were included into the contents of all censuses carried out in Kosovo in the period after Second World War. In the 2011 Census, the data on economic activity were collected for the persons aged 15 years and over. The maximum age limit was not defined taking into account. The 2011 Census applied the concept of the so-called current activity, and therefore all the data on the economic characteristics of the population are derived on the basis of the responses regarding the activities in the week prior to the Census (from 25th to 31st March 2011).

In the 2011 Census of the population of Kosovo, the activity status is definite according to international (ILO) definitions. By activity status, total population is divided into three groups: employed, unemployed and inactive persons. The employed added to unemployed constitute the active population, also called the labour force.

Economically active population comprises all persons of either sex, aged 15 years or more who furnish the supply of labour for the productive activities (falling in the production boundary of the system), during the reference period. The economically active population ("labour force") comprises the persons who perform occupation (employees or self employed persons) and the unemployed persons.

Employed person is considered to be employed if he worked for at least one hour in the reference week, or did not work due to holiday, illness, etc. but is normally in employment. Persons on long term absences as e.g. women on parental leave are included in the category of employed persons if they have a formal attachment to the job.

Unemployed person is considered to be unemployed if he is not employed in the defined sense, is taking active steps to look for work, and is able to start work at short notice.

Not economically active persons ("inactive population") are persons who are not considered employed or unemployed in the observation period; ex. full-time pupils, students, housekeepers, pensioners, compulsory military servants, etc.

The economically active population ("labour force") comprises the persons who perform occupation and the unemployed persons.

### Minorities (population by ethnic affiliation)

The official Yugoslav statistics has, in all of the censuses from 1948 to 1991, paid particular attention to the ethnic features of the population of the republics and autonomous provinces (Vojvodina and Kosovo-Metohija), thus creating ample statistical materials primarily on the high number of the ethnic communities, as well as on their diverse demographic, educational, socio-economic and other characteristics.

Collecting data on the ethnicity of the population in the 2011 Census. The international recommendations do not put the question of the ethnicity among the so-called core topics and thus each country decides independently whether it will collect this kind of data during the census. If this question is included in the contents of the basic census forms, its formulation ought to be as clear and as precise as possible and the respondent must have a possibility to declare completely independently and freely, as well as the right not to declare his ethnic affiliation. In the 2011 Census of Kosovo, the question on the ethnicity in the form for a person (Individual questionnaire – form R3) is formulated as a semi-open type. Enumerated person can choose one of eight listed ethnicities (Albanian, Serb, Turkish, Bosniak, Roma, Ashkali, Egyptian and Goran), or can declare another ethnic affiliation. According to the Kosovo Constitution, the enumerated person may choose not to declare. In that case, it was filled in answer "Prefer not to answer".

### Gross domestic product (GDP)

The main and the most significant macroeconomic aggregate within the System of National Accounts is Gross Domestic Product (GDP), which represents the result of production activities of all residential institutional units.

The calculation of gross domestic product, in accordance with SNA 93 and ESA 95 methodology, is based on the existing administrative data sources, as well as based on official statistical surveys, which had been done in ASK.

Calculation of GDP is based in three approaches:

- Production approach
- Expenditure (cost) approach and
- Income (earning) approach

Expenditure approach. In the ESPON ITAN project database, the presented GDP for Kosovo is calculated by cost method. The GDP by this approach is derived as the sum of all final expenditures on goods and services. These final expenditures are grouped into three big categories: Final consumption, Gross Capital Formation and Net exports (E-I). Since the GDP measures domestic production, the value of expenditures on imports is subtracted from all other expenditures, using the following formula:

$$\text{GDP} = \text{FC} + \text{GCF} + (\text{E}-\text{I})$$

- FC = final consumption
- GCF = gross capital formation
- E = export
- I = import

### *Components of the Gross Domestic Product.*

1. Household final consumption. The household consumption is the main component of GDP by expenditure approach and represents the costs of the resident households, in order to obtain goods and services necessary for their needs and demands. It includes not only directly paid for goods and services, but also the acquisition through income in kind or from own production. The total household final consumption was derived from the Household Budget Survey, which is organized in ASK.
2. Final consumption expenditure of Government. Government final consumption is measured as the sum of purchases of goods and services, compensation of employees and consumption of fixed capital less receipts from sales.
3. Gross capital formation. Based on ESA 95 methodology, the GCF represents the sum of the gross fixed capital formation (GFCF) and changes in inventories. The estimation of gross fixed

capital formation covers acquisitions less disposals of tangible assets and major improvements to tangible non-produced assets, which are used more than one year. The estimates on the GFCF include the following types of assets: dwellings, other buildings and structures, machinery and equipment.

## ANALYSE

### 1. Education

The educational attainment of the population was being improved continuously: in the total population aged 15 years or more, the share of people having a higher educational attainment (secondary and tertiary) has been increasing and that of people having a lower attainment, decreasing.

According to the 2011 Census, in Kosovo there are 1,429,175 persons of age 10 years and over, of which 55,001 are illiterate persons, i.e. 3.4%. Illiteracy rate among males is 1.6%, and among females is four times higher (6.1%). Twenty years before (1991), the illiteracy rate was much higher: 11.9% for total population, 6.0% for males, and 18.2% for females.

The share of people without any education in the total population kept decreasing continuously and the share of those with higher educational attainments kept growing.

According to the 2011 Census final results, about 382.7 thousand people in Kosovo or 26.8% of the total population aged 10 years or more had not received the full eight-year or full nine-year elementary school education. In the census day, in Kosovo 501.6 thousand persons (35.1% of total population aged above 10 years) have completely eight-year or nine-year elementary school education. The number of inhabitants had received (upper) secondary school education (428 thousand or 29.9%) is much higher than ever before, but yet lower than the number of population with elementary education. In this regard Kosovo differs from other Western Balkans countries. This can largely be explained by the very young age structure of Kosovo, as well as a large emigration of the young adult population.

Most intensive increase is among people with tertiary education. The number of persons with post-secondary education is more 100 thousand (116.9 thousand or 8.2% aged 10 years or more, i.e. 9.3% of population aged above 15).

Despite an improvement in the educational structure of population, the proportion of people without primary education is still high (27%) and the percentage of highly educated persons is even low (below 10%), especially if we make the comparisons at international level.

The data on the educational attainment of the population by sex are indicative of a lower educational attainment of females than that of males. The percentage of females without any education or having elementary or lower education is much larger (73% vs. 51%), the share of them with secondary education is smaller (21% vs. 38%), as well as the proportion of those with tertiary educational attainment is significant lower (6% in contrast with 10%) than among males.

The educational attainment varies by population age, which results from the development of education system in the period after the Second World War, particularly from the introduction of obligatory elementary education, as well as the continuously growing number of those who carry on receiving education after finishing the elementary school. Recent census data also shows a change in the sex structure of young adult population having tertiary education. In the age group 20-29, the share of women having university degree is a little higher than the proportion of men (11% and 10%).

#### Attending school

Primary and lower secondary education covers around 97% of relevant population. Around 97% of pupils continue education after completing primary and lower secondary education, but the generation

coverage in secondary education is almost 75% because there is a dropout of pupils after enrolment to upper secondary schools.

## 2. Active population

### Unemployed and employed population

In Kosovo, unemployment is very huge problem, especially among young people and women. According to the 2011 Census results, that year in Kosovo was unemployed 228 thousand persons i.e. 44.8% of economically active population. Also, share of active population in total population aged 15 years or more is very low – only 40.6%, and additionally very extremely low proportion of employed population (22.4%).

High proportion of inactive population (not economically active population) is, first of all, the result of very young age structure, as well as traditionally low percentage of female economically active population (only 23.5%). Because that, Kosovo have, by the European standards, an extraordinary low share of women in total unemployment population (36.0%), and, at the same time extremely high unemployment rate (55.5%). By age, the highest unemployment rate is among age group 20-29 (55.2%)

## 3. Salary and GDP

Total gross domestic product (GDP) of Kosovo is significantly increased. Between 2004 and 2011, the GDP in current prices is increased from 2912 million euros to 4776 million euros. For this period, it is very difficult to calculate the GDP per capita (because unreliable population estimates), but an increase is evident. For the 2011 census year, we estimated the GDP per capita at 2674 euros. It is important to note that the GDP wasn't calculated for whole territory of Kosovo (excluding Northern Kosovo), while the estimated population include the ethnic Serbs.

## 4. Minorities – ethnic structure

Kosovo is a region where ethnic Albanians are largely majority since the Second World War. Over time, their number has tripled and in 1991 they accounted for over 80% of the population (68% in 1948). The second largest ethnic group is that of the Serbs but the lower than Albanians led to a decline in their share in total population (from 24% in 1948 to 10% in 1991). This slower growth can be explained firstly by a lower demographic vitality. During the period 1950-1990, the Albanians of Kosovo are indeed distinguished by exceptional fertility, not only the highest in Serbia but also superior to that of Albanian in Macedonia and in Albania. The more moderate Serb population growth is also due in part to their net emigration. Kosovo, the least developed Yugoslav region has always been a country of emigration, for all ethnic groups until the early 1990s. Among the emigrants, ethnic Serbs were however constantly increasing. Ethnic Albanians have also emigrated, but in much lower, especially after the adoption of the constitutional amendments of 1968.

Crises and conflicts of the 1990s intensified migration, which affected all ethnic groups. In the beginning were the ethnic Albanians who were forced to migrate. With the arrival of international troops (in 1999), the return of Albanians began, resulting in the same time a new exodus of ethnic Serbs (around 200,000 people). Given the intensity of migration, the ethnic composition of Kosovo is not well known. According to the 2011 Census, the proportion of Albanians is 92.9% while that of the Serbs is just 1.5%. But given that the Serbs boycotted the census (especially in Northern Kosovo) the real share of this group is greater. According to official estimates of total population of Kosovo at the census day is greater by 40 thousand inhabitants than according to census results. So we can assume that, according to these estimates, the proportion is 90.8% of Albanians and the Serbs 3.7%.

## **Montenegro**

by Goran Penev  
November 2013

### ➤ **Technical report – Demography**

#### METHODOLOGY

##### 1 – Territory – administrative division

According to the current legal regulation there is no administrative division of the regions in Montenegro. By the Law on Territorial Organization of Montenegro the territory of the country is divided in 21 municipalities.

Because Montenegro not exceeds the maximum limits NUTS 3 level, Montenegro is one statistical region in all three levels which are in accordance with the European NUTS statistical standard.

##### 2 – Definition – total population

When comparing the Census data from 1991, 2003, 2011 the change of total population definition should be taken in consideration. The census moment for 1991 and 2011 was 31 March at 24.00 hours. The 2003 Census day was 31 October.

In the 1991 Census, the total population of a certain place included persons who resided in that place permanently, regardless of whether they were in that place at the critical census moment or they were temporarily absent for any reason whatsoever (work, education, travel, ... etc.). Around the mid-1960s there was a more significant departure of the citizens of the former Yugoslavia aimed at working abroad. According to the methodologies of the 1971, 1981 and 1991 censuses, regardless of their absence, Yugoslav and Montenegrin citizens who were "temporarily" away on account of their work abroad, as well as the members of the family who resided with them abroad, were included in the total population of Yugoslavia as well as in the total population of Montenegro).

In compliance with the international recommendations, in the 2003 Census, the total population of Montenegro included Montenegrin citizens whose work and/or stay abroad was for less than a year, as well as the foreign citizens who worked or resided in country for a year or more. The refugees from the former Republics of the SFR Yugoslavia are included in the total population. Because Montenegro was, at the 2003 Census day, member state of the State Union of Serbia and Montenegro, the internally displaced persons (IDPs) from the Kosovo and Metohija are excluded from the number of total population of the Montenegro.

For the purpose of determining the total number of population of a given area, it was in the 2011 Census that the concept of the "usual population" was used for the first time. Census covers citizens of Montenegro, citizens of Montenegro and foreign citizens, foreign citizens and persons without citizenship who have residence (permanent or temporary) in Montenegro, no matter whether they are at the moment of Census in Montenegro or in abroad, no matter do they in the moment of Census possess personal identification documents and no matter do they live in apartment, other objects or in public areas.

Population represents persons with usual place of residence in Montenegro. Usual place of residence is place where a person usually resides regardless of temporary absence for the purposes of recreation, holiday, visits to friends or relatives, business, medical treatment or religious pilgrimage; as well as place where a person resides continuously, at least from 1 April 2010, or he has arrived in that place later but with intention of stay there at least for one year.

This concept is prepared in the way that ensures that every person has only one usual place of residence. In international context this is important in order to avoid that persons are included in total number of population in more countries or not to be included at all.

In 2011 Census, the refugees from the other former republics of the SFR Yugoslavia are included in the total population of Montenegro in compliance with the same rules.

### Coverage

All censuses of population, households and dwellings organised in 1991, 2003, and 2011 was completely carried on the whole territory of Montenegro.

Immediately after censuses were finished quality control was made on representative sample of enumeration areas in order to evaluate coverage and quality of data collected by census. The results of the quality control of all three censuses are pointing out full coverage of census units.

### Comparability of census data

When using census results, it should be kept in mind that definitions of permanent, that is total population in 1991 and 2003 censuses, are not completely comparable. The 1991 Census on the resident population, by definition, included, besides the population in the country, the population temporarily working abroad as well as their family members living with them abroad.

According to the international recommendations, the 2003 Census on the resident population includes, besides the population in the country, the Montenegrin citizens whose work/stay abroad is shorter than a year as well as foreign citizens who work/stay in our country longer than a year.

In order to achieve the international comparability of data, the methodology used in the 2011 Census is in line with the Conference of European Statisticians Recommendations for the 2010 Censuses of Population and Housing. In the 2011 Census, according to the international statistical standards, the concept of place of usual residence is used in defining of the total population, but an intention of staying has been introduced for the first time as an additional criterion in including/excluding a person from the total population.

## 3 – Population estimates

Statistical Office of Montenegro (Monstat) regularly prepares the annual estimates of the population, to provide up-to-date information for years in which there is no census. After 1991 the estimates are based on observed data about natural population changes (births, deaths) and on data about internal migration (on the territory of former FR Yugoslavia).

The population estimates for the intercensal period 1991-2003 have been corrected on the basis of the 2003 Census final results. The postcensal population estimates (by sex and age) for the years since 2003, have been calculated on the basis of census data on 31 October 2003, and for years since 2011 on the basis of census data on 31 March 2011. The estimates was calculated according to the census data on sex and age, and on the number of live births, deaths, immigrants and emigrants (internal migration), distributed by the calendar year of birth and sex at the municipality level. When estimating the population, the assumption is that the balance of international migration is equal to zero. The total estimated population of Montenegro represents the sum of the total estimated population of respective municipalities.

The population estimates for 2007 - 2010 is revised based on 2011 Census results.

#### 4 – Population by type of settlement

In order to present data by type of settlement, in all three censuses is used the so-called administrative-legal criteria, according to which settlements are divided into "urban" (those that have obtained this status through a legal act of the respective local self-government unit) and into "other" (rural). In the 1991 and 2003 censuses, 41 urban settlements were defined, and in the 2011 Census, 57 urban settlements were defined within territory of Montenegro.

V – Data on vital statistics (births and deaths)

#### 5. Vital statistics sources

The data of births and deaths are provided by the registrars that maintain the respective books.

##### Coverage

Statistics of births cover all births (live births and stillborns) in the respective year. Statistics of deaths include every death case. According to the regulations of keeping the register books, all cases of births and deaths shall be entered in the register maintained for the area where they occurred, regardless the fact whether the person registered resides in the area. The processing procedure anticipates the re-grouping of data and the results are shown by the place of residence of mother (for births), i.e. by the place of residence of deceased person.

##### Definitions and explanations

A live-born child (live birth) is every child who exhibits signs of life at birth, such as breathing, beating of the heart, pulsation of the umbilical cord or definite movements of voluntary muscles. If a child dies soon after birth, it is first registered as a live-born and then as dead infant. In this project data on births in Montenegro means data on live births.

A deceased person (death) is every live-born person in whom there is a permanent disappearance of all evidence of life.

Infant death (infant mortality) is considered death of a child less than one year of age.

Age is expressed according to completed years of age. It is calculated on the basis of the date of birth of a respective person and the date of event occurrence. If the Age is expressed in age intervals i.e. of five years, each group includes persons who turned the years put as the limits of one interval. For example, the 15–19 age groups include all persons who reached 15 and more but have not turned 20 yet.

Total fertility rate is the average number of children that would be born alive to a woman during her lifetime if she were to pass through her childbearing years (15–49) conforming to the age specific fertility rates of a given year.

Life expectancy shows how long a person of a certain age (0, 1, 5 .. 85 + years) will live in average (in additional years of life) if in terms of mortality (age-specific mortality rates) there will be conditions as in the given year (period). In this project LE is cited as life expectancy at birth (by sex).

#### 6 – Migration

Statistical monitoring of migration, especially international migration, is considerably less developed. Data on internal migration in Montenegro are collected from the records kept by Ministry of Interior. The internal migrants are the persons, who have changed their place of residence inside Montenegro. Net internal migration balance at national level must be zero.



Data on international immigrant stocks in Montenegro can be obtained only from population censuses of Montenegro on the basis of immigration from abroad. The same is with Montenegrin emigrant stocks. The actual real number of Montenegrin citizens abroad is difficult to determine, but it is certainly greater than recorded in the three last censuses (1991, 2003 and 2011).

Statistical coverage of international immigrant stock is additionally complicated after the dissolution of the former Yugoslavia (definition of immigrants from former Yugoslav republics before and after the break-up of the joint country).

## ANALYSE

In the late 20th and early 21st century, the demographic development of Montenegro, as in other Western Balkan countries, was conducted under exceptional historic (independence) and socio-economic circumstances (transition to market economy, Euro-Atlantic integration). The vital statistics and the censuses of the population in 2003 and 2011 show that the last two decades have been an extraordinary period for Montenegro also in demographic terms.

### 1. Population growth

Montenegro, according to the 2011 Census was 620,000 inhabitants, and therefore belongs to the group of the least populated European countries. In the same group, with less than one million inhabitants, are also San Marino, Monaco, Liechtenstein, Andorra, Iceland, Malta, Luxembourg, and, in some measure, Cyprus (only the population on the territory controlled by the Government of the Republic of Cyprus).

So, according to the last population census, on 31 March 2011, Montenegro had 620,029 inhabitants, which is by 5 thousand more than 20 years earlier (1991) and equal in total than by previous 2003 Census (620,145). But, the increase of the population in country was more important (around 26.5 thousand). If we look at comparable data, then the population growth was only in the first period. Between 1991 and 2003 censuses, total population of Montenegro (with IDPs from Kosovo and Metohija) increased by 40.5 thousand inhabitants, while in the last intercensal period decrease was 14 thousand. In the first intercensal period population growth was results of natural increase and net immigration, while in the second period the decline was caused only by net emigration (number of live births excised number of deaths).

### 2. Natural increase

In Montenegro, the yearly number of live births is still larger than the number of deaths, but changes are taking place towards bringing them into balance and most likely leading to the natural decrease. The natural growth decreased from more than 5,600 in 1991 to 3,400 in 2001 and only 1,400 in 2011. This was also paralleled by a declining natural growth rate, so that in 2011, it was more than four times lower than that registered in 1991 (a decrease from 9.5 per 1000 to 2.2 per 1000).

Births. Generally speaking, with regard to births in Montenegro, the 1990s do not deviate from the general declining trend manifest in the latter half of the 20th century. Even so, last decade has been made different by the fact that the yearly number of live births has always been under 10,000 and that the lowest average yearly number of live births and the lowest yearly number of live-born children (8,758 in 1997) was registered in it.

The adverse tendencies were put to an end at the beginning of the 21st century: not only was the tendency of the number of live births to decrease arrested, but a slight increase in their number was also registered, to about 8,500 yearly in the 2008-2009 period. But, in the next two years the number of live births continue to decrease reached the lowest annual number in 2011 (7,215), not only in 21st

century, but in whole period after the Second World War. These trends can be explained by huge economic crises and very intensive emigration from Montenegro.

Fertility. In Montenegro, since 1980s, the total fertility rate (the average number of children per woman) is below replacement level. These trends have continued lying down during the second half of the 20th century, but also during the first decade of 21st century. In 2011, the total fertility rate is 1.65, i.e. significantly less than at the beginning of the 1990s (2.05 in 1991).

Mortality. Unlike the trends in births, deaths for the period 1991-2011 showed an increasing trend. From 1991 to 2007, the number of deaths increased from year to year (3975 à 1991 to 5979 in 2007). From 2008 to 2011, the annual number of deaths has fluctuated, but it was still below 6000 (5847 in 2011). A sudden increase in the number of deaths in the early 1990s only to some, and to a lesser extent, can be explained by the wars related to the break-up of the former Yugoslavia. The immediate cause should first look into the aging of population, but also in a slight decrease in mortality by age, and for the same age groups in the increase of age-specific mortality rate.

Infant mortality. In Montenegro, the fastest decrease of mortality achieved among children younger than 10 years, particularly to infants under one year of age, which led directly to a modern mortality pattern by age. The infant mortality rate in the period 1991-2011, decreased by 2.5 times - from high 11.2 per 1000 in 1991 to low level, also by European standards, of 4.4 per 1000 in 2011. This decrease was not continuous. In the early 1990s, the infant mortality rate has increased, and was therefore interrupted the long-term decreasing trends of infant mortality. This can be explained by the then very hard situation in public health as well as the effects of international sanctions against the Federal Republic of Yugoslavia (Serbia and Montenegro). Decrease of infant mortality rates was particularly fast in the second half of the 2000s. Between 2007 and 2011 the number of deaths to children under one year of age was reduced from 83 to 32, and the infant mortality rate from 11.0 to 4.4 per 1000 live births.

Life expectancy. Change in the intensity and direction of mortality by age and sex directly determine the dynamics of the number of years of life expectancy (LE). The changes that occurred in Montenegro between 1991 and 2011 were much more moderate compared to the trends of infant mortality. In addition, changes in LE is not taking place in the same direction for both male and female population. Life expectancy at birth for males is slightly risen (from 70.8 years in 1991 to 71.3 years in 2006 and 72.8 in 2011). At the same time, LE for females initially there was in decrease (from 78.3 to 76.5 years), and in the last five years in the increase (up to 78.1 in 2011, ie at the same level as 1991). This has considerably reduced the differences in male and female life expectancy (from 7.5 to 5.3 years).

### 3. Migration

Intensified migratory movements were one of the main characteristics of the demographic changes taking place in the past two decades, especially in the 1990s. That was not the case in Montenegro only, but also in the majority of the former socialist countries of Europe, as well as in the former Yugoslav republics. In Montenegro, the disintegration of the former SFR of Yugoslavia was the main cause of the very intense migration, which, in the last decade of 20th century, largely had the nature of forced migration.

In the early 1990s, the forced migration of more than 5 million people began. Several million of them changed permanently their place of residence. According to the refugee census conducted in May and June 1996, there were 28.3 thousand war-afflicted persons in Montenegro (mostly from Bosnia and Herzegovina and Croatia). According to the 2003 Census data in Montenegro registered 21,000 refugees and 14,000 IDPs from Kosovo and Metohija. This means that these two groups of forced migrants accounted 5.5% of the total population. The majority of the population remained permanently in Montenegro.

During the 1990s and 2000s, has increased significantly and emigration from Montenegro. Reasons for leaving Montenegro were mainly economic. But in a greater extent than before, there were political reasons, especially in the 1990s. According to the 1991 Census abroad were 24,000 citizens of

Montenegro, or 3.9 % of the total population. In the intercensal period 1991-2003, there was a sharp increase in the number of Montenegrin citizens abroad. For twelve years, the number of Montenegrin citizens out of country more than doubled (a total of 56,000). The actual number is much higher, especially those who have left the country earlier. Emigration has continued since 2003, but so far are not available 2011 Census data about Montenegrin citizens abroad. We estimate that the total number is not less than 70 thousand persons.

#### 4. Population by Sex and Age

In Montenegro, the female population was more numerous than the male one. Looking only by the results of the 1991 Census and the latest ones, conducted in 2003 and 2011, it can be seen that the difference between the shares of males and females in the total population has nearly stable. In the 1991-2011 period, the share of male population in the total one decreased only by 0.3 percentage points (from 49.7% to 49.4%) and the sex ratio from 990 to 976. However, if we consider only the population in the country, the participation of men and women, and the sex ratio in 1991 are the same as in 2011. This suggests that in 1991 the sex ratio of Montenegrin citizens abroad was significant greater than in the population in the country.

There is a striking difference between the structures of various age groups by sex, which are reflected in the first place by the numeric predominance of males in younger age groups, larger share of females in the middle-aged groups and their striking numeric predominance in old age groups.

The biggest disproportion between the number of males and females is in the oldest population groups. According to the 2011 Census results, the number of males to 1000 females by age group was as follows: 65-74: 778; 75-84: 711; and 85 or more: 521.

The results of the latest censuses indicate an accelerated aging of the population of Montenegro. The share of young people decreasing, while the proportion of old people increase continuously.

The demographic ageing was highly intensified in Montenegro in the last two decades. Namely, the share of young population kept decreasing continuously, while that of old population kept growing. In 1991, the number of young people (up to 15) was three times bigger that of the old ones (65 or more), i.e. 155 thousand vs. 51 thousand. In 2011, the young population is still more numerous than elderly, but in this year "only" by 67% (1,250 thousand and 1,025 thousand).

#### ➤ **Technical report – Society and economy**

##### METHODOLOGY

##### 1 – Territory – administrative division

According to the current legal regulation there is no administrative division of the regions in Montenegro. By the Law on Territorial Organization of Montenegro the territory of the country is divided in 21 municipalities.

Because Montenegro not exceeds the maximum limits NUTS 3 level, Montenegro is one statistical region in all three levels which are in accordance with the European NUTS statistical standard.

##### 2 – Society

##### Education

Two main indicators of educational structure of the population, educational attainment and literacy, present the level of population education, also involving the achieved level of socio-economic development of the country. Data on educational attainment and literacy are significant for versatile

socio-economic, sociological and demographic researches, as well as for defining and realizing state strategies and policies for education system improvement. International recommendations do not classify the questions on literacy in the group of so-called "core topics", thus enabling each country to independently decide whether to collect the related data in the census or not. Therefore, the two mentioned characteristics were included in the content of all censuses of the population of Montenegro from 1948 to 2011. Data on literacy have been collected for the persons aged 10 and over, and those on educational attainment for the persons aged 15 or more.

#### *Method of collecting the data on educational attainment of population in the 2011 Census*

International recommendations classify the question on educational attainment (the highest school completed) in the group of so-called "core topics", i.e. the characteristics that should be included in the basic census forms. Data on the highest school completed have been collected for the persons aged 15 and over.

**Educational level.** The Census collected the data on "Educational attainment" for any person, except for pre-school children and primary school pupils. Educational attainment refers to the highest level successfully completed in the educational system of the country. It is the education providing degrees, diplomas, certificates, etc. which have been conferred on a person by regular school, school for adult education or special school. The courses which do not provide certificates as a part of regular school are not considered to be "the highest level successfully completed" (e.g. typing courses, accounting course, etc.), but the data on previously completed school are collected.

In all eight censuses after World War II, the issue of educational attainment exclusively related to education gained within the official educational system. However, the long tradition of collecting the data on educational attainment has been followed by changes regarding methodology approaches and classifications. In order to provide data comparability, which was difficult to obtain due to the change in the educational system and different classifications being used, in the ITAN project, data are shown for larger educational groups, as follows: without educational attainment and incomplete primary education, primary education, secondary education, tertiary education (high or higher education especially education at the college or university level).

**School enrolment.** The Census collected the data on "School attendance". School attendance is defined as regular attendance at any accredited educational institution or programme, public or private, for organised learning at any level of education. The data on school attendance refer to the Census day, i.e. 31 March 2011.

The concept of school attendance is different from, but complementary to, that of enrolment as normally covered by school statistics. In regular annual statistical surveys conducted by the Monstat, cover primary, secondary and higher education institutions. Data on primary and secondary education relate to the end of a school year, whereas data on enrolled students and teaching staff in higher schools, faculties and academies refer to the winter semester when students were enrolled.

**Regular primary and secondary education.** Until 2004/05, there was eight-year education in primary schools, and from 2004/05, the nine-year education has been introduced in primary education. Regular secondary education Secondary school can be established as gymnasiums, art schools or vocational schools (three-year or four-year vocational schools). Education of children with special educational needs (primary and secondary) is education of children and youth disturbed in psychological and physical development. Pupils are registered into schools at the age when school obligation is compulsory but also over that age border. Classes for education of children with special educational needs in corresponding regular schools are shown as school units.

**Higher education.** Until school year 2004/05, higher education included high schools, faculties and art academies. Higher (tertiary education) – faculties and academies (for students enrolled before the school year 2004/05) is received at faculties and art academies, and is lasting minimum 4 years, while high (post-secondary education) is received upon completion of first degree of higher education or completion of high schools, whereas in both cases the schooling lasts 2 years. In almost all faculties

the first year of studies of academic year 2003/04, was organized in consistency with Bologna Declaration, while as of 2004/05 academic year it has been applied in all faculties. There are three levels of higher education: basic studies, postgraduate studies (specialist and master) and Ph.D. studies. The status of student is acquired with the entering an appropriate study programs. Student may have the status of state-financed or self-financed student. In private higher education institutions, students pay the tuition fee and possess the status of self-financed students.

### Unemployed population

Data on employment and unemployed persons are transmitted by the Employment Bureau of Montenegro, representing the results of monthly and annual survey reports. The data on unemployed persons include the persons registered at the Employment Bureau of Montenegro under the unemployed category. Term unemployed person refers to a person aged between 15 and 65, not being employed nor in any kind realized his right to work and is registered at Employment Bureau. Persons looking for a job are considered as unemployed persons.

Data on employed and unemployed persons have been collected through the Labour Force Survey (LFS) according to international definitions. LFS data are available since 2006. Data presents in the ITAN project data base are from annual survey reports of the Employment Bureau of Montenegro.

### Income

Salary. Data on average earnings of employed persons in enterprises, institutions, cooperatives and organizations of private, mixed or state ownership include average earnings of persons employed on a permanent or temporary basis, no matter whether they work fulltime, part time or short time. The organizational-territorial principle is used for a survey on earnings, whereas municipality represents a basic territorial unit.

Earnings of employed persons are gross earnings covering payments for performed work and time spent at work, increased earnings (payments for days not worked), compensation of the earnings and other income, liable to tax on natural person's income, defined by the law, collective agreement, and working contract. Net salary is gross earning without taxes and contributions. Calculation of the average earning is done so that the total sum of all monthly earnings paid is divided by the number of employees received salaries (in place of work).

The monthly survey on employed persons and earnings covers around 70% of total number of employed persons.

Number of cars by household. Within the program of statistical surveys of interest to the whole country, since 2005 Monstat conducted the Household Budget Survey (HBS), which has been carried out since 2003 according to international standards and recommendations. The HBS collects data about incomes, expenditures and consumption of households, i.e. data about primary elements of personal consumption, as well as data about some important indicators of living standard (dwelling conditions, possession of permanent goods, etc.) and primary data about demographic, economical and sociological characteristics of households. The HBS covers durables owned by a household as well as goods put at disposal to a household – as an integral part of dwelling flat/house. Therefore, in this case, the data relate to the share of households owning (or using) a motor car (percentage).

The surveying unit is a household. The term household refers to: a) Single person living, spending and feeding individually; b) Community of persons living, feeding and spending received income together.

### Minorities (population by ethnic affiliation)

The data on the ethnic composition of the population are relevant for the understanding of the cultural diversity of the population, position of the ethnic groups in the society, monitoring of the migratory

flows and other characteristics of the ethnic communities, as well as for the defining and implementation of numerous strategies and policies aimed at enhancing the position of the members of the ethnic groups. For this reason, the official Yugoslav i.e. Montenegrin statistics has, in all of the censuses – from 1948 to 2011, paid particular attention to the ethnic features of the population, thus creating ample statistical materials primarily on the high number of the ethnic communities on the territory of Montenegro, as well as on their diverse demographic, educational, socio-economic and other characteristics.

Collecting data on the ethnicity of the population in the 2011 Census. The international recommendations do not put the question of the ethnicity among the so-called core topics and thus each country decides independently whether it will collect this kind of data during the census. If this question is included in the contents of the basic census forms, its formulation ought to be as clear and as precise as possible and the respondent must have a possibility to declare completely independently and freely, as well as the right not to declare his ethnic affiliation. The question on the ethnicity in the form for a person (Individual questionnaire) is formulated as an open-type. If person did not want to declare themselves on their ethnicity, it was filled in answer "does not want to declare". For the children younger than 15, the response was provided by the parents, adopters or caregivers.

Changes in the classifications of the ethnicity in the censuses 1991, 2003, and 2011. Although the changes in the number of the members of a certain ethnic group primarily represent a resultant of the natural increase (decrease) and net migration on a certain territory and during a certain period, there are some major fluctuations observed in the size of some ethnic groups owing to the changes in the attitudes of the enumerated persons regarding their ethnicity, as well as the changes in the methodological approaches and classifications.

In the 1991 Census, like in the previous two censuses (1971 and 1981) the Muslims were shown as the "Muslims in terms of ethnicity". In the 1991 Census, the classification of ethnic affiliations was expanded with modality Egyptians, and in the 2003 Census this was further expanded with additional modalities: Aškalije, Bosniaks (historical ethnic name of the Muslim ethnic group), Goranci and Cincari. The 2011 Census is specific on account of the fact that it was the first time that there were codes provided for the responses that contained double declaration of the population regarding their ethnicity (Montenegrins-Serbs, Serbs-Montenegrins, Montenegrins-Muslims, Muslims-Montenegrins, Muslims-Bosniaks, Bosniaks-Muslims, etc.).

### 3 – Economy

The questions that relate to the economic activity of the population were included into the contents of all censuses carried out in Montenegro in the period after Second World War. In the 2011 Census, the data on economic activity were collected for the persons aged 15 years and over. The maximum age limit was not defined taking into account the fact that persons may be economically active even after departing the so-called working age (15–64 years of age).

The 2011 Census (like the 2003 Census) applied the concept of the so-called current activity, and therefore all the data on the economic characteristics of the population are derived on the basis of the responses regarding the activities in the week prior to the Census (from 25th to 31st March 2011).

#### Active population.

The economically active population ("labour force") comprises the employed and unemployed persons.

The employee (person who perform occupation) is a person who: 1) performed any kind of regular or usual work for wage/profit (in cash, goods or services) at least one hour or any kind of unpaid work (in enterprise, professional practice or agricultural farm in possession of any member of his/her family), or 2) has not worked (due to illness, vacation, state or religious holiday, education, training, maternity

leave, reduced production and other temporary inability to work), but he has a job to which he will return.

Unemployed person in the census is a person who in a week before the census (from 25 to 31 March 2011) did not work, but he did actively look for a job during March 2011 (four weeks before the census), and he is ready to start working during the two following weeks.

#### *Changes in the census concept of the economic activity of the population, 1991-2011*

In the 1991 Census there was no precisely defined reference framework for collecting data on economic activity, but rather meaning the state at the census day. In this census, the data on the persons seeking for their first employment was collected. Also, in the 1991 Census, the unemployed included only the persons seeking for a job through the Employment Bureau, while, in the 2003 and 2011 censuses, the unemployed also included persons seeking for a job on their own (e.g. through friends, relatives, through ads, competitions or through a direct contact with the employer).

#### Working population.

The term "employees" (working population of Montenegro in the ITAN database) refers to all persons being employed in enterprises, institutions, organizations or by self-employed individuals no matter whether their employment status is based on a permanent or temporary contract and whether they work on a full-time or part-time basis.

From the 1st January 2009 in the total number of employees enter also employed foreigners. Data on employed persons in enterprises, institutions, co-operatives and organizations (legal entities) have been obtained on the basis of regular monthly and annual survey reports on employees and their earnings. The organizational-territorial principle principal has been applied (municipality has been taken to be the basic territorial unit).

The private entrepreneur performing occupation-activity independently comprises a person who, in order to gain profit, founds a shop, or an appropriate form of business (workshop, office, bureau, service, agency, studio, boarding-house, pharmacy, ordination etc.) for performance of independent activity.

#### 4 – Gross domestic product (GDP)

The most common and the most important aggregate in the system of national accounts is the gross domestic product (GDP). It is an indicator of economic activities on the level of a whole country and presents the result of production activities of resident institutional units, and it equals the sum of values added that are calculated for all institutional sectors.

The GDP calculation includes all activities within the production frame defined by SNA'93 and ESA'95 methodologies and covers the whole territory of Montenegro. The estimate of non-observed economy for legal part of economy is partially included in compilation of GDP. The following illegal activities drugs, prostitution, sex-trafficking, illegal selling of CDs, video tapes, illegal use of software, smuggling of weapons, etc. are not included in GDP estimation.

The classification of economic units by activity is in line with the national Classification of Activities (CA) that is harmonized with the Classification of Economic Activities in the European Community (NACE Rev.2)

MONSTAT compile GDP by production and expenditure approaches which are mutually independent. The basic categories for GDP compilation by production approach are: Gross output is defined as a market value of all produced goods and services. It is calculated by activities at approximate basic prices, since all subsidies are treated as subsidies on products and accordingly included into

compilation at national economy level. Intermediate consumption at purchase prices is the value of goods and services, which are transformed, used and consumed during production process. Gross value added, as the output value increase equals to the difference between gross output and intermediate consumption. Gross domestic product at market prices is the value of all goods and services produced by resident units, i.e., the sum of gross value added by activities and taxes on products less subsidies on products. In compilation of intermediate consumption by activities is included the value of financial intermediation services indirectly measured (FISIM) which increase level of harmonisation of GDP compilation in line with European standards.

## ANALYSE

### 1. Education

The educational attainment of the population was being improved continuously: in the total population aged 15 years or more, the share of people having a higher educational attainment (secondary and tertiary) has been increasing and that of people having a lower attainment, decreasing.

According 2011 Census, in Montenegro there are 542,649 persons of age 10 years and over, of which 8,149 are illiterate persons, i.e. 1.5%. Illiteracy rate among males is 0.6%, and among females 2.4%. The average age of illiterate person is 62 years (44 for males, and 66 years for females). Twenty years before, the illiteracy rate was higher: 5.9% for total population, 2.1% for males, and 9.7% for females.

The share of people without any education in the total population kept decreasing continuously and the share of those with higher educational attainments kept growing.

According to the 2011 Census results, about 48.1 thousand people in Montenegro or 9.6% of the total population had not received the full eight-year elementary school education. By the 1991 Census data, this group was larger – 115.8 thousand or every fourth inhabitant of Montenegro aged 15 or more. In the same period was decreased also the number and share of population with completely eight-year elementary school education. In the same period was also reduced the number and the share of the population with completely eight-year elementary school education (from 160.7 thousand to 135.5 thousand i.e. from 29.5% to 20.8% of total population). The largest number of inhabitants had received secondary school education (more than 260 thousand), but the most intensive increase is among people with tertiary education. During two decades the number of persons with post-secondary education is more than doubled (from 40.7 thousand to 85.9 thousand). Despite an improvement in the educational structure of population, the proportion of people without primary education is still high (10%) and the percentage of highly educated persons is even low (17%), especially if we make the comparisons at international level.

The data on the educational attainment of the population by sex are indicative of a lower educational attainment of females than that of males: the percentage of females without any education or having incomplete elementary education is much larger, the share of them with secondary education is smaller than among males, but the proportion of those with tertiary educational attainment is approximately the same as with males.

The educational attainment varies by population age, which results from the development of education system in the period after Second World War, particularly from the introduction of obligatory elementary education, as well as the continuously growing number of those who carry on receiving education after finishing the elementary school. Recent data also shows a change in the sex structure of young adult population having tertiary education. In the age group 25-34, the number of women having university degree is bigger than the number of men.

#### Attending school

Primary and lower secondary education covers more than 96% of relevant population. Over 99% of pupils continue education after completing primary and lower secondary education, but the generation



coverage in secondary education is about 82% because there is a dropout of pupils after enrolment to upper secondary schools.

The number of pupils in primary and secondary schools shows a slight decrease, which is a common trend in recent years, mainly because decreasing number of births in the country. At the same time, the number of students in tertiary education slowly increased, because significant rising of share of persons who continue the education after secondary school.

## 2. Active population

### Unemployed and employed population

In Montenegro, in 2000s, the number of unemployed persons has decreased significantly, from 81.1 thousand in 2000 to 28.4 thousand in 2008 and 30.6 thousand in 2011. In this period, the highest unemployment rate was registered in 2000 (37%). The following years, the rate of unemployment has decreased to 15% (2008). At the same period, the number of employees increased, but significant slowly (from 141 thousand in 2000 to 166 thousand in 2008) than reduction of number of unemployed person (from 81 thousand in 2000 to 28 thousand in 2008). This trend can be explained by better economic situation in the country, by more intense emigration, by increase of share of persons who continue the education after secondary school, but also by more rigorous criteria for the registration of unemployed persons in the Bureau of employment of Montenegro, and by still very presents black economy.

In the 2000s continued the transformation of the economy of Montenegro as reflected in the structure of employees by sectors. In 2002 the largest share of employees was in the manufacturing sector (31.6 thousand or 22.5% of total working population), and in the wholesale and retail trade sector (16.8 thousand or 12.0%) and in the sectors of transport, storage and communications (14.9 thousand or 10.6%). In 2011, most numerous employees were in the trade sector (37.5 thousand i.e. double more than nine years ago). The second by number of employees was the public administration sector with 19 thousand persons (including defence). At the same time, employment in the manufacturing sector was halved (from 31.6 to 15.3 thousand), and their share in total working population fell from 22.5% to 9.4%.

Changes in the structure of employment by sector led to the increase in the share of women in total working population (from 42.7% in 2002 to 46.1% in 2011). It is also changed the composition of unemployment by sex. In 2002 61% of unemployed persons were women, while in 2011 male unemployment presents 53%. As results, in 2002 the unemployment rate of women was significantly higher than that of men (44% as compared with 27%), and in 2011 this rate was equal between the sexes (16%).

## 3. Salary and GDP

Height of earnings is another important indicator of the level of development. In 2000s, in Montenegro the average monthly net salary is continuously in increase. In 2011, the average wage was 484 euros, i.e. more than three times higher than in 2002 (149 euros). Despite the sharp increase in average net salary, in Montenegro it is still one of the lowest in Europe.

Also, the GDP per capita is significantly increased. But this increase (from approximately 2,200 euros in 2002 to 5,200 euros in 2011) was much less intense than the increase in net wages.

## 4. Minorities – ethnic structure

According to the results of all three recent population censuses of Montenegro (1991, 2003 and 2011), they are Montenegrins, Serbs and Muslims / Bosniaks its most numerous ethnic groups. If we look only the ethnic structure in 1991 and 2011, Montenegrins still represent a majority, but with a lower

proportion (62% in 1991 to 45% in 2011). The percentage of ethnic Serbs grew rapidly (9.3% to 29.1%). On the other hand, the proportion of Muslims/Bosniaks is relatively stable (14.6% in 1991 and 12.1% in 2011).

The contrasting trends of the three most represented communities resulting, in part, from the interaction of natural and migration components of population dynamics, but, more significantly, from the changes in reporting ethnicity. Changes of ethnic affiliation for Muslims/Bosniaks are the result of the transformation of a religious group into ethnic nationality. For the Serbs it is a reaction of former ethnic Montenegrins to the changes in government policy vis-à-vis Serbia. The sharp increase of the Serb community, especially recorded from 1991 to 2003, does not lie with an exceptional natural increase or net immigration, but with broad changes in ethnic declaration from one census to another.

## **Serbia**

by Goran Penev  
October 2013

### ➤ **Technical report – Demography**

#### METHODOLOGY

##### 1 – Territory – administrative division

According to the Constitution, Serbia is composed of two Autonomous Provinces (autonomna pokrajina) (AP Vojvodina as well as AP Kosovo and Metohija) and the local self-government units. According actual administrative division the Republic of Serbia (excluding AP Kosovo and Metohija) has 24 districts (okrug), City of Belgrade (Grad Beograd) and 22 other cities, as well as 150 municipalities (opština). Municipality is the basic local self-government unit. The City of Belgrade has a special status, and it is the only city with more than 1.000.000 habitants.

Statistical Office of the Republic of Serbia (SORS) presents, since 2010, statistical data in compliance with the Nomenclature of territorial units for statistics (NUTS), which defines the statistical functional territorial units, i.e., three hierarchical levels: NUTS 1 (two units: Serbia – north and Serbia – south), NUTS 2 (four regions) and NUTS 3 (25 areas).

After 1997, complete data for the AP of Kosovo and Metohija from the regular statistical surveys were not available, thus while calculating the total, estimates and other synthetic statistical indicators relating to the whole territory of the Republic of Serbia, relevant data for Central Serbia and the Autonomous Province of Vojvodina were prevalently used.

##### 2 – Definition – total population

When comparing the Census data from 1991, 2002, 2011 the change of total population definition should be taken in consideration. The Census moment for 1991 and 2002 was 31 March at 24.00 hours. The Census day was 30 September.

In the 1991 Census, the total population of a certain place included persons who resided in that place permanently, regardless of whether they were in that place at the critical census moment or they were temporarily absent for any reason whatsoever (work, education, travel, ... etc.). Around the mid-1960s there was a more significant departure of the citizens of the former Yugoslavia aimed at working abroad. According to the methodologies of the 1971, 1981 and 1991 censuses, regardless of their absence, Yugoslav and Serbian citizens who were "temporarily" away on account of their work abroad, as well as the members of the family who resided with them abroad, were included in the total population of Yugoslavia as well as in the total population of the Republic of Serbia).

In compliance with the international recommendations, in the 2002 Census, the total population of the Republic of Serbia included Serbian citizens whose work and/or stay abroad was for less than a year, as well as the foreign citizens who worked or resided in country for a year or more. The refugees from the former Republics of the SFR Yugoslavia are included in the total population, but the internally displaced persons (IDPs) from the AP Kosovo and Metohija is excluded from the number of total population of the Republic of Serbia, i.e from the number of total population of the Central Serbia and AP Vojvodina.

For the purpose of determining the total number of population of a given area, it was in the 2011 Census that the concept of the "usual population" was used for the first time. According to this concept a person is considered to be a resident of the place in which he/she alone (in case of a one-person household) or with the members of his/her household spends most of the time, that is, the day/night rest, irrespective of where this person has his/her residence registered. Thus the total population of a

certain place includes the persons who have lived in that place continuously for at least one year before the critical census moment, as well as the persons who have lived in that place for less than 12 months but with an intention to stay there for at least one year.

The persons, who were at the Census moment temporarily (for a short period of time) absent from the place of usual residence, on account of vacation, business trip, medical treatment, etc., were included in the total population of that place. Some categories of population have a specific treatment, which to an extent deviates from this rule, as follows:

- Persons who work in another place in the country or abroad are included in the total population of the place of the usual residence of their households if they return to that place at least once a week.
- Primary school pupils and secondary school students who do their schooling in another place in the Republic of Serbia or abroad, as well as the third level students who study in another place in the Republic of Serbia, are included in the total population of the place in which their household resides, irrespective of the length of their absence, intention or frequency of returning.
- The citizens of the Republic of Serbia who study abroad are included, irrespective of the length of absence, in the total population of the place of residence of their households if they return to that place at least once a week.
- Foreign third level students who study in our country are included in the total population of the place in which they are enumerated if they do not return to their homeland every week.
- The children who, after the divorce of their parents, live alternately in two households are included in the total population of the place in which they spend more time. In case when they spend equal amounts of time in both households, they are included in the population of the place in which they found themselves at the Census moment.
- Homeless and other persons without a permanent or temporary address are included in the total population of the place in which they were enumerated.

In this Census, the refugees from the other former republics of the SFR Yugoslavia as well as the internally displaced persons (IDPs) from the AP Kosovo and Metohija are included in the total population of the Republic of Serbia (excluding Kosovo), in compliance with the same rules.

### Coverage

The 1991 Census of population, households and dwellings was not completely carried out in the municipalities of Bujanovac and Preševo within the Central Serbia, neither on the territory of Kosovo and Metohija, due to the boycott of the majority of ethnic Albanian. For above mentioned municipalities in Central Serbia and for AP Kosovo and Metohija the estimates have been obtained, so that 1991 Census results, being reported in this project are in fact sum of Census data and the estimated number of population who refused to take part in the Census (at the census day).

The 2002 Census of population was carried out on the territories of Central Serbia and AP Vojvodina, but not in the AP Kosovo and Metohija due to lack of conditions to this end.

The 2011 Census was not conducted on the territory of the AP Kosovo and Metohija. In the municipalities of Preševo and Bujanovac there was under coverage of the census units owing to the boycott by most of the members of the Albanian ethnic community. The 2011 Census results published by SORS are without the estimated number of population who refused to take part in the Census.

### Comparability of census data

When using census results, it should be kept in mind that definitions of permanent, that is total population in 1991 and 2002 censuses, are not completely comparable. The 1991 Census on the resident population, by definition, included, besides the population in the country, the population temporarily working abroad as well as their family members living with them abroad.

According to the international recommendations, the 2002 Census on the resident population includes, besides the population in the country, the Yugoslav citizens whose work/stay abroad is shorter than a year as well as foreign citizens who work/stay in our country longer than a year.

In order to achieve the international comparability of data, the methodology used in the 2011 Census is in line with the Conference of European Statisticians Recommendations for the 2010 Censuses of Population and Housing. In the 2011 Census, according to the international statistical standards, the concept of place of usual residence is used in defining of the total population, but an intention of staying has been introduced for the first time as an additional criterion in including/excluding a person from the total population.

### 3 – Population estimates

Statistical Office of the Republic of Serbia regularly prepares the annual estimates of the population, to provide up-to-date information for years in which there is no census. Estimates are based on observed data about natural population changes (births, deaths) and on data about internal migration (after 1991).

The population estimates for the intercensal period 1991-2002 have been corrected on the basis of the 2002 Census final results. The postcensal population estimates (by sex and age) for the years since 2002, have been calculated on the basis of census data on 31 March 2002 and the number of live births, deaths, immigrants and emigrants (internal migration), distributed by the calendar year of birth and sex at the regional and municipality level. The total estimated population of Serbia (Central Serbia and AP Vojvodina) represents the sum of the total estimated population of respective municipalities.

### 4 – Population by type of settlement

In order to present data by type of settlement, in all three censuses is used the so-called administrative-legal criteria, according to which settlements are divided into "urban" (those that have obtained this status through a legal act of the respective local self-government unit) and into "other".

### 5 – Data on vital statistics (births and deaths)

#### Vital statistics sources

The data of births and deaths are provided by the registrars that maintain the respective books.

#### Coverage

Statistics of births cover all births (live births and stillborns) in the respective year. Statistics of deaths include every death case. According to the regulations of keeping the register books, all cases of births and deaths shall be entered in the register maintained for the area where they occurred, regardless the fact whether the person registered resides in the area. The processing procedure anticipates the re-grouping of data and the results are shown by the place of residence of mother (for births), i.e. by the place of residence of deceased person.

#### Definitions and explanations

A live-born child (live birth) is every child who exhibits signs of life at birth, such as breathing, beating of the heart, pulsation of the umbilical cord or definite movements of voluntary muscles. If a child dies

soon after birth, it is first registered as a live-born and then as dead infant. In this project data on births in Serbia means data on live births.

A deceased person (death) is every live-born person in whom there is a permanent disappearance of all evidence of life.

Infant death (infant mortality) is considered death of a child less than one year of age.

Age is expressed according to completed years of age. It is calculated on the basis of the date of birth of a respective person and the date of event occurrence. If the Age is expressed in age intervals i.e. of five years, each group includes persons who turned the years put as the limits of one interval. For example, the 15–19 age groups include all persons who reached 15 and more but have not turned 20 yet.

Total fertility rate is the average number of children that would be born alive to a woman during her lifetime if she were to pass through her childbearing years (15–49) conforming to the age specific fertility rates of a given year.

Life expectancy shows how long a person of a certain age (0, 1, 5 .. 85 + years) will live in average (in additional years of life) if in terms of mortality (age-specific mortality rates) there will be conditions as in the given year (period). In this project LE is cited as life expectancy at birth (by sex).

## 6 – Migration

Statistical monitoring of migration, especially international migration, is considerably less developed. Statistical Office of the Republic of Serbia monitors only internal migration in its regular annual research (since 1988) on the basis of data from Ministry of Interior on in/from the records on change of residence. On the other hand, population censuses represent the main source of data on immigrant stock, as well as data on emigrant stock (in censuses carried out from 1971 to 2011).

Data on internal migration in the Republic of Serbia are collected from the regular statistical monitoring of the occurrence at the national level. Namely, each case of residence change is due to be declared through a statement of change of domicile, which contains information on the previous residence, i.e. the new place of residence. Migration statistical data are drawn from citizens' statements or documents and submitted to the residence records service.

The number of immigrants is the number of applications for registration of domicile and number of emigrants is the number of applications forms for de-registration of domicile. In addition, the number of internal immigrants (emigrants) covers only persons which previous (future) place of residence is located on the territory of the Republic of Serbia (including AP Kosovo and Metohija).

Net internal migration balance at national level must be zero. In Serbia, the difference between number of immigrants and number of emigrants is positive because low coverage of internal migration flows from/to Kosovo and Metohija.

Data on international immigrant stock of Serbia can be obtained only from population censuses of Serbia on the basis of immigrants from abroad. The same is with Serbian emigrant stock. The actual number of Serbian citizens abroad is difficult to determine, but it is certainly greater than recorded in the three last censuses (1991, 2002 and 2011) especially due to pure statistical reasons (information collected mostly from family members in the country).

Statistical coverage of international immigrant stock is additional complicated after the dissolution of the former Yugoslavia (definition of immigrants from former Yugoslav republics before and after the break-up of the joint country).

## ANALYSE

Towards the end of the 20th and at the beginning of the 21st century, demographic development of Serbia was taking place under exceptional socio-economic and historic circumstances. Vital statistics, as well as the results of the 2002 and 2011 population censuses, show that the last decade of the 20th century was an extraordinary one for Serbia also in terms of demographic processes. Some of the long-term processes were speeded up considerably (e.g., demographic ageing, homogenisation of ethnic structure, emigration from the country), while others were slowed down very much or suddenly interrupted (urbanisation).

While the population dynamics were affected by international migration (intensified immigration, as well as emigration) much more than in the preceding decades, the natural population movement was characterised by a continued tendency of fertility to decline and the life expectancy to increase. Even so, fertility has been declining at a much faster pace than in the 1980s and the results achieved in the effort to cut the mortality were quite modest, particularly in some age groups. In consequence of such changes in the population movement components and because of the impact produced by a very advanced demographic ageing, the population of Serbia declined and natural decrease occurred.

### 1. Population growth (decline)

According to the last population census, on 30 September 2011, Serbia had 7,186,862 inhabitants, which is by 636,000 less than 20 years earlier (1991) and by 311, 000 less than nine years earlier (2002). But, if compare only population in country (including estimated population of ethnic Albanian community in both census year) the decrease was less important (315.000). In the 1991-2011 period, the total population of Serbia decreased by 320,000 or about 8%. Population decline characterised only the last intercensal period. Between 1991 and 2002 censuses, total population of Serbia (with IDPs from Kosovo) increased by about 63.000 inhabitants, while in the last intercensal period decrease was more than 485 thousand. In the first intercensal period population growth was only results of net immigration (number of deaths excised number of births), while in the second period the decline was caused by natural decrease and by net emigration.

Between 1991 and 2011 the population decline was present only in Serbia - south, where the population (in the country) has fallen to about 400 thousand. At the same time population of Serbia – north has increased by less than 80 thousand inhabitants. However, the population growth in that area was not overwhelmingly - he was only registered in Belgrade (110 thousand).

In the 2011 the region of Belgrade has the highest population density (514 inhabitants/sq km) and it is seven times higher than that in rest regions of the Republic of Serbia. That year the average population density in the Republic of Serbia is 92.6 inhabitants per 1 sq km.

### 2. Natural increase (decrease)

The year 1992 was the first year since the Second World War in which negative natural growth was registered. From then onwards, the number of deaths was larger than the number of live births every year. The negative natural growth kept increasing until 2000, reaching the record level of –30.3 thousand (-4.0‰). In the following year the natural decrease declined considerably (to –20,573). However, an increase in the negative natural growth was registered again already in 2002 and it persisted in the years thereafter, though at a lower rate than in the nineteen-nineties. In 2011, the excess of deaths over births was 37.3 thousand (highest since 1992). With negative rate of 5.2 per 1000, Serbia is in the group of 5 European countries by the value of natural decrease rate.

Births. Generally speaking, with regard to births in Serbia, the 1990s do not deviate from the general declining trend manifest in the latter half of the 20th century. Even so, last decade has been made different by the fact that the yearly number of live births has always been under 100,000 and that the lowest average yearly number of live births and the lowest yearly number of live-born children (72,222

in 1999, the year of NATO military campaign) was registered in it. Furthermore, the largest decrease in the number of live births was registered in that period, after a relatively moderate declining tendency manifest over many decades.

The adverse fertility tendencies were put to an end at the beginning of the 21st century: not only was the tendency of the number of live births to decrease arrested, but a slight increase in their number was also registered, to about 78,000 yearly in the 2001-2004 period. Such demographic changes coincided with political and economic changes, which were objectively speaking, encouraging risen fertility or to be more precise, which helped in preventing it from declining further. Furthermore, the government was conducting a clear pro-natal policy, which besides other measures, has also been supported by substantial non-recurrent financial aid to families with children from 2002 onwards.

After 2004, the number of live births continue to increase reached the lowest annual number in 2011 (65,698), not only in 21st century, but in whole period after the Second World War. These trends can be explained by huge economic crises and very intensive population aging in Serbia.

**Fertility.** In Serbia, since 1956, the total fertility rate (the average number of children per woman) is below replacement level. These trends have continued lying down during the second half of the 20th century, but also during the first decade of 21st century. In 2011, the total fertility rate is 1.4, i.e. significantly less than at the beginning of the 1990s

Fertility decline is more indicated at the regional level (NUTS 2, NUTS 3). In the early 1990s the TFR was in the Southern and Eastern Serbia (Region Južne i Istočne Srbije), as well as several of his area, at replacement level or below them (in 1991 TFR was higher in Pčinjska oblast area with 2.88 children per woman). In 2011, TFR in all regions and areas )NUTS 2, Fertility decline is more indicated at the regional level (NUTS 2, NUTS 3). In the early 1990s the TFR was in the Region of South and East Serbia (Region Južne i Istočne Srbije), as well as several of his area, at replacement level or below it (in 1991 TFR was higher in Pčinjska oblast/area with 2.88 children per woman). In 2011, TFR in all regions and areas (NUTS 2 and NUTS 3) was below replacement level, and the lowest one was just in the Region of South and East Serbia.

**Mortality.** The 1990s were an extraordinary period in the demographic history of Serbia. This is owed to the extraordinary circumstances resulting from the disintegration of the former SFR of Yugoslavia and the ensuing wars, followed by the NATO military campaign lasting several months in 1999. A crisis that is affecting all sectors of society, particularly the economy and health care, has adversely affected the mortality trends. The number of deaths increased from 89 thousand in 1991 to 104 thousand in 2000, and the crude death rate increased from 12 to 14 to 1000. These trends are partly a result of very fast aging of population of Serbia. During the first decade of the 21st century, the annual number of deaths was generally over 100 thousand (between 99,000 and 107,000). During the first decade of the 21st century, the annual number of deaths was generally over 100 thousand (between 99,000 and 107,000), and the crude death rate was around 14 to 1000.

**Infant mortality.** According to infant mortality rate Serbia is behind many European countries. Despite the unexpected favourable movements in the 1990s (decreasing), the mortality of children under one year in Serbia (6.3 per 1000 in 2011) is higher than that in the majority of neighbouring countries.

**Mortality by sex.** The mortality rate by age and sex points at a very low mortality of children and adolescents and a continued decline in the mortality of young adults. The mortality rates in the older middle-aged population are much higher and showing slight changes.

The difference in mortality by sex is most striking in the middle-aged population (20-59 years). In that large age group, the specific mortality rates are by about 2-3 times higher in male than in female population, the difference being the most striking in the population under 30 years of age.

**Life expectancy.** The life expectancy at live birth in Serbia in 2011 was 71.6 and 76.8 years for the male and female population respectively. This means that compared with 1991 (when the life expectancy was 68.6 and 74.8 years respectively), the difference between life expectancy in the male and female populations has declined (from 6.2 to 5.2 years). However, the life expectancy has



increased just a little in two decades (by 3.0 and only 2.0 years in the case of males and females respectively). Such movements in the mortality domain spoiled very much the rank of Serbia in terms of life expectancy (particularly for females) in Europe.

### 3. Migration

Intensified migratory movements were one of the main characteristics of the demographic changes taking place in the 1990s. That was not the case in Serbia only, but also in the majority of the former socialist countries of Europe. As far as the former Yugoslav republics are concerned, the disintegration of the former SFR of Yugoslavia was the main cause of the very intense migration, which largely had the nature of forced migration.

In the early 1990s, the forced migration of more than 5 million people began. Several million of them changed their place of residence for good. Of that number, almost a million (of which about 95% are accounted for by Serbs) settled down in Serbia for good or temporarily. For the intercensal period 1991-2002 net immigration of 234.3 thousand persons was calculated based on the final census results for total population (in country) in 1991 and 2002 (including author's estimation of number of IDPs from Kosovo and Metohija). Using the same methodology, for the last intercensal period (2002-2011) was calculated a net emigration of 85.2 thousand people.

In view of the extraordinary circumstances under which the migratory movements were taking place, their full statistical coverage is non-existent. What is available are several sources of data on migrations, among which the most reliable ones are the UNHCR registers of refugees and war-afflicted persons made in 1996 and 2001, as well as the population census conducted in 2002.

According to the refugee census conducted in May and June 1996, there were 597,5 thousand war-afflicted persons in Serbia (mostly from Bosnia and Herzegovina and Croatia). The re-registration of refugees and internally displaced persons was conducted in 2001, though covering Central Serbia and Vojvodina only. It was found on that occasion that there are 376,700 refugees in Serbia, which is by 220,000 less than in 1996. This decrease resulted from repatriation, emigration to third countries and death. However, the registers also included 201.6 thousand internally displaced persons from Kosovo and Metohija, who reached Central Serbia and AP Vojvodina in 1999 and later, i.e., during and after the NATO military action.

Regarding emigrant stocks, according to the 2002 Census, their number has increased very much in relation to 1991. At the 2002 Census, the Serbians working and staying abroad numbered 414.8 thousand, which is by over 50% more than in 1991 (273.8 thousand). 2011 Census data on Serbian citizens working and staying abroad are not available at the moment.

The real number of these emigrants is much larger, which is also pointed at by the "mirror" statistics. Moreover, in the 1990s, besides the traditional receiving countries (Germany, Austria, France), also some other countries became the migrant workers' destinations (mainly the former European socialist countries, such as Hungary, Czech Republic, and Russian Federation). The emigration to overseas countries (USA, Canada and Australia) has also intensified.

### 4. Population by Sex and Age

In Serbia, the female population was more numerous than the male one. Looking only by the results of the 1991 Census and the latest ones, conducted in 2002 and 2011, it can be seen that the difference between the shares of males and females in the total population has increased. In the 1991-2011 period, the share of male population in the total one decreased by 0.4 percentage points (from 49.1% to 48.7%) and the sex ratio from 965 to 949.

There is a striking difference between the structures of various age groups by sex, which are reflected in the first place by the numeric predominance of males in younger age groups, larger share of females in the middle-aged groups and their striking numeric predominance in old age groups.

The biggest disproportion between the number of males and females is in the oldest population groups. According to the 2002 Census results, the number of males to 1000 females by age group was as follows: 65-74: 802; 75-84: 671; and 85 or more: 513.

This is caused mostly by decreased fertility and almost continuously decreasing number of live births; different death rates by age to the disadvantage of male population (longer female life expectancy in all age groups); and migrant selectivity by age and sex. The effect of migratory movements on the sex structure of the total population in the regions of emigration differs from that in the regions of immigration, but what is also important for that structure is the migration type (internal or external, forced or voluntary, temporary or permanent).

The results of the latest censuses show that according to their characteristics, the populations of Serbia belong to the group of demographically old population. The share of young people is small and decreasing, while that of old people is big and growing continuously.

The demographic ageing was highly intensified in Serbia in the last two decades. Namely, the share of young population kept decreasing continuously, while that of old population kept growing. In 1991, the number of young people (up to 15) was 66% bigger than that of the old ones (65 or more), i.e. 1,487 thousand vs. 896 thousand, while in 2011, the number of elderly was 22% bigger than that of the young ones (1,250 thousand and 1,025 thousand).

The population ageing characterised not only Serbia, but also the regions. The results of the censuses conducted in the last decades of the 20th century and at the beginning of the 21st century show that there are no regions or municipalities in Serbia, the population of which was not exposed to very intensive demographic ageing.

## ➤ **Technical report – Demography**

### METHODOLOGY

#### 1 – Territory – administrative division

According to the Constitution, Serbia is composed of two Autonomous Provinces (autonomna pokrajina) (AP Vojvodina as well as AP Kosovo and Metohija) and the local self-government units. According to actual administrative division the Republic of Serbia (excluding AP Kosovo and Metohija) has 24 districts (okrug), City of Belgrade (Grad Beograd) and 22 other cities, as well as 150 municipalities (opština). Municipality is the basic local self-government unit. The City of Belgrade has a special status, and it is the only city with more than 1.000.000 inhabitants.

Statistical Office of the Republic of Serbia (SORS) presents, since 2010, statistical data in compliance with the Nomenclature of territorial units for statistics (NUTS), which defines the statistical functional territorial units, i.e., three hierarchical levels: NUTS 1 (two units: Serbia – north and Serbia – south), NUTS 2 (four regions) and NUTS 3 (25 areas).

After 1997, complete data for the AP of Kosovo and Metohija from the regular statistical surveys were not available, thus while calculating the total, estimates and other synthetic statistical indicators relating to the whole territory of the Republic of Serbia, relevant data for Central Serbia and the Autonomous Province of Vojvodina were prevalently used.

#### 2 – Society

##### Education

Two main indicators of educational structure of the population, educational attainment and literacy, present the level of population education, also involving the achieved level of socio-economic

development of the country. Data on educational attainment and literacy are significant for versatile socio-economic, sociological and demographic researches, as well as for defining and realizing state strategies and policies for education system improvement. Therefore, the two mentioned characteristics were included in the content of all censuses from 1948 to 2011.

*Method of collecting the data on educational attainment of population in 2011 Census*

International recommendations classify the question on educational attainment (the highest school completed) in the group of so-called "core topics", i.e. the characteristics that should be included in the basic census forms. Data on the highest school completed have been collected for the persons aged 15 and over.

Classifications of highest completed school in 1991, 2002 and 2011 censuses

1991	2002	2011	ITAN
Without educational attainment	Without educational attainment	Without educational attainment	Without educational attainment and incomplete primary education
1–3 grades of primary school	1–3 grades of primary school	1–3 grades of primary school	
4 grades of primary school	4 grades of primary school	4 grades of primary school	
5–7 grades of primary school	5–7 grades of primary school	5–7 grades of primary school	
Primary school	Primary school	Primary school	Primary education
Schools for qualified workers			Secondary education
Schools for other vocational staff			
Schools for highly qualified workers			
Upper secondary schools for vocational staff	Two-year and three-year vocational schools	Two-year vocational schools and those lasting shorter	
		Three-year vocational schools	
Four-year and five-year secondary vocational schools	Four-year secondary vocational schools		
Upper secondary vocational-oriented education	Upper secondary vocational-oriented education		
Gymnasium	Gymnasium	Gymnasium	
	Schools for specialisation after secondary education and schools for highly qualified workers	Schools for specialisation after secondary education and schools for highly qualified workers	
High schools	High schools	High schools	Tertiary education
First grade of faculty	First grade of faculty	First grade of faculty	
Faculties and higher schools	Faculties and higher schools	Higher schools	
		Faculties	
Faculties and arts academies	Faculties and arts academies	Arts faculties and arts academies	
Unknown	Unknown	Unknown	Unknown

*Educational level.* The highest school completed is defined as the school that a person completed gaining the highest level of education. The question about educational attainment related exclusively to education provided within the official educational system, meaning that education received in scope

of non-standardized programs, i.e. informal education (various sorts of courses organized within adult education centres, national universities, etc.) was not considered as an appropriate answer.

In all eight censuses after World War II, the issue of educational attainment exclusively related to education gained within the official educational system. However, the long tradition of collecting the data on educational attainment has been followed by changes regarding methodology approaches and classifications.

In order to provide data comparability, which was difficult to obtain due to the change in the educational system and different classifications being used, in the ITAN project, data are shown for larger educational groups, as follows: without educational attainment and incomplete primary education, primary education, secondary education, tertiary education (high or higher education especially education at the college or university level).

*School enrolment.* In regular annual statistical surveys conducted by the SORS, data on primary and lower secondary and upper secondary education (only the regular primary and lower secondary education) relate to the end of the school year, whereas data on students enrolled in tertiary education refer to the beginning of winter semester, i.e. when students were enrolled.

Primary and lower secondary education in the Republic of Serbia is compulsory, lasting eight years and being conducted in two educational cycles. The first cycle covers the first, second, third and fourth grade. For the pupils of this cycle, classroom teaching is organized. The second cycle covers the fifth, sixth, seventh and eighth grade, in which the subject teaching is organized.

Activity of upper secondary education is the activity of the direct social interest and is realized as public service. Activity of upper secondary education is performed in secondary school, i.e. in gymnasium, vocational school, arts school, mixed school (gymnasium and vocational or arts school).

Pupils with disabilities acquire education, as a rule, in schools with other pupils, and when it is in the best interest for pupils, they attend schools for pupils with disabilities, in accordance with the Law. Following the rule, schools for pupils with disabilities receive children at compulsory school age or after.

Adult education schools enable persons aged over 15 (adults), who do not attend school on regular basis, to acquire elementary education and upbringing. Adults acquire upper secondary education as part-time pupils in upper secondary schools. Adult education is not included in ITAN data on school attendance.

### Unemployed population

The data on unemployed persons are obtained from the National Employment Service (NES), and cover only those persons registered with the NES. The persons employed in underground economy are not excluded from the number of unemployed persons (if they are in the NES registers). By the law, an unemployed person is a person between 15 years of age and the age eligible for retirement (or 65 years of age at the most), capable and immediately ready to work, who has not entered into an employment contract or exercised the right to work in any other way, who is in the unemployment register and who is looking for a job actively (Law on Employment and Unemployment Insurance, The Official Gazette of the Republic of Serbia, 36/09).

### Income

Salary. According to the law, salaries and wages comprise remuneration including taxes and contributions that are paid out of earnings that employed acquired for the work executed and the time spent as office hours; then extra remuneration and other payments (excluding compensations for commuting to work, allowances for business trips – domestic and abroad, retirement compensations, solidarity aid, jubilee awards, compensations of undertaking costs and compensations for damages

due to injury at work or professional disease). Net salary is without taxes and contributions. Calculation of the average earning is done so that the total sum of all monthly earnings paid is divided by the number of employees received salaries (in place of work).

Number of cars by household. Within the program of statistical surveys of interest to the whole country, SORS conducted the Household Budget Survey, which has been carried out since 2003 according to international standards and recommendations. The survey collects the data on income, expenditure and household consumption, i.e. the data on basic elements of individual consumption. Besides, the survey compiles also the data on some important living standard indicators (dwelling conditions, supply with durable consumer goods, etc.), as well as certain basic data related to demographic, economic and social features of households. The Survey covers durables owned by a household as well as goods put at disposal to a household – as an integral part of dwelling flat/house. Therefore, in this case, the data relate to the share of households owning (or using) a motor car (percentage). Since 2011, the survey data were presented with the observance of Republic of Serbia and four statistical regions (NUTS 2 level).

#### Minorities (population by ethnic affiliation).

The data on the ethnic composition of the population are relevant for the understanding of the cultural diversity of the population, position of the ethnic groups in the society, monitoring of the migratory flows and other characteristics of the ethnic communities, as well as for the defining and implementation of numerous strategies and policies aimed at enhancing the position of the members of the ethnic groups. For this reason, the official Yugoslav e.i Serbian statistics has, in all of the censuses – from 1948 to 2011, paid particular attention to the ethnic features of the population, thus creating ample statistical materials primarily on the high number of the ethnic communities on the territory of the Republic of Serbia, as well as on their diverse demographic, educational, socio-economic and other characteristics.

Collecting data on the ethnicity of the population in the 2011 Census. The international recommendations do not put the question of the ethnicity among the so-called core topics and thus each country decides independently whether it will collect this kind of data during the census. If this question is included in the contents of the basic census forms, its formulation ought to be as clear and as precise as possible and the respondent must have a possibility to declare completely independently and freely, as well as the right not to declare his ethnic affiliation. The question on the ethnicity in the form for a person (Individual questionnaire) is formulated as an open-type question with a legal notice concerning the fact that pursuant to the Constitution of the Republic of Serbia citizens are not obliged to declare themselves on their ethnicity.

When providing the training for the direct participants in the field implementation of the 2011 Census, it was stressed that the enumerators must not influence, suggest or exert pressure on respondents when providing an answer to this question, as well as that they were under obligation to write down the response exactly as the person who provided the data declared himself on the ethnicity, including also a possibility of double declaration. For the children younger than 15, the response was provided by the parents, adopters or caregivers.

In the municipalities of Preševo and Bujanovac, and partly in the municipality of Medvedja, there was under coverage of the census units owing to the boycott by most of the members of the Albanian ethnic community.

Changes in the classifications of the ethnicity in the censuses 1991, 2002 and 2011. Although the changes in the number of the members of a certain ethnic group primarily represent a resultant of the natural increase (decrease) and net migration on a certain territory and during a certain period, there are some major fluctuations observed in the size of some ethnic groups owing to the changes in the attitudes of the enumerated persons regarding their ethnicity, as well as the changes in the methodological approaches and classifications.

In the 1991 Census, like in the previous two censuses (1971 and 1981) the Muslims were shown as the "Muslims in terms of ethnicity". In the 1991 Census, the classification of ethnic affiliations was expanded with modalities: Bunjevac, Egyptian and Šokac, and in the 2002 Census this was further expanded with additional modalities: Aškalije, Bosniaks (historical ethnic name of the Muslim ethnic group), Goranci and Cincari. The 2011 Census is specific on account of the fact that it was the first time that there were codes provided for the responses that contained double declaration of the population regarding their ethnicity (Serb-Montenegrin, Macedonian-Serb and others).

### 3 – Economy

The questions that relate to the economic activity of the population were included into the contents of all censuses carried out in Serbia in the period after Second World War. In the 2011 Census, the data on economic activity were collected for the persons aged 15 years and over. The maximum age limit was not defined taking into account the fact that persons may be economically active even after departing the so-called working age (15–64 years of age).

The 2011 Census (like the 2002 Census) applied the concept of the so-called current activity, and therefore all the data on the economic characteristics of the population are derived on the basis of the responses regarding the activities in the week prior to the Census (from 24th to 30th Sept. 2011).

#### Active population.

The economically active population ("labour force") comprises the persons who perform occupation and the unemployed persons.

The persons who perform occupation are:

1. the persons who, in the week prior to the Census, have performed any kind of job for at least an hour, which has been paid or will be paid (in money or in kind), independently from whether the person has a formal and legal employment contract, only a verbal agreement with the employer or has an own-account job;
2. the persons who have a job, but from objective reasons were prevented from performing it during the reference week owing to an illness, vacation, strike, etc.

The unemployed persons are those persons who have not worked in the reference week, who are actively seeking for a job (through the employment service or on their own) and who could start working in the two subsequent weeks after the census day. The unemployed persons were classified into the persons who used to work and the persons seeking for their first employment.

Changes in the census concept of the economic activity of the population, 1991-2011.

In the 1991 Census there was no precisely defined reference framework for collecting data on economic activity, but rather meaning the state at the census day. In this census, the data on the persons seeking for their first employment was collected. Also, in the 1991 Census, the unemployed included only the persons seeking for a job through the NES, while, in the 2002 and 2011 censuses, the unemployed also included persons seeking for a job on their own (e.g. through friends, relatives, through ads, competitions or through a direct contact with the employer).

Economic activity of the persons who are abroad. In the censuses 1991 and 2002 are not collected any data on the current occupation of Serbian citizens working abroad. In the 2011 Census, the data on the activity were also collected for the persons working/living abroad, so for the first time there are more detailed and comprehensive information about the economic characteristics of these persons.

#### Working population.

Data on employed persons in enterprises, institutions, co-operatives and organizations (legal entities) have been obtained on the basis of regular semiannual survey on employees and their earnings.

Employees in the Ministry of National Defense, Ministry of Interior, as well as employees in branch offices abroad are not included in this survey. Data on entrepreneurs, persons performing independent activity-occupation, and their employees are taken from the semi-annual survey, issued by the Republic Fund of Health Insurance.

The territorial monitoring principal has been applied (municipality has been taken to be the basic territorial unit).

The term employed in this survey (i.e. the working population of Serbia in the ITAN database) comprises persons who entered into employment with an employer (enterprise, institution, organization and private entrepreneur–person performing occupation-activity independently), as well as employer himself in case of a private entrepreneur - person performing occupation-activity independently. Persons working under contract on performing temporary or occasional jobs are not considered to be employed.

The term private entrepreneur- person performing occupation-activity independently comprises a person who, in order to gain profit, founds a shop, or an appropriate form of business (workshop, office, bureau, service, agency, studio, boardinghouse, pharmacy, ordination etc.) for performance of independent activity.

### Gross domestic product (GDP)

The most common and the most important aggregate in the system of national accounts is the gross domestic product (GDP). It is an indicator of economic activities on the level of a whole country and presents the result of production activities of resident institutional units, and it equals the sum of values added that are calculated for all institutional sectors. Three methods are approached for GDP calculation: production, cost and earning method. The GDP (at current prices) is calculated by the production method, as the sum of gross added values at basic prices (the amount that producer receives from buyer for a unit of produced goods and services, excluding taxes and including subsidies received) of all resident institutional units, with added amounts of taxes on products and subtracted subsidies on products on the level of the total economy, as well as FISIM (Financial intermediation services indirectly measured). Gross added value is obtained as the difference between total output (production value) and intermediate consumption.

Regional GDP. The calculations of regional GDP, as a part of the system of national accounts of the Republic of Serbia, were established pursuant to the EU principles and methodology, i.e. the European system of national accounts (ESA 95) and the Nomenclature of territorial units for statistics of the Republic of Serbia, which has been harmonized with the European Nomenclature of territorial units for statistics (NUTS). The calculations of regional GDP were carried out at the NUTS 2 level (regions) and the sum of GDP for all regions is identical to the GDP of the Republic of Serbia. For the regional GDP calculations applied is production approach for value added estimation, which is calculated as the difference between the production value, i.e. output, and all tangible and intangible inputs used in the production process (intermediate consumption).

## ANALYSE

### 1. Education

The educational attainment of the population was being improved continuously: in the total population aged 15 years or more, the share of people having a higher educational attainment (secondary and tertiary) has been increasing and that of people having a lower attainment, decreasing.

The share of people without any education in the total population kept decreasing continuously and the share of those with higher educational attainments kept growing.

According to the 2011 Census results, about 842,000 people in Serbia or 13.7% of the total population had not received the full eight-year elementary school education. By the 1991 Census data, this group was larger – 2.1 million or every third inhabitant of Serbia aged 15 or more. In the same period was decreased also the number and share of population with completely eight-year elementary school education. In the same period was also reduced the number and the share of the population with completely eight-year elementary school education (from 1542 thousands to 1279 thousands i.e. from 25% to 21% of total population). The largest number of inhabitants had received secondary school education (more than 3.0 million), but the most intensive increase is among people with tertiary education. During two decades the number of persons with post-secondary education increased by 77% (from 560 thousands to 1.0 million) but. Despite an improvement in the educational structure of population, the proportion of people without primary education is still very high, and the percentage of highly educated persons is even low especially if we make the comparisons at international level. The continuously growing shares of the population of Serbia with the highest educational attainment illustrate the quality of the educational structure of its population. However, the migration of highly educated people from Serbia to developed countries ("brain drain"), particularly in the 1990s and 2000s, shows that such educational potential is not being used enough.

The data on the educational attainment of the population by sex are indicative of a lower educational attainment of females than that of males: the percentage of females without any education or having incomplete elementary education is relatively larger, the share of them with secondary education is smaller than among males, but the proportion of those with tertiary educational attainment is approximately the same as with males.

The educational attainment varies by population age, which results from the changes made in the education system in the past decades, particularly from the introduction of obligatory elementary education, as well as the continuously growing number of those who carry on receiving education after finishing the elementary school. Recent data also shows a change in the sex structure of young adult population having tertiary education. In the age group 20-39, the number of women having university degree is bigger than the number of men.

Regional disparities. The level of education is the highest in the region of Belgrade and in the Vojvodina region. These two regions of the north Serbia is more developed and with larger network of university centres. In regions/areas of Serbia-south structure of the population by educational attainment is less favourable. In both regions of Serbia- south the proportion of the population without primary education is higher and the proportion of people with secondary or tertiary education is lower, especially in relation to the City of Belgrade.

### Attending school

Primary and lower secondary education covers more than 95% of relevant population. Over 99% of pupils continue education after completing primary and lower secondary education, but the generation coverage in secondary education is about 85% because there is a dropout of pupils after enrollment to upper secondary schools.

The number of pupils in primary and secondary schools shows a slight decrease, which is a common trend in recent years, mainly because decreasing number of births in the country. At the same time, the number of students in tertiary education slowly increased.

## 2. Active population

### Unemployed population

Between 1991 and 2011 the number of unemployed has increased significantly, from 535,000 to 739,000. The reasons are many, but the most important are the very long and deep economic crisis, economic transition and one more or less unsuccessful privatisation process. The highest unemployment rate was registered in 2006 (916 thousand). The following year, the number of



unemployed has increased to 785 thousand. Such changes can be explained by more rigorous criteria for the registration in the NES. A similar conclusion indicates stagnant number of employees (about 2 million). At the same period, the number of employees decrease which resulted in an increase in the unemployment rate. In 2011, the unemployment rate was 29.7% and was among the highest in Europe.

In Serbia, in terms of unemployment present huge regional differences. The unemployment rate is much higher in Serbia-south (38% in 2011) than in Serbia-north (22%). The differences are even more pronounced at lower levels. At NUTS 2 level unemployment rates are in the interval between 14% (Belgrade region) and 39% (South and East Serbia region). At NUTS 3 level the gap is even greater - 14% in Belgrade area to over 50% (in Toplica area - 53% and in Jablanica area - 53%).

### 3. Salary and GDP

Height of average earnings is another indicator of the level of development of Serbia. The average salary of 380 EUR (2011) is among the lowest in the Western Balkans and one of the lowest in Europe. There are also regional differences, but they are not as pronounced as in the indicators of unemployment. The lowest and highest average salary in the previously mentioned areas, Belgrade (460 EUR), and Toplica (260 EUR).

The results of the estimates obtained by regional GDP survey confirmed significant differences in the level of development of regions. In 2011, GDP per capita in Serbia -North was two times higher than in Serbia – South, and the Belgrade area is 2.5 times higher than in both regions of Serbia - South.

### 4. Minorities – ethnic structure

The disintegration of the former SFR of Yugoslavia and the establishment of new states, wars and ethnic cleansing, enormous number of refugees and IDPs, and voluntary or and forcible ethnocentric migrations were conducive to major changes in the demographic development and ethnic structure of the population of Serbia.

Serbia is a region having a strikingly homogenous ethnic composition of its population. According to the three last censuses, more than 80% of total population declared as ethnic Serbs (80.4% in 1991, 83.7% in 2002, and 84.3% in 2011). The second largest ethnic minority group are the Hungarians, but with a clear declining trend (344 thousand in 1991 and 254 thousand in 2011). Almost all ethnic Hungarians living in Vojvodina region (99%) which represent about 14% of the total population of this autonomous province. Most of them are in the area and the North Banat (48% of total population) and North Bačka area (45%).

The third-largest ethnic group are the Muslims. Since the 2002 Census this community members are mostly declare themselves as Bosniaks, while a much smaller number (below 15%) continue to identify themselves as ethnic Muslims. The number of ethnic Bosniaks / Muslims has decreased in the period 1991-2002, primarily due to emigration to Bosnia and Herzegovina and other European countries (mostly in Germany). In the last intercensal period, their number had increased slightly due to natural growth. However, they were in 2011 about 8% less than in 1991, while the share in the total population has remained around 2.5%. The largest proportion of ethnic Bosniaks / Muslims is in the region of Šumadija and West Serbia (8%), ie. in the Raška area (36%) and Zlatibor area (16%). In this region live about 95% of total Bosniak/Muslim ethnic minority group.

Roma ethnic group is the latest minority group with more than 100 thousand people. It is also the only ethnic group whose size has increased in both intercensal periods (94,000 in 1991, 108,000 in 2002 and 147,000 in 2011). The population growth is the result of natural increase, but also of the emancipation of this ethnic minority group (net migration is negative). Unlike other ethnic groups, the Roma live in whole territory of Serbia. Most of them are in the Belgrade region (27,000 or 18% of Roma in Serbia), and the proportion is highest in the South and East Serbia region (about 3.5%).

## Morocco

by Jean-Yves Moisseron  
January 2014

### ➤ Analysis of the Moroccan territorial divisions and their populations

#### 1. Available data, sources and statistical methodologies

The data delivered were collected by Hicham Hafid (local expert) under the supervision of Jean-Yves Moisseron (International expert) during May-June and July 2013. The data requested by ESPON ITAN Project were procured from the HCP (Haut Commissariat au Plan), which produces and collects most of the official statistics of the Moroccan Kingdom. The data were collected with the strong implication of the HCP staff who answered quickly to our requests. We tried to follow as much as possible the directives of ITAN project as set out in the data collection manual concerning the metadata and the data. It was not possible to deliver the DEMO B data. Most of the DEMO data are very well provided for the year 2004, i.e. the year of the National Census with a comparison with 1994 date of the previous National Census.

#### 1.1. The Haut Commissariat au plan (HCP) : Presentation

The HCP is a Ministerial organization created in 2003 as a public administration directed by a Haut Commissaries with a Ministerial rank nominated by the King of Morocco. The HCP is the central institution in the Moroccan national statistics system and is the main supplier of demographic, economic and social statistics. It provides studies related to conjuncture, macroeconomics and prospective. It manages an Observatory of the household living conditions and a Centre of demographic studies. HCP is conforming to the regulations and international norms related to statistics and is admitted since 2005 to the FMI special norms for data dissemination. HCP is not only a statistical institution but as the successor of the Ministry of Planning, it is also in charge of the economic plan. The HCP is managed by Ahmed Lahlimi since its creation in 2003. It is by law independent of the state<sup>86</sup>.

---

<sup>86</sup> The organization and the management of the HCP are officially stated in the following texts:

- The Statistical Laws are based on the Royal Decree promulgating law No 370-67 of 10 Jumada I 1388 (5 August 1968) which establish the creation of the CCSS (Committee for the Coordination of Statistical Studies). The Royal Decree promulgating law No 371-67 lays down the composition and organization of the CCSS. We may mention the following laws:
- Text creating the Statistics Directorate: Decree No 2-75-463 of 10 Shaaban 1395 (19 August 1975) relating to the duties and organization of the Secretariat of State, reporting to the Prime Minister, charged with regional planning and development.
- Decree No 2-02-397 of 17 July 2002 setting out the duties and organization of the High Commissariat of Planning also specifies the organization and duties of the Statistics Directorate. It also places the National Accounts Office under the HCP.
- Decree No 2-94-422 of 17 Jumada II 1415 (21 November 1994) modifying and supplementing Decree No 2-93-23 of 21 Kaada 1413 (13 May 1993) relating to the duties and organization of the Ministry of Agriculture and agrarian reform.
- Dahir No1-05-38 of 20 Shawal 1426 (23 November 2005) promulgating law No 76- 03 establishing the Bank Al-Maghrib.
- Decree No 2-94-285 of 17 Jumada II 1415 (21 November 1994) relating to the duties and organization of the Ministry of Public Health.
- Law No 65.99 of the labour code of 2003 for social statistics.
- Law No 061 requiring tourism enterprises to supply data to the Ministry of Tourism.
- Law No 19-06 relating to statistical statements with the aim of collecting data on foreign trade, the balance of payments, and the overall external financial position of Morocco, promulgated by Dahir No 1-07-51 of 28 Rabii 1 1428 (17 April 2007).
- Decree No e-07-885 of 8 Hija 1428 (19 December 2007) relating to the application of law No 19-06.

The CCSS comprises members of different ministries (c.f. 1.3.1). According to Article 4 of the statistical law, the CCSS comprises four sub-committees, authorized to form working groups:

- Sub-committee for demographic and social studies
- Sub-committee for agricultural statistics
- Sub-committee for economic statistics
- Sub-committee for data processing.

## 1.2. The structure of the National statistical system

The National statistical system is structured as follows:

- Directorate of Statistics: under the High Commissariat of Planning (HCP), compiles the collection of economic, social and demographic, data. It is also responsible for their publication.
- Directorate of National Accounts: under the HCP, it is responsible for the accounts of the nation and the macroeconomic data.
- Foreign Exchange Office: in charge of the production of data on the overall external position (foreign trade, the balance of payments).
- Ministry of the Economy and Finance is responsible for government statistics (revenue, taxes, debt, etc).
- Ministry of Agriculture and Maritime Fishing: is responsible for the collection and production of data on agricultural activity and fishing products.
- Bank Al-Maghrib: a public establishment must centralize and collect the monetary statistics and exchange rates (Decree No 1.59.233).
- Ministry of Health: in charge of the production of data on health.
- The Centre for Demographic Studies and Research (CDSR), part of the HCP, establishes surveys on the population. The Observatory for Population Living Conditions (OPLC) is responsible for analysing living conditions of the population.

## 1.3. Methodological update

The HCP has launched huge reforms in the last decade in order to update the methodology and the organization of the data collection process by using modern technological innovation and trying to implement the best practices. It was obvious in the employment survey, indicators, new nomenclatures, the collection and the dissemination of data.

## 1.4. Geographic information system (GIS)

Morocco has elaborated a modern Geographic Information System (GIS) in order to supply maps framework to the integrated database especially for the Census of 2004. Since 2008 the HCP undertook an upgrade program of the GIS.

## 1.5. Regional accounts

In order to respond to the new needs of spatial statistics related to the regionalization policy, a large effort was made to develop new spatial and regional indicators. The process of collection and publication of regional accounts are in accordance with the principals of the SNA 93. Production accounts by branches leads to the production and the dissemination of the regional GDP by sectors. Final consumption of households by region has been calculated pour 2004 and 2007.

## 1.6. Content of the delivered ITAN database

The data for Morocco were collected at SNUTS 3 level for the 16 regions (SNUTS 2) and for the 80 provinces. A large part of the basic demographic data was available in the Annual statistic report.

More detailed data are available for 2004 and 1994 when a General Census was carried on. The Moroccan data are very detailed and we may go further at the municipal data for 2004. It is noticeable that all these data are available on line on the HCP web site: [http://www.hcp.ma/Recensement-general-de-la-population-et-de-l-habitat-2004\\_a633.html](http://www.hcp.ma/Recensement-general-de-la-population-et-de-l-habitat-2004_a633.html)

The main problem we had to face is the changes in the zonings of the region (see above for examples). The territorial reform of 2009 introduced 13 new provinces to the previous organization. Some of the new provinces were created by a split of previous provinces or by re-arrangement. But most of the provinces keep their name even if their geographical limits changed.

As a matter of fact many data available for 2011 were not available before because they were not created. But it means also that even if the name of the province is the same for many years, the data collected are not comparable. It would be possible to rebuild the ancient data using the last administrative zoning for 2004 by aggregating the municipal data. But according to ITAN manager, this was not realized by the experts in the present contract.

Table 1: Moroccan's demographic ITAN database at a glance

Module	Variables	Code	Period covered	Remarks
<b>A</b>	Total population	Pop_t	1994, 1995, 2004, 2005, 2006, 2007, 2008, 2009, 2010, 2011	
	Population by area	Pop_urb, pop_rur	1994, 1995, 2004, 2005, 2006, 2007, 2008, 2009, 2010, 2011	
	Population by sex	Pop_m, pop_f	2004	
	Population by Age	pop_t (group age)	2004	
<b>C</b>	Live expectancy	Unavailable at governorate level		
	Total Deaths	Death_t	2000	
	Deaths by age	0, 1-4,5-9,10-14,15-19,20-24, 25-29, 30-34, 35-39, 40-44,45-49,50-54,55-59,60-64,65-69,70-74,75-79, +80	2000	
	Deaths by sex	Death_m, death_f	2000	
	Total Births	Birth_t	2000, 2001	
	Births by Sex	Birth_m, birth_f	2000	
	Fertility rate	2004		
<b>D</b>	Total Domestic immigration	Mig_dom_incoming	2011,1994	
	Total Domestic emigration	Mig_dom_out,	2011,1994	
	Total Returning migrants	Return_mig_t	1999-2004	
	Total Returning migrants by sex	Return_mig_t	1999-2004	

## 1.7. Main statistical Sources

### The statistical yearbook

The statistical yearbook is an annual publication that provides useful information and vast statistics on demographic, economic and social statistics of Morocco. This publication presents and aggregates

different data collected by the HCP and the other structures of the national statistical system. The main data are related to: population, climatology, agriculture, fishery, mines, energy, industry, real estate, transportation, communication, tourism, education, health, employment, justice, children protection, cultural activities, price, money, credit, national accounts... It is available on CD since 2000 (but not available during the mission of the international expert).

### The General Census of Population and the Habitat

A general Census of the population was carried on in 1960, 1971, 1982, 1994 and 2004. A new Census will be organized in 2014. The Recensement Général de la population et de l'habitat (RGPH) describes the characteristics of the resident population. The census provides indicators of the housing conditions of the population (type of residence, occupational status, age and basic facilities of the accommodation, water source, and road access). The methodology consists in doing exhaustive population interviews.

### National demographic Survey

A first National demographic survey was carried on in 1986-88 and the last one was published in 2011<sup>87</sup>: the purpose is to know the principal factors of the Moroccan demographic structure. It is carried on on unregular basis. HCP published also many studies on demographic issues<sup>88</sup>. But most of the studies don't provide regional data at province level (snuts 3) and rarely at Regions level (snuts 2).

### Le Maroc des Régions

This document provides detailed information and data on the different regions at province level but with the description and maps of the municipalities. It has been published in 2010 and is available on line. It includes demographic data but also economic and social important data. It gives also the number of rural and urban municipalities of the province.

### Other Surveys

The HCP undertakes regular surveys on different topics concerning the households, for example surveys on living conditions and on the consumption and expenditure of households or household standards of living are regularly conducted. Modules for international migration and transfers make possible to estimate internal and external migration flows and to establish a portray of the migrant population.

### Regional statistic index

Under the authority of the HCP, sixteen regional offices were established in the sixteen regions of the country. They are in charge of recording and collecting data. They have to publish regular surveys

---

<sup>87</sup> Enquête Nationale Démographique à Passage répétés 2009-2010, Principaux résultats, Rabat, le 14 mars 2011.

<sup>88</sup> Vers une nucléarisation des ménages marocains (2011) ; Capacité fonctionnelle des personnes âgées au Maroc (2011) ; La vulnérabilité des enfants (2011) ; Les déterminants proches de la fécondité au Maroc (2010) ; La fécondité à travers le recensement général de la population et de l'habitat de 2004 (2010) ; La migration irrégulière au Maroc : un état des lieux (2010) ; La migration de retour au Maroc (2010) ; Perceptions de la vieillesse, dimension du genre et vulnérabilité chez les personnes âgées au Maroc (2009) ; Retraite, préretraite et activité chez les personnes âgées au Maroc(2009) ; Relations familiales et sociales chez la population âgée au Maroc (2009) ; Etat de santé et morbidité chez la population âgée au Maroc(2009) ; Profil socio-démographique de la population âgée au Maroc (2009) ; Projection des ménages de 2004 à 2030 (2008) ; Projection de la population du Maroc par milieu de résidence: 2004-2030 (2008) ; L'insertion socioculturelle des Marocains résidant à l'étranger dans les pays d'accueil (2007) ; L'insertion des Marocains résidant à l'étranger dans le marché du travail des pays d'accueil (2007) ; Education et formation des Marocains résidant à l'étranger: une voie pour l'intégration dans les sociétés d'accueil?; Profil démographique et mobilité géographique des Marocains résidant à l'étranger (2007) : Les apports économiques des migrants de retour et les obstacles rencontrés (2006) ; La «réinsertion» sociale des migrants de retour dans le pays d'origine (2006)

concerning their respective regions, notably the administrative statistics (construction permits, registry office, etc.) They have to undertake specific studies demanded by local authorities and have to respond to local users. The Regional HCP office have to provide a report on their respective region on a regularly basis. These report both in Arabic and French are very detailed and disseminate data on a very large scale of issues sometimes at the municipality level. The report is available on line on the HCP web site for the year 2011. The efforts of the HCP to establish data on regional level and the results achieved are noticeable.

Table 2: List of the statistic index

Annuaire Statistique régional du grand Casablanca, 2011 (version arabe et française)
Annuaire statistique régional du grand Casablanca, 2011 (version arabe et française)
Annuaire statistique de la région Fès Boulemane, 2011 (version arabe et française)
Annuaire statistique de la région Taza-Al Hoceima-Taounate, 2011 (version arabe et française)
Annuaire statistique de la région de l'Oriental, 2011 (version arabe et française)
Annuaire statistique de la région Laayoune-Boujdour-Sakia el hamra, 2012 (version arabe et française)
Annuaire statistique de la région Souss-Massa-Draa, 2012 (version arabe et française)
Annuaire statistique de la région Guelmim-Smara, 2012 (version arabe et française)
Annuaire statistique de la région Tadla-Azilal, 2012 (version arabe et française)
Annuaire statistique de la région Tadla-Azilal, 2011 (version arabe et française)
Annuaire statistique de la région Souss-Massa-Drâa, 2011 (version arabe et française)
Annuaire Statistique régional du grand Casablanca, 2010 (version arabe et française).
Annuaire statistique de la région Rabat-Salé-Zemmour-Zaër, 2010 (version arabe et française)
Annuaire statistique de la région Fès Boulemane, 2010 (version arabe et française)
Annuaire statistique de la région Marrakech Tensift Al Haouz, 2010 (version arabe et française)
Annuaire statistique de la région Souss-Massa-Drâa, 2010
Annuaire statistique régional Laâyoune-Boujdour-Sakia El Hamra, 2010 (version arabe et française)
Annuaire statistique de la région Guelmim-Smara, 2010
Annuaire statistique de la région d'Oued Eddahab-Lagouira, 2010
Annuaire statistique de la région Tadla Azilal, 2010
Annuaire statistique de la région Doukala-Abda, 2009
Annuaire statistique de la région de l'Oriental, 2009
Annuaire statistique de la région Gharb-Chrada-Beni Hssen, 2009
Annuaire statistique de la région Fès Boulemane, 2009
Annuaire statistique de la région Rabat-Salé-Zemmour-Zaër, 2009
Annuaire statistique de la région Chaouia-Ouardigha, 2009
Annuaire statistique de la région Marrakech Tensift Al Haouz, 2009
Annuaire statistique de la région Gharb-Chrada-Beni Hssen, 2008
Annuaire statistique de la région Rabat-Salé-Zemmour-Zaër, 2008
Annuaire statistique de la région du Grand Casablanca, 2008
Annuaire statistique de la région de Guelmim-Smara, 2006 (version arabe et française)

Source: HCP web site

### 1.8. Statistical processing of the migratory questions

The Law of 2003 defines the rules concerning the entry and stay of foreigners in Morocco and aggregates legal conditions that were split among different texts of law. The new law tries to address the issue of illegal migration and also human trafficking. The structure of the Ministry of the Interior was strengthened by the creation of two new entities, the Office of Migration and Border Surveillance and the Observatory of Migration.

Despite everything, International migration data is not formally collected by a unique office that would be responsible for. Migration statistics are collected and estimated through the population censuses and from the following entities:

- the High Commissariat for Planning (HCP), and within it the Directorate of Statistics (DS);
- the Ministry of the Interior, with its General Directorate of National Security (GDNS), the Office of Migration and Border Surveillance, and the Observatory of Migration;
- the Ministry of Foreign Affairs and Cooperation, in particular its Office of Consular and Social Affairs (OCSA);
- the Delegated Ministry for the Moroccan Community Resident Abroad; the Ministry of Employment and Professional Training ;

- the Ministry of National Education, Higher Learning, Executive Training, and Scientific Research ;
- the Ministry of Tourism and Crafts;
- the Centre for Demographic Studies and Research (CDSR);
- the National Institute of Statistics and Applied Economics (NISAE);
- the Hassan II Foundation for Moroccans Resident Abroad;
- the Council of the Moroccan Community Abroad (CMCA);
- the Maghreb Association for Study and Research on International Migration (MASRIM).

## 2. Territorial Organization

### 2.1. Concept of territory in Morocco

The purpose to organize the regions and provinces in Morocco is far from being new. In its long history of domination attempts, the Makhzen try to portray inside administrative limits in order to establish its control and the fiscal system. Assessing the resources of a given territory and organize the negotiation processes with important tribes leader needed to fix their influence areas. Moulay Hassan the First tried to fix 330 districts<sup>89</sup>. For a long period of time, since the beginning of the 20th century, the territory concepts in Morocco were inherited from the French post-colonial schools of Geography. The regions were mainly conceptualized as physical topics looking for large homogeneous areas sharing the same geographical relief, the same climate and landscape and then the same types of human activities<sup>90</sup>.

Hardy and Celérier, two geographer of the French Protectorat have presented Morocco divided in 6 regions in a book edited for the first time in 1922. The six regional areas were in reality large part of the Moroccan territory homogeneous from a geophysical point of view. :

- The « North Region » including the Rif and the Mediterranean shore.
- The Sebou Basin including the river and its tributaries.
- The Moroccan Meseta i.e. the Central Morocco Central, the central plateaux.
- The Atlas mountains
- The eastern Morocco, towards Algerian Border.
- The Saharan Morocco including all the south of the country

The geographical region was more a description of the country useful for Geography as a scholar activity than a tool to conduct regional policy. Morocco must wait 1971 to implement a first regionalization policy and the a second one in 1996.

### Short History of the evolution of Moroccan regions

- In 1900, Morocco was an independent sultanate, although several European countries had sought varying degrees of influence. Spain, in particular, had possessed exclaves on the Mediterranean coast for many years. Spain also claimed, and later occupied, the coastal exclave of Ifni in the south.
- 1911-11-04: France and Germany agreed to respect French pretensions to Morocco in exchange for a French cession in the Cameroons.
- 1912-03-30: Morocco divided into a French protectorate and a Spanish protectorate. The Spanish protectorate consisted of strips of territory at the north and south ends of the country.
- 1925-06-01: Tangier established as an international zone (effective date).

<sup>89</sup> Kerbout M., Hajouj A., 1999, « Les territoires à l'épreuve des normes : référents et innovations ». Territorial Development and New Regionalism : Norms, Referent and innovaion, Antheaume et al, LERMA-Montagnes Méditerranéennes.

<sup>90</sup> *Ces grandes lignes de reliefs, dérivées de l'évolution géologique et porphologiques, permettent de distinguer, au Maroc, un certain nombre de grandes unites topographiques qui, par leur situation et leur altitude, influençaient à leur tour le clima, fomant le cadre des grandes regions naturelles auxquelles s'est adaptée la vie humaine*, Celerier, J., 1943, *le Paysage rural au Maroc*, Hesperis, Institut des Hautes etudes Marocaines, Rabat, Tome XXX, 3ème-4ème trimestres.

- 1946: French protectorate consisted of the regions of Agadir, Casablanca, Fès, Marrakech, Meknès, Oujda, and Rabat. Spanish protectorate consisted of the regions of Gomara, Kert, Lucus, Rif, and Yebala (northern area) and the Southern Protectorate of Morocco.
- 1956-04-07: Morocco became independent. The Spanish protectorate ended on this date; the French protectorate had ended earlier in the same year.
- 1956-10-29: Status of Tangier changed from international zone to province of Morocco.
- ~1957: Morocco divided into provinces. The provinces of Agadir, Beni-Mellal, Casablanca, Fès, Marrakech, Mazagan, Meknès, Ouarzazate, Oujda, Rabat, Safi, Tafilalet, and Taza corresponded to French Morocco. The provinces of Chauen, Larache, Nador, Rif, Tangier, and Tetuan corresponded to Spanish Morocco (the northern protectorate). Southern Protectorate of Morocco became the province of Tarfaya.
- 1960: The administrative decrees of 1959 and 1960 provided that Morocco's primary divisions were the provinces and prefectures. They were subdivided into cercles (circles), which were further subdivided into circonscriptions rurales and circonscriptions urbaines (rural and urban constituencies). The rural constituencies were subdivided into communes; the urban into arrondissements.
- 1962-07-09: Name of Kenitra (the city) officially changed to Mina Hassan Tani (Port Hassan II, in honor of the king); however, the new name has not been in use.
- 1965-01: Rabat province split into Rabat prefecture and Kenitra province.
- 1965-06-15: Safi province split from Marrakech.
- ~1967: Name of Tafilalet province and its capital changed to Ksar es Souk. Name of Rif province and its capital changed to Al Hoceïma. Chauen, Larache, and Tetuan provinces merged to form Tétouan. Mazagan province merged with Casablanca.
- 1969-06-30: Ifni restored to Morocco by Spain, becoming part of Agadir province.
- ~1970: El Jadida (formerly Mazagan), Khouribga, and Settat province split from Casablanca; name of Rabat province changed to Rabat-Salé.
- 1971-06-23: By decree 1-71-71, dated 1971-06-16 but published a week later, a new level of local government was created. Seven "administrative regions" were formed by combining the existing 19 provinces and two prefectures, which remained in place as secondary divisions. The regions were as follows:
- 1973-08-13: El Kelâa des Sraghna province split from Marrakech. Khémisset province split from Rabat. Khénifra province formed from parts of Ksar es Souk and Meknès.
- 1974-01-14: Figuig province formed from parts of Ksar es Souk and Oujda.
- 1976: Spain relinquished control of Spanish Sahara. Mauritania and Morocco promptly divided it between them. This action was not recognized as legal by the international community. The United Nations intends to hold a referendum to determine the future of this territory, now known as Western Sahara. Pending the decision, other governments have withheld recognition of Morocco's sovereignty over Western Sahara.
- 1978: Azilal province formed from parts of Beni-Mellal and Marrakech. Ben Slimane province split from Casablanca. Boulemane province formed from parts of Fès and Taza. Chefchaouen (formerly Chauen) province split from Tétouan. Essaouira province split from Safi. Taounate province split from Fès. Tata province formed from parts of Agadir and Ouarzazate. Tiznit province split from Agadir.
- 1979: Mauritania ceded its portion of Western Sahara to Morocco.
- 1980: Tarfaya province split into three parts. Two of the parts became Guelmim and Tan-Tan provinces. The third part merged with Laâyoune province in Western Sahara. Since Morocco's sovereignty over Western Sahara is not internationally recognized, we must regard this third part as a separate Laâyoune province in Morocco.
- 1981: Casablanca divided into five prefectures: Aïn Chock-Hay Hassani, Aïn Sebâa-Hay Mohammedi, Ben M'sick-Sidi Othmane, Casablanca-Anfa, and Mohammedia-Zenata.
- 1982: Ifrane province split from Meknès. Name of Ksar es Souk province and its capital changed to Errachidia.
- 1986: Sidi Kacem province split from Kenitra. Taroudannt province split from Agadir.
- The changes from 1990 to 1997 may or may not be completely accurate, but they do help account for some of the discrepancies in the standards.



- 1990: Larache province split from Tétouan. Rabat-Salé province split into three prefectures: Rabat, Salé, and Skhirate-Témara.
- 1993: Agadir province split into Chtouka-Aït Baha province and Agadir-Ida-Tenane and Inezgane-Aït Melloul prefectures. Meknès province split into El Hajeb province and Meknès-El Menzeh prefecture. Oujda province split into Berkane-Taourirt, Jerada, and Taourirt provinces and Oujda-Angad prefecture. Assa-Zag province split from Guelmim. Chichaoua and Al Haouz provinces split from Marrakech. Sefrou province split from Fès.
- 1994: Mohammedia-Zenata prefecture split into Al Fida-Derb-Sultan, Méchouar de Casablanca, Mohammedia, and Sidi Bernoussi-Zenata (possibly with annexations from other prefectures). Marrakech split into Marrakech-Ménara province and Marrakech-Médina and Sidi-Youssef-Ben-Ali prefectures. Fès province split into Fès el Jadid-Dar Dbibagh, Fès-Médina, and Zouagha-Moulay Yacoub prefectures. Al Ismaïlia prefecture split from Meknès-El Menzeh, El Hajeb, or parts of both.
- 1997: Berkane-Taourirt province split into Berkane and Taourirt.
- 1997-03: Sixteen regions created as primary subdivisions, relegating provinces and prefectures to the secondary level.

### The Moroccan region in 1971<sup>91</sup>

The main purpose of the post-colonization period was the development of the country. Therefore, the region was defined as a set of Provinces that must be linked on geographical, economical and social aspects in order to stimulate their development and then require a comprehensive and coherent urban and rural planning (Loi du 16 juin 1971). The most important criteria for the creation of the economic regions were:

- The influences of big cities and the urban network
- The catchment basin and their irrigation opportunities
- The density of the rural population
- The harbours and the gate to the seas
- The road network
- The industrial value-added.

Most of the criteria were demographic (based on the first post-colonial statistics in the 60s), economical. Contrary to the previous period, the physical geography was neglected. The economic development was the priority. The criteria lead to the creation of seven economical regions very different from the previous conception. The importance of big cities in order to boost the regional development was taken into account. Most of these regions have simply a name related to a cardinal point. Most of them open out on the sea and as a result the mountains are connected to the Atlantic vallées to strengthen the complementarity between very different regions. A principle of an intra-territorial complementarity was adopted. Each region must benefit from a part of the different physical environments (mountains, desert, plains, shore). This was coherent with a low economic development where local exchanges were important.

Table 3: Names of the region in 1971

<i>Name</i>	<i>Surface (km<sup>2</sup>)</i>	<i>Administrative components</i>
Sud	142 850	Agadir; ouarzazate; Tarfaya
Tensift	41470	Marrakech, Safi
Centre	37650	Beni Mellal; Casablanca; El Jadida; Khouriba; Settat
Nord-Ouest	30775	Kenitra; Rabat-Salé; Tanger; Tetouan
Centre Nord	43955	Al Hoceima; Fez; Taza
Oriental	48530	Nador; Oujda
<i>Centre-Sud</i>	<i>113500</i>	<i>Ksar es Souk; Meknes</i>

Sources: Plan Quinquennal 1973-1977, Direction du Plan et du Développement Régional, Rabat.

<sup>91</sup> Most of the following elements are inspired by the excellent analysis of Ahmed Bellaoui, L'organisation régionale au Maroc : Vers une plus grande artificialisation de l'espace géographique, 89-92, in Territorial Development and New Regionalism : Norms, Referent and innovation, antheaume et al, LERMA-Montagnes Méditerranéennes

## The reform of the region in 1996

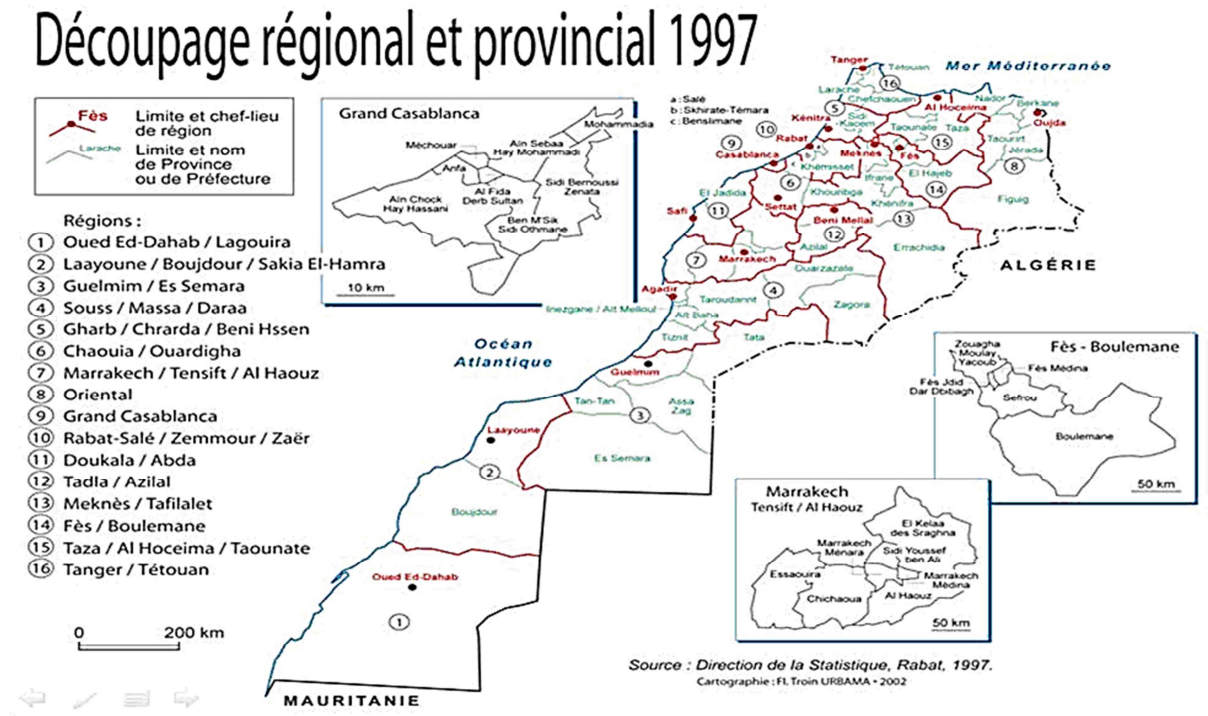
A new conception of the region appeared in the 90s and opens out to a new territorial organization in Morocco that was established by the Loi n° 47-96. It is supposed to be a space of debate, of negotiation and construction of the public issues and even as a "representation" tool added to the national representation. The new regional policy must implement a general decentralization of authorities in order to integrate the local economic and social dynamics in a continuous process of democratic learning. We may consider that institutional aspect became more important than strictly economic one. As a matter of fact, names and territorial limits are established by Law. Comparing with the previous, the historical criteria were integrated in order to foster the integration of the different regions. The homogeneity, urban polarity, and the synergies were important. Sixteen regions created as primary subdivisions, relegating provinces and prefectures to the secondary level.

Table 4: Names of the regions in 1996

REGIONS	CHEF LIEU	NOMBRE	NOMBRE	POPULATION (en milliers)
		DE PREFECTURES	DE PROVINCES	
Oued Ed-Dahab - Lagouira	Dakhla	-	2	145
Laâyoune - Boujdour - Sakia El Hamra	Laâyoune	-	3	299
Guelmim - Es-Semara	Guelmim	-	5	502
Souss - Massa - Drâa	Agadir	2	7	3 337
Gharb - Chrarda - Béni Hssen	Kénitra	-	3	1 952
Chaouia - Ouardigha	Settat	-	4	1 705
Marrakech - Tensift - Al Hoouz	Marrakech	1	5	3 252
Oriental	Oujda	1	6	1 983
Grand Casablanca	Casablanca	2	2	3 786
Rabat - Salé - Zemmour - Zaër	Rabat	3	1	2 599
Doukkala - Abda	Safi	-	4	2 046
Tadla - Azilal	Béni Mellal	-	3	1 488
Meknès - Tafilalet	Meknès	1	5	2 226
Fès - Boulemane	Fès	1	3	1 682
Taza - Al Hoceima - Taounate	Al Hoceima	-	4	1 844
Tanger - Tétouan	Tanger	2	5	2 668
National		13	62	31 514

Source: le Maroc des regions, 2010, HCP, p. 8

Figure 1: Provincial cutting in 1997



A new administrative zoning were defined in 2009 which introduced 13 new Provinces: Berrechid, Driouch, Fquih Ben Salah, Guercif, Midelt, Ouezzane, Rehaman, Sidi Bennour, Sidi Ifni, Sidi Slimane, Tarfaya, Tinghir, Youssoufia. They were created by a split in previous provinces. It is difficult to document the reasons of such changes but it is mainly due to demographic evolutions. It means also that demographic data must be used carefully in ITAN project for comparison analysis. The data of the Regions: (SNUTS 2) are comparable and also the province data where no change occurred in 2009: M31n, M33n M18n, M11n, M22n. In order to use the other province data for comparable purposes, a deeper analysis on communal level (SNUTS 4) needs to be undertaken. It is the case for: M14, M23, M21, M13, M12, M24, M17, M16, M15, M34, M32.

## 2.2. Territorial and regional planning in Morocco

### Evolution of the « regionalisation » since the independence

Morocco involved in regional policy from the very beginning of its independence and was aware of the importance of the local management in order to achieve development goals. Region was considered as policy tools. As a matter of fact, in the reforms of 1971, the 16 Moroccan regions were written in the Constitution and were mostly economical region. In 1976 a first Royal initiative related to decentralization policy supplied the « Charte communale ». This text defines the local authorities, their resources and the organization of local elections at the municipal level. The text is considered as a first step of the local democracy. But one must wait the Constitution of 1992 to transform the regions in real local communities, which benefit from a legal status and with autonomous possibilities to design and conduct economic, social and cultural local policies. The Constitution of 1992 improves the democratic space of the regions. They can elect Regional Councils which proper resources and precise rights.

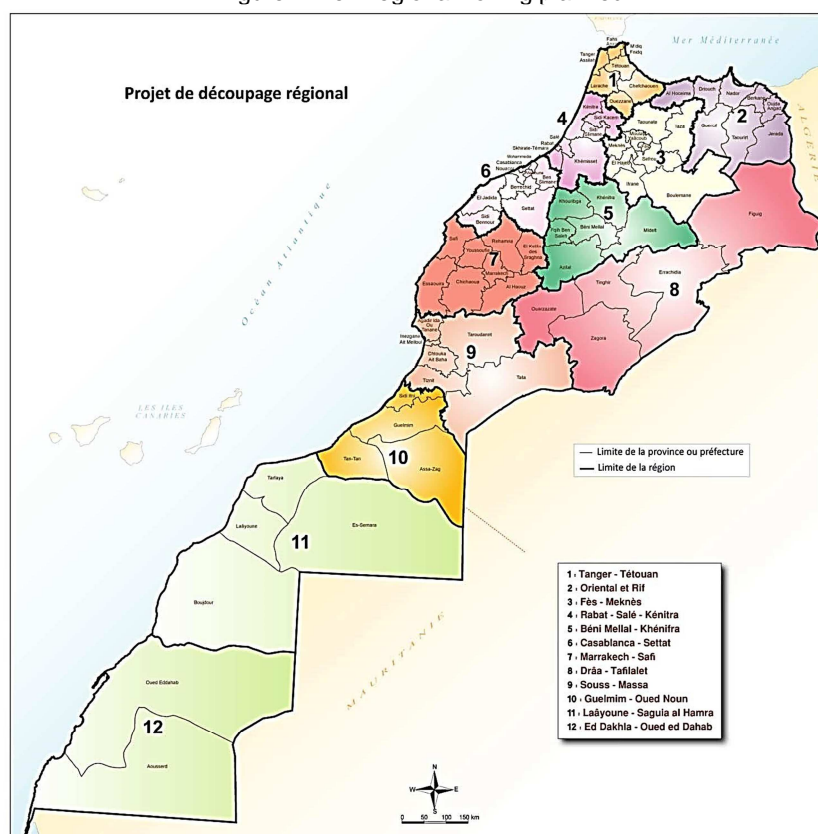
In 2002, the Regions become the economic development engine. They have to be pro-active in the development project, in the economic strategy and the choice of development. The region has to become attractive for international and national investments. In 2006, The Region obtains an proper budget fixed in the State Budget.

### A new Commission for regionalisation : La Commission Consultative de la Régionalisation (CCR)

Settled in 2010, is in charge of designing a new regionalization program call the « advanced regionalization » embedded in the global reform program launched by the King. The main purpose is to promote the civic participation in order to foster the democracy and boost economic and social development. The Advanced regionalization must also be a way to modernize the State and improve the local governance. The goals are : to release the spirit of initiative and the enterprising energies of the citizens, their local representative ; to thwart and oppose the bureaucratic red tape ; promote proximity and develop intersectoriality and then to reinforce responsibility and accountability at the different level. Territories are a new tool to fuel the State efficiency<sup>92</sup>.

The CCR have published a report which proposes a new regional authorities and projects in Morocco: A social « mise à niveau » program including the creation of a solidarity fund of 128 to 215 billions of dirhams. The creation of a « Agence régionale d'exécution des projets (AREP). This office will accompany the local initiative and also establish rules of controls based on a posteriori instead of a priori procedures. The regional Council will have the possibility to levy new regional taxes on infrastructures as airports for example. The part of the corporate tax saved for the regions will be raised and the revenues provided by cars will be more fairly divided up. The new regions are not any more designed under the principle of intra-territorial complementarity but in connection with the globalization and the new role the regions have to play in the context of the economic openness. Circulation infrastructures of people and ideas are today much more important. The CCR foresees a new regional zoning with only 12 regions. But the reform is not yet adopted.

Figure 2: new regional zoning planned



Source: CCR report : <http://www.regionalisationavancee.ma/PDF/Rapport/>

<sup>92</sup> « L'efficacité des interventions de l'Etat à chaque niveau d'organisation territoriale, leur pertinence aux yeux des citoyens et l'effectivité de leur impact réel seront assurées par leur mise en cohérence programmatique, leur synchronisation opérationnelle et la complémentarité des services aux populations, sans dédoublement ni déphasage ». p. 25

### 2.3. Administrative zoning in Morocco

In the current situation, the region is the first administrative level division of Morocco. The regions are subdivided into a total of 61 prefectures and provinces, which represent the second-level administrative divisions. In the ITAN data, the prefectures correspond to big cities, are the following : Casablanca, Mohammadia, Marrakech, Fez-Dar-Dbibegh, Rabat, Salé, Shirat-Temara, Fahs Anjra, Tangier-Assilah.

The prefectures or provinces are divided into municipalities which can be either rural (communes rurales) either urban (municipalités).

A special attention must be paid to the three southern regions. Western Sahara is still a zone of conflict and its sovereignty is disputed between Morocco and the Polisario Front. For Morocco Western Sahara is a part of the historical Morocco that was under the domination of the Spanish colonization. But for the Polisario it is not true and the Polisario claims the territory as the independent Sahrawi Arab Democratic Republic. A large part of Laâyoune-Boujdour-Sakia el-Hamra is located in this disputed territory. The region of Guelmin-Es Samara is only in part in Western Sahara.

### 3. Demographic profile and principal trends

The HCP has undertaken works in order to assess the spatial and temporal variations of the demographic transition factors. Projection of population, at the national, regional and municipal level make possible to carry out sound demographic prospective surveys.

The HCP has completed demographic studies by specific multidisciplinary works on a large set of issues.

#### 3.1. Main demographic trends

The total population in Morocco was estimated at 32.6 million people in 2012 from 11.6 million in 1960, i.e. a 180 percent increase during the last 50 years and only 5 million in 1900. The trend of demography is classical all along the century. Slow at the beginning of the century, the demographic growth became mushrooming in the 50's with a pic of 3,3% between 1952 and 1960.

Table n°4. Morocco population, 1900-2006

Year	Population (millions)	Annual average growth (en %)	
		Period	rate
1900	5,00	—	—
1912	5,40	1900-1912	0,6
1936	7,04	1912-1936	1,1
1952	8,95	1936-1952	1,5
1960	11,63	1952-1960	3,3
1971	15,38	1960-1971	2,6
1982	20,42	1971-1982	2,6
1994	26,02	1982-1994	2,0
2004	29,84	1994-2004	1,4
2007		2004-2006	1,1

Sources: HCP, CERED (1997). Situation et perspectives démographiques. RGPH de 1960, 1971, 1994 et 2004; et projections de la population pour 2007.

Demography was an important issue for the Moroccan government since the independence of the country that occurred in the period of the demographic pic. Through the *Plans de Développement économiques et social*, a population policy was portrayed in order to reduce the population growth rate. One of the main targets was to develop contraception. The fertility rate, which reached 7 children per woman in the 60's, is decreasing and is under 2,5 in 2004 and is dropping to 2,24 in 2011. This very fast deceleration is due to marital practices. The marriage age increased a lot. It was 23,6 for the men (resp. 17,3 for women) in 1960 and 31,4 for men (resp 26,1 for women) in 2012. The indicators

are lower in rural areas. Urban men marrying on average 2,5 years later than those living in cities. And urban women get married 1.8 later than rural women. The contraceptive prevalence reaches 67,4 of women aged 15-49 in 2011 and is almost equally available across the kingdom. Another important change is visible in endogamy that was a traditional way for maintaining family assets dropped from 33% in 1987 to 21% in 2010. The changings in demographic statistics reveal the deep transformation of the social values and the cultural behaviour.

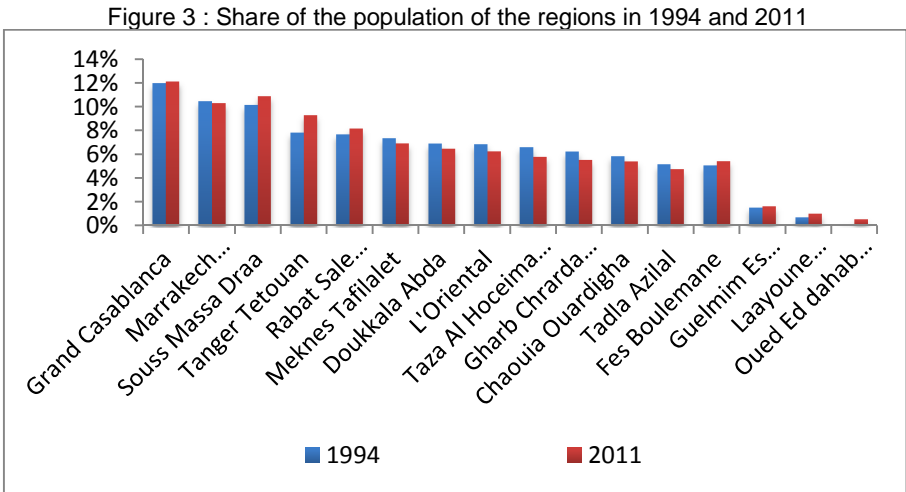
The Moroccan infant mortality rate is still high, but it has fallen notably. If in the early 1960s, almost one child in every seven died before their first birthday, it is the case in 2012 with one in 33. This noticeable improvement is due to the betterment of sanitary conditions after the health policy targeting infants the Kingdom launched. For example, the ratio of the number of inhabitants to medical doctors moves out from 12120 in 1967 to 1780 in 2004. As a matter of fact the life expectancy increased a lot. In 1950, life expectancy was estimated at 40y and it gains 25y till today.

An important point to notice is the relative homogeneity of the demographic transition in the different areas of Morocco. Even if the living conditions, the cultural and the economic conditions contrast widely, the demographic trends are homogeneous<sup>93</sup>.

### 3.2. Demographic weight of Moroccan areas

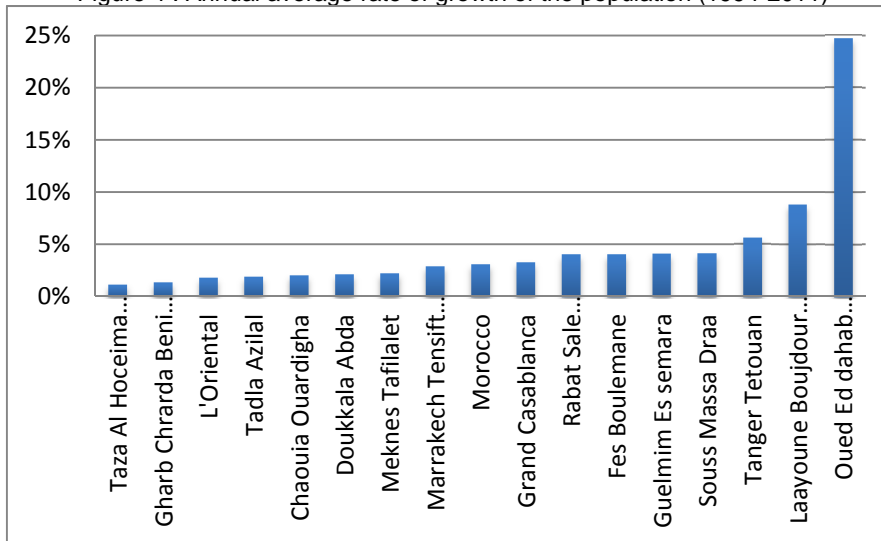
The population of Morocco is unequally distributed among the different regions. According to the data of the HCP in 2011, half of the total population lives in the five more populated regions: Grand Casa (12, 1% of the total population), Souss Massa Draa (10,8%), Marrakech-Tensift (10,3%), Tanger Tetouan (9,3%) et Rabat-Salé (8,1%). At the opposite the three southern region house only 2,1% of the population. The former ones are dominated by big cities and the latter by an arid climate. Grand Casablanca houses the larger part of the population. In the middle8 regions house from 4, 7% to 6,4% of the population.

This ranking was almost the same in 1994. But certain regions are very dynamic like Souss Massa Draa, Tanger and Fez and other are declining as Taza, Charb Chrad and l'Oriental. These regions decline in share of the total population (Graph n° 3) and the average annual growth rate of the population is inferior to Moroccan's one (Graph n°4). On the opposite, the regions around big cities except Meknes continue to increase in size faster than the Moroccan average. The south, in spite of being the less populated region is growing along a mushrooming trend.



<sup>93</sup> Sebti M, Courbage Y., Festy P., Kursac-Souali A.-C., 2009, Maghreb, Morocco, Marrakech : Demographic convergence, socio-economic diversity, Population et sociétés, n°459

Figure 4 : Annual average rate of growth of the population (1994-2011)



This evolution suggests that the most important regions regarding population may continue to grow fast in the future in spite of the regionalization policy.

#### ➤ Data and analysis of social, economic and environmental trends in Morocco

This report is the second technical and analytical report of ITAN project for Morocco and follows the first ITAN technical report: Analysis of the Moroccan Territorial Divisions and their population July 2013 which was devoted to Demographic data.

As in the first report, the data delivered were collected by Hicham Hafid (local expert) under the supervision of Jean-Yves Moisseron (International expert) during May-June and July 2013. The data requested by ESPON ITAN Project were procured from the HCP (Haut Commissariat au Plan) which produces and collects most of the official statistics of the Moroccan Kingdom

As mentioned in the first report, the data for Morocco was collected at SNUTS 3 level for the 16 regions (SNUTS 2) and for the 80 provinces. A large part of the data was available in the Annual statistic reports. More detailed data are available for 2004 and 1994 when a General Census was carried on. The Moroccan data are very detailed and we may go further at the municipal data for 2004. It is noticeable that all these data are available on line on the HCP web site: [http://www.hcp.ma/Recensement-general-de-la-population-et-de-l-habitat-2004\\_a633.html](http://www.hcp.ma/Recensement-general-de-la-population-et-de-l-habitat-2004_a633.html)

The first report stated that the main problem we had to face is the changes in the zonings of the region (see above for examples) and we encountered the same difficulties for the socio and economic data. The territorial reform of 2009 introduced 13 new provinces to the previous organization.

As a matter of fact many data available for 2011 were not available before because regions were not created. But it means also that even if the name of the province is the same for many years, the data collected are not comparable.

Table 1: Moroccan's socio-economic ITAN database at a glance

<b>Module</b>	<b>Variables</b>	<b>Code</b>	<b>Period covered</b>	<b>Remarks</b>
<b>SOC E</b>	Primary school enrolment	Primary-school-enrol-t/m/f/rur/urb	2011	Province
	Secondary school enrolment	Secondary-school-enrol-t/m/f/rur/urb	2011	Province
	No-education	No_education_t/f/m	2004	Province
	Primary education	Primary_education/t/f/m	2004	Province
	Secondary first level education	Secondary1_education/t/f/m	2004	Province
	Illiteracy rate	Rate_ill_t/f	2011	Province
<b>SOC F</b>		Unavailable at province level		
	unemployment	Unemp-t/f/m/f_urb/f_rur/m_urb/m_rur/m_15-24/m_25-34/m_35-44/m_45+/f_15-24/f_25-34/f_35-44/f_45+	2011	Region
	Unemployment rate	Rate_unempt/urb/rur		Partially Region
<b>SOC G</b>	Minority	Mino_t/urb/rur	2004	Province
	Active population	Active_pop_m/t/urb/rur/	2004	
<b>ECO H</b>	Rate of activity	Rate_activity_m/f/t/rur_m_rur_f/urb_m/urb_f/urb_T / +15_urb/+15_rur/	2004 2010-2011	
	Working population	Work_pop_t/f/m Work_pop_urb/rur/agri/in d/serv/unclear/+15_t/+15_urb/+15_rur	2004/2011 2011	Region Province
<b>ECO I</b>	Gross Domestic Product	Gdp_t/Capita/	2007/2009/2010	Region
	Final Consumption Expenditure of Households	Fceh-t/capita	2007/2009/2010	Region
<b>ECO J</b>				

The organisation of the report is consistent with the list of issues requested in the Technical appendix expert team contract, p.2/3.

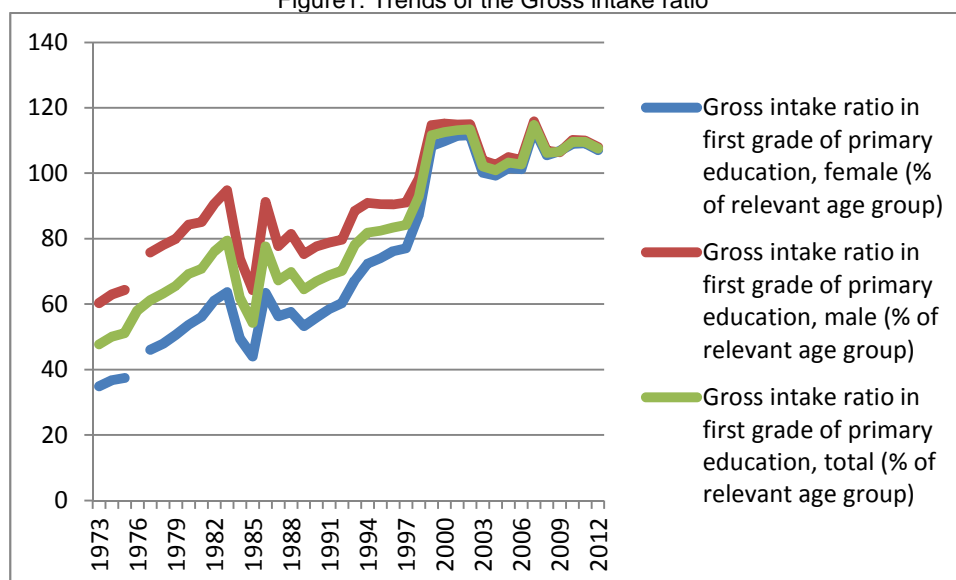


## 1. Social evolutions

### 1.1. Schooling and educational attainment of the population.

The Moroccan government has made education one of its priorities since its independence in 1956. King Mohamed VI, for example, decided to implement the "Decade for Education" for the period 1999-2009. The state expenditure devoted to education thus amounts to more than 25 % of the total state budget since 1997 with a peak of 27.7 % in 2004. The gross enrolment ratio, which represents the number of entries in a class with respect to the theoretical population, who is supposed to enter class (which may be greater than 100%), increases from the 70s with a convergence between girls and boys. We can observe this kind of convergence in the percentage of girls and in secondary school students who were one third in 1974 (32.1%) then 40% in 1990 and now 45%. Special efforts were made to reduce regional inequalities in the area of access to education by establishing an early regional decentralization where the regions are responsible for a third of the educational programs content to adapt to local problems. The enrolment rate has greatly increased over the past 20 years to reach 90% in 2012. Education expenditures exceed 5% of GDP since 1997, which puts Morocco in a better position than many Arab countries. In fact, the adult literacy rate increased although it remains well below the rate in countries like Tunisia. Apart from modern education programs, we can still observe a traditional education sector with the network of Quranic schools.

Figure1: Trends of the Gross intake ratio

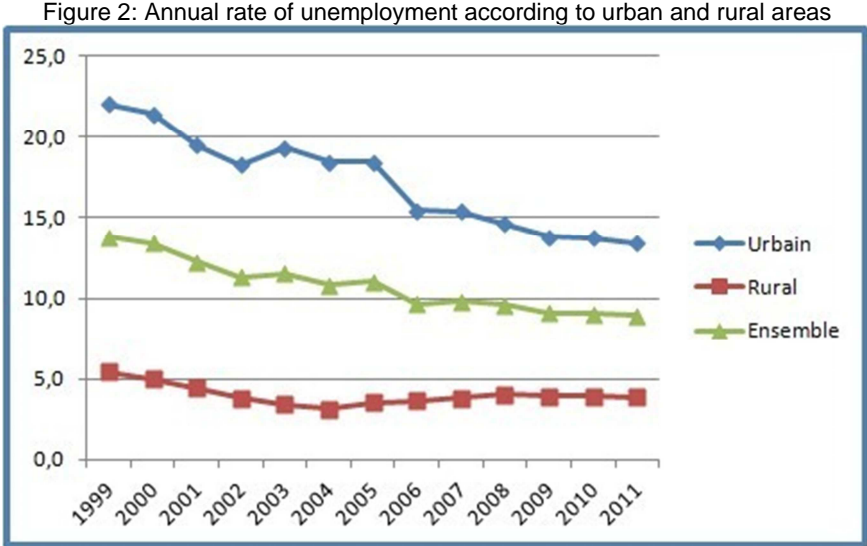


Despite a number of successful improvements, the educational system of Morocco suffers from significant differences in terms of gender, and from a high dropout rate in primary and secondary education plus a large number of inputs in higher education.

### 1.2. Research study on purchasing power, income and unemployment.

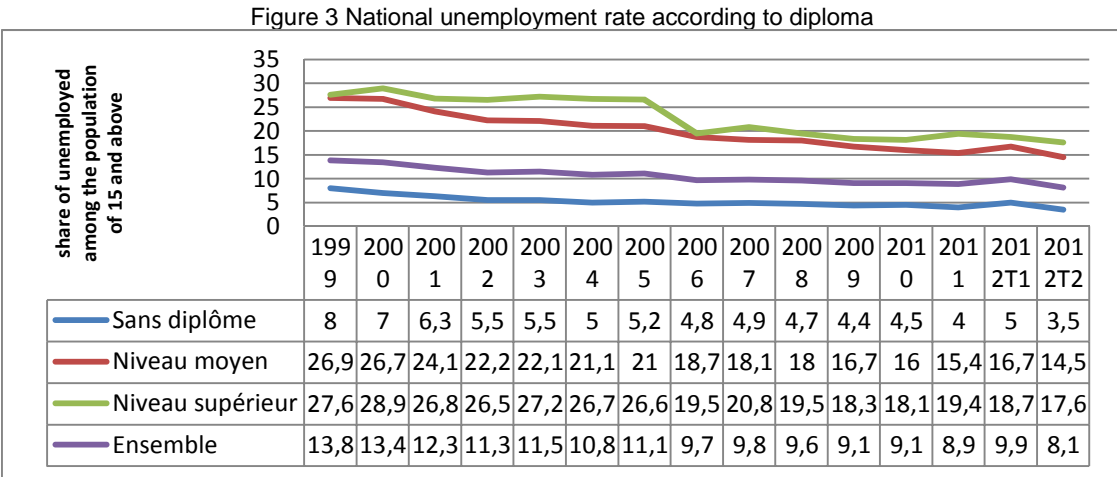
Directorate of Statistics of the Ministry for Economic Forecasting and Planning conducts an annual national survey on employment. The observation of the volume and main characteristics of activity, employment, unemployment and underemployment as well as input of their socio-demographic and socio-professional structures are the main objects of this statistical operation. From 1995, the survey also made possible a quarterly monitoring of basic indicators of activity, employment and unemployment. In 1999, the survey in question was widespread in rural areas. This nation-wide operation affects annually a large representative sample of 48,000 households, of which nearly 16,000 in rural areas, among different social classes and regions.

High Commission for Planning (HCP), the official organ of statistics in Morocco, calculates unemployment with the standards set by the International Labour Office (ILO), in their wider version. We can notice a general decrease of the unemployment rate between 1999 and 2013 with, however, an important disparity between rural and urban areas. We can observe in the second quarter of 2013 we observe a rate of 13.8 % in urban areas contrary to 3.2 % in rural areas.



Source : Enquête nationale sur l'emploi, Haut-Commissariat au Plan (Direction de la Statistique).

In the second quarter of 2013, the highest unemployment rates are found among young people aged 15-24 (18.4%) and among graduates (15.8%). The analysis of the main characteristics of the unemployed active population reveals that four out of five (83.2%) unemployed live in urban areas; two out of three (67.9%) are young people aged 15-29; one in four (24.6%) has graduated with higher diploma; one in two (51.3%) is primary job seeker and nearly two in three (66.2%) have been unemployed for over a year. Here, we can take notice that young people in Morocco make up 30%<sup>94</sup> of the population, and one tenth of the region's total youth population (TYP). The graph n°2 shows that the bulk of unemployed youth has less than TYP with a secondary education or no-education at all. Less than 5 % in the big pie of unemployed are with tertiary education.

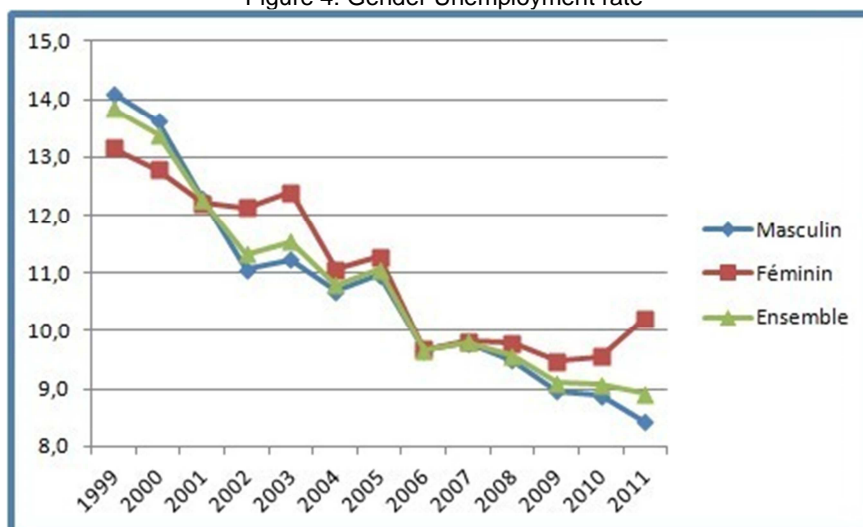


Source : Enquête nationale sur l'emploi, Haut-Commissariat au Plan (Direction de la Statistique).

<sup>94</sup> <http://www.worldbank.org/en/news/feature/2012/05/14/challenge-of-youth-inclusion-in-morocco>

The share of activities shows an increase of the women activity rate from 19,5% in 1999 to 25,6% in the second trimester of 2013 while the male activity rate increases in the same period of time from 46,9% to 74,4%. Nevertheless, non-stipend jobs (mainly home-care workers in agricultural sector) are still mainly composed of female workforce.

Figure 4: Gender Unemployment rate



Source : Enquête nationale sur l'emploi, Haut-Commissariat au Plan (Direction de la Statistique).

### 1.3. The minorities in Morocco

Concerning the religious minority, the Moroccan constitution states the freedom to practice one's religion but Islam remains the official State religion and the king is considered as the Believers' chief and thus must guarantee respect of Islamic principles. Among a total population of 34,8 million inhabitants in 2004, 98,7% are Muslim, 1,1% Christian and 0,2% Jewish. Christians are mainly expatriates (catholic and protestants) and represent 25 000 people. The Jewish community that was influent in the past emigrated in the last decades. The Jewish population is nowadays estimated at 3000 people mainly in Rabat and Marrakech.

Estimation of Shiite Muslims varies from 3000 to 8000 and the Baha'i could account for 400 people. Shiites and Baha'is, mainly expatriates also count some converted who encountered pressure as Baha'ism in particular is considered as a heretic form of Islam and Bahaists as apostates. As a matter of fact, if the freedom to believe is tolerated all forms of conversion from Islam to other religions is subject to political censure and social vilification. The distribution of religious non-Muslim documents is kept under strict surveillance.

Morocco is a Muslim and an Arab country by the constitution. But its history is based on both Arabs and Berbers. For a long time, Arabs were in the cities (Fes, Rabat, Salé and in Marrakech while the Souss, the Rif and the mountains were mainly inhabited by Berber population. Half of the population speaks Berber and uses the language in the daily life. A quarter of the population doesn't speak the Moroccan Arab dialect. Recently the Berber demands to a better recognition is increasing. The Amazigh movement started in the 60's and was based on the cultural revival of the Amazigh culture. But it grows in the 90's and the Charter of Agadir in 1991 demanded a clear respect of linguistic rights and even a change in the Moroccan Constitution. Mainly due to the "Arab spring" this demand was fulfilled and Berber is now an official language of Morocco.

### 1.4. Foreign Residents localisation

General Census of Population and Habitat (GCPH) presents an array of indicators on the profile of the foreign population, one of the components of the total population of the country. Thus, the data

emanating from 2004 GCPH indicate a more or less significant presence of nationalities from all continents. It is:

- Europeans, with a marked French domination
- North Africans, especially Algerians and Tunisians
- a mid-eastern community of rather well represented, especially
- nationals of Syria, Egypt, Iraq, Lebanon, Jordan and Palestine
- nationals of other African countries mainly Sub-Saharan, ie
- Congolese and Senegalese;
- finally nationals of other countries in Asia, America and Australia.

In 2004 GCPH, 51,435 people of foreign nationalities were identified among the legal population of Morocco. Almost 95% of foreigners live in urban areas.

Prefectures of Casablanca and Rabat account for nearly half of the foreigners that are 47.9%. However, other provinces and prefectures have a significant number of foreigners: mainly Marrakech, Tangier, Oujda, Agadir and Fez which house a little over a quarter, that is 25,8% of all foreigners living in Morocco.

In many respects, the structure of foreigners differs from that of nationals. Thus, the foreign population has a relatively old age structure, with 16.3% of people aged 60 years and older. This is a fairly educated population, characterized by high rates of literacy and education, and a proportion of people with a higher level of education that exceeds 48.4%. Moreover, foreigners live generally in good housing conditions especially marked by significant proportions of households living in villa type housing (25.1%) or flat (39.1%) and having all the basic equipment needed.

Table 2: Evolution of the foreign population resident in Morocco

	1994		2004		AGR (%)
	number	%	number	%	
Grand Casablanca	180163	36,2	17711	34,4	-0,3
Rabat Sale Zemmour Zear	10249	20,4	10208	19,8	0
L'Oriental	5766	11,5	4816	9,4	-1,8
Marrakech Tensift Al Haouz	2425	4,8	4141	8,1	5,5
Tanger Tetouan	4473	8,9	4014	7,8	-1,1
Souss Massa Draa	2172	4,3	2715	5,3	2,3
Fes Boulemane	1370	2,7	1845	3,6	3
Meknes Tafilalet	1216	2,4	1485	2,9	2
Gharb Chrarda Beni Hssen	1328	2,6	1253	2,4	-0,6
Chaouia-Ouardigha	520	1	817	1,6	4,6
Doukkala Abda	935	1,9	767	1,5	-2
Laayoune-Boujdour-Sakia el Hamra	289	0,6	537	1	6,4
Taza Al Hoceima Taounat	713	1,4	528	1	-3
Tadla Azilal	272	0,5	293	0,6	0,7
Oued Ed-Dahab-Lagouira	28	0,1	171	0,3	19,8
Guelmin es-semara	262	0,5	134	0,3	-6,5
<b>Total</b>	<b>50,181</b>	<b>100</b>	<b>51435</b>	<b>100</b>	<b>0,2</b>

Source: HCP, GCPH, 1994, 2004

Compared to nationals, foreigners live in smaller households and occupy relatively spacious housing. A little less than half of the foreigners live in mixed households. In terms of economic activity, foreign

women living in Morocco are much more active than their national counterparts (27.2% against 17.6%). On unemployment, foreigners are generally less exposed to this phenomenon, but with important differences among the group of nationalities. Thus, if North Africans represent more than half of the unemployed, with an unemployment rate approaching the national one, Europeans are in a situation of almost full employment (with an unemployment rate of 1.9 %). In terms of employment status, the prominent assessment is the high proportion of employer status among foreign actives (13.4% against 1.8% for national actives).

In addition, other outstanding traits were identified among inactive population, that is the rate of pensioners registered as inactive adults in Europe (36.3%). This is the group of nations that has the highest rate of pensioners among its inactive. Concerning Africans, more than six of ten Sub-Saharan Africans are students.

## 2. Economic trends

Table 3: GDP by region

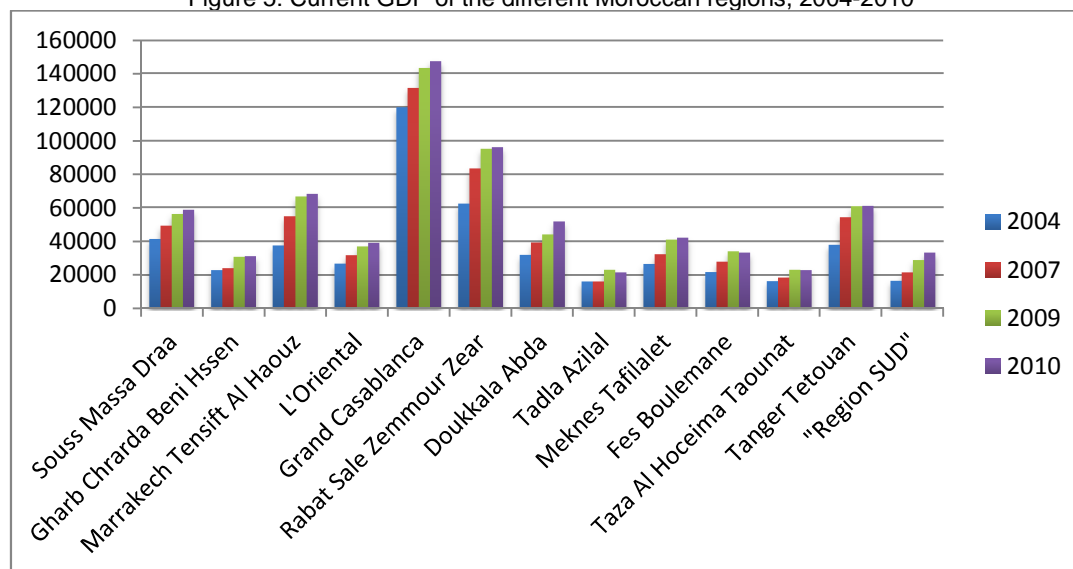
	Current GDP 2011		GDP/Cap.	Annual Growth rate
Souss Massa Draa	58567	9%	34263	6,0
Gharb Chrarda Beni Hssen	31152	5%	17015	5,2
Marrakech Tensift Al Haouz	67886	10%	15001	10,4
L'Oriental	39089	6%	20677	6,5
Grand Casablanca	147069	22%	19644	3,5
Rabat Sale Zemmour Zear	96140	14%	38016	7,6
Doukkala Abda	51663	8%	37256	8,3
Tadla Azilal	21702	3%	25051	5,0
Meknes Tafilalet	41972	6%	14464	7,9
Fes Boulemane	33279	5%	19088	7,3
Taza Al Hoceima Taounat	23045	3%	19357	5,8
Tanger Tetouan	60752	9%	12414	8,2
Region SUD	33216	5%	23124	12,2
<b>Total</b>	<b>672316</b>	<b>100%</b>		

Source: HCP, ITAN 2013

The four first richest regions in Morocco (Casablanca, Rabat, Marrakech & Souss Massa) produce more than half of the total GDP. Casablanca alone represents more than a fifth of the total production. This strong regional inequality is balanced by the medium annual growth rate. Casablanca for instance has the lowest growth rate (3,5%) while the « South », one of the smallest region considering its share in the total production grows at a rate of 12% between 2004 and 2011.

Morocco remains characterised by a strong inequality between the regions. The openness of the country impacts differently the traditional industrial cities such as Casablanca compared to a holiday spot such Marrakech. One of the challenges of the regionalisation policy is to mobilize the region in order to compete in attracting investments and the reduction the regional inequality.

Figure 5: Current GDP of the different Moroccan regions, 2004-2010



Source : HCP et ITAN, 2013.

## 2.1. Informal economy and territorial economy assessment

The surveys show a huge discrepancy in the dispersal of employment. As a matter of fact, the new job creations concern mainly

- Male for 74,4%;
- Mainly adults aged from 40 to 59 years old
- City dwellers. Rural areas are characterised by large under-employment even if unemployment rate is low.
- Globally one out of three active people has a diploma.
- Almost 2 workers out of 3 have no contract, and unpaid employment represent one fourth of the employment at national level and one half in rural areas.
- Less than 20% of the active population benefit from medical coverage.

Regarding the difference of the distribution of employment and the precarity that characterizes a good part of it, an analysis of the informal economy in Moroccan society is indispensable.

The latest national figures on informal economy are issued of two national studies concerning the informal sector made by the Haut Commissariat au Plan de 1999/2000 and to 2006/2007. The HCP adopts in these studies the same definition of the informal work as the ILO 1991. In this study, the term Informal sector is used to designate independent activities of very small production units concerning :

- Non-observed economy
- Illicit economy
- Underground or non-declared economy

According to the results of the national study on informal sector in 2007, the number of informal production units raised from 1.550.274 units, in other words, a net increase of 320.000 units over an 8 years period of the equivalent of 40.000 units each year.

Two thirds of the informal production units are situated in urban milieu. This phenomenon is accentuated in the largest cities, "Grand-Casablanca" concentrates 14,3% of informal production units, followed by "Marrakech-Tensift-AlHaouz" which accounts for 13,5%. On the other hand, Sahara regions such as "Oued Ed-Dahab-Lagouira", "Lâayoune-Boujdour-Sakia Al Hamra" and "Guelmim-Es-

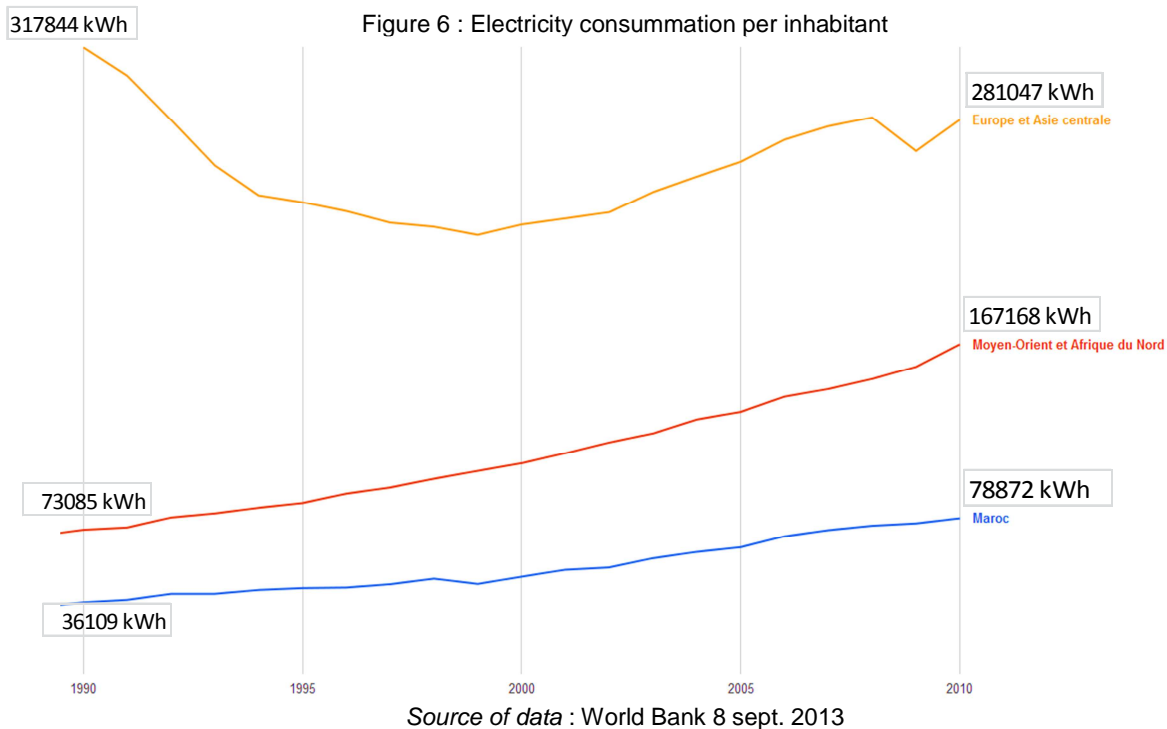
Semara" together account for 3% des UPI, followed by the region of "Taza-Al Hoceima-Taounate" which portion doesn't reach 3,2%.

Retail and repair shops is the most important sector and maintains growth for these units with a portion of 57,4% of the UPIs. In the second position, we find the service industry (20,1%) in front of industry and construction sectors.

One of the principal particularities of the informal units of production in all the various sectors of activity is the precarity of the conditions in which they exercise their activities without fixed address or little access to public services such as electricity, water and telephone. The average size of these informal units is 1,4 person a slight decrease since 1999 (1,5 people). Also, results of the same study show us that 90,1% of these UPI are lead by men against 9,9% with female managers.

## 2.2. Electric consumption Data and estimation of regional GDP

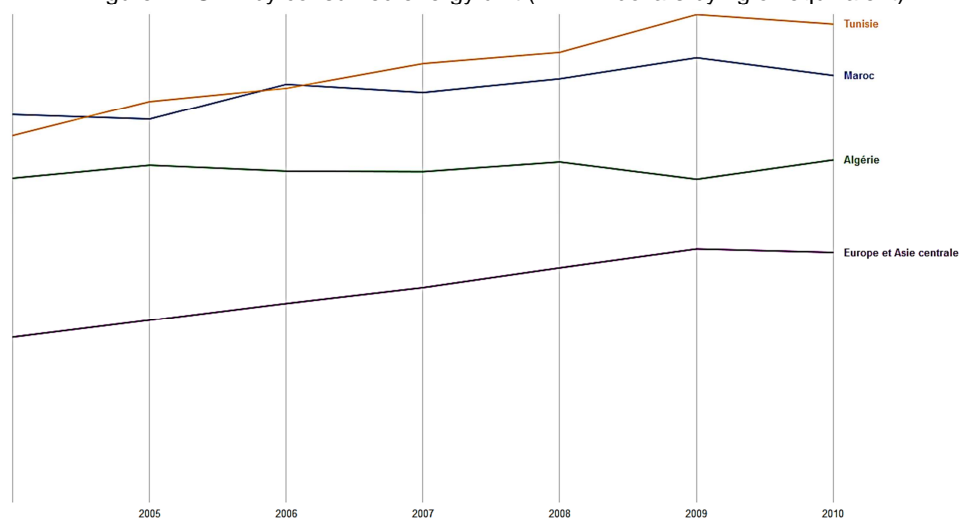
It is not really necessary to use the electricity consumption as a proxy of the regional GDP as the HCP has provided Regional GDP for many years as mentioned before. But electric consumption indicates interesting elements on economic dynamics. Both economic and demographic growths impact significantly the energy demand in the last two decades.



The electrical sector of Morocco is characterised by a very heavy dependence on the imported fossils energy- more than 90 % of electricity use dis of thermic- there is a rapid growth of demand (7 to 8 % per year). Energy products remain the highest level of imported products reaching one forth of total import in the first trimester of 2013. In the OME<sup>95</sup>'s outlook to 2030, we can see how energy demand is higher in Morocco and how energy intensity is decreasing spurred by the industry and the transport sectors, while the residential and commercial/services sectors push electricity intensities upward.

<sup>95</sup> Observatoire Méditerranéen de l'énergie

Figure 7 : GDP by consumed energy unit (in PPA dollars by kg oil equivalent)

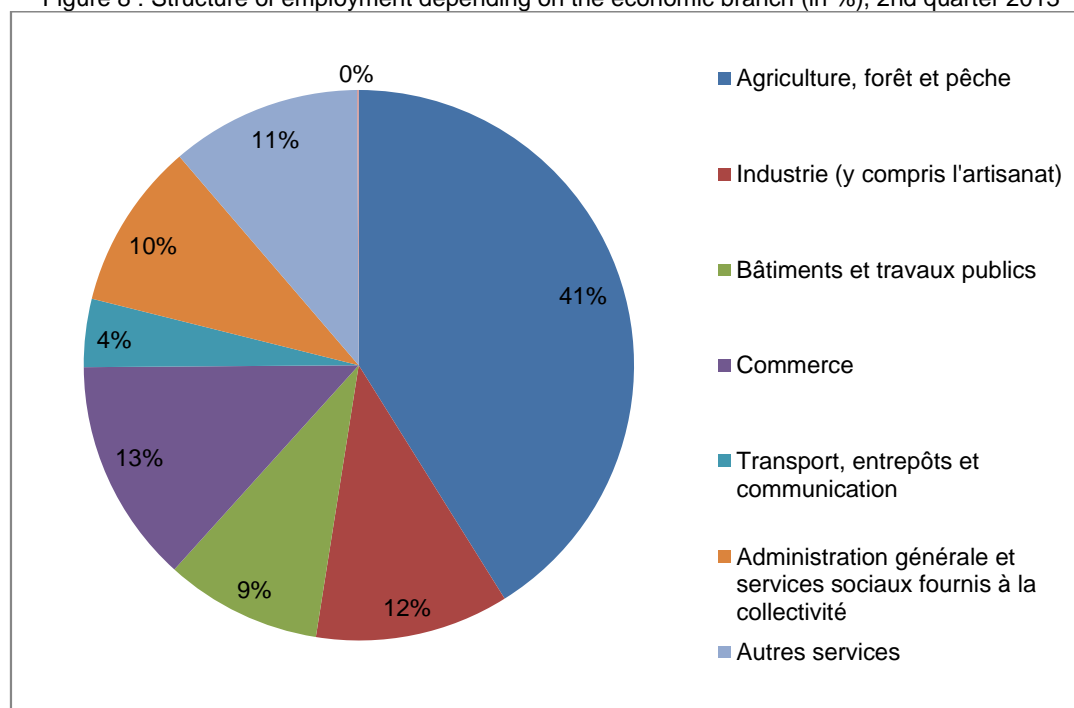


Source of data: World Bank, 8 sept. 2013

### 2.3. Economic activity, geographical distribution, production and employment by sector

In 2013, the growth rate should be around 4,4%, in contrast to 2,7% in 2012, mainly because of the increase of 19,4% of the added value of the first industry. The current economic growths of the tertiary and secondary sectors are, respectively, +1,8% and +3,8%. Labour market was characterized from 2011 by a significant employment reduction in the productive sectors, in particular in industry which lost 31.000 jobs in 2011 compared with an annual average of 12.000 in terms of job creation between 2000 and 2010. Furthermore in the agriculture, forest and fishing sectors, which lost 9.000 jobs contrary to an annual average of 13.000 jobs created. The building sector created 30.000 jobs instead of 48.000 annually between 2000 and 2010 or 63.000 for the interval 2008-2010.

Figure 8 : Structure of employment depending on the economic branch (in %), 2nd quarter 2013



Source : Enquête nationale sur l'emploi, Haut-Commissariat au Plan (Direction de la Statistique). Rapport annuel, Activité, emploi et chômage, premiers résultats 2012



As main driver of activity the domestic demand increases by an average of 5% (compared to 2,4% in 2012). This increase is primarily driven by the growth of household consumption (6% in comparison to 3,6% in 2012), Mostly because of an income flow as a consequence of the last prosperous agricultural season.

#### 2.4. Relations between regions and with foreign international flows

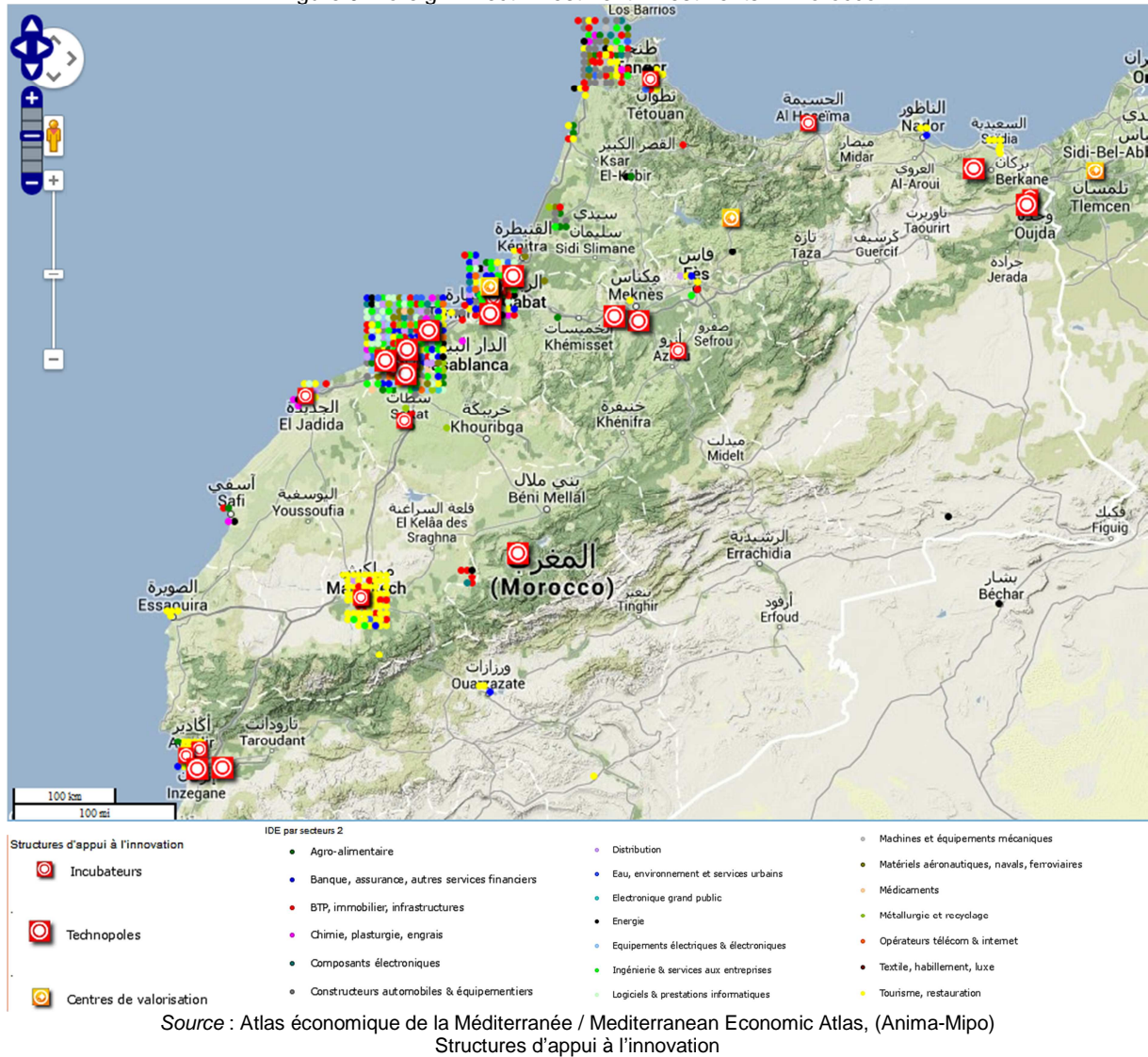
In the decade 2003-2012, French foreign direct investments (FDI) represent 40% of all foreign investments received by Morocco. In 2012, the European market holds 60% of Morocco's total exchange flows (57,5% in 2011), followed by Asia (21%) of Morocco's total exchange flows, America (12%) and Africa (6,5%). It should also be noted that Morocco exportation to sub-Saharan African countries increased annually by 40%. This trend is a concretization of the current Moroccan strategy to the area. France is still the Morocco's first trade partner and client (22% of Moroccan exportations).

Morocco's maritime strategy can be explained by its nearly land-locked position: bordered by the Mediterranean sea on the North coast, the Atlantic ocean on the West coast and the Sahara desert in the South. 95% of its trade goods transits through its ports.

To enhance the overall attractiveness of the country, the state is developing as part of "le plan Emergence" adopted in 2006, Export Free Zone (EFZ) reserved to export-oriented industrial activity dedicated to national and international company. In this way, the government is developing 3 more Export Free Zone (EFZ) to develop Tanger Med Port and bringing it capacity to 3 million of containers from 8 million in 2017. In order to stimulate regional balance, other ZEF is implementing as example in Nador in the oriental region. Main benefits from EFZ are: Customs duties, VAT and registration fees on capital increases; a full exemption from corporate tax for 5 years, no deduction on dividends an interest paid abroad; exemption of transactions in foreign currencies without control of the foreign currencies without control of foreign exchange bureau.

The expectation of regional balance is also part of state strategy in other sectors like agriculture (Maroc vert) and energy (Plan solaire marocain). In 2012, in the region of Ouarzazate the first solar plan was launched with a total amount of 1Md\$.

Figure 9: Foreign Direct Investment Investments in Morocco



### 3. Environmental evolutions

#### 3.1. Arable land

Agriculture holds a crucial place in the Moroccan economy with 15% of GDP and 40% of employment. However, the sector is very dependent on precipitations. Indeed, Morocco, has very low irrigation rates of its arable land with 4,61% in 2010. Morocco is the world's leading exporter of Phosphates, of which three quarter as a world reserves are found.

#### 3.2. Water

According to the plan Bleu, the absence of hydraulic survey that would permit an evaluation of realistic annual samples of water, is a serious handicap for the evaluation of real water demands Effectively others than the supply of water from dams for which the statistics are relatively reliable or available, information is lacking concerning other types of diversions for irrigation, water catchment, water ground table samples (Plan Bleu 2011, BELGHITI M'hamed, L'efficience d'utilisation de l'eau et approche économique. Etude nationale Maroc)

In Morocco, in virtue of the communal charter of 2002, alimentation services in drinkable water depends upon the authority of communes. The communes can manage the water services either through direct administration, through independent public enterprises or through a concession to a private operator.

The ONEP, (Office National de l'Eau Potable) is the principal provider of drinkable water in Morocco. The sell of water by ONEP provides all the cities and the rural areas of the kingdom and represent approximately 80 % of drinkable water distributed in Morocco.

During the last decade, in order to face the enormous investment needs of drinkable water with which to extend the network as well as rehabilitate the obsolete networks, the public authorities have more and more turned towards public-private partnerships.

Morocco is a country which ecosystem is diverse but very fragile at the same time. Water is a scarce and an irregularly available resource among the different regions and the in the course of the time. Is it therefore necessary to develop the water network and infrastructure in order to face the growing need of water in both agriculture and for households?

Only the Northwest of the country and especially the Sebou and Loukous basin benefits from significant rainfalls. This area corresponds to 7,5 % of the national surface and registers for more than half of the total rainfalls of the country. From a geological point of view the main groundwater tables are located in the areas in the neighbourhood of these hydraulic basins. By opposition to a common view, annual rainfalls are very erratic and unpredictable and this has been true for more than 50 years.

### 3.3. How climate change impacts local resources.

International experts stated a medium annual growth of temperature of 0,74% since 1905. They also announced the decrease of 40% of the icecap while correlations with other major climatic phenomena as the increasing frequency and intensity of hurricanes in Northern Atlantic are stated.

International negotiations, which have started in the 70s, were aiming a stabilisation of the growth rate of temperature to 2% but the international consensus achieved in Durban in 2011 targets 4 degrees. Morocco is already suffering from the climate change. Water inputs to groundwater tables are decreasing. For the river basin of Hassan Addakhil dam researches of the EHTP anticipate a decrease of 9,7% of water collected in the next 35 years. For the same period the water stocks available will fall under 500m<sup>3</sup>/inh. /y. This will be due to demographic factors but also because of climatic change. As stated in the different scenarios, superficial water flows will decrease from 5 to 34% in the next 20 years.

### 3.4. Other major changes in environmental issues

As Morocco only has limited energy resources, it is currently 97% reliant on an external supply. This strong dependence on energy imports, combined with the ascending trend of oil prices, places a substantial burden on the trade balance and on the Government's budget. This situation has encouraged the Moroccan Government to establish a regulatory and institutional framework to stimulate renewable power generation. The Renewable Energy Law (No. 13-09) aims to promote energy production from renewable resources, to market and to export by public entities or private

On mid-term 2020, Morocco commits to develop renewables energy and make up this share to 42% of total existent capacity (6 000MW in 2012). In 2009 the Moroccan solar plan aims at establishing by 2020 a capacity of 2.000 megawatts between 2015 and 2020. Its implementation shall be entrusted to the Moroccan Agency for Solar Energy with a total estimate cost of 6,2 milliards €. In the same time a similar program based on wind energy is implementing by the National Office of electricity and water (ONEE) also of a minimum of 2,000 MW by 2020 in contrast to a capacity in 2010 of 280 MW.

The Ouarzazate power plant (NOOR 1), the first phase of the project to develop a solar power complex was financing in a most important part of 630m EUR by IFI's: European Investment Bank (EIB), AFD, KfW, European Commission (NIF), Clean Technology Fund (CTF) and African Development Bank (AfDB).

NOOR 1 will have a parabolic trough power plant with a capacity of 160 MW out of a total of 500 MW. It will be located roughly 10 km to the northeast of Ouarzazate and will be delivered in 2015. The green electricity produced will be for the local market. In short, this project will eventually reduce the Kingdom's energy dependence and strengthen its power generation capacity. It will also reduce the negative impacts of fossil fuel imports on the budget and trade balance, manage a national resource with underexploited potential, promote the creation of a new solar power industry in Morocco and, finally, reduce greenhouse gas emissions. The Solar Plan (2 GW) will avoid the emission of roughly 3.7 million tons of CO<sub>2</sub>. The carbon balance for the first 160 MW phase can thus be estimated at roughly 270,000 tons of CO<sub>2</sub> equivalent avoided every year.

The Moroccan Integrated Wind Energy Project also is developing through Public-private partnership between ONEE and private partners selected in the context of international calls for tender. HM King Mohammed VI in the presence of the French President launches the wind power plant in Taza of 150 MW. This project is the first phase of Integrated Wind Energy Project.

Moreover, to support the national plan for renewable energy development, an energy investment company for developing renewable energy (SIE) was created specifically for this purpose with a 1 billion dirhams capital. This strategy benefits from the resources mobilized under the frame of the Energy Development Fund with an amount equivalent to \$ 1 billion donation from the Kingdom of Saudi Arabia (U.S. \$ 500 million), UAE (U.S. \$300 million) and the contribution of the Hassan II Fund for Economic and Social Development (200 million U.S.).

## **Algeria**

by Zahia Ouaddah-Bedidi  
January 2014

The report is available only in French language. It is possible to obtain it from the ITAN Lead partner (CNRS / GIS "CIST").

### Contents:

#### 1. Statistical sources and geographical aspects of data

##### 1.1. Sources of collected data

- censuses
- civil registrars
- surveys and other administrative sources

##### 1.2. Geography, delineation

#### 2. Collected data and analysis

##### 2.1. Demographic data

- women of childbearing age
- fertility
- mortality by age

##### 2.2. Social data

- level of education
- level of education by sex and age
- school enrolment
- illiteracy
- unemployment

##### 2.3. Economic data

- active population
- employed population
- geography of activity

## **Tunisia**

by Nidhal Ben Cheick  
December 2013

### ➤ **Analysis of the Tunisian territorial divisions and their populations**

#### 1. Available data, sources and statistical methodologies

The delivered ITAN database contains practically the most requested variables for the first step of the ESPON ITAN Project which is aiming to build a long-term database for Tunisian governorates and delegations. The rules stated in the data collection manual have been followed in gathering the data for the ITAN database (data and metadata model). It is important to point out that all the delivered data filled into the modules A, C and D, have been produced and published by the Tunisian National Institute of Statistics (INS).

#### The National Institute of Statistics (INS)<sup>96</sup>: Presentation, main functions and products reliability

The National Institute of statistics (INS) was created in 1969 as a non-administrative public organization under the supervision of the Ministry of Regional development and Planning. The INS is considered as the central institution in the national statistics system. According to its status, INS is managed by a directory board chaired by the INS General Director.

The main functions or missions of the INS are as follows:

- ✓ Ensuring data gathering, processing and analysis as well as disseminating statistical information in coordination with other public statistical organizations;
- ✓ Conducting censuses and demographic, social and economic surveys;
- ✓ Elaborating national accounts according to its different scopes (national, quarterly);
- ✓ Elaborating indicators for the business cycle and insuring the follow-up and the analysis of this cycle;
- ✓ Organizing national statistical documentation by gathering data issued by the organizations of the national statistical system (NSS);
- ✓ Ensuring technical coordination for public statistical activities;
- ✓ Ensuring the permanent secretariat for the National Statistics Council;
- ✓ Organizing international cooperation in the field of statistics.

As for the credibility and the reliability of the INS products (General Census, Surveys, National Account, Foreign trade statistics ...), the statistical law guarantees the impartiality of the INS. Article 3 of statistical law stipulates that the units of the INS enjoy professional independence and carry out their tasks in accordance with the concepts, methodological rules and techniques commonly accepted in the field.

The overall structure in terms of concepts and definitions (Demography, employment, national accounts ...) follows internationally accepted standards, guidelines and good practices.

#### Content of the delivered ITAN database

The comparison carried out between the original set of requested demographic variables and the statistical data that have been collected and filled in the ITAN database is relevant insofar that permits to stand out two main problems that we encountered all along the data collection step. These problems could be divided into two types:

---

<sup>96</sup> INS : Institut National des Statistiques : [www.ins.nat.tn](http://www.ins.nat.tn)

- The absolute unavailability of statistical data concerning live expectancy and infant mortality since the only way is to get information at national level ;
- Statistical information at the delegation's level is available only for the two censuses of 1994 and 2004 and limited to the overall population, population by sex ...

The following table recalls in a synoptic way the main statistical data introduced in the ITAN's database as well as the covered periods:

Table 1: Tunisia's demographic ITAN database at a glance

Module	Variables	Code	Period covered	Remarks
<b>A</b>	Total population	Pop_t	1975, 1979-2010	Two missing years : 1983 and 1988
	Population by area	Pop_urb, pop_rur	1989, 1994, 1994, 2004,2010	
	Population by sex	Pop_m, pop_f	1989, 1994, 2004, 2010	
	Population by Age	pop_t_(group age)	1989, 1994, 2004, 2010	
<b>C</b>	Live expectancy	Unavailable at governorate level		
	Total Deaths	Death_t	1989, 1998-2010	
	Deaths by age	Unavailable		
	Deaths by sex	Death_m, death_f	1989, 1998-2010	
	Total Births	Birth_t	1998-2010	
	Births by Sex	Birth_m, birth_f	1998-2010	
	Births by childbearing age	Birth_(age15-49)	1991, 1998, 2000, 2004, 2008, 2010	
<b>D</b>	Infant Mortality	Unavailable at governorate level		
	Total Domestic Migration	Mig_dom_t	1987-1994, 1999-2004, 2004-2009	
	Domestic Migration by sex	Mig_dom_m, mig_dom_f	1987-1994, 1999-2004, 2004-2009	
	Domestic Migration by age	Mig_dom_(age group)	1987-1994, 1999-2004, 2004-2009	
	Domestic migration by education level	Mig_dom_educlevel	1987-1994, 1999-2004, 2004-2009	
	Domestic migration by cause	Mig_dom_cause	1999-2004, 2004-2009	
	Total International Migration	Mig_int_t	1999-2004	
	International Migration by age	Mig_int_(agegroup)	1999-2004	
	International Migration by sex/by sex	Mig_int_m_(agegroup), Mig_int_f_(agegroup)	1999-2004	
	International Migration by cause	Mig_int_cause	1999-2004	
	International Migration by education level	Unavailable		
	OD Matrix (domestic Migration)	Mig_dom_t (inflow/outflow)	1987-1994, 1999-2004, 2004-2009	

### Main statistical Sources

#### *The statistical yearbook (1975 – 2010)*

It is a reference publication for all those who need information on economic and social statistics of the country. It offers at annual base vast quantified statistical information on Tunisia. This publication gathers wide range of statistics produced by the INS and the other structures of the national statistical system. In this document published regularly since the creation of the INS, estimates of the Tunisian population as well as its distribution between the different governorates are usually annually carried out.

These annual statistical documents enabled us to collect the following information:

- Population demographic trends between 1975 and 2010;
- Births;
- Deaths

#### *Estimation methods of Population data*

In order to confer the requested homogeneity on demographic annual statistics series, the population is regularly estimated on the 1st of July as the average of the two estimates of the population at 1st January and 31st of December. Population estimates at the end of each year is based on the results of the General Census of the Population as well as the natural movement of the population (births and death).

#### *Registry Office statistics*

Among all the population's data sources in Tunisia, the marital status is the oldest (since 1886). It constitutes the only source which permits to obtain annual data on the natural movement of the population (births, death and marriages). Births registration is deemed to be exhaustive: the coverage rate is estimated at 100% since 1975.

However, the death statement certificate does not cover the totality of the population deceased and this, in spite, of the obligatory character of the marital status statement since the independence. Currently, the coverage rate is estimated by the INS at nearly 85%.

#### *Demographic surveys*

At midway between two censuses, an intercensal survey of significant size (mini-census) works out a demographic assessment of the population and employment. Four periodic surveys were successively carried out in 1980, 1989, 1999 and 2009.

#### *The General Census of Population and the Habitat*

##### Presentation

The general census of the population and the habitat is regarded as one of the most important tasks entrusted to the INS in the fields of the organization and those of human and logistic means mobilization as well.

##### Dates of censuses in Tunisia

In 1921, date of the first census, the Tunisian population counted 2 500 000 inhabitants whilst during the last census in April 2004, it passed to 9 910 872 inhabitants. The census of 2004 is the fifth since the independence whereas it is the 11th in the history of Tunisia.

The first four censuses had been carried out at quinquennial frequency (1921, 1926, 1931, 1936) and became decennial since the fifth in 1946 following the international recommendations.

##### Objectives of the census

The census aims at the collection and the exploitation of information dealing with different characteristics relating to the population, the households, standards of living and housing whilst



ensuring to get statistical data at national, regional and local levels. Basically, the following statistical data are covered by the census:

- The population distribution population by administrative units (governorate, delegation, commune, sector);
- The population distribution by demographic characteristics: age, sex, marital status ... ;
- The educational characteristics: educational level, illiteracy, school enrollment, university, vocational training...;
- The economic characteristics: working-age population and activity rate, distribution of the employed population by occupation, economic sector, level and rate of unemployment ;
- The household's characteristics: household size, standard of living indicators (water, electricity, domestic equipment -TV, parabola, telephone, car, refrigerator, computer...;

The census is also used in the development a reference household database from which samples are drawn in order to conduct surveys such as the household survey on expenditure, budget and living standards (2005 and 2010) as well as the quarterly/annual survey on employment.

This basis is often used for drawing survey samples for administrative statistical structures and specialized firms.

#### Phases of the census

The operations of the census proceed in two phases:

- The pre-counting phase:

The main aim of this phase consists in locating on the ground the residences and the households and constituting the census districts.

In urban areas, INS statisticians begin by locating the households grouped into islets and then recording their corresponding size to constitute the census districts and likewise for rural areas.

- The counting phase:

Over this phase, the census takers have to visit all the buildings of their respective district and to proceed to the census itself of the population and the housings.

They then complete all the control and working papers (slip household-housing, institution file, and books of district...)

- The questionnaire:

The questionnaire housing/household, considered as the pillar document of the census, is designed to collect data from each housing in the district and each resident household including all its members present or temporary absent during the census day.

The questionnaire of the census (2004) relates to:

- Statistical ID;
- Housing characteristics;
- Household living conditions;
- Resident members of the household including those who are absent;
- Visitors to the household the day before the reference day;
- Demographic information;
- Educational information;
- Internal and international migration;
- Economic characteristic (employment and unemployment);
- ICT (Information and communication technology) uses;
- Specific population categories: elderly and handicapped people.

*Development of the methodology of evaluation of the indicators of employment and unemployment through the household's surveys and the censuses*

At the time of the General Census of the Population and Habitat of 2004, the INS decided to revise the methodology of the household's employment surveys in order to ensure a better compliance with international standards and the ILO's concepts of Employment/unemployment. This new methodology permits a better understanding and statistical processing of the employed and unemployed populations. The sum of the employed and the unemployed population measured for a short reference period is equivalent to the labour force, also known as the current economically active population (Age group more than 15 years).

Since the beginning of the 2000's, the INS started to carry out annual household employment surveys whereas their publication started to be effective only from 2007. The annual household employment surveys are usually conducted on the ground during the two months of May and June. It is relevant to underscore the fact that the sample's size about 164000 household is considered to be highly representative.

### *Statistical processing of the migratory questions*

#### Internal Migration

In this report, the general censuses of the population (1994 and 2004) as well as the household employment survey (2009) have been used to collect statistical data that would relate changes of residence and main migratory inflows/outflows trends that occurred between the year kept back to define the former residence and migratory flows trends inherent to the year's census.

The adopted definitions are as follows:

- Mobility is defined as the overall population that changed residence, without reference to the administrative unit where the two residences were;
- The migration is defined as the changes of residence from an administrative unit to another, common and non-communal area and between delegations.

#### Statistics of the international migration

In recent years, the Office of Tunisians Abroad (OTE: Office des Tunisiens à l'Étranger), in collaboration with the Ministry for Foreign Affairs, have carried out on annual basis the update of a database covering Tunisians living abroad. Nonetheless, the statistical data available in this database are deemed to be defective due the wide development of non-migratory movements (tourism, pilgrim, business...). These data would be even more doubtful insofar as the illegal migration outflows which are visibly increasing and fast-growing still not captured.

Among all the censuses, a specific module on "International Migration" has been introduced for the first time in 2004 when the General Census of the Population and the Habitat has been carried out. Data collected in this frame described the departures abroad between 1999 and 2004 and counted the presence of family members abroad. The Household employment Survey realized in 2009 introduced a simple question on international migration in order to compute outflows over the period 2004-2009. However, this survey doesn't provide information with the origin by governorate of the recorded international migrants.

## 2. Territorial Organization

### Concept of territory in Tunisia

Since its independence in 1956, Tunisia knew deep transformations which made essential the redefinition of the country planning policy. This policy accompanied all the main economic development steps that Tunisia knew. However, Economic planning has always preceded the

regional/country planning since the latter appeared gradually in 60's, without being really established as a planned program. During the first thirty years of independence, the regional planning has been integrated in a sectoral approach of the State action as well as in the vertical economic planning. The disparities between littoral and interior areas inherited from the colonial period are still widening. Indeed, areas on the fringe of dynamic metropolitan zones know a depression of their productive activities and depend more and more on public employment.

The year 1985 marked up the elaboration of the first National Scheme of Regional Planning. The official documents (Official Journal of the Republic of Tunisia, Economic and Social Development Plan) and the current National Scheme of Regional Planning, seem to choose choices that are likely to strengthen the tendencies of selective and differentiated development.

#### Territorial and regional planning in Tunisia

The planning of the territory is based on the need for having reference documents, writings and cartography that would enable to foresee the development possibilities territorial space, at the same time in its globality and its regional and local diversity. The planning of the territory is at the same time old and recent in Tunisia, according to whether one adopt the broad or the narrow meaning.

The independent authorities will take a long time to come out with new texts relating to territorial planning, since the first urbanism code goes back to 1979. This text does not consider yet the planning of the national territory, but introduces the regional component into the spatial planning through the creation of the Urbanism Directory Plans beside the classical Urban Development Plans. The first are implemented on a regional scale, and the local authorities are simply consulted during their preparation. The seconds are implemented on a commune scale which is involved in its preparation, which does not cover any precise legal significance.

Since the Eighties, decision makers start to become aware of the immensity of the gap separating the littoral areas from the interior ones. From this moment, the will to articulate spatial planning and socio-economic planning started by being translated into a short experiment of integration between the General "Commisariat" for Regional Development (CGDR) and the Directory of Territorial Planning (Direction D'aménagement du Territoire - DAT) which lasted only from 1983 to 1985. The incapacity of authorities to integrate socio-economic dimensions and other dimensions related to spatial planning in the regional planning which continues till now, expresses the primacy of the short term political logic on structured development logic.

Even if restricted to indicative role, the regional planning was emptied of its contents by the governorate's influence role in the implementation of the development policies. The zoning (The commonly used term in Tunisia is : "Découpage") of the country in economic areas knew several changes, but failed to impact the design and the execution of local development integrated strategies.

At the time of the VIth of Economic Development (1982-1986), the country was split up into six economic areas (North East, North West, Centre East, Centre West, South East, South West) whereas the XIth Economic Development Plan (2007-2011) chose a new zoning that divided the country in five districts (North East Is including the District of Tunis considered since 2004 as an economic region in the publications of the INS, North West, Centre West, Centre East and the South). Just after the revolution of 14th January and as regard of the notorious development gap between the areas, the last publications of the Ministry of Regional Development and Planning stress the need for adopting new administrative and economic zoning in order to foster development in the most disinherited territories.

#### Development of administrative zoning in Tunisia

Between 1956 and 2010, the number of governorates passed from 13 to 24 and that of the delegations passed from 86 to 264 which are subdivided in 2073 sectors. In addition, another subdivision of the territory is adopted and consists in the partition of the country in communal areas

and non-communal areas. The areas that have been raised as communes obey to urbanistic considerations that are not necessarily related to administrative zoning quoted before: the number of communes is 264 in 2010. We should note here that the majority of the official statistical documents (results of the censuses, household surveys...) use a zoning based on bringing together governorates (with the precise administrative limits) along two axes: a northern axis, center, southern and a East-West axis: District of Tunis, North East, North West, Centre East, Centre West, South East, South West.

### *Governorates*

Governorate is the greatest administrative splitting up of the national territory, fixed by the decree of the 21th of June 1956 and amended by the law of 17th of March 1969. Today, Tunisia is composed of several governorates which represent the local authority at the head of which one finds governors appointed by the President of the Republic further to a proposal from the Minister of Interior Department. The number of governorates passed from 13 after independence to 24 today.

The increase in the governorates number Tunisia began during the 70's when three governorates have been created in median Tunisia: Siliana, Zaghouan and Sidi Bouzid. The Sahel, in its turn, has been divided into three governorates: Sousse, Monastir and Mahdia. In the 80's, further to political tensions three new governorates have been created in the South: Kébili, Tozeur and Tataouine which are located on the Tuniso-Algerian borders. These governorates have been separated from their respective original governorates: Gabès, Gafsa and Médenine.

After the "Revolt of the Bread" in 1984, the governorate of Tunis was divided into three governorates: Tunis, Ariana and Ben Arous. Finally, the governorate of Manouba has been created in 2000.

The governor is at the same time the general administrator of the governorate as a decentralized authority of the interior minister and the representative of the State. The governor is personally responsible for the general administration of the governorate. He is assisted by the regional administrations and in particular by the delegates on a local scale and Omdas (heads of sectors). The Minister of Interior exerts on the governor at the same time administrative, organic and functional hierarchy.

### *Delegations*

The delegation is the principal territorial splitting up of a governorate and usually bears the name of its seat. Delegations are intermediate administrative units between the governorates and the sector (Imada). The representative of the State in each delegation is the delegate. He is appointed by the Minister of Interior's Department and is placed under the supervision of the governor. He ensures the administrative operations and the management of the local public services. The number of the delegations passed from 86 in 1959 to 264 delegations currently. The areas with strong demographic growth and the large cities have known the most subdivisions (South, Centre and great centres like Tunis, Sfax, Sousse, Gabès...), whereas the areas with low urban dynamism and stabilized areas did not know great changes: The North-West, cap-bon (Governorate of Nabeul).

### *Municipalities*

The Municipalities are also called "Urban Communes", and count actually 264 municipal councils in Tunisia. They are a party or a territory delimited by a decree which forward them to the municipal law and are constituted of one or more urban sectors. As a local administrative structure, the management of the municipality is ensured by permanent civil servants who constitute the direct bond between this institution and the citizens. Municipalities are also forwarded to a political management, ensured by the municipal council who supervises and fixes the guidelines, and makes the significant decisions relating to the commune management.

### The sectors (*Imadas*)

It is about the smallest administrative entity in Tunisia. This sector can be urban or rural. The head of sector is charged to assist the various administrations, like taking care of citizen's interests.

Table 2: Territorial administrative organization between 1990 and 2009

Governorate	Number of Communes		Number of Sectors		Number of Delegations	
	In 31th of December 1990	In 31th of December 2009	In 31th of December 1990	In 31th of December 2009	In 31th of December 1990	In 31th of December 2009
Tunis	6	8	121	161	14	21
Ariana	11	6	67	48	8	7
Manouba	-	9	-	47	-	8
Ben Arous	8	11	46	75	7	12
Nabeul	23	24	90	99	15	16
Zaghouan	5	6	42	48	5	6
Bizerte	13	13	85	102	12	14
Béja	7	8	95	101	8	9
Jendouba	8	8	85	95	6	9
Le Kef	12	12	81	87	10	11
Siliana	10	10	79	86	9	11
Kairouan	12	12	110	114	11	11
Kasserine	10	10	93	106	12	13
Sidi Bouzid	9	10	105	113	11	12
Sousse	14	16	95	104	14	16
Monastir	31	31	70	77	13	13
Mahdia	14	14	94	99	10	11
Sfax	14	16	119	126	13	16
Gafsa	8	8	68	76	10	11
Tozeur	5	5	34	36	5	5
Kébili	5	5	33	42	4	6
Gabès	9	10	68	73	9	10
Médenine	7	7	87	94	8	9
Tataouine	5	5	54	64	6	7
<b>Total</b>	<b>246</b>	<b>264</b>	<b>1821</b>	<b>2073</b>	<b>220</b>	<b>264</b>

Source: National Institute of Statistics (INS)

### 3. Demographic profile and principal trends

Since the beginning of the 90's, Tunisia knew major changes on the demographic level. The population development has been slowing down considerably. In the same way, the attitudes and the behaviours as regards procreation underwent significant changes brought about by the economic and social development and basically the enlarged diffusion of contraception methods in society. Thus, like the example of developing countries, Tunisia followed the traditional model of the demographic transition.

## Main demographic trends

The demographic growth rate passed under the bar of 2% since 1989 and was reduced gradually to be stabilized around 1% on average a year during period 2006-2010 against an average rate of about 1.4% during the period 1990-2010.

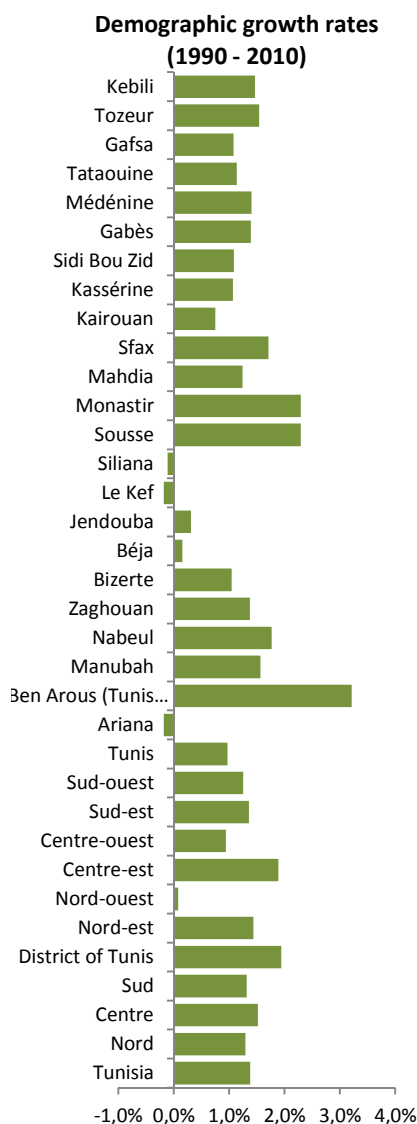
The analysis of the population's demographic growth rates over the period 1990-2010 recorded by governorates and great economic areas reveals a strong contrast between the littoral areas and the areas of the interior of the country. Indeed, the areas of the East of the country in particular the district of Tunis, North East and the Centre East, successively recorded rates of about 1.9%, 1.4% and 1.9%, whereas the areas of the Nord West, the Centre West and the South West recorded a very weak demographic growth rates, which successively as follow : 0.1%, 0.9% and 1.3%.

These population trends of the population would be due to the migratory phenomena which accentuated the deceleration of the overall population's growth brought about by the demographic transition. The negative demographic growth, observed in both governorates of Kef and Siliana between 1990 and 2010, corresponding to annual annual rates of about 0.2% and 0.1%, is explained basically by negative migratory balances having been recorded in these two governorates at the time of the general census of the population of 2004.

It is important to highlight the fact that the demographics' growth downward trend has accentuated during the lasting five years (2006-2010) since the annual growth rate fell to 1%. This fall was more marked in the areas of the interior in comparison with the rates recorded in the areas located on the littoral. The following table and graph illustrate clearly this situation:

Table 1. Demographic annual growth rate, by region

	Demographic Annual Growth Rate			
	1990-2010	2006-2010		
Tunisia	1,4%	1,0%	Zaghouan	1,4% 0,9%
Nord	1,3%	0,9%	Bizerte	1,0% 0,6%
Centre	1,5%	1,2%	Béja	0,2% 0,1%
Sud	1,3%	0,8%	Jendouba	0,3% 0,2%
District of Tunis	1,9%	1,4%	Le Kef	-0,2% -0,2%
Nord-est	1,4%	1,0%	Siliana	-0,1% 0,0%
Nord-ouest	0,1%	0,1%	Sousse	2,3% 1,9%
Centre-est	1,9%	1,5%	Monastir	2,3% 2,0%
Centre-ouest	0,9%	0,6%	Mahdia	1,2% 0,7%
Sud-est	1,4%	0,8%	Sfax	1,7% 1,4%
Sud-ouest	1,3%	0,8%	Kairouan	0,7% 0,5%
Tunis	1,0%	0,3%	Kassérine	1,1% 0,8%
Ariana	-0,2%	2,7%	Sidi Bou Zid	1,1% 0,7%
Ben Arous (Tunis Sud)	3,2%	2,1%	Gabès	1,4% 0,9%
Manubah	1,6%	1,5%	Médénine	1,4% 0,9%
Nabeul	1,8%	1,3%	Tataouine	1,1% 0,3%
			Gafsa	1,1% 0,7%
			Tozeur	1,5% 1,0%
			Kebili	1,5% 0,9%



Sources: Author's calculations on the basis of INS data (Statistical Yearbooks)

### Demographic weight of Tunisian areas

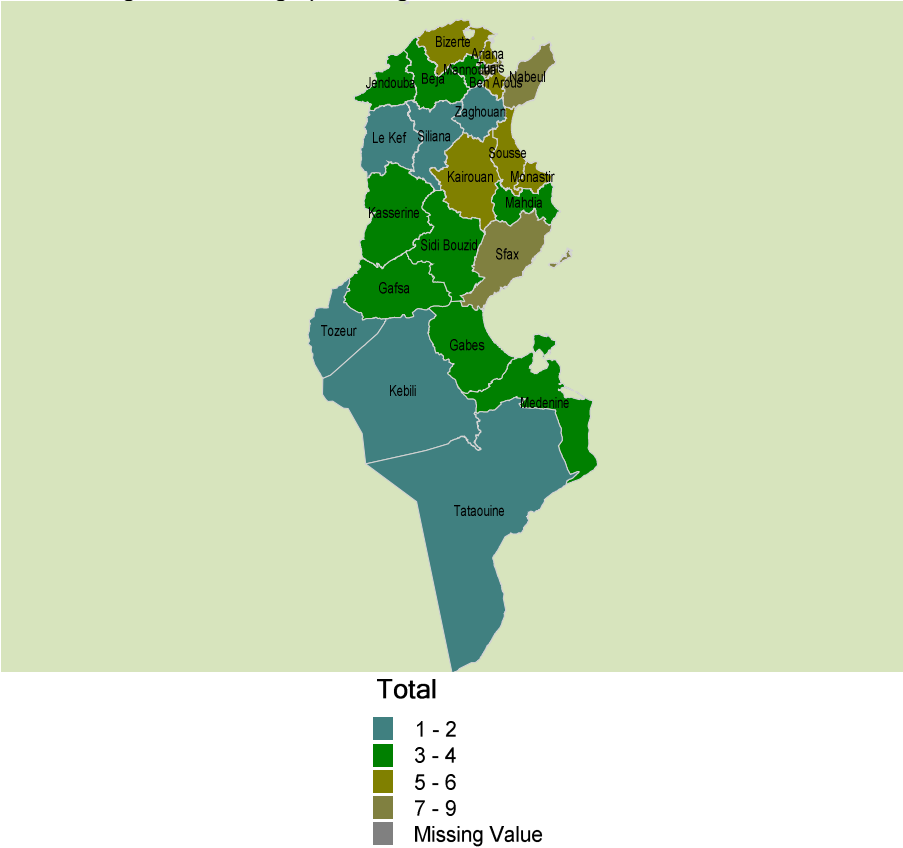
These divergent demographic trends between repulsive areas of interior Tunisia, and attractive areas of the Eastern littoral brought about a profound reshaping of population distributional patterns and notably the demographic weight of each area in the country.

The table below as well as the maps show a District of Tunis population's fast rise which passed from 17% in 1975 to 21% in 1990 and then to 23% into 2010, corresponding to more than the fifth of the Tunisian population. In fact, this trend raised the District of Tunis as big metropolis polarizing and ordering all the national space and similarly for the case of the Centre East which weights raised from 21% in 1975 to 23% in 2010. On the other hand, the weight of western north areas knows a spectacular fall passing from 17% in 1975 to 15% in 2000 to be established at 12% in 2010. This remarkable drop would be produced by the migratory phenomena which heavily impacted both governorates of Kef and Siliana. Indeed, the demographic weight's fall of these two governorates is edifying: The governorate of Kef which counted 4% of the population in 1975 counts only half today, about 2% in 2010.

As regional imbalances are increasingly accentuating, the population tends to become denser on the Eastern littoral: the District of Tunis, North East and the Center East count in 2010, nearly 60% of the total population gaining 6 point compared to the situation prevailing in 1975.

Thus, the choices of Tunisia's development model in particular at the beginning of the Seventies which gave the priority to national construction, to an accentuated centralization, the industrialization and the development of tourism, led to support great urban areas located on the littoral areas at the detriment of interior Tunisia.

Figure 1 : Demographic weights of Tunisian Governorates in 2010



Source: Author's calculations based on the Household Employment Survey for 2010 (INS)

➤ **Economic and social database**

1. Available data, sources and statistical methodologies

The delivered ITAN database contains an important part of the initially requested variables for the second step of the ESPON ITAN Project which is aiming to build a long-term database for Tunisian governorates and delegations. The rules stated in the data collection manual have been followed in gathering the data for the ITAN database (data and metadata model). The delivered data filled into the modules E, F, H, I and J have been produced and published by the Tunisian National Institute of Statistics (INS), the Tunisian Company of Electricity and Gas (STEG), the CNSS (Caisse Nationale de Sécurité Sociale) and the Ministry of education.

This section will be consecrated to the description of the delivered database and to making comparisons between the original set of economic and social variables and the collected data that we filled in the ITAN's database.



As we already presented the INS and its products and methodologies in the first report, we'll try to briefly present how statistics are produced and published in the Ministry of Education which is considered, beside the INS, as the biggest producer and provider of administrative statistics related to education. It is worth adding that education statistics produced by the INS are counted in terms of stocks (School enrollment by age brackets) whereas the major statistics produced and published by the Ministry of Education such as the yearly number of pupils enrolled in primary and secondary schools, are counted in terms of flows.

### The education census

School statistics are produced on a yearly basis by the Ministry of Education and are technically permitted thanks to an exhaustive census covering all the primary and secondary schools. The overall number is actually about 6451 institutions divided into 5997 public institutions and 454 in the private sector.

As for the frequency, the annual census is commonly undertaken in two main steps:

1. Each 16th of October, a month after the back-to-school period (15th of September), the census begins and covers all the pupils in the primary and secondary schools as well as the equipment ;
2. Each 15th of November, the census concerns the preparatory cycle as well as the private institutions.

### Content of the delivered ITAN database

The comparison carried out between the original set of requested demographic variables and the statistical data that have been collected and filled in the ITAN database is relevant insofar that permits to stand out some problems that we encountered all along the data collection step.

These problems are as follows:

- The absolute unavailability of statistical data concerning income and GDP at the local level that we tried to overcome by gathering robust statistical information and variables that could reflect the best economic dynamics at local level. The tables below are going to explain the adopted methodology ;
- Comparability over time between some variable notably those produced by the labour force household surveys is hampered due to some changes as for the employment and unemployment definitions.

The following table recalls in a synoptic way the main statistical data introduced in the ITAN's database as well as the covered periods and the main problems encountered :

Table 1: Tunisia's economic and social ITAN database at a glance

Module	Initial variables	Availability	Coverage	Remarks
E	Education level reached by the total population	Yes	1989, 1994, 1999, 2004, 2009, 2010	These statistics are produced by the INS
	Education level by sex	Yes	1989, 1994, 1999, 2004, 2009, 2010	
	Education level by Age	No		
	School enrolment total	Yes	1990 – 1991, 1992-1993, ..., 2012-2013	These statistics are published by the ministry of Education
	School enrolment by sex	Yes	1990 – 1991, 1992-1993, ..., 2012-2013	
	School enrolment by	Yes	1994, 1999,	It's difficult to make over

	age		2004 et 2009	time comparisons because surveys didn't keep the same age brackets.
F	Total Number of unempoyed	Yes	1989, 1994, 1999, 2004, 2008, 2009, 2010 et 2012	The definition of unemployment changed three times over the period 1990-2013 (2004, 2006 and 2010). The main changes are described in the paragraph related to the labour force survey.
	Unemployed population by sex	Yes	1989, 1994, 1999, 2004 et 2009	
	Unemployed population by Age	Yes	2009	
	Unemployed population by education level	Yes	1989, 2004 et 2009	
	Household Income	No		
	Gross or net salary	No		
	Population by social category	No		
	Number of cars by household	yes	1989, 1999, 2009	

## 2. The education system in Tunisia : Overview, dynamics and performances

Tunisia which elevated education to the status of a fundamental right and a constant in its development equation, succeeded in providing with education for the near total of the schooling age population. Indeed, the various reforms undertaken permitted to take up the quantitative challenges, to reach the universal schooling of the children in all the territory and finally to improve quality of teaching.

### The Education System in Tunisia: a brief presentation

The academic year runs from September to June and examinations are held in late June or early July.

#### *Early Childhood Care and Education (ECCE)*

Tunisian government has shown strong commitment towards pre-school education. Pre-school education is to be imparted in establishments or specifically designated places to the children from three to six years of age. In Tunisia the pre-school education is provided primarily in three settings: Kindergartens, Kouttabs (religious institutions) and the preparatory year.

#### *Basic Education*

*Enseignement de base* consists of nine years of school education, and is divided into two distinct stages: 6 years of primary and 3 years of preparatory education (lower secondary). At the end of 9 years students sit for examen national de fin d'études de l'enseignement de base, success in which leads to the Diplôme de Fin d'Études de l'Enseignement. Students are required to score above 50 percent at the end of sixth grade to progress to the lower secondary level. Although there is a high percentage of students who fail the important grade 6 examinations.

### *Secondary (upper) education*

The four years of secondary education are open to all holders of Diplôme de Fin d'Etudes de l'Enseignement de Base where the students focus on entering university level or join the workforce after completion. The Enseignement secondaire is divided into two stages: general academic and specialized.

### Education performances

The net enrolment rate of children aged 6 year old reached nearly 100 percent these last years in most of the governorates. The net enrolment rates of the different age brackets had also improved very appreciably these ten last years, especially on the level of the primary education bordering the 98% in 2011-2012. These efforts combined with other national actions permitted to reduce regional disparities in school enrolment and vocational training. On its side, the illiteracy rate reached 18,6% in 2011 against 31,7% in 1994.

The censuses and the employment surveys confirmed these evolutions. Indeed, according to the census of 2004, the rate of schooling of the age bracket 6-14 years exceeds or borders the 90%, in all the governorates of the country as well for the boys as for the girls, even if some gaps are still relatively important between some governorates.

Tunisia did not give up investing in education to match its indicators with those of the most performing countries in the world. In particular for the average pupils by class and the pupils/teacher ratio which respectively reached 22,1 and 17,2 in 2011- 2012 in the cycle of primary education.

In addition and as explained above, a particular attention was given to pre-school education considered nowadays as being one of the main paramount factors to improve pupil's performance. The studies of UNESCO show that the pupils attending this education cycle are those to get the better schooling performances. Within this framework, a preparatory class for the 5 year old children was generalized. The implementation of this program started in October 2001 by the opening of a preparatory class within 363 primary schools. The State focused its efforts basically in the poor and rural zones.

As concretization of the equity and social justice principles, Tunisia implemented a national programme aiming at the integration of children carrying handicaps in primary and secondary schools.

Nevertheless, some disparities at the regional level are still persisting in terms of school attendance, dropout rates and some other indicators. Efforts should be made to overcome in the coming years those problems and shortcomings of Tunisia's education system functioning. In other terms, a triple challenge has to be raised:

- The reduction to the maximum of the disparities about quantitative indicators (average pupils by class, pupils/teacher ratio...) with a focused attention on the governorates of Center-East and North-east;
- The targeting of a parity index of 100 percent to imply more the girls in the development process. The areas of the Centre-west and the North-West must be particularly targeted at the conception process of government's upcoming responses;
- To raise the challenge of the school failure through the pursuing of number of actions notably the necessary improvement of education's quality. Governorates of centre west and the south-west need a particular attention and a regular follow-up.

As for the latter point, it is important to underscore the fact the drop-out rates in the first cycle of basic teaching were reduced appreciably in most of the governorates over the last decade. The rate at the national level has been stabilized around 1,4 percent during three last years and to reach 1 percent in 2011-2012. This rate varies widely between 0,2 percent during the first year and 1.5 percent in the 5th year. However, basic education second cycle's dropout rates are remaining high which constitute consequently a serious phenomenon to be fought.

Indeed, dropout rates passed from 8,9 percent for the school year 2001-2002 to 9,7 percent in 2002-2003, to reach percent into 2011-2012. For the same years, secondary education recorded respectively the rates of 9 percent, 9,8 percent and 11,4 percent. The challenges that the Tunisia's education system has to raise for the coming years could be crystallized the fight against the school failure and are as follows:

- Reinforcement of the education quality;
- Improvement of the school life in school establishments as well as the operationalization of specific structure to ensure better involvement and participation of pupils and parents;
- Improvement of the articulation enters the various levels of lesson in order to ensure the footbridges between the levels and the cycles and to improve their coherence and complementarity;
- To reinforce the external effectiveness of the education system to timely capture changes that would occur at the side of the economic environment and to adapt consequently;
- Professionalize more the profession of teachers and trainers.

Table 2 : Total number of dropouts

	1St Year	2nd year	3rd year	4th year	Total
Tunis1	799	374	252	677	2102
Tunis2	810	462	293	740	2305
Ariana	772	458	314	619	2163
Ben Arous	1171	507	255	812	2745
Mannouba	809	425	268	559	2061
Zagouan	438	236	152	240	1066
Bizerte	1055	588	369	816	2828
Béja	651	461	251	502	1865
Jendouba	978	503	345	691	2517
Le Kef	579	238	176	513	1506
Siliana	567	244	197	367	1375
Kasserine	920	607	402	570	2499
Sidi Bouzid	977	551	280	690	2498
Gafsa	665	428	292	1022	2407
Tozeur	248	185	39	133	605
Kebilli	341	136	140	235	852
Tataouine	360	343	154	409	1266
Médenine	957	564	390	445	2356
Gabes	1017	428	213	431	2089
Sfax 1	846	207	265	377	1695
Sfax 2	634	404	172	251	1461
Kairouan	1076	568	316	800	2760
Mahdia	901	348	247	391	1887
Monastir	1169	593	302	657	2721
Sousse	1286	527	335	676	2824
Nabeul	1618	722	465	613	3418
Total Tunisia	21644	11107	6884	14236	53871

Table 3 : Total number of pupils in secondary schools, 2011-2012

	1St Year	2nd year	3rd year	4th year	Total
Tunis1	6576	5770	5345	5507	23198
Tunis2	5702	4940	4461	4511	19614
Ariana	5848	5369	4476	4544	20237
Ben Arous	7437	6166	5682	6014	25299
Mannouba	4642	3828	3283	3416	15169
Zagouan	2049	1702	1528	1511	6790
Bizerte	6706	5943	4791	5244	22684
Béja	3935	3540	2867	3014	13356
Jendouba	5906	4811	4171	4308	19196
Le Kef	3647	3094	2949	3212	12902
Siliana	3224	2520	2434	2482	10660
Kasserine	5744	5188	4603	4186	19721
Sidi Bouzid	5368	4540	4187	4504	18599
Gafsa	5010	4478	4274	5311	19073
Tozeur	1542	1231	1112	1109	4994
Kebilli	2164	1753	1474	1733	7124
Tataouine	2444	2113	1893	1791	8241
Médenine	5891	5230	4261	4119	19501
Gabes	5275	4206	3567	3627	16675
Sfax 1	6577	5548	5463	5285	22873
Sfax 2	3984	3346	2857	2665	12852
Kairouan	6209	5406	4734	4944	21293
Mahdia	4873	3790	3395	3447	15505
Monastir	7035	6081	5379	5504	23999
Sousse	7942	6510	5929	6062	26443
Nabeul	8403	6813	5824	6052	27092
Total Tunisia	134133	113916	100939	104102	453090

Table 4 : Dropout rates

	1St Year	2nd year	3rd year	4th year	Total
Tunis1	12,2	6,5	4,7	12,3	9,1
Tunis2	14,2	9,4	6,6	16,4	11,8
Ariana	13,2	8,5	7,0	13,6	10,7
Ben Arous	15,7	8,2	4,5	13,5	10,9
Mannouba	17,4	11,1	8,2	16,4	13,6
Zagouan	21,4	13,9	9,9	15,9	15,7
Bizerte	15,7	9,9	7,7	15,6	12,5
Béja	16,5	13,0	8,8	16,7	14,0
Jendouba	16,6	10,5	8,3	16,0	13,1
Le Kef	15,9	7,7	6,0	16,0	11,7
Siliana	17,6	9,7	8,1	14,8	12,9
Kasserine	16,0	11,7	8,7	13,6	12,7
Sidi Bouzid	18,2	12,1	6,7	15,3	13,4
Gafsa	13,3	9,6	6,8	19,2	12,6
Tozeur	16,1	15,0	3,5	12,0	12,1
Kebilli	15,8	7,8	9,5	13,6	12,0
Tataouine	14,7	16,2	8,1	22,8	15,4
Médenine	16,2	10,8	9,2	10,8	12,1
Gabes	19,3	10,2	6,0	11,9	12,5
Sfax 1	12,9	3,7	4,9	7,1	7,4
Sfax 2	15,9	12,1	6,0	9,4	11,4
Kairouan	17,3	10,5	6,7	16,2	13,0
Mahdia	18,5	9,2	7,3	11,3	12,2
Monastir	16,6	9,8	5,6	11,9	11,3
Sousse	16,2	8,1	5,7	11,2	10,7
Nabeul	19,3	10,6	8,0	10,1	12,6
Total Tunisia	16,1	9,8	6,8	13,7	11,9

Source: Estimates of the Ministry of Education

### 3. Make least advanced zones connected to the most advanced to benefit from spill-over effects

The major political events that Tunisia knew in 2011 stripped bare the gravity of regional imbalance and the limits of the current territorial organization mode. A strategic conceptual note produced by the transition government (February – November 2011) rejects the old style of downward development (North towards the South and North towards the East) and proposes a new territorial structuring founded on the rise to power of " areas of progress ".

This report is based notably on the thesis of complementarity and put forward the possibility of carrying out new policies by coupling/linking interior and littoral territories. Indeed, this design ensures the favourable conditions which are likely to guarantee the effectiveness of development policies thanks to spill-over and diffusion effects which constitute the most powerful channels of spatial development.

To connect the least developed governorates to the most dynamic ones and to benefit from the spill-over effects, the aforementioned report proposed the following actions to be adopted by the coming governments:

- The development of interurban transport in particular the rail transport in order to facilitate the mobility of the people and the goods ;
- New administrative division of the country to benefit more from the spill-over effects that would be brought about by a new well defined institutional ;
- To facilitate urban centres expansion process by planning the urbanization ;
- To facilitate exchanges of the goods and services with neighbour countries.

Towards a reconsideration of the actual administrative division to better exploit geographical proximity to greater agglomerations. In spite of the multiplicity of areas definitions, administrative division should in theory concretize at local level the institutional and functional purposes based on democracy, local participation and economic and social development.

The model of administrative division suggested in the transitional government's report was elaborated from strategic considerations based on economic equilibrium and political. In this context, the number of areas, the number of governorates in each economic region (area) and its size, the borders of the areas and the choice of the regional capital will be the subject of debates between main actors at local level then national level.

The approach adopted here for the administrative division is deemed to be coherent possible and aims to limit disparities between Tunisian areas. These rules are efficiency, functionality, accessibility, role of spill-over effects, proportionality and balance. The awaited positive impact of administrative division aims at reducing the deficits of the poor zones through an efficient anchoring of these zones to driving governorates able to draw the poor ones and to structure the new economic regions or areas.

The principle of efficiency relates to the question of the size (surface, population) and of the number of governorates to be set up. The principle of functionality refers to the distinction between North, the Center and the South which characterizes the national territory. This division must take into account the demographic migrations and the intensity of the exchanges of goods and services between the governorates and around the large cities.

The assets of large dynamic cities will be essential more and more as an advantage that should be promoted and exploited in the context of globalization. Since urban structure made up around some powerful and developed governorates is an essential asset, the choice of a strong polarization around urban centres must occupy a determining place in the delimitation of the new areas/regions in Tunisia.

The concept of *accessibility* is rather of physical essence. It translates the distance into kilometers between two governorates: an area is described as accessible when the distance desirable to traverse in order to reach the regional capital or the leader governorate is 80 to 150 km, approximately

equivalent of one to two hours of car. This time necessary to arrive at destination, makes it possible to achieve the round trip, to make transactions and also to work in the same day.

The concept of *proximity* does not refer to a geographical distance dimension, but rather to a relational distance facilitating further mobility of the labour and the exchange of goods and services. As statistics relating to the exchanges of goods are unavailable, the intensity of the inter-governorate migration could be adopted as the best variable to capture the concept of proximity.

The concept of *spill-over effect* means that in each area/region, the most dynamic governorates pull upwards the latecomer governorates in order to ensure definitely a convergence of the economic and social indicators.

Tunisia historically has a powerful urban structure made up around some littoral governorates as interior governorates of the country showed a delay in their development process. This new regional division should create new poles located inside the country like Jendouba, Kef, Kasserine, Sidi Bouzid, Gafsa and Tozeur. The constitution of these new poles is imperative that the government should promote to create new dynamics in the interior areas.

For lack of data on exchanges flows between governorates, cross migratory flows were used for the analysis of the reports/ratios of influence of each governorate on the others. Thus, the intensity of migratory flows is a good indicator to constitute new functional and integrated areas in which two or three large cities have to pull up all the area as a whole.

The internal migration constitutes a mechanism of socio-economic and space regulation to limit regional disparities. Not only these migratory flows have strong repercussions on reception and the starting zones, but also they permit to capture relations between the governorates (exchange of goods and services and mobility of people). The large cities of the littoral monopolize most of the migrants. The final balance (entered less left) is positive for Ariana, Ben Arous, Manouba, Nabeul, Sousse, Monastir, Medenine and Sfax. However, the other governorates know significant exits which largely exceed the entries. The governorates of the Tunis District are the most dynamic as regards inflows and also outflows of migrants.

Figure 1: Tunis migration inflows



People of Tunis migrate especially towards Ariana, Ben Arous and Manouba to be replaced partly by people from Jendouba, Béja and Siliana. The governorates of Tunis District currently account for 21% of the total population, 33% of the urban population and 56% of the migrants. In fact, the migratory space of this area covers all the territory and constitutes the national's migratory space tracing and the

principal centre of attraction as well. The map shows the migrants inflows for the governorate of Tunis. Migratory inflows comes from others governorates of Tunis District (Ariana, Manouba and Ben Arous) and then, from the governorates of the North and Sfax.

The governorate of Nabeul attracts more people from Kairouan and Western North (Jendouba, Kef and Siliana). The entries estimates (inflows) between 1999 and 2004 are about 24 165 and the exits (outflows) are 15 968, which corresponds to a positive balance of 8197. As for Bizerte, the migrants come primarily from all the governorates of North (Kef, Jendouba and Siliana). Once again people from Kairouan are those who migrate more towards others governorates, in particular to Bizerte. Thus, North could constitute an independent area/region with two dynamic governorates namely Nabeul and Bizerte which are likely to draw up the others governorates of Kef, Béja, Jendouba, Siliana and Zaghuan through spill-over effects.

Figure 2: Nabeul and Bizerte Migration inflows

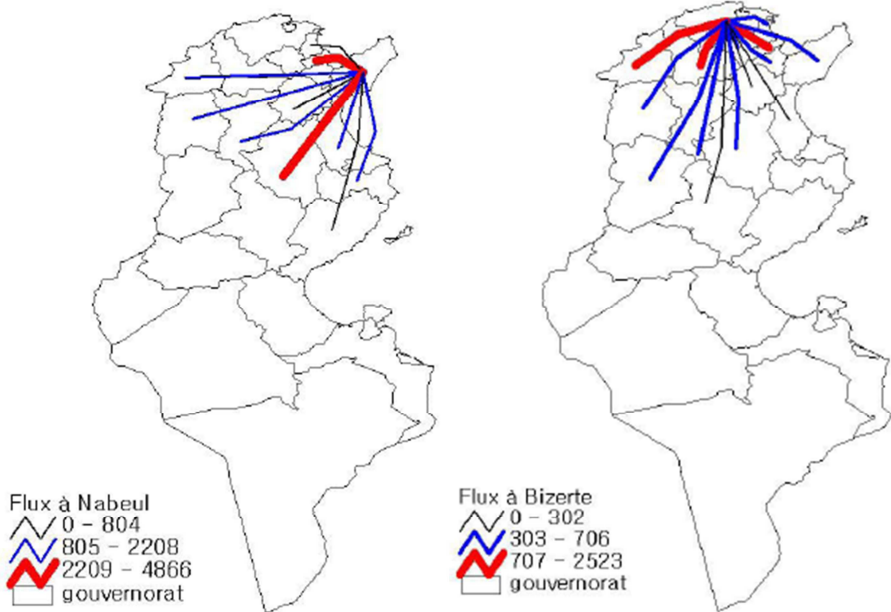
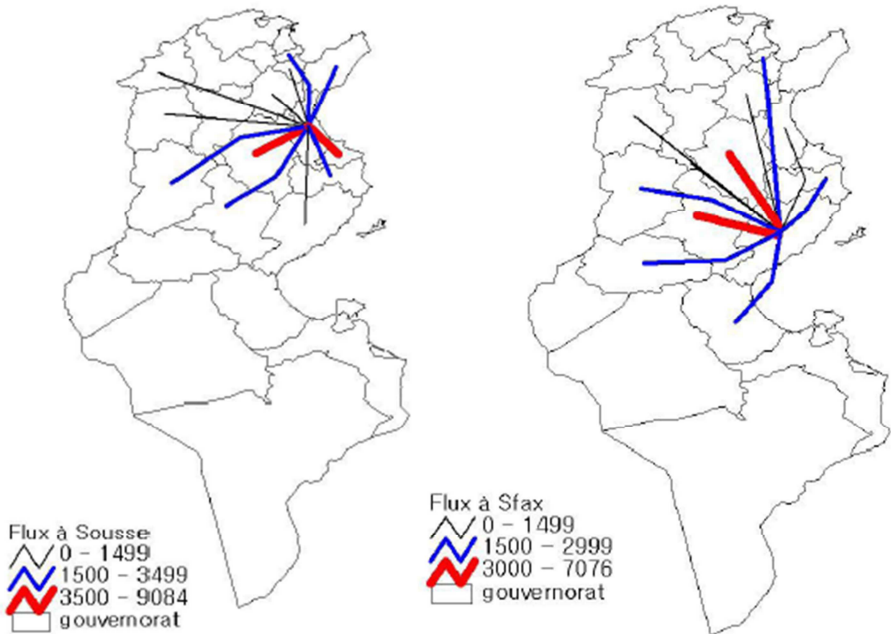


Figure 3 : Sousse and Sfax migration inflows



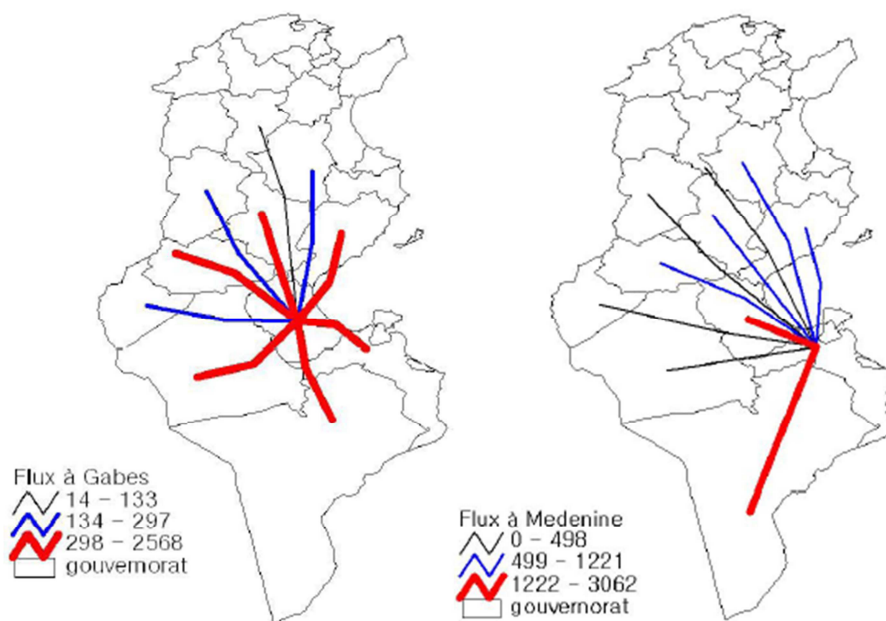


The governorates of Sousse and Monastir respectively have a positive migratory balance of 22049 and 16878. The migrants towards Sousse are about 35704 people who come from Kasserine, Sidi Bouzid and especially Kairouan and Monastir. The migrants towards Monastir are about 28485 people who come basically from Kairouan (5995), Sousse (2510) and Kasserine (2510). Thus, the governorates of Sousse, Monastir, Kairouan and Kasserine be constituted as an independent area/region where the littoral governorates are going to play major role by pulling up the other governorates through diffusion effects.

The governorate of Sfax maintains the significant relations with the governorates of Mahdia, Sidi Bouzid and Gafsa and migratory flows are reflecting well these relations. Indeed, the most significant number of migrants comes from Sidi Bouzid (7076), followed by Kairouan (3462), then Kasserine (2999), Gafsa (2351), Gabès (1908) and finally Mahdia (1719). Thus, Sfax and its bordering governorates (Mahdia, Sidi Bouzid and Gafsa) form a coherent zone.

The governorates of Gabes and Medenine are the most dynamic in the South regions. The governorate of Gabes attracts especially migrants from close governorates (2568 migrants from Médenine, 1732 from Sfax, 1292 from Kebeli, 1145 from Gafsa, 1019 from Tataouine, 906 from Sidi Bouzid and 304 from Tozeur), whereas the Governorate of Medenine records a flow which comes primarily from Tataouine (2151) and Gabes (3062). Hence, it is possible to conclude that the governorates of Gabes, Medenine, Kebeli, Tataouine and Tozeur could constitute an area/region since they form a coherent and homogeneous unit.

Figure 4 : Gabes and Medenine migration inflows



Finally, the transitional government's strategic note proposes that all the areas would be constituted by a set of complementary governorates including large poles. Each area/region will have a governorate with touristic vocation, an industrial governorate, an agricultural governorate and another one with a service vocation. This interdependence will be likely to generate dynamics of development inside each area and between the areas.

## ➤ Living standards, environmental and agriculture database

### 1. Available data, sources and statistical methodologies

The final delivered ITAN database contains an important part of the initially requested variables for the third step of the ESPON ITAN Project which is aiming to build a long-term database for Tunisian governorates and delegations. The rules stated in the data collection manual have been followed in gathering the data for the ITAN database (data and metadata model). The delivered data filled into the modules K have been produced and published by the Tunisian National Institute of Statistics (INS) mainly through two references (The statistical yearbook and the annual report on infrastructure) and the Ministry of education through two farm structure surveys (1994-1995 and 2004-2005).

As nearly all the data contained in the delivered database has been extracted from two statistical sources, namely the national report on the infrastructure indicators and the farm structure survey, a presentation will be consecrated to the latter in order to explain the adopted methodologies. Then, a second section will be consecrated to the description of the delivered database, its content in terms of variables and time coverage.

#### The report on the infrastructure indicators

The report on the infrastructure indicators comprises charts and statistics to better facilitate the overtime analysis and highlight the efforts undertaken by many actors in various fields and sectors, basically the sector of infrastructure. The criteria used permitted to put forward the significant results recorded in these fields. Furthermore, the report aims to reflect the improvements made at the side of household's living conditions.

This report encompasses indicators on infrastructure relating to connections to drinking water network, to sewage system, to public power grid, to the internet, to landline and mobile lines networks. Many other indicators are annually published and cover many other sectors such as education, vocational training, higher education, scientific research, health, youth, sports, childhood and culture.

The indicators covering the period 1994-2009 are final, 2010 are semi final, 2011 are probable and those of 2012 are expected. It should be noted that the governorate of Manouba was created in July 2000 by dividing the governorate of Ariana into two: the governorate of Ariana within its new limits and the governorate of Manouba.

It is worth noting that this report has been carried out by a technical committee within the National Institute of Statistics and supervised by the Ministry of Development and International Cooperation. This commission is composed of the representatives of the main departments and sectors concerned by the report.

#### The farm structure survey: concepts and methodology

Since the independence, three farm structure surveys have been undertaken by the Ministry of Agriculture aiming at gathering statistical data to guarantee the development of the agricultural sector on solid bases. The data filled in the ITAN's database dealing with arable land has been drawn from the two last farm surveys: 1994-1995 and 2004-2005 as the time reference is the agricultural season.

The methodology adopted for the realization of the survey on the farm structure is mainly based on the interviews using a questionnaire with closed questions. The survey has touched all the big farms and a representative sample of the small and medium ones.

In order to minimize sampling errors, all the big farms were subject to an exhaustive census. In fact, each farm with a useful agricultural land in dryness which area exceeds 80 hectares is automatically

surveyed. As for the exploitations specialized in the irrigated cultures, this surface is lower than the limit fixed for the exploitations in dryness.

A sampling method is used to produce a representative sample of the small and medium sized farms, consisting in interviewing a number of farmers in urban and rural areas.

## 2. Content of the delivered ITAN database

The comparison carried out between the original set of requested demographic variables and the statistical data that have been collected and filled in the last ITAN database is relevant insofar that permits to stand out some problems that we encountered all along the data collection step.

These problems are as follows:

- The absolute unavailability of statistical data concerning productivity by sector and by governorate as it is explained by the unavailability of national accounts at the regional level ;
- The relative unavailability and uneven production of environmental indicators at the governorate level by statistical producers, except the statistics gathered within the National Report on Infrastructure indicators.

The following table recalls in a synoptic way the main statistical data introduced in the ITAN's database as well as the covered periods and the main problems encountered:

Table 1 : Tunisia's environmental, agricultural and living standards ITAN database at a glance

Variable Code	Variable	Data Coverage	Remarks
House_total	Total number of households (thousands)	1994, 2004, 2008, 2009, 2010, 2011	These statistics are produced by the INS and would permit to ITAN's experts to calculate to produce analysis and rates on the connection of households to the public power grid, to the drinking water network, etc ...
House_urban	Total number of urban households (thousands)	1994, 2004, 2008, 2009, 2010, 2011	
House_rural	Total number of rural households (thousands)	1994, 2004, 2008, 2009, 2010, 2011	
Variable Code	Variable	Data Coverage	Remarks
refrigerator	Total number of households owning a refrigerator (thousands)	1994, 2004, 2010	Due to the unavailability of direct estimates of GDP elements at the regional/local level, living condition indicators could in many ways and in such cases serve as efficient proxies of household welfare at the governorate level. A construction of an index of living standards using those indicators is likely to permit international comparisons of living conditions in Tunisia.
car	Total number of households owning a car(thousands)	1994, 2004, 2010	
Stallite_dish	Total number of households owning a satellite dish (thousands)	1994, 2004, 2010	
television	Total number of households owning a television (thousands)	1994, 2004, 2010	
washmachine	Total number of households owning a wash machine (thousands)	1994, 2004, 2010	

Landline_tel	Total number of households having a landline number (thousands)	1994, 2004, 2010
Mobile_ph	Total number of households having a landline number (thousands)	2004, 2010
computer	Total number of households having a computer at home (thousands)	2004, 2010
internet	Total number of households connected to the internet network (thousands)	2004, 2010
Drinkw_total	Total number of households connected to the drinking water network (thousands)	1994, 1995, 1996, 1997, 1998, 1999, 2000, 2001, 2002, 2003, 2004, 2005, 2006, 2007, 2008, 2009, 2010, 2011 and 2012
Drinkw_urban	Total number of households connected to the drinking water network (thousands)	1994, 1995, 1996, 1997, 1998, 1999, 2000, 2001, 2002, 2003, 2004, 2005, 2006, 2007, 2008, 2009, 2010, 2011 and 2012
Drinkw_rural	Total number of households connected to the drinking water network (thousands)	1994, 1995, 1996, 1997, 1998, 1999, 2000, 2001, 2002, 2003, 2004, 2005, 2006, 2007, 2008, 2009, 2010, 2011 and 2012
sewage	Total number of households connected to the sewage network (thousands)	1994, 1995, 1996, 1997, 1998, 1999, 2000, 2001, 2002, 2003, 2004, 2005, 2006, 2007, 2008, 2009, 2010, 2011 and 2012
Hous_pgrid	Total number of households connected to the public power grid	1994, 1995, 1996, 1997, 1998, 1999, 2000, 2001, 2002, 2003, 2004, 2005, 2006, 2007, 2008, 2009, 2010, 2011 and 2012
Num_bhcenter	The number of public health centers	1994, 1995, 1996, 1997, 1998, 1999, 2000, 2001, 2002, 2003, 2004, 2005, 2006, 2007, 2008, 2009, 2010, 2011 and

2012		
Num_hbeds	The number hospital beds	1994, 1995, 1996, 1997, 1998, 1999, 2000, 2001, 2002, 2003, 2004, 2005, 2006, 2007, 2008, 2009, 2010, 2011 and 2012
Num_doc	Total number of practicing physicians in each governorate	1998, 1999, 2000, 2001, 2002, 2003, 2004, 2005, 2006, 2007, 2008, 2009, 2010, 2011 and 2012
Num_hotels	Total number of hotels in each governorate	2004, 2005, 2006, 2007, 2008, 2009, 2010, 2011 and 2012
Num_hotelbeds	Total number of hotel beds in each governorate	2004, 2005, 2006, 2007, 2008, 2009, 2010, 2011 and 2012
Arable_area	Total arable land area in thousand hecatres	1994-1995, 2004-2005
Fallow	Total area of fallow land	1994-1995, 2004-2005
Total_area	Total farming area in thousand hectares	1994-1995, 2004-2005
Brushland	Total area of brush land in thousand hectares	1994-1995, 2004-2005
Wooded_forest	Total area of wooded forest land in thousand hectares	1994-1995, 2004-2005
Nagri_land	Total area of non agricultural land in thousand hectares	1994-1995, 2004-2005

### 3. Profiling poverty and living standards at regional/governorate level

In Tunisia, it is common knowledge that poverty is mainly concentrated in the rural areas and some areas of the country, particularly the Centre-West Region. A strong variation in the poverty rate between regions may account for the feelings of injustice and social instability. Thus, the poverty measurement at regional level helps to better define regional development priorities. The measurement of absolute poverty in Tunisia is a well-established practice. Nonetheless, poverty statistics produced by the National Institute of Statistics on the basis of the Household expenditure surveys undertaken since the 70s, did not permit to yield a robust poverty profile at the governorate level. The knowledge of the poverty dynamics at the governorate level is still very feeble. However, living standard indicators (durable goods, number of households connected to drinking water network or sewage network, employment indicators, education and illiteracy indicators ...) could be adopted as efficient proxies to conventional measures of monetary poverty. For these reasons, a presentation of the poverty profile at the regional level will be presented according to the absolute poverty approach developed by the INS. Then, the analysis developed in the frame of this report, will be using a Principal Component Analysis (PCA) in order to highlight in a graph the most advanced governorates and the lagging ones in terms of living standards.

### The poverty profile at the regional level

Despite the various improvements by the INS to its methodology, the fact remains that the very basis of this methodology has stayed unchanged for 30 years. The methodology is based on an absolute conception of poverty and uses total expenditure as the standard of living indicator.

Indeed, since the 1980s, the median income has more than doubled and consumption patterns have changed significantly. Policies that promoted widespread public education, particularly for girls, helped to drastically reduce the illiteracy level. Besides, social policies that promoted free healthcare for some population groups and the subsidizing of essential commodities helped to improve health and nutritional conditions resulting in increased life expectancy in the country. The report published by the INS in 2013 presents the poverty trend in Tunisia over the last ten years and provides estimates of poverty by region. Household is deemed to be poor if its consumption per capita is below the poverty line.

### *Incidence of poverty at national level*

Calculating the percentage of the population with a consumption level below the poverty line constitutes one of the possible poverty measurement methods. This is referred to as “incidence of poverty”. Based on the aggregate consumption described previously, Table 2 shows the various incidences of poverty (official and extreme) for 2010 and the two previous periods.

Table 2: Incidence of poverty by stratum (%)

	Poverty line			Extreme poverty line		
	2000	2005	2010	2000	2005	2010
Tunisia	32.4	23.3	15.5	12	7.6	4.6
Cities	21.5	15.4	9	4.3	2.2	1.3
Medium sized towns	32.5	22.1	14	10.5	6.5	2.9
Non-communal areas	40.4	31.5	22.6	19.1	13.4	9.2

Source: National Institute of Statistics (2010)

Although the method used here does not calculate a national poverty line per household, but rather a poverty line specific to each stratum, estimating the incidence of poverty in each of the three strata may be aggregated (by using an appropriate weighting system) to obtain (both for extreme and official poverty) the incidence of poverty at national level.

The poverty rate stood at 15.5% in 2010 compared with 23.3% in 2005 and 32.4% in 2000. This significant decline in poverty may be explained by the strong growth between 2000 and 2010. Indeed, consumption rose faster than prices during the period, causing a significant fall in the proportion of Tunisians living below the poverty line. This is also true for the extreme poverty index which fell from 12% in 2000 to 4.6% in 2010. Despite this major reduction in poverty nationally, the official poverty rate continues to be nearly twice higher in non-communal areas of Tunisia than in communal areas. If extreme poverty is used, the gap between the communal areas and the cities worsened. Whereas extreme poverty rate in the communal areas was four times higher than in the cities in 2000, it was seven times higher in 2010.

### *Incidence of Poverty at Regional Level*

The poverty rate varies considerably between the regions of Tunisia, as indicated in Table 3. The Centre-West and North-West regions remain the poorest, followed by those in the South. The poverty trend between 2005 and 2010 varies significantly according to regions. As all survey-based estimates entail a margin of error, it is necessary to take this error into account when making comparisons over time and between regions. The results obtained show with a minimum statistical error that the poverty rate declined in all the regions except the North-West where the decrease is statistically insignificant.

Table 3: Incidence of poverty by Region (%)

	Poverty line			Extreme poverty line		
	2000	2005	2010	2000	2005	2010
Tunis District	21	41.6	9.1	4.3	2.3	1.1
North East	32.1	21.6	10.3	10.5	5.4	1.8
North West	35.3	26.9	25.7	12.1	8.9	8.8
Centre East	21.4	12.6	8	6.4	2.6	1.6
Centre West	49.3	46.5	32.3	25.5	23.2	14.3
South East	44.3	29	17.9	17.5	9.6	4.9
South West	47.8	33.2	21.5	21.7	12.1	6.4

Source: National Institute of Statistics (2010)

However, regional disparities did not reduce. The Centre-West remains the country's poorest region and its backwardness in relation to Tunisia's other coastline regions have even worsened. For example, its extreme poverty rate which was six times higher than that of Greater Tunis in 2000 and became thirteen times higher in 2010.

#### *Moving out of Poverty and "Fragility"*

The concentration of households just below the poverty line in 2005 could explain why so many people came out of poverty in the following five years. These households which reportedly witnessed an increase in their real consumption, therefore, found themselves above the poverty line. However, this observation could not be confirmed statistically given that the 2005 and 2010 surveys did not cover the same households. Monitoring a group of households (or panel study) over time is one of the areas INS seeks to improve. This would differentiate between households in a transitional poverty (hovering around the poverty line) and those in chronic poverty (never come out of poverty). Poverty reduction programmes would be more effective if the nature of the poverty facing each type of household could be specified. These two groups require support specific to their poverty situation.

The North-West, South-West and South-East are also potentially identified as priority regions. Lastly, the North-East, Centre-East and Greater Tunis (littoral) regions are not deemed to be priority regions in 2010. The intervention priorities do not change if the upper threshold is considered instead of the lower threshold, even if the priority gaps are reduced. The conclusion is that conclude that the Centre-West and, to a lesser extent, the North-West constitute two major pockets of extreme poverty. These regions require special attention. Furthermore, the situation in the Centre-West and the Centre-North regions worsened considerably between 2000 and 2010.

In contrast, in Tunisia's most affluent regions, namely Greater Tunis and the Centre-East, extreme poverty improved. This is the first indication that even whereas growth significantly contributed to reducing the incidence of poverty at the national level, it aggravated inter-regional disparities.

#### *The analysis of Poverty at the governorate level through the standard of living indicators*

As explained above, Tunisia's statistical system does not produce statistics or measurements on how monetary poverty is evolving at the governorate level. Nevertheless, many indicators on infrastructure, living standards are deemed to be strongly correlated to household expenditure or poverty line. Thus, these indicators are adopted as good proxies of poverty and its multiple dimensions at sub national levels.

Globally, all the majority of the chosen indicators (durable goods, connection to the power grid, connection to drinkable water or sewage network, unemployment rates ...) have improved significantly over the two past decades. However, the gap between the coastal governorates and those situated at the Algerian borders has worsened (Table 4). Table 4 illustrated to what extent the indicators that are going to be used in the Principal Component Analysis have evolved over the period 1994-2010.

Table 4 : Living standards indicators (1994-2010)

	Households owning a Refrigerator			Households owning a Car			Households owning a Television		
	1994	2004	2010	1994	2004	2010	1994	2004	2010
Tunis	82%	92%	99%	25%	29%	31%	92%	95%	101%
Ariana	75%	90%	95%	29%	36%	37%	91%	95%	95%
Ben Arous	80%	93%	97%	24%	31%	33%	92%	96%	99%
Manubah		87%	103%		20%	18%		93%	103%
Nabeul	58%	87%	92%	15%	19%	16%	86%	93%	94%
Zaghouan	32%	73%	100%	11%	15%	19%	71%	87%	103%
Bizerte	53%	80%	91%	11%	14%	14%	79%	89%	95%
Béja	39%	73%	90%	9%	13%	13%	74%	87%	94%
Jendouba	39%	74%	93%	9%	10%	10%	67%	84%	98%
Le Kef	39%	74%	89%	10%	13%	14%	71%	89%	97%
Siliana	29%	70%	86%	8%	12%	10%	65%	87%	95%
Sousse	67%	88%	93%	18%	23%	23%	87%	93%	95%
Monastir	71%	91%	101%	17%	22%	29%	87%	93%	102%
Mahdia	43%	79%	90%	12%	18%	18%	76%	89%	93%
Sfax	67%	88%	91%	20%	27%	28%	85%	93%	92%
Kairouan	26%	64%	98%	10%	14%	16%	61%	83%	102%
Kassérine	21%	49%	69%	7%	12%	11%	49%	76%	87%
Sidi Bou Zid	20%	63%	89%	10%	15%	19%	60%	81%	96%
Gabès	57%	81%	89%	14%	19%	22%	79%	90%	92%
Médénine	56%	85%	105%	21%	27%	33%	77%	90%	107%
Tataouine	51%	77%	90%	26%	29%	32%	71%	86%	93%
Gafsa	57%	80%	86%	8%	15%	14%	78%	90%	91%
Tozeur	68%	89%	89%	8%	11%	9%	85%	92%	92%
Kebili	62%	87%	88%	11%	16%	22%	85%	93%	91%

Gouvernorat	Drinkable water connectio		sewage		power grid		Pysicians/1000 people		Unemployme	Rudimentar
	1994	2010	1994	2010	1994	2010	1998	2010	2010	2004
TUNIS	97,9	99,8	88,9	96,3	99,3	99,9	2,2	3,7	14,2	1,6
ARIANA	91,6	99,4	53,4	91,1	96,2	99,8	0,7	1,3	10,8	0,5
BEN AROUS	95,1	98,1	70,9	95,3	97,9	99,8	0,7	1,0	12,2	0,7
MANOUBA		95,5	--	92,9	--	99,1		0,9	15,3	0,5
NABEUL	71,1	88,2	65,4	90,3	93,2	99,8	0,6	0,9	11,4	0,5
ZAGHOUAN	53,9	73,5	65,3	92,8	70,0	99,4	0,6	0,9	4,9	1,5
BIZERTE	68,8	83,7	81,6	97,8	84,2	99,3	0,6	0,9	12,8	1,2
BEJA	54,9	68,6	87,9	99	82,9	99,1	0,4	0,7	11,5	1,1
JENDOUBA	39,1	58,5	72,1	87,9	78,9	99,3	0,3	0,5	17,7	1,8
LE KEF	51,4	66,9	71,6	91,5	76,6	99,7	0,4	0,6	12,4	0,7
SILIANA	41,9	61,9	72,3	93,8	71,1	98,9	0,4	0,6	15,6	0,9
SOUSSE	91,5	98,8	71,9	96,2	96,1	99,8	1,2	1,9	13	0,5
MONASTIR	96,7	99,3	46,0	83,5	98,2	99,9	0,8	1,2	6,1	0,6
MAHDIA	55,5	87,7	29,5	68,6	83,2	99,7	0,5	0,9	12,2	0,5
SFAX	70,1	86,2	39,5	70,8	93,4	99,7	0,9	1,8	7,4	0,4
KAIROUAN	42,2	72,6	71,6	89,7	62,4	99,8	0,3	0,6	10,6	0,6
KASSERINE	39,7	59,2	44,6	77,2	59,4	98,8	0,3	0,5	20,7	0,6
SIDI BOUZID	28,9	54,9	26,5	66,5	61,6	99,1	0,3	0,5	14,7	0,5
GABES	77,5	92,1	38,0	85,6	89,9	99,4	0,5	0,8	18,1	1
MEDENINE	61,6	88,0	7,4	27,5	90,4	99,7	0,5	0,8	13,9	0,8
TATAOUINE	61,7	89,5	20,7	61	91,6	99,5	0,5	0,6	23,6	1,1
GAFSA	75,9	86,3	33,2	68,1	88,8	99,5	0,4	0,7	28,3	0,5
TOZEUR	95,0	98,0	55,3	87,9	98,0	99,7	0,6	0,8	17	0,8
KEBILI	89,5	96,7	11,8	59	98,4	99,8	0,5	0,6	14,5	0,3



# **Libya**

by Jean-Yves Moisseron and Rafea Tabib  
July 2014

## ➤ **Analysis of the Libyan territorial divisions and their populations**

### 1. Introduction

Libya is bordering the Mediterranean Sea, between Tunisia and Egypt. The most part of the population live in a strip of fertile land in the North part of the country bordering the Mediterranean. The surface of the country is 1,8 million square kilometres and the major part of the land is completely arid desert.

The Libyan economy is completely dependent on oil revenues. Oil and derivatives contribute to about 27 % of the GDP, 95 % of export earnings, and 78 % of government revenues. The uprising in Libya and the foreign military intervention to support anti-Kadhafi mobilisations strongly affected the Libyan society. The resulting civil war and the military violence drastically decrease the oil exports and have affected the GDP since 2011. Libya has lost two thirds of its oil revenues due to the incapacity of the post-Kadhafi elected government to circumscribe tribes' fragmentation and military opposition.

In July 2014, Libya is highly fragmented in different communities or tribal groups that try to get political benefit and a share of the oil-rent. This fragmentation is a traditional characteristic of the Libyan society but it became much more effective after the death of Colonel Kadhafi who had, on his own personal and very peculiar way, managed coordinating the tribal structure of the Libyan society, until he broke this fragile equilibrium in the last years of his regime.

Libya is now almost split in its three traditional big regions: Cyrenaica, Tripolitania and Fezzan. Due to the geography of oil wells and pipes, the eastern and the western parts of the country are able to live independently from an economical point of view. But inside the three regions, regional or community groups, structured by the tribal alliances, struggle for territories and resources. They can use the military arsenal inherited from the armed conflict which opposed pro-Kadhafi forces, the revolutionists and the West.

The tribe mentality allows all kind of excesses in the name of the best interests (or what it is considered as the best interests). One may lie especially with figures concerning its own tribe. One may even deny the very existence of the next tribe. The tribes know perfectly how to manipulate the figures and statistics as it has become one of the justifications means in order to get benefit from the distribution of resources.

Libyan now faces a strong violent period that reminds the violence of its history. The Italian Fascist occupation is still in the memories. The occupation meant large population transfers and the corresponding plagues. Afterwards, Libyan people faced at the same time urbanisation and rentier-revenues till the war in 2011. The country has not had the time to establish a long-term capacity building process. Libyan society is still featured by "reversibility". Everything is done and undone. Everything is built and then fall in ruins. Everything reflects the Bedouin tent: quickly installed for a short moment in a space that never becomes a place.

### 2. Available data, sources and statistical methodologies

The data delivered were collected by Rafea Tabib during two main missions: the first between the 26 of January 2014 and the 2nd of February 2014, the second from the 11-12-13 may 2012. Data were also collected during short stays in Libya for other linked purposes. Rafea Tabib had visited several institutions during its mission: the Ministry of Plan, the Ministry of Health, the Ministry of Education, the National Election Office, the Libyan Centre for Research and Development, the Libyan Centre for Strategic Studies.

Most of the data were available on paper, and a part of the data was available on the website of the Bureau of Statistics and Census (<http://bsc.ly/#>) in Arabic. Jean-Yves Moisseron has supervised the treatment of the data and the meta-data in order to build the ITAN tables. Based on Rafea Tabib fieldwork including interviews with the persons in charge of the statistics in Libya and using his report, Jean-Yves Moisseron has written the Technical report but Rafea Tabib and Jean-Yves Moisseron can be considered co-authors of the present report.

The data requested by ESPON ITAN Project were procured from the different Ministries listed before and mainly the Bureau of Statistics and Census which collects most of the Libyan official statistics. It was not possible to deliver the DEMO B data. Most of the DEMO data are very well provided for the year 2012 and we encountered problems in comparing the data of the previous years because of the very frequent changes in regional boundaries inside Libya (see section 7).

The main obstacle to the proceeding of the mission relied on the unsafe security situation in Libya. Rafea Tabib could go on the field in Tripoli because of his excellent knowledge of the local situation and its own personal network. But it was not possible for the other expert to travel to Libya during the mission. Another difficulty has limited the scope of the study: very few information is available in English on the web dedicated to statistics offices, the methodology used, the different institutions involved in the statistic production. We have tried to collect and organise very limited information.

### 3. Main statistic resources and documents

#### The Statistic Book of 2010

The Ministry of Plan, Bureau of Statistics and Census, published this document in 2012 under the Libyan Transitional Government. It was the first edition delivered after the 2011 uprising and the last before the National Census in 2012. The document is framed in several thematic chapters (Health, Education, Transport...). The figures are based on estimations made from the 2006 Census. The document is very unbalanced according to the different thematic. For example, the population estimations do not reflect the situation after the 2011 uprising. A large part of the population fled the country particularly the foreign people. Data on education, health, energy, infrastructure must also be considered with caution even if they have been up-to-dated by the Ministries involved. The document is composed of 78 pages, 17 chapters plus an introduction.

#### The Statistic booklet "Koutaïeb Al Ehssaï"

The "1998" booklet is published by the Data and Documentation National Authority of the Libyan Arab Socialist Jamahiriya. No date is visible on the document but a stamp suggests that it was published in 1999. The signature of the document by the President of this Authority is not dated. The volume includes 67 pages with an introduction in English and Arabic. Most of the data are presented at the National Level. A presentation of the Census of 1995 proceedings is made at the end of the booklet.

The Data and Documentation National Authority of the Libyan Arab Socialist Jamahiriya also published a "1999" booklet. No date and no stamp are visible on the document. The volume contains 68 pages with a series of themes based on economic and social thematic. The figures are not presented according to the regions.

#### National Censuses

Compared with other Arab countries, population censuses have been carried out in Libya for a long time. The first Census dates from 1931 and the last one from 2012 despite the unsafe situation. A general Census of the population was carried on in 1931, 196, 1954, 1964, 1973, 1984, 1995, 2006, 2012.

Table 1: Libyan's census

Census year	Males (thousands)	Females (thousands)	Total population (thousands)
1931			704
1936	463	386	849
1954	564	524	1 089
1964 (July 31)	813	751	1 564
1973 (July 31)	1 192	1 057	2 249
1984 (July 31)	1 954	1 689	3 643
1995 (August 11)	2 237	2 168	4 405
2006 (April 15)	2 536	2 723	4 811
2012	2 746	2 617	5 363

- *National Census of 2012*

The Bureau of Statistics and Census published this document of 85 pages in November 2012. The introduction presents the overall methodology, the data collection proceedings, the main concepts and definitions used. But the publication presents figures without any comments. Regarding the instable political transition period, it would have been useful to have more details on the way the present situation in Libya had affected the collecting process. After that last Census document, only economic studies were published afterwards.

#### The proceeding of the Census

The regions have not been investigated in the same condition as usual. Some of the places have been destroyed almost completely and in some case, all its population was compelled to flee abroad or to other part of Libya. The militia devastated Cities as Tawargha, Mazdah or Syrte. Some of their district disappeared in the Census and were aggregated in bigger zones. Tawargha had more than 40 000 inhabitants before the uprising in 2011. This city doesn't exist anymore, physically and from a demographic point of view. Its population was sent off and the city is now integrated to it neighbour Misratha which has been also largely destroyed. Several areas were out of bound for the investigators. For example, the districts of Gwaresch and Laithi in Benghazi were not visited because of the refusal of Islamist factions that control these areas.

One of the usual habits in the Libyan Census is the overstatement of figures concerning the number of inhabitants in some districts. The tribes inflate numbers in order to obtain as much benefit as possible. One of the oddities of the Census was to have employed investigators who belonged to the region they were investigating. Social pressure, or sometimes the objectives of the local community they belong to, push them to interpret answers in a way that boosts the actual numbers.

The interviewer teams have been trained by supervisors at the head office of the Bureau. The fieldwork was dispatched among the 667 districts. Each district has been split in Census regions composed of 450 to 600 households. The local authorities have been associated to the proceedings, especially the local branches of the Ministries, the local Councils. The main problems encountered by the interviewers were:

- the absence of legal security forces in a large part of the territory.
- Large number of militia under different names that act as security forces.
- Difficulties to collect information from the foreign households due to the unsafe situation and sometimes because they do not understand Arabic.
- Some districts and detention camp were out of access.
- Lack of precise maps of the cities after the bombings and the destructions.

## Legal framework of the Census

The Census was proceeded by the Census Office on the legal base of the Law n° 16 of the year 1963 and on the other Laws regarding the Census. The Census concerns all the population inside the Libyan Borders and is an important tool to portray the policies concerning the population and the economy. The questionnaires investigate the presence of Libyan or non-Libyan household, the size of the household, the location, the type of residency (temporary or permanent), number of deaths by causes, and the missing persons.

- *National Census of 2006*

The last results of the National Census of 2006 are also published by the Bureau of Statistics and Census of the Ministry of planning. A first phase was published in December 2006 and a second one in October 2008, which presents the results, by Cha'biyat. The whole document is composed of 203 pages with a methodological introduction. As in the Census of 2012, figures are presented without comments. A special focus was made on employment, education and on household equipment. This Census also reveals a new interest of the Libyan authorities on poverty and employment issues that were not of big concern in the previous Census.

- *Other documents*

The following tables are available for 2010, 2011 and 2012:

- "Tables on martyrs" indicate an estimation of death people during the fights against the loyal forces to Kadhafi. This table does not include the other people dead under the bombing of the foreign forces either under the militia violence
- Table of injured people during the revolution
- Table of people registered in electoral roles
- Table of paid salaries
- List of public and private schools by region
- Tables regarding the health conditions
- Tables of car registration
- Tables of criminal acts.

Table 2: Libyans' ITAN database at a glance

Module	Variables	Code	Period covered	Remarks
A	Total population	Pop_t	1995 (snuts 2), 2006 (snuts 3), 2012 (snuts 3)	
	Population by sex	Pop_m, pop_f	1995 (snuts 2), 2006 (snuts 3), 2012 (snuts 3)	
	Population by Age	pop_t (group age)	2012 (snuts 3)	
D	Total Deaths	Death_t	2012 (snuts 3)	
	Deaths by sex	Death_m, death_f	2012 (snuts 3)	
	Total Domestic emigration	Mig_dom	2012 (snuts 3)	
	Total Domestic emigration By sex	Mig_dom		
E	School enrolment	School_enrol_t	2012 (snuts 3)	
	School enrolment by sex	School_enrol_m/f	2012 (snuts 3)	
F	Unemployment	Unemp_t	2012 (snuts 3)	
	Unemployment by sex	Unemp_m/f	2012 (snuts 3)	
H	Active population	active_pop_t	2012 (snuts 3)	
	Active population by sex	active_pop_f/m	2012 (snuts 3)	
I	Working population	work_pop_t	2012 (snuts 3)	
	Active population by sex	work_pop_f/m	2012 (snuts 3)	

#### 4. Presentation of the Libyan office statistic

The National Statistics Office was established by a 1963 law and its amendments, until 2012 where a new provisional law replaced it under name of Bureau of Statistics and Census. The Data dissemination is made on available hard copies, on the Static website ([www.BSC.ly](http://www.BSC.ly)), on CDs (non-available during the mission).

#### 5. Content of the delivered ITAN database

The data for Libya were collected at SNUTS 3 level for the 22 regions. A large part of the basic demographic data was available in the Census report in 1995, 2006 and 2012. The main problem we had to face is the changes in the zonings of the region.

#### 6. Some facts to interpret

In 2012 and 2006 the men are more numerous than women in all the Shabiyat. It is one of the distinctive features of the Libyan migration: the migrants come only for a few years. For example, the number of non-Libyan Arab men is twice the number of women. For Africans, the number of men is triple. We observe the same feature in the age pyramid (men numbers surpass women) despite life expectancy is higher for women.

Libya is known to be a country where kidnapping and rape of women is usual. In Ajdabiya in 2000 two anti-black "pogroms" started because of the rape of young Libyan ladies by African migrants in this oil city. The migrants avoid bringing their wife in the country in order to avoid rape by young idle young Libyans which sometimes come in the migrants' camp (called Kambo). One must remember that Libyan society remains very conservative and that the deferment of the age marriage due to the lodgement crises, increases tension and sexual frustration.

We observe also an important gap between men and women for the 70-74 years age class; the gap is much more important than the previous classes. The explanation can be found in the fact that this class is the last that has known Italian fascist occupation with all brutalities and atrocities of the time (population transfers, epidemics, war.) Many new births died and especially the girls.

#### 7. Territorial organisation

##### Short history of the evolution of Libyan regions<sup>97</sup>

Libya is nowadays divided into 22 Cha`biyat. This word is difficult to translate in English as it mixes a demographic and a geographic notion. It means "popular" but it defines a region. One of the characteristics of the regional history of Libya is the instability of their boundaries, particularly during the long period of Kadhafi's ruling. The political governance Kadhafi implemented has hindered the development of a stabilised state with clear administrative and regional bodies. The regional administrative organisation was about to change regularly in order to avoid structured administration. Kadhafi wanted to rule the country by an "ordered disorder" in which he was always at the centre of the game. He was using a mix of arbitrarily violence and redistribution of revenues or advantages between the different tribes. That explains the complexity of the regional organisations and the successive reforms of the Libyan regions.

In 2014, the regional organisation is based on 22 Cha'biyat:

LY011	SNUTS3	1.0	Tarabulus
LY012	SNUTS3	1.0	Al Jfara
LY013	SNUTS3	1.0	Az Zawiyah
LY014	SNUTS3	1.0	An Nuqat al Khams (Zwara)

<sup>97</sup> Most of information are based on <http://statoids.com/uly.html>

LY015	SNUTS3	1.0	Nalut
LY016	SNUTS3	1.0	Al Jabal al Gharbi
LY017	SNUTS3	1.0	Misratah
LY018	SNUTS3	1.0	Al Murgub
LY019	SNUTS3	1.0	Surt
LY021	SNUTS3	1.0	Wadi al Shatii
LY022	SNUTS3	1.0	Al Jufrah
LY023	SNUTS3	1.0	Ghat
LY024	SNUTS3	1.0	Wadi al Hayaa
LY025	SNUTS3	1.0	Sabha
LY026	SNUTS3	1.0	Murzuq
LY031	SNUTS3	1.0	Benghazi
LY032	SNUTS3	1.0	Al Marj
LY033	SNUTS3	1.0	Al Jabal al Akhdar
LY034	SNUTS3	1.0	Darnah
LY035	SNUTS3	1.0	Al Butnan (Tubruk)
LY036	SNUTS3	1.0	Al Wahat (Al Wahat + Ajdabya)
LY037	SNUTS3	1.0	Al Kufrah

The names of some districts can be explained: Tripoli means three cities. It comes from the Greek tri : three and, polis. Benghazi means the son of the conqueror. It comes from the Arabic worl bani: sons, and gazi: conqueror. Al Wanah means oasis, Al Jabal al Akhdar means Green Mountain and Al Jabal al Gharbi, means Western Mountain.

Before this period, Libya has traditionally been divided geographically into three regions: Tripolitania in the northwest, Cyrenaica (or Barca) in the East, Fezzan in the Southwest.

- In 1919, Libya obtained territories from France and from Egypt and Anglo-Egyptian Sudan. The former were incorporated into Tripolitania and the latter into Cyrenaica.
- In 1926: Libya gained more territory from Egypt. The new border follows the meridian of 25° East.
- 1934: Cyrenaica province split into Benghazi and Derne provinces; Tripolitania split into Tripoli and Misratah.
- 1943: occupying British and French forces re-established the three traditional provinces.
- 1963: Libya changed its organisation with the creation of ten Muhafazat (districts, governorates).

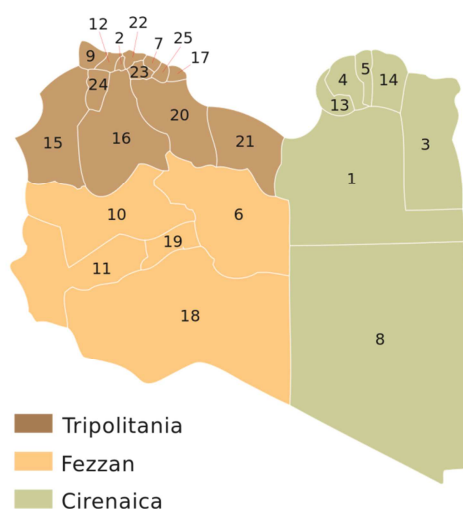
Governorate	Capital	Equivalent
Al Jabal al Akhdar	Al Bayda'	Al Fatih, Al Jabal al Akhdar
Al Khums	Al Khums	Al Khums, Sawfajjin, Tarhunah
Awbari	Awbari	Awbari, Murzuq
Az Zawiyah	Az Zawiyah	An Nuqat al Khams, Az Zawiyah
Benghazi	Banghazi	Ajdabiya, Benghazi, Al Kufrah
Darnah	Darnah	Darnah, Tobruk
Al Jabal al Gharbi	Gharyan	Ghadamis, Gharyan, Yafran
Misratah	Misratah	Misratah, Surt, Zlitan
Sabhah	Sabha	Al Jufrah, Sabha, Ash Shati'
Tripoli	Tripoli	Al `Aziziyah, Tripoli

- In 1969, after the coup of the Free Officers, Libya's regional administration was reorganised. The local authorities had new prerogative to implement policies and also to label and design the boundaries of the ten governorates. A new law cancelled the Muhafazat in 1975: Libya issued a law that abolished governorates but they were maintained and continued to be operative till a new law in 1983 which established the 46 new Baladiyah or municipalities.
- 1983: Libya reorganized into 46 municipalities (baladiyah)

Municipality	Capital	Municipality	Capital
Ajdabiya	Ajdabiya	Darnah	Darnah
Al Abyar	Al Abyar	Jalu	Jalu
Al `Aziziyah	Al `Aziziyah	Janzur	Janzur
Al Bayda'	Al Bayda'	Masallatah	Masallatah
Al Jufrah	Waddan	Misratah	Misratah
Al Jumayl	Al Jumayl	Mizdah	Mizdah
Al Khums	Al Khums	Murzuq	Murzuq
Al Kufrah	Al Kufrah	Nalut	Nalut
Al Marj	Al Marj	Qaminis	Qaminis
Al Qarabulli	Al Qarabulli	Qasr Bin Ghashir	Bin Ghashir
Al Qubbah	Al Qubbah	Sabha	Sabha
Al `Ujaylat	Al `Ujaylat	Sabratah	Sabratah
Ash Shati'	Birak	Shahhat	Shahhat
Awbari	Awbari	Surman	Surman
Az Zahra'	Az Zahra'	Surt	Surt
Az Zawiyah	Az Zawiyah	Tajura'	Tajura'
Bani Walid	Bani Walid	Tarhunah	Tarhunah
Benghazi	Banghazi	Tobruk	Tubruq
Bin Jawwad	Bin Jawwad	Tripoli	Tripoli
Ghadamis	Ghadamis	Tukrah	Tukrah
Gharyan	Gharyan	Yafran	Yafran
Ghat	Ghat	Zlitan	Zlitan
Jadu	Jadu	Zuwarah	Zuwarah

- 1987: After a few years, Libya went back to the reform and established 25 Baladiyat listed in the following table.

Municipality	Capital	Municipality	Capital
Ajdabiya	Ajdabiya	Darnah	Darnah
Al `Aziziyah	Al `Aziziyah	Ghadamis	Ghadamis
Al Fatih	Al Marj	Gharyan	Gharyan
Al Jabal al Akhdar	Al Bayda'	Murzuq	Murzuq
Al Jufrah	Waddan	Misratah	Misratah
Al Khums	Al Khums	Sabha	Sabha
Al Kufrah	Al Jawf	Sawfajjin	Bani Walid
An Nuqat al Khams	Zuwarah	Surt	Surt
Ash Shati'	Birak	Tarhunah	Tarhunah
Awbari	Awbari	Tobruk	Tubruq
Az Zawiyah	Az Zawiyah	Tripoli	Tripoli
Benghazi	Banghazi	Yafran	Yafran
		Zlitan	Zlitan

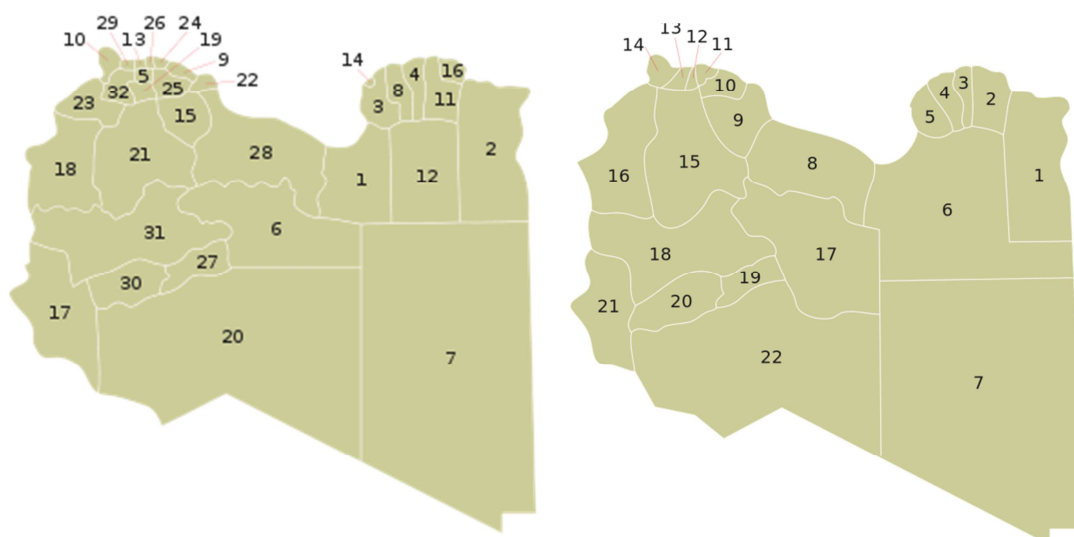


- Then in 1995 Libya decided to go back to a more limited number of 13 municipalities. The name of Baladiyat was dropped for the term of Cha'biyat.

Municipality
Al Butnan
Al Jabal al Akhdar
Al Jabal al Gharbi
Al Jufrah
Al Wahah
Al Wusta
Az Zawiyah
Benghazi
Fazzan
Misratah
Naggaza
Sawfajjin
Tarabulus

- In 1998, the number of Cha'biyat doubled and reach 26 Chabiyat and increase in the new organisation in 2001 which account for 32 Cha'biyat.

The 32 Libyan municipalities (*cha'biyat*) de Libye (2001-2007)



- Since 2007, Libya is divided in 22 chabiyat.

As the two previous maps indicate, the boundaries of some of the Cha'biyat changed. It means that new Cha'biyat were not always a split of old one. It was then impossible to establish a table-pass between the data of the Census in 2006 and the Census of 2012 at SNUTS 3.

#### Remarks on region divisions

Several remarks were made on the subject of land divisions; for example the region of Misratha includes both this town-state and its rival, Bani Walid. The experts wondered whether it was a good idea to combine two enemy towns that contain the main two tribes competing to control power in Libya and who fought a significant battle in October 2012 (i.e. a few months after the census).

The areas of Ajdabiya and Nalout appear destined to "recompense" tribes that, following the 2011 events, have become the main movers in the political arena (respectively, the Megharba in the oil



fields and ports bordering Ajdabiya, and the Zenatnes whose tribal territory comes into this region south of Nalout). The experts find it difficult to find any arguments in favor of creating the two areas, whose characteristics seem too vague to justify the division.

The capital, Tripoli, clearly weighs heavily in Libya's urban framework. However, unlike other towns, tribal issues do not play a significant role there. No large tribes live there or make up a majority. As a result, it cannot claim any form of *asabiyyah* (solidarity or cohesion of a group), whereas the suburbs are tribal strongholds. Consequently, the powerful tribes around the capital have succeeded in imposing a division of their strongholds into districts distinct from Tripoli and thus figures relating to "Greater Tripoli" feature nowhere in the official statistics. On a functional level, the town encompasses the suburbs, which are hugely residential, but this town does not emerge in the statistics, since it is broken up into several distinctive administrative entities.

The division in Fezzan is clearly devised to break up this region, which has extremely fertile land and a small, mainly Toubou, population. From only one district in 1995, the region was divided into 6 districts in 2012.

## 8. Demographic profile and principal trends

### Main demographic trends

The Libyan population density is one of the world's lowest (185th of 192 countries). Only 3,6 people are living per square kilometre. 90% of the people live in less than 10% of the country. More than 85% of the population live in urban areas.

Population density varies noticeably between the fertile Northern coastal strip, and the rest of the country. In the North, population density is around 50 people per square km. The other part of the country is desertic. People are broadly disseminated with a density under one person per square kilometre.

Libyan population is quite homogenous as 97% of Libyans are of Berber and Arab. The remaining part is composed of different ethnic groups, as Tuareg and Toubou in the southern part of the country. A part of them are nomadic or semi-nomadic. There is very little descent of Italian. The vast majority of Libyans are Muslims and from the Sunni part of Islam. The Jewish community, which was important, fled the country in the last decades. There is also a Christian community – Egyptian Copts and Catholics – of 100 000 persons. The biggest foreign community come from North Africa and Sub-Saharan Africans.

### Remarks on the quality of 2012 demographic data

Data on prisoners and missing persons are significantly under-estimated. The interviewed persons made it clear that this figure only represents a tiny proportion of the real numbers. Not all of the prisons held by the militia in Misratha, Benghazi and Tripoli feature in the census. Yet, according to crossed figures, over 30 000 people are held in prisons run by the militia, who obey no laws.

Figures for missing persons are far lower than in reality, but according our local contacts, this number comes from the declarations of those surveyed. People only very rarely declare the disappearance of a family member, since most are soldiers who died fighting alongside Gaddafi's units. To avoid any kind of repression against the family from the "victorious" militia, those questioned prefer to say that no one has died.

The census does not include the number of people who have moved abroad. Data is highly contradictory in this area. The Tunisian minister for Foreign affairs declared at a press meeting that "1 900 000" Libyans reside in Tunisia. This figure has never been confirmed despite the standing of the person who made the announcement. At a congress for Libyan refugees in Tunisia held in Sousse in May 2014, the congress coordinator announced a figure of "600 000 Libyan exiles" in Tunisia. This

clearly refers to one of the categories of Libyans present in Tunisia, i.e. those belonging to tribes loyal to Gaddafi. However, it does not cover other categories, such as economic refugees, the long-term ill, promoters and large property owners who have lived in Tunisia for some time, etc. It is worth noting that at the elections on 25 June 2014, only 360 people on Tunisian territory were registered on the electoral list. In Egypt, obtaining reliable data is even harder, but according to estimates from refugee organizations, they total about 800 000, not counting the members of Ouled Ali tribes, who live on the border to the South of Jaghoub. The ministry for health has put forward a figure of over “45 000” “injured of the revolution” in hospitals in Jordan, Turkey and some European countries.

In the census, households living in the orbit of Tripoli and Benghazi were declared to be residents of these districts. However, these households are actually originally from tribal regions (Wercheffana, Tarhouna and Werfella) and were lodging in Tripoli. Most of them are former civil servants from the fallen regime who were living in Tripoli and left the capital in a hurry (and to a lesser extent, Benghazi) to take refuge in their respective tribal strongholds. This was an effective way of escaping any form of repression from the militia who occupied the capital. Yet in the 2012 census, they declared themselves to be owners of their residence (it is common in Libya to build a house in your home town or region even if it remains unoccupied) and to be residents of the district. As a result, they contributed to distorting the figures on domestic migrations between regions and towns and made it harder to explain the drop in the populations of Tripoli and Benghazi.

#### Remarks on the quality of other data

Incomes in the coastal towns are higher than in the rest of the country because of the significant contribution from the private sector. Women in coastal towns find more work than those living inland.

The vast majority of income in inland towns is from civil service and local authority salaries. These wages are very low in Libya because civil service is not seen as providing a resource for the worker and his or her family, but rather an important role in controlling the redistribution of resources towards the tribe. Given the lack of high civil functions in inland and southern regions, salaries are generally very low. Even wages from oil companies, which are relatively high, are paid into accounts in the capital or coastal towns, which are the hometowns of the main local managers of these companies. Since the events, and increasing numbers of attacks on armed vehicles travelling to provincial banks, people prefer to have their wages paid into accounts in the capital to avoid any accidents.

Since the events in 2011, many young men have left school or university to join the militia or counterfeit and informal networks. A member of the militia is paid 3 000 Libyan dinars (plus perks such as a private vehicle and housing) and obtains social and symbolic standing. A university graduate of the same age with a technical or scientific diploma earns around 1 300 dinars. The massive exodus of young men has consolidated the superiority of women students in university and school institutions. The phenomenon is particularly noticeable in the border regions (Fezzan), but also in regions where education does not constitute a social ladder.

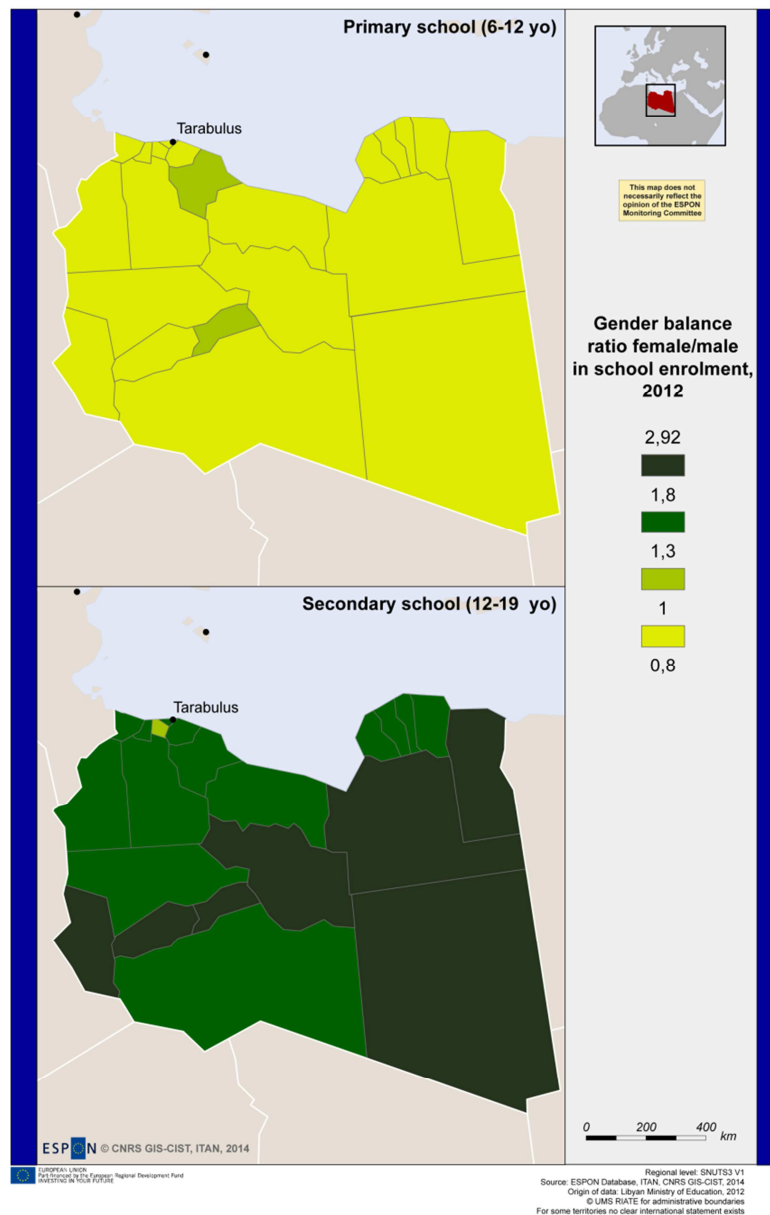
### 9. ITAN Maps on Libya and first results

#### The boys let the school to the girls

The data indicate a strange and strong inversion between the enrolment of girls and boys. The figures are balanced for the primary school. Boys and girls attend school equally. But for the age class of 12-19 the ratio is very high. It means that boys leave the school much earlier than the girls. The phenomenon is comparable to what is happening in Algeria and in the whole Maghreb but it has occurred more intensely: sometimes girls are more than twice the number of boys.

The reasons of this unbalanced situation can be different according of the different regions. In Misratha for example, because of the informal economy and especially handle with Turkey, Emirates, and the Egyptian tax-free harbors, youngsters find easily opportunity to make money. The figure of the “Trabendist” is very attractive in a city that settles its reputation on business and trade. In parallel to

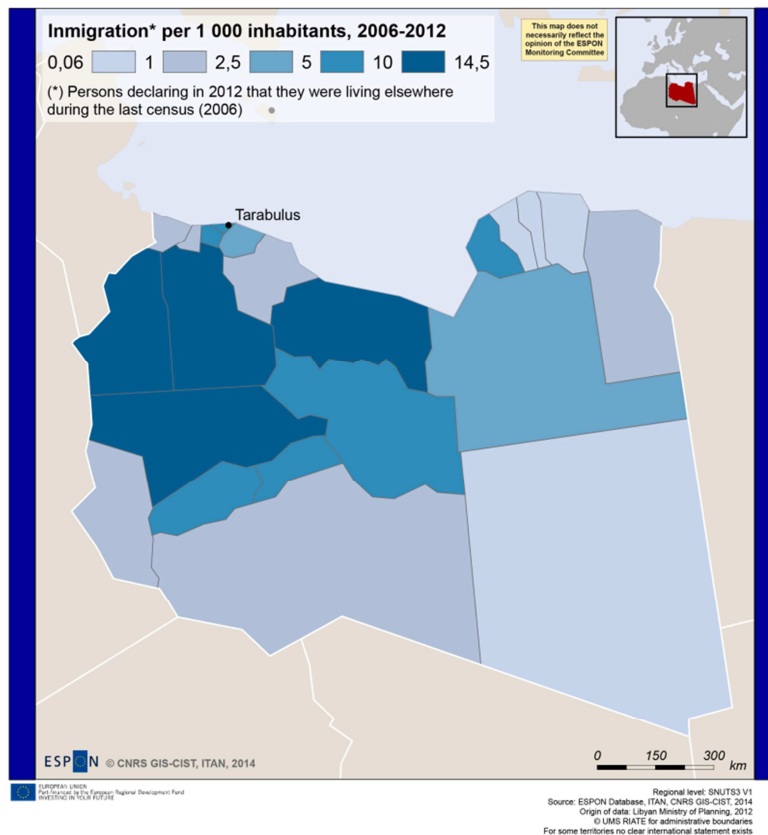
this male school desertion, young women take benefit of the school infrastructures, which is of high quality in a city that always had intellectual elite. In Libya, female medical doctors that come from Misratha are considered as good practitioner with high professional skills. It is the same for journalists and teachers.



The situation in Fezzan is different. Early departure of youngsters from the school can be explained by the Toubous traditions. Toubous have a specific way to practice nomadism. The family does not move all together. A boy is very often “given” or “rented” to a relative because they need additional people to herd. As a matter of fact, the boys do not leave with their relative and migrate from a family to another. With the development of the transnational traffics especially with the Chad, the Niger and the Darfour, youngsters find jobs in more or less legal trade activities. Moreover, girls show a real infatuation for studies. There is a reason for that. Marriage in Toubou’s tradition is exogenous at the fifth degree, in opposition with the traditional Arab marriage which promotes the marriage between cousins. The women know that they will have to leave their family and live in their husband’s residence. But as Toubous are settled in fourteen different countries, they may be very far from their original residence.

Education and diploma are a way to take control of the spouse choice and then of the future residence.

### Importance of migration

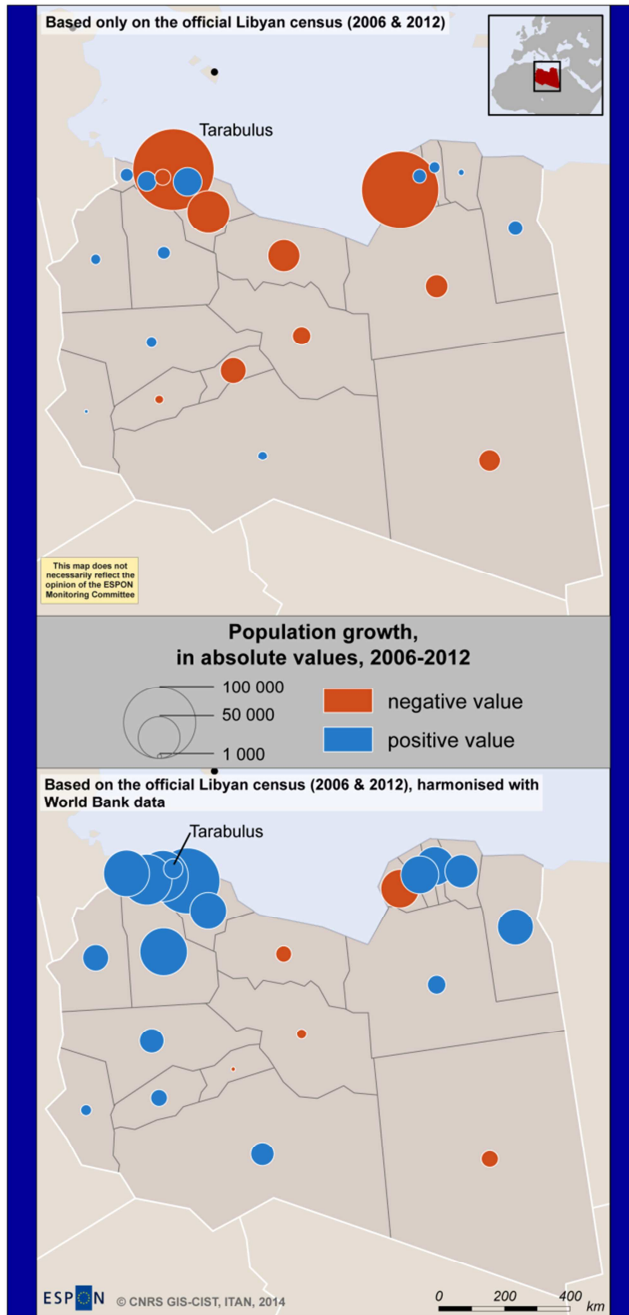


We observe that the immigrant's ratio is higher in the Western region. The explanation relies on the proximity of Tunisia on one hand and of Italia with Lampedusa, which is the gate of the European Eldorado. Tunisian migrants work in the cities of Zouara, Boukammach, Zaouïa and Tripoli thanks to the placing networks organized by mix Tunisian industrial projects in the region. The tribes can capitalize their long-term exchange relations and fructify their transnational capital.

Sub-Saharan African migrants prefer also this region because of its proximity to Europe and because of the countless opportunities of jobs. It is important to notice that very few racist acts were registered in this region contrary to the Eastern cities.

### Differences in projections of the population

The figures concerning the population projections are different according to the Libyan Census and the World Bank. We don't know how to explain such a difference as we do not have information on the WB methodology. It seems however that the WB is very optimistic and under-estimates the consequences of the civil conflicts.



Regional level: SNUTS3 V1  
 Source: ESPON Database, ITAN, CNRS GIS-CIST, 2014  
 Origin of data: Libyan Ministry of Planning, 2006, 2012; World Bank, 2014  
 © UMS RIATE for administrative boundaries  
 For some territories no clear international statement exists

# **Egypt**

by Delphine Pagès-El Karoui  
Novembre 2013

The report is available only in French language. It is possible to obtain it from the ITAN Lead partner (CNRS / GIS "CIST").

## Contents:

1. A strongly centralised country
  - 1.1. One century and a half of Egyptian censuses
  - 1.2. An administrative organisation dominated by the urban / rural cleavage
  - 1.3. Shortcomings of the Egyptian definition of the urban space
  - 1.4. The authoritative management of local territories
2. An upset and divided society
  - 2.1. A « demographic exception » ?
  - 2.2. Family transformation
  - 2.3. Religion is back
  - 2.4. A divided society
3. A mostly urbanised territory
  - 3.1. Official statistics do not say all of the rapid urban growth
  - 3.2. The growing metropolisation of Cairo
  - 3.3. The States overrun by the urban informal settlements
4. Deep territorial inequalities
  - 4.1. Persisting regional disparities
  - 4.2. A diminishing cleavage between urban and rural space
  - 4.3. Redrawing the map of Egypt
5. Egyptian territories in globalisation
  - 5.1. The liberal turn
  - 5.2. Egypt in the world
  - 5.3. The new Egyptian landscapes of the global era
6. Facing the Egyptian challenges
  - 6.1. An economy devastated by the revolution
  - 6.2. The energy challenges
  - 6.3. The environmental challenges
  - 6.4. The food and water challenges

Conclusion: Egyptian territories in the revolution turmoil

## **Israel**

by Yinon Cohen

June 2014

email address: [yc2444@columbia.edu](mailto:yc2444@columbia.edu). Many thanks to Michael Buryak and Anna Cohen-Yanay for their assistance with the literature review and data analyses, and to Neve Gordon for his helpful comments.

### ➤ **Regional inequalities in Israel : Jews and Palestinians in Israel's districts, 1995-2012**

#### 1. Data Sources and Availability

The Central Bureau of Statistics (CBS) is responsible for collecting and disseminating data regarding the country's population and territory. It does so on the basis of periodical surveys focusing on a variety of subjects (e.g., labour force surveys, expenditure surveys, income surveys), administrative data (e.g., population registry), as well as population censuses that were conducted in 1948, 1961, 1972, 1983, 1995, and 2008.

Population and demographic estimates for the entire country and by geographic divisions are based on population censuses and on the changes that occurred in the population after the Censuses, as recorded in the Population Register. The Israeli population is defined on the basis of the permanent (de jure) population, and consists of Israeli citizens and permanent residents (including those who have been out of the country for less than one year). Not included are the estimated 202,000 labour migrants and 54,000 asylum seekers who entered Israel without entry visa, even if they have resided in Israel for over a year (CBS 2013: 30).

Until the 1995 census, all information was collected from households. The 2008 census combined administrative data with information obtained by traditional methods. The Israeli Statistical Abstract, the flagship publication of the CBS, publishes an annual portrait of Israel's population, economy and society, based on the various surveys, administrative records, and information provided by various governmental organizations. The statistical abstract is bilingual (Hebrew and English) and available online at <http://www.cbs.gov.il/reader>. In addition to a full census count, a representative sample of approximately 20% of the population is conducted in each census year to provide detailed demographic, social and economic information about the population. Both the demographic and geographical versions of the 20% population censuses are available for researchers.

Much of the data presented in the following pages, are thus based on our analysis of the 20% geographic public use files of the 1995 and 2008 (PUF) censuses. Maps and figures are taken from the website of the Statistical Abstract. Some tables are based on published data in the Israeli Statistical Abstracts of various years (mostly 1996 and 2013), as well as on some other CBS publications.

CBS data and surveys are considered to be professionally run and of high quality. However, the coverage of Bedouins living in small communities in the south is partial. The CBS is an official Israeli unit in the Prime Minister's Office and as such reflects the policies of the Israeli government with respect to Israel's territory and population. This of course has consequences for the way Israel counts its population and the information it collects about its residents.

The recognized international borders of contemporary Israel are those specified in the 1949 armistice agreements between Israel and its Arab neighbours; these borders, with some minor modifications, were consolidated and received wider international legitimation in later years following peace agreements with Egypt and Jordan and a UN-approved agreement with Lebanon. However, the 1949 borders of Israel, known more commonly as the 1967 borders, or the "Green Line," were in effect for only 18 years, until 1967. Following the 1967 war, Israel occupied the West Bank, the Golan Heights, the Sinai Peninsula and the Gaza Strip. At present, the West Bank and the Golan Heights are still under Israeli occupation. Moreover, during the past 46 years Israel has been transferring some of its own Jewish population to these occupied areas. At the end of 2012, about 531,000 Israeli Jewish settlers lived in the occupied West Bank (including an estimated 190,000 in East Jerusalem, which

was unilaterally annexed by Israel immediately after the 1967 War). An additional 19,000 settlers reside in the annexed Golan Heights.

Israel considers its population to include all those residing within the 1967 borders, plus all those residing in Jewish settlements in the West Bank (341,400 at the end of 2012), as well as all those (both Jews and Palestinian-Arabs) residing in annexed East Jerusalem and the Golan Heights. By contrast, the international community does not consider the occupied West Bank and the Golan Heights to be part of Israel, nor does it recognize the annexation of East Jerusalem or consider the settler population in the Occupied Territories to be part of Israel. However, because of the way Israel collects and publishes data on its own population, it has not been possible to obtain statistics on all characteristics of the Israeli population that excludes all settlers, especially those residing in East Jerusalem and the Golan Heights. This being the case, the OECD includes a note in all tables pertaining to Israel, which states: "For technical reasons, this table uses Israel's official statistics, which include data relating to the Golan Heights, East Jerusalem and Israeli settlements in the West Bank" (OECD, 2010).

Israel's current territory is divided into six administrative districts plus one "area." Each of the six districts is divided into sub-districts and natural areas (Map 1). At present, there are 15 sub-districts and 51 natural areas (up from 50 in 1995). The districts and sub-districts are defined according to the official administrative division of Israel, which is used by many Israeli ministries and governmental bodies, including the CBS<sup>98</sup>. This report will therefore follow this division, providing most information at the district level.

Four of the districts cover territory entirely within the "Green Line" (the districts of Tel Aviv, Haifa, Central, and the South). The Northern and Jerusalem districts were enlarged following the 1967 war to include the territories Israel unilaterally annexed in the Golan Heights and East Jerusalem. A new "area," called the "Judah and Samaria area" by Israel, and in this report the West Bank, includes the occupied West Bank, but excludes 70 square km that were annexed to Jerusalem<sup>99</sup>. The Israeli Statistical Abstract includes some demographic, social and economic information by districts, treating the West Bank as a district. Likewise, the 20% public use geographic file makes it possible to present and compare the Israeli population by seven districts, thereby enabling us to compare the settler population in the West Bank (not including those in East Jerusalem)<sup>100</sup> to the population in Israel's other six districts, something that has not been done by previous research that had addressed regional inequalities in Israel (Portnov and Erell 2003)<sup>101</sup>.

The occupation, annexation of East Jerusalem and Golan Heights, and the settlement movement, emanating from the 1967 war have all influenced the complex way Israel counts its population. Yet many of the current territorial issues within Israel, especially those pertaining to Israel's Palestinian citizens<sup>102</sup>, have their roots in the 1948 war and its aftermath. This being the case, before turning to describe the demographic and socioeconomic trends in Israel's districts since 1995, the next section provides some necessary historical background focusing on the 1948 war, Israel's land regime and policies, and immigration trends since 1948.

---

<sup>98</sup> Some ministries use other divisions (e.g. municipalities) for some purposes.

<sup>99</sup> Note that Map 1, being an official Israeli map, includes the 1967 borders for most of the West Bank (but not in Jerusalem or the Golan Heights). Other Israeli maps, most notably those available at schools and other state institutions, do not show the 1967 borders between Israel and the West Bank and the Golan Heights.

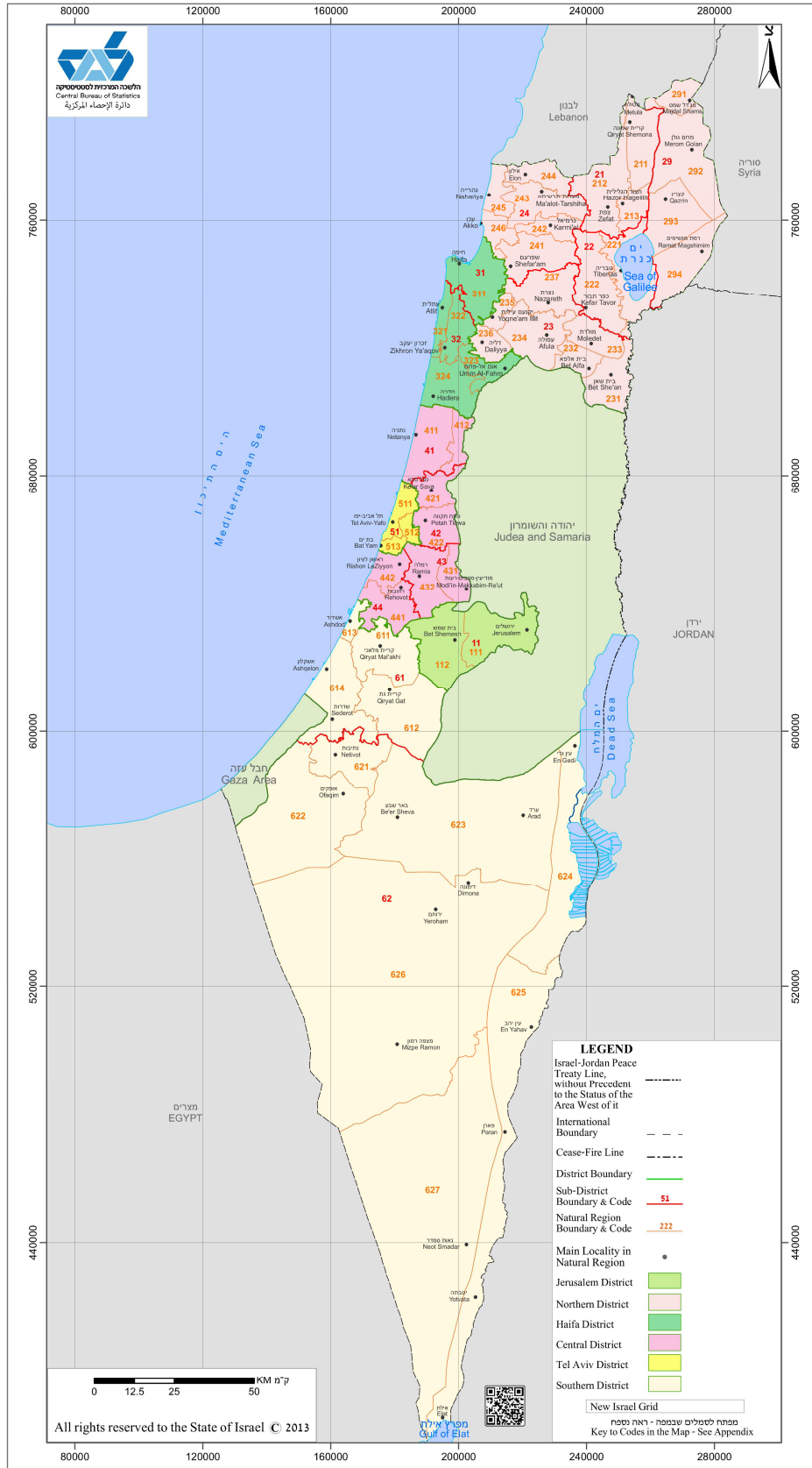
<sup>100</sup> It is not possible, as it is with respect to the West Bank, to provide socioeconomic characteristics for the settler population of East Jerusalem (estimated by Betzelem at the end of 2011 at 190,423) and the Golan Heights (estimated by the CBS [2013] at the end of 2012 at 18,900 (Table 2.16) or 20,200 (Table 2.17). Virtually no data are reported separately in CBS publications or in the geographic public use samples of the censuses for the two parts of Jerusalem.

<sup>101</sup> Until 1996, Israel collected and published some information on the Palestinian population under occupation, a practice that was stopped following the Oslo agreements and the establishment of the Palestinian Authority. This report will therefore not discuss the Palestinian-Arab population of the West Bank, with the exception of those residing in East Jerusalem, nor the territorial disputes over land, water and other resources between Israel and the Palestinian Authority in West Bank.

<sup>102</sup> In the interest of brevity, this reports refers to the Palestinian-Arab citizens of Israel (as well as to the non-citizens Palestinian residents of occupied East Jerusalem) as "Palestinians."



Map 1. Districts, Sub-Districts and Natural Regions



Source: Statistical Abstract of Israel no. 64, 2013 (map 1.1)

## 2. Historical Background

At the end of the 19th century, under Ottoman Empire rule, the territory of Palestine was divided among several administrative districts, notably the Vilayet of Beirut and the Sanjak of Jerusalem. According to Kimmerling (2001: 35), in 1888 Jews composed 6% of the population in the area, holding 0.3% of the land. In 1922, after the occupation of Palestine by the British, the Jewish population comprised 84,000, accounting for 11% of the total population, holding 3.2% of the land. Just before the 1948 war, following waves of Jewish immigration, the Jewish population of Palestine reached 33%, yet still held no more than 7% of Mandatory Palestine's 26.3 million dunams of land. In the territory that would become Israel in 1949, between 780,000 and 900,000 Palestinians<sup>103</sup>, and 630,000 Jews resided in 1947. Major demographic and geographic changes in Israel occurred during the 1948 war and the several years of Israeli state legislation and military actions that followed it. The war reshaped the borders of the new Israeli state as well as the composition of the population and settlements in its territory.

In 1947, just before the war, there were about 350 Jewish settlements and about 700 Palestinian settlements in the territory later to be under Israeli jurisdiction. During the 1948 war, which lasted well into 1949, at least 369<sup>104</sup> Palestinian villages were destroyed and about 750,000 Palestinians were displaced from their land, becoming refugees (Morris 1987). A similar number of Jews, Holocaust survivors and Jews from Arab countries, were brought to Israel during the years 1948-1951. These two shifts completely transformed the demographic, national and ethnic composition of Israel's population, without changing the overall population size, as the new Jewish immigrants "replaced" the displaced Palestinians (Cohen, 2002). During the following 15 years, until 1967, an additional 700,000 Jewish immigrants arrived in Israel, mostly from Arab countries in the Middle East.

Most of the new Jewish immigrants were settled by the new government on lands previously held or used by Palestinians, so that 350 of the 370 new Jewish settlements established soon after 1948 were built upon or in proximity to Palestinian villages that had been vacated during the war (Kedar and Yiftachel, 2006: 137), while 120,000 Jewish immigrants who arrived during 1948-51 were housed in vacant Palestinian houses in cities and villages occupied during the war (Cohen, 2002).

After the 1948 war, about 160,000 Palestinians remained in Israel and received Israeli citizenship. Yet they lost 40-60% of the land they possessed prior to the war (Yiftachel and Kedar, 2006: 139). The war ended with Israel controlling 78% of British Palestine's area. Yet, officially, land owned by Jewish individuals and organizations (notably the Jewish National Fund and the Jewish Agency) amounted to only 8.5% of the area under Israeli jurisdiction (Kedar and Yiftachel, 2006: 138). Adding the land formerly owned by the British Mandate and inherited by Israel, soon after the 1948 war, the state was owner of 13.5% of the land it occupied (Forman and Kedar, 2004). The rest of the land was under Palestinian ownership, but many did not have proper documentation for their ownership. Soon after the war, the State of Israel initiated a 'nationalization' process, during which lands owned by Palestinians were confiscated and transferred either to the Jewish National Fund (JNF) or directly to the hands of the state<sup>105</sup>. This legal and administrative process, which ended in 1960 with the establishment of the Israeli Land Administration (ILA, in Hebrew: Rashut Mekarke'ei Yisrael), made the state the owner of 93% of the land of its judicial territory.

With the establishment of the Israeli Land Administration (ILA) in 1960, the legal process of land confiscation was, for the most part, completed, creating a category of "State Lands" (in Hebrew: admot medina), which referred to all lands that belong either to the state or to the JNF. Any transfer of ownership — except among the partners — was restricted, thus creating a closed reservoir of lands. As late as 2009, the ILA mentioned in its annual report that one of its roles is "to buy lands and to aid the state in confiscating lands by all legal means, including for environmental causes" (ILA 2009). At

<sup>103</sup> See Bachi (1974) for the low estimate and Zochrot (<http://zochrot.org>), based on Abu Sitta (2004) for the high estimate.

<sup>104</sup> Zochrot (<http://zochrot.org>), based on Abu Sitta (2004) lists 530 destroyed Palestinian villages.

<sup>105</sup> Israel applied the law of "Mawat Land" (literally meaning: "dead land"), an Ottoman judicial category which applies to all unregistered, uncultivated lands lacking an ownership that is established by law. The law stated that all such lands belong to the Ottoman Empire. The state of Israel reapplied this category, arguing that all unregistered land which is not cultivated is therefore Israeli land, by virtue of the *Mawat Laws*.

present, The ILA, uniting the territorial assets owned by the state and the Jewish National Fund, manages 93% of the 22 million dunams that are Israel's territory (including East Jerusalem, but not the rest of the occupied West Bank). In other words, the law states that all State Lands, 93% of the Israeli territory, cannot be sold but only leased. Moreover, according to the bi-laws of the JNF, which are applicable to 13% of the "State Lands," leasing land to non-Jews is prohibited<sup>106</sup>. Due to the legal and institutional involvement of the Jewish Agency and JNF (which are not part of the Israeli state, and can therefore follow policies favoring Jews), as well as the total Jewish domination of the land and planning systems, a leading Israeli geographer, Oren Yiftachel (2009), concludes that "Arab citizens are effectively prevented from residing in over 80% of Israel's territory. In those exact same areas, Diaspora Jews can purchase or lease land even if they are not citizens of the state."<sup>107</sup>

Alongside the legal and administrative actions taken to control the land, Israel has aggressively followed a policy of de-facto "Judiazing the land" (Yiftachel 2006). This entailed a twofold strategy of confining the Palestinians in the villages in which they were living and dispersing the Jewish population across space. Initially, many of the immigrants, especially Mizrahim (Jews of Asian or African origin mostly from Arab countries), were dispersed in small agricultural localities ("moshavim") across areas that had been captured during the war and were located in the periphery. A few "development towns" – small cities of less than 50,000 inhabitants – were built nearby the rural moshavim to serve as local urban centers. Failing to develop into economic or cultural centers, development towns – most are located in the Northern and Southern districts – are currently among the poorest Jewish localities in Israel. That nearly 50 years after the end of mass migration from Arab countries, Mizrahim (now mostly second- and third-generation Israelis) are the vast majority of the population in these development towns is an indication that the ethnic cleavage within Jewish Israelis (between Mizrahim and Ashkenazim) is far from over.

That more than 700 new Jewish communities have been established in Israel since 1948, but only a handful of new Arab communities in the South, is one consequence of these laws and policies.

### 3. Israel's settlement map

#### Proletarianization without urbanization

During the 1948 war, Palestinian urban centers such as Jaffa, Haifa, Acre, Lydda and Ramle were severely damaged and depopulated, all of them becoming Jewish cities with a negligible Palestinian minority and no Palestinian economic base. The rural population remaining in Israel did not fare better. After losing lands in the 1948 war and the subsequent confiscation of land by the state, former Palestinian farmers were forced into a rapid proletarianization. With no land to cultivate, the farmer-dominated Palestinian population of Israel has been transformed into a worker-dominated population. Living in densely overpopulated villages (some absorbed Palestinian refugees from other villages), without an industrial infrastructure, they were forced to seek employment outside their villages.

The Palestinian population residing in Palestinian villages in Israel had a high rate of natural increase, so thousands, and in some cases tens of thousands, now populate villages that had a few hundred inhabitants in 1949. Yet due to the ILA national land allocation policy, the municipal boundaries of Palestinian villages have remained largely the same in the past six decades. While these villages are defined by the CBS as "urban" in terms of population size (having more than 2,000 inhabitants), they lack most of the characteristics of urban areas in terms of urban development, infrastructure and cultural and educational institutions. Villages considered to be rural in 1960 became urban only because of natural population growth, without going through a profound urbanization process. They are, in a sense, bloated villages. The proportion of Palestinian Israelis living in "urban localities" increased from 63.6% in 1961 to 94.6% in 2012 (the respective figures among Jews are 87.0% and 90.2%). The only thing this means is that in 2012 the vast majority of Israeli-Palestinians resided in

---

<sup>106</sup> The JNF has recently agreed to sell to non-Jews for a limited time, ahead of a High Court discussion on three petitions calling on the ILA to stop restricting public tenders for JNF land to Jews (Jerusalem Post 6/10/2013).

<sup>107</sup> In 2000 the High Court of Israel ruled that the ILA policy of leasing land only to Jews was discriminatory and illegal, calling for the equal right of all citizens to purchase or lease state land. Yet, as observed by Yiftachel nine years later (2009: 59), "this is yet to have an influence on Arab mobility or spatial equality."

localities (99 out of 135) with more than 2,000 inhabitants (Table 1). Nearly half (47.5%) of Israeli Palestinians (but only 23.3% of Jews) live in localities that have 10,000-50,000 inhabitants (CBS, 2013, Table 2.21). Evidently, the Palestinian proletarianization process lacked essential elements: city migration or urbanization. Palestinian villagers did not migrate to the cities but commuted to Jewish areas looking for employment possibilities.

Table 1. Urban (pop. 2,000 or more) and Rural Localities (pop. less than 2000) by Year

	1961			1995			2012		
	All	Jewish	Palst.	All	Jewish	Palst.	All	Jewish	Palst.
Total	873	771	109	1185	1067	127	1200	1074	135
N of Urban	104	76	34	192	113	87	243	152	99
N of Rural	769	695	75	993	955	40	957	922	36
% Urban Pop	84.3	87.0	63.6	90.9	90.6	91.9	91.4	90.2	94.6

*Source:* Statistical Abstract of Israel no. 64, 2013 (Table 2.21).  
Mixed localities are counted twice: as Jewish and as Arab localities.  
There were 7 mixed localities in 1961 and 9 in 1995 and 2012.

Not only have Palestinians lost most of the land they owned, the land controlled by their municipalities is severely restricted. Currently, about 97% of all Israel's land area is under Jewish municipal control (Kedar and Yiftachel, 2006: 144). Palestinian Israelis, who account for over 20% of Israel's population, control only 2.7% of the state's municipal jurisdictions and hold 3.5% of the land in private ownership and another 0.3-0.5% in leased land (Kedar and Yiftachel, 2006: 135). In the past two decades, many Palestinian localities have applied to the ILA with requests to redraw their municipal boundaries, but most have been left unanswered. As mentioned above, the municipal boundaries of Palestinian localities in Israel have largely remained the same throughout the past 65 years underscoring Israel's policy of uneven land allocation (Kedar and Yiftachel, 2006: 135).

Palestinian villages are not the only localities requesting to enlarge their municipal boundaries. Disputes over municipal boundaries are increasingly common among Jewish localities seeking to increase their tax revenues. Several Mizrahi development towns requested that their municipal boundaries be redrawn to include industrial areas located just beyond their municipal boundaries. Businesses located in these industrial areas, mostly traditional technology manufacturing plants, pay local taxes to other municipalities, while most blue-collar workers in these plants are inhabitants of the Mizrahi development towns. The poverty of development towns is in part due to the demarcation of municipal boundaries that reflect the subordinate position of Mizrahi and their communities in Israel (Azulai et al. 2009).

### "Unrecognized" Villages

The only exception to the ILA policy towards non-Jewish citizens – restricting the development of any new or existing settlement – is the forced relocation of Bedouin in the Negev (Yiftachel, 2009). In 2013, there are about 200,000 Bedouin living in the South of Israel (the vast majority of the 216,200 Palestinians in the Southern district are Bedouin)<sup>108</sup>. About 54,000 of these Bedouin live in an estimated 45 "unrecognized villages," and another 150,000 live in 7 towns (established by the state in the Beer Sheva metropolitan area) and in 11 Bedouin villages which received recognition in the past few years, but are still lacking the infrastructure of recognized localities<sup>109</sup>.

The major consequence of the 'unrecognized' status of the 45 Bedouin villages is their lack of basic infrastructures, such as connection to electricity grids, running water, a sewage system as well as medical clinics and public transportation. A report published by Physicians for Human Rights and the Local Council for the Unrecognized Villages in the Negev in 2008 shows that the state is depriving the

<sup>108</sup> For an official report by the ministry of construction on the demography of the Bedouins (in Hebrew), see [http://www.moch.gov.il/SiteCollectionDocuments/rashut\\_habeduyim/meysda\\_statisti/demographiya.pdf](http://www.moch.gov.il/SiteCollectionDocuments/rashut_habeduyim/meysda_statisti/demographiya.pdf). There is some disagreement about the number of Bedouin in unrecognized villages. See Yiftachel (2013: 8) for a higher estimate.

<sup>109</sup> For a Map of Unrecognized Bedouin-Arab Villages, Newly Recognized Villages and Planned Towns in the Negev, Israel, see: <http://goo.gl/maps/LXJzk>

45 unrecognized villages of these basic services in order to force the Bedouin to move to other “recognized” settlements (PHR, 2008).

The status of “unrecognized villages” is a result of an ongoing land dispute between the State of Israel and the Bedouin. While the latter claim ownership of 550,000 dunam which comprise about 4% of the Negev region, the state claims that these same lands are “State Lands.” The present state policy regarding the Bedouins of the Negev and the unrecognized villages is outlined in the Praver-Begin Plan<sup>110</sup>. The plan seeks to put an end to the land dispute between the state and the Bedouins by deeming their demand for land ownership illegal, based on the 1953 Land Acquisition Law, and offering compensation, in land or money, that does not accord with the claims of the Bedouin citizens. Further, the plan entails the forced transfer of about 30,000 residents of the unrecognized villages into several recognized villages, to be built by the state in a location unspecified at the time of writing. Some of the areas of Bedouin settlement to be evacuated according to the Praver-Begin Plan are already allocated for the development of military bases as well as for several Jewish localities. The land dispute between the State and the Bedouin population of the Negev is currently one of the major areas of Palestinian struggle in Israel<sup>111</sup>.

### Segregation

Segregation by nationality is arguably the most salient feature of the Israeli settlement structure, the vast majority of localities being either Arab or Jewish, and defined as such by the CBS. There is a mixed population of Jews and Palestinians in only nine localities (out of 1,200), five of which were Palestinian cities prior to 1948 and became Judaized: Jaffa, Acre, Lydda, Ramle, and Haifa which was a mixed city before 1948 (and occupied East Jerusalem). Currently, in these cities Palestinian and Jewish families rarely live in the same building, street, or even neighbourhood, and the Palestinian population is a minority. In Tel Aviv-Yafo, for example, commonly known as Tel Aviv, Palestinians are only 6.5% of the total city population, all residing in several neighbourhoods in Jaffa (Yafo). The other mixed localities include Neve Shalom (a small community – the only one in Israel – of Jewish and Palestinian families who are ideologically committed to living together) and Nazareth-Ilit (literally, Upper Nazareth), a development town on a hilltop overlooking adjacent Palestinian Nazareth. It was established in the 1960s as part of a plan to “Judaize the Galilee.” Starting in the 1970s, Palestinians from overpopulated Nazareth and other villages in the area moved to this Jewish town. By the end of 2012, Palestinians are 19.1% of the city’s population of nearly 41,000 (CBS website on communities). Sadly, the mayor of Nazereth Ilit does not view this demographic development as a chance to promote Palestinian/Jewish coexistence in a new mixed city. Rather, he calls to halt Arab immigration to Nazerath Ilit so it will be “Jewish forever” (Haaretz 9.8.2013).

The major areas of Palestinian settlements are in the Northern district of Israel, where 686,900 Palestinian citizens live in 83 localities up from 66 in 1961 (Table 3). The “new” 17 localities are villages that were “unrecognized” in 1961 and became recognized by 2012. As Kedar and Yiftachel explain, the Arab settlement map was “frozen” in 1948 and simultaneously surrounded by Jewish settlements, thus creating a “geography of enclaves” in which the vast majority of Israel’s Palestinian citizens have remained.

The Jewish settlement map, especially in the North, South and the West Bank has thus proliferated. In fact, the number of Jewish localities in Israel, 1,074 in 2012, is among the highest in world given the population size (Tzfadia 2010). Most of the new Jewish localities are neither villages nor cities. The term “village” in Israel is reserved for Palestinian localities. Jewish localities, which are not cities, are classified into *kibbutzim*, *moshavim*, and a new category called “communal localities” (in Hebrew:

---

<sup>110</sup> The plan online (Hebrew):

[http://adalah.org/Public/files/Hebrew/Legal\\_Advocacy/Discriminatory\\_Laws/Praver\\_Plan\\_Bill\\_Hebrew.pdf](http://adalah.org/Public/files/Hebrew/Legal_Advocacy/Discriminatory_Laws/Praver_Plan_Bill_Hebrew.pdf)

<sup>111</sup> Before the establishment of the State of Israel, about 70,000 Bedouins lived in the Negev, but following the 1948 war only 12,000 or so remained in Israel; the rest fled or were expelled across the border to Jordan and Egypt. Under the directives of Israel’s first premier David Ben-Gurion, many of the Bedouins who stayed in Israel were uprooted from the lands they had inhabited in the western Negev and were concentrated in the north-eastern part of the Negev in a mostly barren area known as the *Siyag* zone, where most of the unrecognized villages are (Gordon 2012). Cleared of Palestinian Bedouin, the Negev’s most fertile areas were given in the 1950s to new *kibbutzim* and *moshavim*. It also enables the state to challenge the current Bedouin’s claim that they had lived in the area (of the unrecognized villages) long before the establishment of the state of Israel.

yishuvim Kehilatiyim) which are, in fact, suburbs. Nearly 300 new localities, most of them “communal localities,” were established between 1961 and 1995, about half of them in the occupied West Bank and Golan Heights<sup>112</sup>, and the vast majority of the rest in the Northern and Southern districts. Between 1995 and 2012 the rate of building new Jewish communities declined, at least within the Green Line. Moreover, some Jewish communities in the Tel Aviv district were consolidated, and 21 settlements in the Gaza Strip and 4 in the West Bank were dismantled. Consequently, the number of Jewish localities in 2012 listed in Table 3 (1,074) is only slightly larger than the number in 1995 (1,067). Yet the 2012 CBS figure for the West Bank does not include over 100 “outposts” which are considered “illegal” by the Israeli government, nor about 100 “individual settlements,” some in the North and most in the South which are often populated by one or two families. Since these settlements are smaller than 40 people, they are not recognize as “localities,” and are not included in the locality count by the CBS nor in Table 2. The reason for their establishment (with the assistance of the Jewish Agency and JNF) is primarily to keep lands in the North and especially in the South in Jewish control, lest these lands will be settled by Bedouins (Hamdan 2005).

Table 2. Number of Localities by Nationality, District and Year

	District	All <sup>1</sup>	Jewish	Palestinian
Total	1961	873	771	109
	1995	1185	1067	127
	2012	1200	1074	135
Jerusalem	1961	63	59	5
	1995	68	64	6
	2012	66	63	5
Northern	1961	293	229	66
	1995	407	329	81
	2012	417	337	83
Haifa	1961	97	75	23
	1995	97	75	23
	2012	94	76	19
Central	1961	231	219	14
	1995	233	226	9
	2012	239	232	9
Tel Aviv	1961	20	20	1
	1995	18	18	1
	2012	14	14	1
Southern	1961	169	169	0
	1995	224	217	7
	2012	247	229	18
West Bank	1961	0	0	0
	1995	138	138	0
	2012	123	123	0

Source: Statistical Abstract of Israel no. 64, 2013 (Table 2.16)  
Mixed localities are counted twice: as Jewish and as Arab localities.

There are currently 14 Jewish cities with more than 100,000 inhabitants (Table 3), but only two Palestinian cities with more than 50,000 inhabitants in Israel: Nazareth in the North, and Rahat in the South. Rahat was established by the state in 1972 as part of a national program of resettlement of Bedouins in the Negev. Unlike Nazareth, Rahat lacks most characteristics of a “city.” It received municipal status in 1994 and is ranked in the lowest socioeconomic strata in Israel. Including Nzaareth and Rahat, there are ten Palestinian municipalities in Israel (out of 75 municipalities).

<sup>112</sup> Including 16 settlements that were established after 1967 in the Sinai desert and were dismantled in 1982, following the peace agreement with Egypt.

Segregation of Israeli Palestinians is maintained not only by physical separation but also through three major institutions: the educational system, the military, and the defense/security industry. The Israeli educational system is divided into two main tracks: the Jewish educational system (including secular, orthodox and ultraorthodox schools) where instruction is in Hebrew and the non-Jewish educational system (including the Arab, Druze and Bedouin “sectors”) where instruction is in Arabic. Military service, which is obligatory for all Jewish citizens 18 years of age, is forbidden to most Palestinian-Arab citizens (it is obligatory for Druze, and possible for Bedouins, and recently for some Christians as well). Most Palestinians therefore do not have the necessary background and security clearance to be employed in the many firms that are connected, directly or indirectly, to the large defense security sector of the Israeli economy<sup>113</sup>. Palestinians, on their part, have not demanded to be drafted to the military, nor have they lobbied for the integration of the Jewish and Arab educational systems. Rather, Palestinian Israelis demand that all rights and subsidies be divorced from military service, and that the Arab educational system be run and managed by Palestinian Israelis and receive equal funding per student as the Jewish system.

Table 3. Population (Thousands) in Cities with over 100,000 Inhabitants in 2012

District	City	1995	2012
Jerusalem	Jerusalem <sup>1</sup>	602.7	815.3
Tel Aviv	Tel Aviv-Yafo <sup>2</sup>	409.0	414.6
	Holon	164.5	185.3
	Bene Brak <sup>4</sup>	130.7	168.8
	Ramat Gan	128.7	148.4
	Bat Yam	138.5	129.4
Central	Rishon Lezion	165.2	235.1
	Petah Tikwa	151.3	213.9
	Netania	146.1	192.2
	Rehovot	85.2	120.9
Haifa	Haifa <sup>3</sup>	259.5	272.2
Southern	Ashdod	129.8	214.9
	Beer Sheva	152.8	197.3
	Ashkelon	83.1	120.0

Source: Statistical Abstract of Israel no. 64, 2013 (table 2.24)

(1) Defined as a mixed city, Palestinians (mostly non-citizens) are 38.5% in 2012.

(2) Defined as a mixed city, Palestinians are 6.5% in 2012.

(3) Defined as a mixed city, Palestinians are 20.0% in 2012.

(4) Most residents are ultraorthodox Jews.

Palestinians are not the only segregated population group in Israel. Ultraorthodox Jews, estimated at 10% of the entire population (and 12.5% of the Jewish population) in 2009 (Paltiel et al. 2012), tend to reside in segregated localities or neighborhoods, have their own educational system, and are exempted from military service if they enroll in Yeshiva (higher Jewish religious school). Unlike the Palestinians, the spatial segregation of the ultraorthodox is due to their own volition, they control their own educational system which is well funded by the state, and the state attempts, thus far with only limited success, to draft them to the military. Labour force participation of ultraorthodox men, due to lack of skills and fear of being drafted to the military if they are not in a Yeshiva, is as low as that of Palestinian women. Consequently, despite the many differences between the two communities, Palestinian and ultraorthodox localities and neighborhoods are the poorest in Israel.

#### 4. Demographic Dynamics

According to the CBS, the Israeli population of nearly 8 million at the end of 2012 included 79.4% “Jews and others” and 20.6% “Arabs” (including about 190,000 Palestinian residents of annexed East Jerusalem). “Others” are 338,000 non-Arabs with no religious classification and non-Arab Christians,

<sup>113</sup> There is an important exception: the main economic activity of Druze men (after fulfilling their 3-year compulsory military service) is permanent employment in the military or border police.

most of whom are new immigrants from the former Soviet Union. Since they are “sociologically” Jews, this report follows CBS practice and includes them with Jews in all Tables. The Palestinian-Arab population of Israel is classified by the CBS into the three categories of Muslims, Christian and Druze. Currently 84.2% of Arabs are Muslims, and the proportions of “Arab Christians” and Druze are 7.8% and 8.0%, respectively. The important social group of ultraorthodox Jews, comprising about 12.5% of the Jewish population, is not identifiable in CBS publications and the Census public use files.

While the CBS published data do not report all district-specific statistics separately for Jews and Palestinians, this report does provide such data, for the socioeconomic differences between the two national groups are far greater than the gaps between districts. In fact, many of the regional differences in Israel are driven by the population composition of the various regions. In general, the greater the share of Palestinians, ultraorthodox Jews, and Mizrahi Jews in a district, the poorer the district is and the lower the socioeconomic standing of its population.

### Population Growth

Average annual population growth for Israel for the period 1948-2012 is very high at 3.7%. It was near 8.2% until 1960, when nearly a million new immigrants accounted for nearly two-third of the total population growth. It declined to 1.8% during the 1980s, but rose again to 3.5% during 1990-1995, when 680,000 immigrants came to Israel. Since 1996 immigration declined, bringing down Israel’s annual growth rate to below 2%. Jewish population growth fluctuates with the ebb and flow of immigration waves. Since 1948 immigration was directly responsible for 35.2% of the growth among Jews, while among Palestinians all growth until 1995, and 96.4% since 1995 was due to natural increase (CBS, 2013, Table 2.12).

The CBS does not provide growth data by districts, except for the current year. We used annual data to construct table 4 for the period 1999-2012. The table presents average growth rates for the various districts for Jews and Palestinians, distinguishing between sources of growth: migration balance and natural increase. For Jews, total migration balance is 23.5% of total growth, and the main component in the migration balance is new immigrants who came to Israel during 1999-2012. For Palestinians, who normally cannot immigrate to Israel due to Israel’s immigration laws, total immigration balance for the 14-year period was 3.8% of total growth and the main components are not entirely clear<sup>114</sup>.

Annual average population growth rates for the entire period are higher among Palestinians (2.9%) than among Jews (1.8%), and can be observed in all districts. However, while the Jewish growth rates for 2011 and 2012 are the same as the average for 1999-2012, among Palestinians, the growth in both 2011, 2012 is down to 2.3% reflecting decline in fertility. The two districts/nationalities with the largest growth rates are Southern Bedouins and Jewish settlers in the West Bank, both doubling their population during the 14-year period.

Most of the population growth since 1999, especially among Palestinians, is due to natural increase (births minus deaths) rather than migration balance. Migration between districts is negligible among Palestinians as no more than a few hundreds move between districts each year, with the possible exception of Jerusalem that increased its population by close to 10,000 new migrants since 1999. The Tel Aviv district gained about 1,500 Palestinians due to migration since 1999, which is nearly one third of the total Palestinian growth in Tel Aviv. Jews migrated out of Jerusalem and Tel Aviv, and moved to other districts – most notably the West Bank and the Central district, where migration was responsible for 39.6% and 47.4% of total growth in these districts.

---

<sup>114</sup> The main components among Palestinian citizens are most likely returning Palestinian Israelis from abroad, foreign-born spouses of Palestinian-Israelis who were permitted to immigrate to Israel, and non-Arab Israelis (Jews or “others”) changing their religion to Muslim (most likely following marriages), thereby becoming “Arabs” by Israel’s definition of the “Arab population.” There were 6,000 such persons during 1996-2012.



Table 4. Sources of population growth by District and Nationality, 1999 – 2012

District	Population (thousands) at beginning of period	Population (thousands) at end of period	Total growth (thousands)	Annual average growth <sup>1</sup> %	Migration balance of total growth <sup>1</sup> %
Total Population	6,041.4	7,984.5	1,943.1	2.0%	18.0%
Jerusalem	717.0	987.4	270.4	2.3%	-2.6%
Northern	1,026.7	1,320.8	294.1	1.8%	4.3%
Haifa	788.6	939.0	150.4	1.3%	12.7%
Central	1,358.2	1,931.0	572.8	2.5%	43.4%
Tel Aviv	1,138.7	1,318.3	179.6	1.1%	-13.5%
Southern	840.0	1,146.6	306.6	2.2%	14.0%
West Bank <sup>2</sup>	172.1	341.4	169.2	5.3%	39.6%
Jews, Total	4,936.0	6,337.3	1,401.3	1.8%	23.5%
Jerusalem	516.8	676.7	159.9	1.9%	-10.3%
Northern	509.4	615.6	106.2	1.4%	11.8%
Haifa	624.0	701.8	77.8	0.8%	21.5%
Central	1,251.4	1,772.0	520.6	2.5%	47.4%
Tel Aviv	1,125.2	1,299.8	174.6	1.0%	-14.7%
Southern	737.1	930.4	193.3	1.7%	19.7%
West Bank <sup>2</sup>	172.1	341.0	168.9	5.3%	39.6%
Palestinians, Total	1,105.4	1,647.2	541.8	2.9%	3.8%
Jerusalem	200.2	310.7	110.5	3.2%	8.7%
Northern	517.4	705.2	187.8	2.2%	-0.1%
Haifa	164.6	237.2	72.6	2.6%	3.7%
Central	106.8	158.9	52.1	2.9%	4.1%
Tel Aviv	13.5	18.5	5.0	2.3%	30.2%
Southern	102.9	216.2	113.3	5.4%	4.5%

Source: Our calculations based on CBS Statistical Abstract of Israel, 1999-2012 (tables: 2.13, 2.5, 2.4)

1 Our calculations. Average growth rates are geometric means.

2 Including in 1999 6,100 settlers in Gaza Strip. They were not included in calculating annual average growth for the West Bank. If included, the average annual growth for the West Bank is 5%.

Over 3.2 million of Israel's population in 2012 (40.7%) resided along the coast in the relatively small Tel Aviv and Central districts. However, the population concentration in these districts today is less than it was in 1995 (41.9%) or in 1961 (CBS, Statistical Abstract 2013, Table 2.15), when over half the population resided in these two districts. As the share of the population along the central coast (including Haifa) has declined, other districts' share of the population has increased. Most of the increases since 1961 have been in the South (from 8% to 14.4%, in large part due to the higher fertility rate of Bedouins), Jerusalem (from 9% to 12.4%, in large part due to the annexation of East Jerusalem in 1967), and the West Bank, where 4.3% of the Israeli population resided at the end of 2012, compared to none in 1961 and 2.5% in 1995).

Notwithstanding the lower population concentration along the central coast today than in 1995 (and 1961), Israel continues to support population dispersion, especially to the "periphery" (as the Northern and Southern districts are labelled) and the West Bank. Part of the reason for the Israeli concern with populating the North and Southern districts is the growing population density in the Central district (Table 5). Population density in Israel is among the highest in the world, and the countrywide figure (353 persons per sq. km) is in fact an underestimate because very few Israelis reside in the Negev desert in the Southern district, which comprises nearly two third of Israel's territory. The Israeli concern with population dispersion, however, is motivated primarily by Zionist concerns, namely, the desire to

maintain a large Jewish majority not only in the entire Israeli territory, but in each and every region. Between 1995 and 2012, when the proportion of Jews in the Israeli population declined from 81.0% to 79.6%, the decline was sharper, about 3 to 5 percentage points, in those districts where most Palestinians reside: the South, the North, and Jerusalem.

Table 4a. Population (Thousands and Percentages) by Year, Nationality and District

District	1995				2012			
	All	% in District	% Jews	% Palst.	All	% in District	% Jews	% Palst.
Total	5,619.0	100.0	81.0	19.0	7,984.5	100.0	79.4	20.6
Jerusalem <sup>1</sup>	662.7	11.8	72.7	27.3	987.4	12.4	68.5	31.5
Northern <sup>2</sup>	952.1	16.9	49.4	50.6	1,320.8	16.5	46.6	53.4
Haifa	740.3	13.2	77.7	22.3	939.0	11.8	74.7	25.3
Central	1,213.2	21.6	91.2	8.8	1,931.0	24.2	91.8	8.2
Tel Aviv	1,141.9	20.3	97.8	2.2	1,318.3	16.5	98.6	1.4
Southern	770.2	13.7	85.9	14.1	1,146.6	14.4	81.1	18.9
West Bank <sup>3</sup>	138.6	2.5	100.0	0.0	341.4	4.3	100.0	0.0

Source: CBS Statistical Abstract, 1996 (table 2.5), 2013 (table 2.13)

1 Including Occupied East Jerusalem.

2 Including Occupied Golan Heights.

3 Jewish Settlers in the Occupied West Bank and Gaza Strip (in 1995) and only in West Bank (in 2012).

Table 5. Land Area (km<sup>2</sup>) in 2012 and Population Density (persons km<sup>2</sup>) of Districts by Year.<sup>1</sup>

District	Land Area	Density		
		1972	1995	2012
Total	21,643	154.8	247.4	353.1
Jerusalem	653	554.0	1,035.6	1,512.2
Northern	4,473	142.3	211.4	295.2
Haifa District	866	566.5	860.9	1,084.9
Central District	1,294	466.7	953.2	1,492.1
Tel Aviv	172	5,336.7	6,678.6	7,657.5
Southern	14,185	25.1	53.0	80.8

Source: Statistical Abstract of Israel no. 64, 2013 (table 2.23, table 1.1).

1 The CBS does not provide population density for the West Bank. Land Area includes the occupied Golan Heights (1,154 square km) and East Jerusalem.

### Jewish Ethnicity

In 1947 Mizrahi Jews were about 20% of the Jewish population of Palestine. The immigration waves during 1948-1967 had long-term effects on Jewish ethnicity in Israel. Since Mizrahi immigrants of the 1950s and 1960s were younger and had a higher fertility rate than the Ashkenazim, the proportion of Mizrahim in the Jewish population grew, reaching parity with the Ashkenazim in the late 1960s, and maintaining a slight majority until the 1990s (Goldschider 1996; Cohen 2002). In 1983 first- and second generation Mizrahim and Ashkenazim were 44% and 40% of the Jewish population of Israel, respectively, the remaining 16% being third-generation Israelis of "Israeli origin" (Israeli-born to parents who were also born in Israel) of unknown ethnicity<sup>115</sup>. The proportions of Mizrahim in 1983

<sup>115</sup> Origin is defined in Israeli statistics strictly by one's country of birth, and for the Israeli-born, by the father's continent of birth. The reliance on an objective definition of country of birth as the sole indicator of ethnicity, together with the decision to trace it back only one generation, results in the elimination of Jewish ethnicity from official statistics within two generations, or about fifty years. Whether such administrative "Israelization" affects identities or changes the role of ethnicity in Israel remains to be seen. So far, available evidence suggests that the role of ethnicity has not diminished, at least with respect to voting patterns and, in particular, in determining social and economic standing. Unlike their Jewish counterparts, Israeli Palestinians are unable to attain the status of having an "Israeli origin" no matter how many generations their ancestors have resided in Israel/Palestine.

were lower in the Haifa (34%) and Tel Aviv (39%) districts, and larger in the North (48%) and especially the South (62%) (Sikron 2004).

Table 6. Ethnicity of Jews by Year and District (%)

District / Year	1995	2008
Total	100.0	100.0
Ashkenazim	28.8	24.6
Mizrahim	35.8	26.5
Third Gen & Mixed	22.2	33.0
New Immigrants	13.2	15.9
Jerusalem	100.0	100.0
Ashkenazim	28.7	24.2
Mizrahim	32.2	23.7
Third Gen & Mixed	30.4	39.6
New Immigrants	8.7	12.5
Northern	100.0	100.0
Ashkenazim	24.9	23.3
Mizrahim	37.3	27.5
Third Gen & Mixed	21.3	32.4
New Immigrants	16.6	16.8
Haifa	100.0	100.0
Ashkenazim	35.2	29.6
Mizrahim	29.2	22.2
Third Gen & Mixed	18.7	27.0
New Immigrants	17.0	21.2
Central	100.0	100.0
Ashkenazim	28.5	24.5
Mizrahim	37.3	27.4
Third Gen & Mixed	22.9	33.8
New Immigrants	11.3	14.3
Tel Aviv	100.0	100.0
Ashkenazim	34.3	28.9
Mizrahim	33.9	25.7
Third Gen & Mixed	22.8	32.5
New Immigrants	9.1	13.0
Southern	100.0	100.0
Ashkenazim	17.2	17.7
Mizrahim	46.0	33.1
Third Gen & Mixed	15.0	25.4
New Immigrants	21.8	21.9
West Bank	100.0	100.0
Ashkenazim	29.7	24.8
Mizrahim	27.2	18.2
Third Gen & Mixed	33.6	46.7
New Immigrants	9.5	10.3

Source: Israel Census 1995, 2008 (Public use files – PUF).

Notes. Definitions:

- Ashkenazim: Born in Europe, America or Oceania or born in Israel to at least one parent who was born in Europe/America/Oceania and no parent born in Asia/Africa.
- Mizrahim: Born in Asia or Africa or born in Israel to at least one parent who was born in Asia/Africa and no parent born in Europe/America/Oceania.
- Third Generation & Mixed: Born in Israel to Israeli-born parents or one parent was born in Asia-Africa and the other in Europe-America.
- New Immigrants: Foreign-born who arrived in Israel after 1989.

Until 1995 they were referred to as “non-Jews” and since then as “Arabs,” and they are classified by the CBS according to their religion (Cohen, 2002).

Following the collapse of the Soviet Union, 1.2 million Jewish immigrants and their non-Jewish family members came to Israel between 1990 and 2008, over half of them arrived in Israel before 1996. Most of the immigrants (75%) came from the former Soviet Republics and Ethiopia (7%). Table 6 lists new immigrants as a separate category for they are not yet viewed in Israel as Ashkenazim or Mizrahim according to their continent of birth, nor do their experiences in Israel resemble those of the veteran Mizrahi and Ashkenazi populations<sup>116</sup>; rather, they are referred to in Israel as “Russians” and “Ethiopians.” Excluding new immigrants, the proportions of Mizrahim and Ashkenazim in Table 6 are understandably lower than their share in 1983. However, even if all immigrants are counted as Mizrahim or Ashkenazim by their continent of birth, the combined group of Mizrahim and Ashkenazim (including new immigrants) comprises only 67% of the Jewish population in 2008 (compared with 84% in 1983, and 78% in 1995). The remaining 33% of Jews in 2008 (16% in 1983 and 22% in 1995) were third-generation Israelis (Israeli born to Israeli-born parents), the fastest growing group of Israeli Jews. Third-generation Israeli Jews, whose ancestry is unknown, are younger than other Israeli Jews and therefore comprise a greater share of the population in districts with high fertility rates and large families, namely, Jerusalem and especially the West Bank.

Since educational levels of Ashkenazim are significantly higher than those of Mizrahim, the proportion of Mizrahim in a district is correlated with lower socioeconomic achievements. This is the case in the Southern district where the proportion of Mizrahim is one third of the Jewish population, compared to 18-27% in other districts. Although residential segregation between Mizrahi and Ashkenazi Jews is not nearly as severe as between Jews and Palestinians, many development towns and small localities, especially in the peripheral districts of the North and South are exclusively or almost exclusively Mizrahi.

New immigrants comprised about 16% of Israel’s Jewish population in 2008. They are found in all districts, with the largest proportion (over 20%) in Haifa and the South, and the lowest (10%) in the West Bank, a finding that is consistent with previous research<sup>117</sup>, but not with the popular (and mistaken) belief that new immigrants from the former Soviet Union disproportionately reside in the West Bank. Finally, low-education immigrants from Ethiopia are concentrated in the Southern and Northern regions, while high-education immigrants from Europe and especially America are overrepresented in the Jerusalem and West Bank districts (Cohen 2009).

### Fertility

Israel’s rate of natural increase is among the highest in the developed world. Whether this is due to Israel’s pro-natal policy, is not clear, especially since this policy is limited to Jewish fertility, while Palestinians’ high fertility rate is viewed as a problem<sup>118</sup>. In 2012, the Total Fertility Rate (TFR) for the entire population – the number of children the average woman is expected to have during her childbearing years – was 3.05. There are major differences in TFR by district, but most of the territorial differences are driven by the demographic composition of districts and, among Jews, by level of religiosity.

Figure 1 presents the fertility rate by women’s religion over time. The lowest fertility rate is among Russian immigrants with no religious classification, followed by Palestinian Christians and Druze (each about 8% of the Palestinian population of Israel), who reside mostly in the Haifa and Northern districts. The majority of Palestinians in Israel (84%) are Muslims and they have the highest fertility rate, much of it driven by the extremely high fertility of Bedouins, the most impoverished population group in Israel.

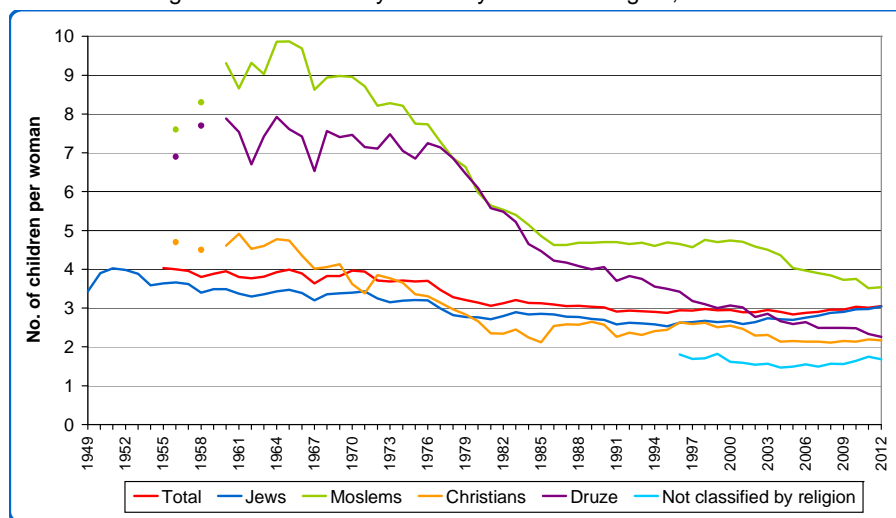
---

<sup>116</sup> Until 1995 new immigrants from the former Soviet Union were classified as being born in Europe, even if they were born in one of the Asian republics of the former Soviet Union.

<sup>117</sup> See Gilis (2009) for the ethnic composition of settlers in the occupied West Bank, Gaza Strip and Golan Heights in 1983 and 1995.

<sup>118</sup> See Sikron 2004 and Goldschider (1996) for Israel’s natality policy.

Figure 1. Total Fertility Rates by mother's religion, 1949 – 2012



Source: CBS Statistical Abstract, 2013 (table 3.13, figure 3.3).

Among Jews, fertility rates are lower in the coastal districts where highly educated secular Jews reside. However, even the lowest Israeli rate in the district of Haifa (2.41) is higher than in other developed countries, which are at replacement level or below. Fertility rates among Jews are particularly high in Jerusalem (4.24) and the West Bank (4.97), where the proportion of very high-fertility ultraorthodox Jews as well as other high-fertility religious Jews is relatively high.

In most countries, including Muslim countries in the Middle East and North Africa, rising women's education, economic development and labour force participation have driven down the birthrate. This appears to be the case in Israel as well, but more so among Palestinians than for their Jewish counterparts. Table 7 presents a steep decline in the fertility of Palestinian women between 1995 and 2012, but not among Jewish women. Among Palestinians, TFR declined from over 4 children per woman in 1995 to 3.32 in 2012. This is to be expected, as the educational attainments of Palestinian women, including Muslims, have risen during this period. Even among high-fertility Bedouin women, the TFR has declined significantly since 1995, although it is still very high in 2012 (5.85). By contrast, among Jews, TFR has increased from 2.62 to 2.95 during this period. The rise among Jews is observed in all districts, and so is the decline among Palestinians.

That Jewish rates have not declined in any of the districts, in spite of impressive increases in the educational level and labour force participation of Jewish women in all districts, could be due to the rise in the proportion of religious and ultraorthodox Jews in all districts. Unfortunately, there are no readily available data for the proportion of religious and ultraorthodox Jews in the various districts, with the exception of the settler population, where most ultraorthodox settlers reside in a few homogeneous settlements (the largest of which are Betar Ilit and Modiin Ilit each with about 50,000 inhabitants). Thus, the increase in TFR in the West Bank, from 4.73 per woman in 1995 to 4.97 per woman in 2012, has been due to the rise in the share of high-fertility ultraorthodox Jews in the settler population, from about 15% in 1995 to about 30% in 2012 (Gordon and Cohen, 2012). In fact, during the past decade, the extremely high fertility rate in the West Bank has been the main source of population growth in the West Bank (Table 4). This is in sharp contrast to the 1980s and 1990s when internal migration from other districts to the occupied West Bank was responsible for most of the increase in the settler population.

Table 7. Total Fertility Rate (TFR) and Infant Mortality Rate by Year, Nationality and District

District		Total Fertility Rate		Infant Mortality	
		1995	2012	1996	2012
Total	Palestinians	4.06	3.32	10.10	6.60
	Jews	2.62	2.95	5.50	2.60
	All	2.94	3.05	6.90	3.60
Jerusalem	Palestinians	4.20	3.55	9.50	5.70
	Jews	3.76	4.24	6.30	2.70
	All	3.91	4.01	7.40	3.70
Northern	Palestinians	3.71	2.72	9.90	4.50
	Jews	2.60	2.68	5.90	2.90
	All	3.22	2.72	8.50	3.00
Haifa	Palestinians	3.52	2.85	10.10	6.00
	Jews	2.13	2.41	5.80	2.70
	All	2.51	2.55	7.70	3.90
Central	Palestinians	4.04	3.32	7.60	6.00
	Jews	2.41	2.69	3.80	2.30
	All	2.58	2.77	4.40	2.70
Tel Aviv	Palestinians	2.29	2.93	3.80	4.70
	Jews	2.34	2.59	5.60	2.30
	All	2.34	2.60	5.60	2.40
Southern	Palestinians	7.33	5.85	13.10	12.00
	Jews	2.73	2.91	6.20	3.50
	All	3.37	3.46	8.10	6.00
West Bank	Jews	4.73	4.97	6.20	2.50

Source: Statistical Abstract for Israel, 1997, Table 3.9; 2013 Table 3.11.  
 Infant mortality rates (per 1,000 births) are average for 1994-96 and 2010-12.

In sum, the level of religiosity, rather than labour force participation rates, ethnicity or educational level, governs most territorial differences in fertility among Jews. Among Palestinians, Christian and Druze have “European” levels of fertility, while Muslim fertility in all districts appears to be in decline (similar to the decline in other Middle East countries, including Palestinians in the West Bank and Gaza), probably due to rising women’s education, and possibly due to recent reductions in economic assistance to families with children. Interestingly, while religiosity is the main variable explaining fertility among Jews, it has modest or no effect on Palestinian fertility (Okun 2013). Should the observed trends in fertility among Jewish and Palestinian women continue, TFR would soon be higher among Jews than among Palestinians, as it is already in the district of Jerusalem. It will take several decades, however, for these fertility changes to significantly alter the proportions of Jews and Palestinians in Israel. In the short run the younger age structure of Palestinian in Israel (median age of 21 among all Muslims and 15 in the South compared with 32 among all Jews and 19 in the West bank) ensures momentum for future growth of the Palestinian population in Israel despite declining TFR<sup>119</sup>.

### Infant Mortality

The infant mortality rate for the entire population has declined by about half, from 6.9 per 1,000 in 1996, to 3.6 in 2012. This figure, however, is an average of the low rate among Jews and very high rates among Palestinians, especially in the Southern district. The rate of decline in infant mortality between 1995 and 2012 was similar among Jews and Palestinians, resulting in persistent gaps over time, with the exception of the Southern district, where the infant mortality rate for Jews declined from 6.2 to 3.5, while the rate for the Bedouin population declined only slightly from 13.1 to 12.0. That the Jewish/Palestinian gaps have remained stable or increased between 1996 and 2012 is surprising and

<sup>119</sup> See Paltiel et al. (2012) for population projections for Israel under various fertility and mortality assumptions.

disturbing. Infant mortality is a major indicator for general health and wellbeing, and the gap between Jews and Palestinians should have significantly narrowed over time, something that has not happened since 1996.

## Education

In developed countries, including Israel, educational levels are arguably the most important indicator for socioeconomic standing. Education is highly correlated with labour force participation, high-status occupations, and earnings, and negatively correlated with unemployment and poverty. Educational levels in Israel are high by European standards, especially among Jews, and they were on the rise between 1995 and 2008. As shown in Table 8, among persons 25-69 years old, the proportion of those with at least a first university degree (BA or equivalent) increased from 19.3% in 1995 to 29.5% in 2008. The proportion of those with less than full high school education decreased during the same period from 32.9% to 17.3%.

The educational levels of the population in the developed districts in central Israel are higher than in the Northern and Southern districts, and not only because Palestinians, with lower education, are concentrated in the peripheral regions (North and South). Even among Jews, the proportion with at least a first university degree, an educational level that has become increasingly necessary to attain many white-collar jobs, is significantly lower in the Northern and Southern districts, the latter in particular. Moreover, measured in percentage points, the gaps in college graduation of the Jewish population of the two peripheral districts (about 25% in 2008) and the other districts (about 35% in 2008) were greater in 2008 (about 10 percentage points) than in 1995 (about 6 percentage points).

**Table 8. Educational Levels of Persons 25-69 years old by Year, Nationality and District (%)**

District		% Less than High-School		% High School <sup>1</sup> but less than BA		% with BA or more	
		1995	2008	1995	2008	1995	2008
Total	Palestinians	62.4	45.8	30.8	41.2	6.8	13.0
	Jews	27.8	11.4	50.8	55.7	21.4	32.8
	All	32.9	17.3	47.8	53.3	19.3	29.5
Jerusalem	Palestinians	56.9	44.1	31.6	39.1	11.5	16.7
	Jews	22.7	7.9	49.0	58.3	28.3	33.8
	All	31.5	18.2	44.6	52.9	24.0	29.0
Northern	Palestinians	64.4	45.2	30.2	41.2	5.4	13.5
	Jews	29.5	12.3	53.8	61.0	16.7	26.7
	All	45.1	28.5	43.3	51.3	11.6	20.2
Haifa	Palestinians	60.7	42.2	32.7	45.4	6.5	12.5
	Jews	27.5	11.9	49.6	54.0	22.9	34.2
	All	33.3	18.3	46.6	52.1	20.0	29.6
Central	Palestinians	61.5	42.3	32.7	47.3	5.8	10.5
	Jews	27.6	11.3	51.2	53.5	21.2	35.3
	All	29.8	13.3	50.0	53.1	20.2	33.6
Tel Aviv	Palestinians	49.5	44.5	38.4	43.3	12.1	12.1
	Jews	28.3	11.1	49.7	52.0	22.0	36.9
	All	28.6	11.5	49.6	51.9	21.8	36.6
Southern	Palestinians	75.9	62.1	20.5	31.1	3.6	6.9
	Jews	32.4	15.3	51.0	60.6	16.7	24.1
	All	35.2	20.6	49.0	57.3	15.8	22.1
West Bank	Jews	11.5	4.0	58.7	62.1	29.8	33.9

*Source:* Israel Census 1995, 2008 (Public use files – PUF).

*Table reads:* in 1995 62.4% of all Arabs had less than high school education, compared to 27% of Jews with less than high school education.

111 and 12 years of schoolings are grouped together in the PUF file. Therefore, this category includes persons with 11 years of schooling, while "less than high school" includes persons with less than 11 years of schoolings.

The educational level of Palestinians, particularly in the South, is much lower than that of Jews. Recall that Jews and Palestinians do not attend the same schools, and that state funding of Jewish schools is more generous than for Palestinian schools. In 1995, nearly two thirds of Palestinians (and 75.1% of Bedouins of the South) had less than high-school education, compared with less than a quarter among Jews. And only 6.8% of Palestinians were college graduates, as compared to 21.4% of Jews. Between 1995 and 2008 the educational levels of both Jews and Palestinians increased, but the gaps remained stable or even increased at the top educational level. Specifically, while the Jewish/Palestinian gap in the rate of high-school dropouts has slightly decreased or remained unchanged, the gaps in college graduation rates of Jews and Palestinians, measured in percentage points, increased from 14.6 points in 1995, to 19.8 points in 2008. Moreover, this growing gap is observed in all districts.

## 5. Economic Activity

Israel publishes a multitude of economic data, including labour force statistics, national accounts, GDP, and the like. However, the CBS or the Bank of Israel rarely presents economic data by districts, let alone for Jews and Palestinian-Arabs separately within districts. There are a few exceptions where data are provided by districts, and they will be discussed below. In addition, we analysed the 20% samples of the 1995 and 2008 censuses to present labour force statistics – labour force participation rates, unemployment, industrial and occupational distributions and commuting patterns of the workforce – by district and nationality.

Israel's total Gross domestic product (GDP) in 2009 was 630 billion NIS, about 70% of it in the business sector (CBS Israeli National Accounts 1995-2011). Between 1995 and 2009 the economy grew by 72% and the business sector by 77%, from 266 to 473 billion (all figures are in 2009 NIS). Available data by district are for the contributions of manufacturing establishments to the business sector. These contributions declined from 24% in 1995 to 21% in 2009. The data presented in Table 9 reveal major shifts in the contributions of the various districts over time. While in Tel Aviv manufacturing's contribution decreased by 24%, it grew by 194% in the Southern district, which by 2009 contributed more than any other district to Israel's manufacturing industries.

Table 9. Gross Value Added: Manufacturing Establishments by District and Year

District / Year	Gross value added Manufacturing (NIS million, 2009 prices)		
	1995	2009	% Change
Total	64,232.1	100,090.8	55.8%
Jerusalem	3,419.2	6,228.7	82.2%
Northern	10,943.8	16,714.8	52.7%
Haifa	9,696.9	14,709.8	51.7%
Central	17,180.4	24,620.7	43.3%
Tel Aviv	13,249.9	10,039.3	-24.2%
Southern	9,001.1	26,350.4	192.7%
Ashqelon Sub-District	3,989.8	17,097.5	328.5%
Be'er Sheva Sub-District	5,011.3	9,252.9	84.6%
West Bank	694.3	1,427.1	105.6%

Source: CBS manufacturing survey 1995, 2009; CBS Israeli National Accounts 1995-2011.

The decline in Tel Aviv was driven by the shift in the Israeli economy from manufacturing to services. The huge rise in the South is primarily due to the Intel Corporation. In 2008 it enlarged an already huge high-tech manufacturing plant in Kiryat Gat, a development town in the northern part of the Southern District, in the Ashqelon sub-district. The manufacturing output of the Ashqelon sub-district, where Kiryat Gat is located, increased from 4 to 9 billion NIS between 1995 and 2006, and from 9 to 17 billion NIS between 2006 and 2009, whereas the contribution of the southern sub-district of the



South (Beer Sheva) remained virtually unchanged between 2006 and 2009 at about 9 billion NIS. Evidently, Intel's plant is responsible for nearly all the rise in the South's output from 2006 to 2009.

Intel's choice to locate its plant in Kiryat Gat is revealing. In order to qualify for the tax breaks provided by the government to large multinational corporations, Intel had to locate its plant in an area approved by the government, generally in the Northern or Southern districts. Although locating the factory in an industrial park south of Beer Sheva or in the Northern district would have been cheaper, there were not enough skilled workers, especially engineers, in these districts to fill the many vacancies in the new plant. The choice of Kiryat Gat, located about 60 km south of Israel's two largest cities, Jerusalem and Tel Aviv (less than an hour's drive), and even closer to Beer Sheva, a city of nearly 200,000 south of Kiryat Gat, solved the labour problem. It enables Intel to recruit workers from the four largest districts in Israel where workers of all skill levels reside.

### High Technology Sector

The Intel factory is considered a high technology manufacturing plant. Israel's high tech sector is considered by many to be the engine of the Israeli economy. In 2007 it contributed 14% to Israel's GDP and accounted for 47% of all exports, up from 8% and 37% in 1995, respectively (Table 10). In 2007 over 1 of 10 Israeli wage earners was employed by a high tech firm in services or manufacturing, a higher proportion than in OECD countries.

Most high tech jobs are in the Central and Tel Aviv districts. In 2007, these two districts employed 48.8% of all salaried workers in Israel, but 61.2% of the workers in the High Tech sector. High Tech jobs are available in the North, Haifa and Southern districts, but less so in Jerusalem and the West Bank.

Table 10. Salaried workers in all sectors and in the High Tech Sector by District of Employment (%)

	1995		2007	
	All Sectors	Hi-Tech	All Sectors	Hi-Tech
Total	100.0	100.0	100.0	100.0
% Palestinians:	13.1	2.7	14.9	4.3
District				
Jerusalem	10.9	8.7	10.2	5.3
Northern & Haifa	25.4	20.3	24.7	21.7
Central & Tel Aviv	48.9	58.2	48.8	61.2
Southern	11.5	11.6	12.5	10.6
West Bank <sup>1</sup>	3.3	1.1	3.8	1.2

Source: Development in the Hi Tech sector in Israel, 1995-2005. CBS Report 1389, 2010, Table 8, 10.

<sup>1</sup> Include "unknown" district

It is unlikely, however, that Intel and other such high tech firms employ many of the poor. Table 10 shows that Palestinians comprised only 4.3% of employees in the High Tech sector, compared with 14.9% in the Israeli economy. As bad as the situation was in 2007, it was not as bad as it had been in 1995 when only 2.7% of Hi Tech workers were Palestinians.

### Labour Force Participation

There are major geographical differences in rates of participation in the labour force. Some of these are no doubt due to educational differences between the districts. In Israel, as in other countries, participation rates are positively correlated with educational levels. Thus, for example, the lower participation rate of Jewish men and women in the South compared to the Central, Tel Aviv, Haifa, and Northern districts is in part due to the lower educational levels in the South.

However, for the most part, the proportion of low-participation Palestinian women and ultraorthodox men in districts is responsible for the differences in inter-district participation rates. In 2008 the participation rate of all Israelis 25-69 years old was 74.1%. This figure, however, is an average of the participation rates of Jewish men (82.8%), Palestinian men (73.0%), Jewish women (75.5%) and Palestinian women (26.1%). The wide gaps in participation rate between Palestinian women and the three other groups are similar across districts. Hence the lowest participation rates in 2008 were in the Northern district (64.9%), where Palestinians are over half the district's population, and in Jerusalem district (65.2%), where Palestinians comprise 31.5% of the population and ultraorthodox Jewish men, another group with a low (but unknown) participation rate, are concentrated.

Table 11. Labour Force Participation, for persons 25-69 by Year, District Gender, and Nationality (% in Labour Force)

District		All		Men		Women	
		1995	2008	1995	2008	1995	2008
Total	Palestinians	49.9	49.7	78.3	73.0	21.0	26.1
	Jews	74.0	79.0	81.9	82.8	66.8	75.5
	All	70.5	74.1	81.4	81.1	60.4	67.4
Jerusalem	Palestinians	44.2	47.0	74.2	77.6	14.2	16.3
	Jews	72.3	72.3	77.0	73.1	68.0	71.6
	All	65.0	65.2	76.2	74.4	54.6	56.3
Northern	Palestinians	50.8	51.0	79.7	72.4	21.3	29.2
	Jews	75.0	78.5	82.6	82.3	68.0	74.8
	All	64.4	64.9	81.3	77.4	48.0	52.7
Haifa	Palestinians	54.3	53.9	83.2	77.1	24.5	30.7
	Jews	73.0	78.5	81.2	83.1	65.6	74.2
	All	69.7	73.3	81.6	81.8	58.8	65.3
Central	Palestinians	54.2	52.4	81.8	74.2	26.2	29.8
	Jews	76.4	82.0	84.0	86.3	69.3	78.0
	All	74.9	80.1	83.8	85.5	66.6	74.9
Tel-Aviv	Palestinians	63.6	64.4	78.9	76.4	49.4	49.1
	Jews	73.7	80.4	83.0	84.3	65.6	76.8
	All	73.6	80.3	83.0	84.2	65.4	76.5
Southern	Palestinians	37.1	35.9	61.4	58.6	12.5	14.8
	Jews	70.4	75.9	79.0	80.2	62.3	71.8
	All	68.2	71.4	77.8	77.7	59.1	65.3
West Bank	Jews	83.9	79.5	87.0	79.2	80.8	79.8

Source: Israel Census 1995, 2008 (Public use files – PUF).

Between 1995 and 2008, the participation rates of Jewish and Palestinian women increased in all districts by 2-11 percentage points. Most impressive is the rise in the rate of participation among Palestinian women in the North (from 21% to 29%) and Jewish women in the coastal districts of Tel Aviv (from 66% to 77%), Central (from 69% to 78%), and Haifa (from 65% to 75%). By contrast, the participation rates among Palestinian men have declined in all districts, while among Jewish men there was virtually no change in the peripheral districts of the North and South, a slight increase of 2 points in the coastal districts, and large declines of 4 and 9 percentage points respectively in Jerusalem and the West Bank, where the proportions of ultraorthodox Jews have significantly increased since 1995. The decline among Palestinian men is most likely due to the aging of the Palestinian male population that tends to exit the labour force at a younger age than Jews, in part because they are employed in physically demanding blue-collar jobs (Sa'di and Lewin Esptein 2001). While the participation rates of women settlers in the West Bank did not change between 1995 and 2008, the decline in the rate of participation among their male counterparts resulted in a unique situation among settlers in 2008, which is typical of ultraorthodox Jews in Israel: women are more likely than men to participate in the labour force.

## Unemployment

In both 1995 and 2008 the unemployment rates in Israel among persons 25-69 years old were relatively low, around 6.1% in 1995 and 5.4% in 2008. In 1995 the South experienced the highest unemployment rate, 8.4%, and in 2008 the highest unemployment rates were in the North (7.4%) and South (6.6%). These higher rates reflect the lack of economic opportunities in these districts, combined with a higher proportion of Palestinians, and people with relatively low education.

In general, women, especially Palestinian women, are more likely to be unemployed than men. In 2008 Palestinian women in the Northern, Haifa, and Southern districts suffered from a double-digit unemployment rate. The high unemployment rates among Palestinian women probably reflect the lack of suitable jobs in Palestinian villages, given cultural norms against commuting outside Palestinian communities to find employment.

Table 12. Unemployment Rate for Persons 25-69, by Year, District, Gender, and Nationality (% Unemployed)

District		All		Men		Women	
		1995	2008	1995	2008	1995	2008
Total	Palestinians	6.17	8.03	5.16	6.38	10.06	12.73
	Jews	6.13	5.09	4.44	4.77	8.05	5.43
	All	6.13	5.43	4.54	5.02	8.15	5.90
Jerusalem	Palestinians	8.48	5.17	7.86	4.84	11.80	6.73
	Jews	5.35	5.09	4.51	4.84	6.23	5.33
	All	5.89	5.11	5.36	4.84	6.58	5.44
Northern	Palestinians	5.42	8.49	4.38	5.91	9.48	15.02
	Jews	6.12	6.65	4.31	5.88	8.19	7.46
	All	5.88	7.37	4.34	5.89	8.43	9.51
Haifa	Palestinians	6.26	5.60	4.71	3.69	11.84	10.45
	Jews	6.80	5.75	4.99	5.35	8.84	6.16
	All	6.73	5.72	4.93	5.00	9.04	6.58
Central	Palestinians	4.23	5.08	3.34	4.37	7.13	6.95
	Jews	5.63	4.43	3.97	4.17	7.55	4.71
	All	5.57	4.46	3.93	4.18	7.54	4.77
Tel-Aviv	Palestinians	7.14	4.54	6.13	4.66	8.65	4.31
	Jews	5.50	4.59	4.24	4.53	6.93	4.64
	All	5.52	4.58	4.26	4.53	6.95	4.64
Southern	Palestinians	8.94	23.11	7.93	22.65	14.06	24.83
	Jews	8.34	5.57	5.38	5.09	11.98	6.10
	All	8.36	6.60	5.51	6.60	12.01	6.59
West Bank	Jews	5.15	5.36	3.59	4.74	6.92	5.99

Source: Israel Census 1995, 2008 (Public use files – PUF).

Palestinian men, with the exception of Bedouins of the South, do not face a greater risk of unemployment than Jewish men. Part of the reason for this seemingly unexpected result is that Palestinian Israelis are willing to take jobs that Jews view as undesirable, mostly low-paying and physically demanding jobs in construction, services and manufacturing. Yet the very high unemployment rate of Bedouin men (about 23% in both 1995 and 2008) suggests that other factors may also be responsible for it, including greater employment discrimination against Palestinians in the South.

## Economic Branches (Industries)

As in most developed countries, the Israeli economy has experienced a shift from manufacturing to services. Between 1995 and 2008 the proportion of the workforce employed in manufacturing industries (including construction) declined from 28.4% to 20.2%, while the proportion in services (both public and business services) increased from 56.4% to 65.5%.

Table 13. Employed persons 25-69, by Economic Branches, Year, Nationality and District (%)

District	Year			2008		
	All	1995 Jews	Palst.	All	Jews	Palst.
Total	100.0	100.0	100.0	100.0	100.0	100.0
Agriculture	2.5	2.4	4.2	2.3	2.3	2.5
Manufacturing	28.4	27.1	39.8	20.2	19.0	29.0
Trade	12.7	12.7	13.2	12.1	11.8	15.1
Business Services	23.3	24.0	16.4	29.6	30.5	22.2
Public Services	33.1	33.8	26.6	35.9	36.5	31.2
Jerusalem	100.0	100.0	100.0	100.0	100.0	100.0
Agriculture	1.1	1.0	1.3	0.9	0.9	0.9
Manufacturing	18.3	15.3	31.7	13.2	10.8	22.1
Trade	10.6	9.3	16.2	10.7	8.8	17.7
Business Services	23.6	23.9	22.5	27.3	26.4	30.6
Public Services	46.5	50.4	28.4	47.9	53.1	28.7
Northern	100.0	100.0	100.0	100.0	100.0	100.0
Agriculture	5.5	6.4	3.8	4.5	5.6	2.5
Manufacturing	37.4	34.2	43.4	28.3	26.3	32.3
Trade	10.2	9.0	12.4	11.0	9.4	14.1
Business Services	15.6	16.5	13.9	21.1	22.2	18.9
Public Services	31.3	33.9	26.5	35.1	36.6	32.1
Haifa	100.0	100.0	100.0	100.0	100.0	100.0
Agriculture	2.1	1.6	5.2	1.6	1.3	3.0
Manufacturing	30.9	29.5	40.6	23.8	22.5	30.6
Trade	12.3	12.4	11.8	12.0	11.6	14.3
Business Services	21.0	21.7	16.3	27.4	28.6	20.6
Public Services	33.6	34.8	26.1	35.3	36.0	31.5
Central	100.0	100.0	100.0	100.0	100.0	100.0
Agriculture	2.4	2.2	7.5	1.5	1.4	4.0
Manufacturing	28.5	28.1	38.0	18.9	18.7	25.7
Trade	13.6	13.6	14.4	13.4	13.3	18.3
Business Services	23.1	23.5	15.0	33.1	33.4	23.0
Public Services	32.4	32.7	25.1	33.1	33.2	29.1
Tel Aviv	100.0	100.0	100.0	100.0	100.0	100.0
Agriculture	0.4	0.4	1.3	0.3	0.3	0.7
Manufacturing	23.1	23.1	31.4	14.1	14.1	19.6
Trade	15.9	15.9	19.7	13.9	13.8	22.9
Business Services	31.4	31.5	23.9	40.5	40.5	35.3
Public Services	29.1	29.2	23.8	31.2	31.3	21.6
Southern	100.0	100.0	100.0	100.0	100.0	100.0
Agriculture	5.1	5.0	9.0	4.9	4.8	5.3
Manufacturing	33.5	33.5	33.4	23.9	23.9	22.8
Trade	10.3	10.4	8.5	11.0	10.9	11.9
Business Services	19.7	19.7	21.3	24.4	24.3	25.5
Public Services	31.4	31.5	27.8	35.9	36.0	34.6
West Bank		100.0			100.0	
Agriculture		2.3			2.9	
Manufacturing		22.3			13.5	
Trade		9.4			8.8	
Business Services		21.2			24.1	
Public Services		44.7			50.7	

Source: Israel Census 1995, 2008 (Public use files – PUF).

The three districts where employment in services is disproportionately high are Jerusalem, Tel Aviv and the West Bank. In Jerusalem, the capital of the State of Israel, 47.9% of the workforce was employed in public services in 2008, mostly in governmental ministries. In Tel Aviv, the financial and economic

centre of the country, private firms in finance, real estate, communication, transport, and other business services employed 40% of the workforce in the same year.

The highest share of employment in public services is in the West Bank, where in 2008, one in two settlers (50.7%) was employed in the public sector, either providing services in the settlers' communities or commuting to public service jobs in the other districts. Even as the Israeli government has been eroding the welfare state, it has been recreating it in the West Bank, providing many services (e.g., smaller classes, after-school programs) and subsidies not available in other districts (Gutwein 2004; Gilis 2009). These services are labour-intensive and require workers that are available in the settlements. Indeed, between 1995 and 2008, the share of the workforce employed in the public sector in the West Bank increased by 6 percentage points, more than in any other district.

Industry differences between Jews and Palestinians declined between 1995 and 2008. For example, in 1995 only 26.6% of Palestinians were public sector employees, compared with 33.8% among Jews, a gap of 7.2 percentage points. By 2008 the gap had declined to 5.3 points. The gaps between Jews and Palestinians are greatest in Jerusalem, where Palestinians are not citizens of the State of Israel and are barred from some government jobs. Although Palestinians and Jews increasingly find themselves working in the same broad economic branches, some of the largest firms that provide the best compensation and working conditions have almost no Palestinian employees, generally justifying it due to "security considerations." For example, there are virtually no Palestinians employed directly by the Israeli Electric Corporation, the Israeli Aerospace Industries, and El Al Israeli Airlines. Put differently, although Jews and Palestinians appear to be working in the same broad economic sectors, they are generally not employed by the same firms, nor, as we discuss in the next section, in the same occupations.

### Occupations

Most of the 3 million workers in Israel's workforce are in white-collar occupations. Table 14 presents the occupational distributions of the Israeli workforce by district for both Jews and Palestinians, for three broad occupational groups: Professional, Technical and Managerial (PTM) workers, other white-collar workers (mostly clerical and sales), and all blue-collar workers. On average, those in PTM occupations enjoy better wages and working conditions than workers in the other two occupational categories. In 1995 the Israeli workforce was distributed equally among these three broad occupational categories. By 2008, the share of blue-collar workers had declined by about 8 percentage points, while the share of PTM and other white-collar workers increased by 7 and 1 percentage points, respectively.

There are some regional differences in the occupational distributions, but they are dwarfed by the differences between Jews and Palestinians within each district. In general, the types of available jobs and the general educational level in a district determine its occupational distribution.

As expected, the peripheral districts in the South and North, where the levels of education are lower and the share of manufacturing industries is relatively large, have the highest proportion of blue-collar workers and the lowest proportion of PTM workers. In both districts about one-third of the workforce is in PTM occupations, and one third in blue-collar jobs. By contrast, 40% or more of workers in the other five districts are PTM workers, and only 17-26% work in blue-collar jobs. The ratio of PTM to blue-collar workers is the highest among the settler population, and it increased between 1995 and 2008, reflecting both the lack of manufacturing jobs and the growing availability of public service jobs in the settlements.

In all districts, about half the Palestinians are blue-collar workers, compared to 16-30% among Jews. By contrast, in all districts except the South, Palestinians are significantly less likely than Jews to be in PTM occupations. The figures for the South, showing similar proportions of Palestinian and Jews in PTM occupations, are surprising. Selectivity to the labour force is responsible for this result. Specifically, the low employment and high unemployment levels among Bedouin men and women (Tables 5 and 6) suggest that many Bedouins either get a "good" PTM public sector job in health,

education or social services, or stay out of the labour force, or try unsuccessfully to get a private sector job.

The Jewish/Palestinian gaps in occupational distributions (“occupational segregation”) have not changed much since 1995. The index of dissimilarity, ranging between 0 (no segregation) and 100 (total segregation), indicates the proportion of Palestinians or Jews who would have to change occupation for the two occupational distributions to be identical. Table 14 reports the value of the index for all districts. The overall level of segregation declined from 29.5 in 1995 to 27.3 in 2008. Segregation is greatest in Jerusalem, where the index has increased slightly since 1995, indicating that the Palestinian population of East Jerusalem is even less integrated in the city now than in 1995. The relatively low occupational segregation in the poor districts in the North and South is not so much due to Palestinian integration in desirable jobs, as to the fact that in these two districts a higher proportion of (lower education) Jews (compared to other districts) are in blue-collar occupations, where most of the Palestinians are, regardless of their district.

Table 14. Occupations of Employed Persons 25-69, by Year, Nationality and District (%)

Year	1995				2008			
	All	Jews	Palst.	Segregation <sup>1</sup>	All	Jews	Palst.	Segregation <sup>1</sup>
District								
Total	100.0	100.0	100.0	29.7	100.0	100.0	100.0	27.3
PTM	32.7	34.1	20.5		39.9	41.5	26.8	
Other WC	33.9	35.5	19.5		35.0	36.4	23.8	
Blue collar	33.4	30.4	60.1		25.1	22.1	49.4	
Jerusalem	100.0	100.0	100.0	36.0	100.0	100.0	100.0	38.1
PTM	38.5	42.7	20.0		42.4	48.0	22.2	
Other WC	34.2	36.7	23.4		33.5	36.2	23.9	
Blue Collar	27.2	20.6	56.6		24.0	15.8	53.9	
Northern	100.0	100.0	100.0	20.3	100.0	100.0	100.0	18.4
PTM	25.6	28.2	20.7		33.8	36.7	28.2	
Other WC	26.9	31.4	18.6		30.6	34.0	24.1	
Blue Collar	47.5	40.5	60.8		35.6	29.3	47.7	
Haifa	100.0	100.0	100.0	29.5	100.0	100.0	100.0	24.7
PTM	34.5	36.6	20.7		39.3	41.4	27.1	
Other WC	32.8	34.5	20.9		34.5	36.1	25.7	
Blue collar	32.7	28.9	58.4		26.2	22.4	47.2	
Central	100.0	100.0	100.0	35.3	100.0	100.0	100.0	33.2
PTM	34.4	35.1	19.6		43.0	43.5	25.2	
Other WC	34.4	35.3	15.5		36.1	36.6	21.7	
Blue collar	31.2	29.6	64.9		20.9	19.9	53.2	
Tel Aviv	100.0	100.0	100.0	29.4	100.0	100.0	100.0	30.2
PTM	34.9	35.1	19.2		44.0	44.1	21.1	
Other WC	39.8	40.0	26.5		39.5	39.5	32.2	
Blue collar	25.2	24.9	54.3		16.6	16.4	46.6	
Southern	100.0	100.0	100.0	21.9	100.0	100.0	100.0	19.9
PTM	25.5	25.6	22.7		32.7	32.8	31.9	
Other WC	30.5	31.0	12.1		34.4	35.3	16.2	
Blue collar	44.0	43.4	65.3		32.9	32.0	51.9	
West Bank		100.0				100.0		
PTM		41.4				48.7		
Other WC		33.5				33.7		
Blue collar		25.1				17.7		

Source: Israel Census 1995, 2008 (Public use files – PUF).

1 Index of Dissimilarity for occupational segregation between Jews and Palestinians. The Index ranges between 100 (total segregation) and 0 (no segregation).

## Commuting

The industry data presented in Table 13 refer to the district of residence of workers and not necessarily to their district of employment. There is a fair amount of between-district commuting in Israel, much of it short distance between adjacent districts. In general, skilled workers tend to commute longer distances than less skilled workers, for the labour market of the former is national rather than local. For many years, this was not the case in Israel. Palestinians residing in the Haifa and Northern districts were commuting to Jewish communities as early as the late 1960s<sup>120</sup>.

Table 15. Percent commuting to work in another district (among total employed) for persons 25-69 by Year, District of residence, Gender, and Nationality

District		All		Men		Women	
		1995	2008	1995	2008	1995	2008
Total	Palestinians	18.1	14.8	20.8	17.4	6.8	7.2
	Jews	18.8	22.1	22.7	26.0	14.4	18.1
	All	18.8	21.3	22.4	24.7	14.1	17.4
Jerusalem	Palestinians	3.6	8.8	4.1	9.9	0.6	3.7
	Jews	6.9	9.7	10.1	14.3	3.6	5.3
	All	6.3	9.5	8.5	12.9	3.4	5.2
Northern	Palestinians	21.6	14.8	25.3	18.1	6.0	6.0
	Jews	11.8	13.7	15.4	17.5	7.6	9.7
	All	15.1	14.2	19.7	17.7	7.3	8.8
Haifa	Palestinians	23.6	23.6	27.3	27.6	8.6	12.8
	Jews	12.2	18.1	15.4	22.7	8.5	13.2
	All	13.6	18.9	17.6	23.8	8.5	13.2
Central	Palestinians	21.5	15.1	23.6	17.5	14.2	9.1
	Jews	33.3	31.4	38.0	34.6	27.7	28.1
	All	32.7	30.8	37.1	33.7	27.4	27.6
Tel-Aviv	Palestinians	8.5	9.3	9.9	11.3	6.3	5.2
	Jews	13.7	20.2	17.8	24.6	9.0	15.5
	All	13.6	20.1	17.7	24.5	8.9	15.5
Southern	Palestinians	7.3	5.4	8.0	6.3	3.2	2.4
	Jews	11.6	12.9	13.9	15.9	8.5	9.8
	All	11.5	12.6	13.7	15.3	8.5	9.6
West Bank	Jews	71.5	56.5	76.5	61.9	65.9	51.0

Source: Israel Census 1995, 2008 (Public use files – PUF).

As late as 1995, Palestinians residing in the Haifa and Northern districts had higher commuting rates than Jews (Table 15). Lack of employment opportunities in Palestinian communities, combined with the proletarianization process that followed the confiscation of their land, forced over 25% of Palestinian men in these districts (but only 15% of Jewish men) to seek (mostly blue-collar) employment in Jewish communities in other districts. By 2008 a lower proportion of Palestinians, especially in the North and Central districts, and a higher proportion of Jews, especially those residing in Haifa and Tel Aviv, crossed district boundaries while commuting to work. Many factors, not mutually exclusive, could have led to this development, including more employment opportunities for Palestinians in the North and Haifa districts (providing services in Palestinian communities to a growing Palestinian population with greater purchasing power than in the past), and improvement in

<sup>120</sup> In the 1950s and early 1960s Palestinians were not allowed to commute unless they had a special permit from the military governor of their area. This restriction was lifted in 1966 with the end of the martial law to which Palestinian citizens had been subject.

roads and public transportation that has enabled skilled Jews to seek employment outside their districts, or to change residences without changing employment.

Both Jews and Palestinians residing in Jerusalem and the South are less likely to commute, while West Bank settlers experience the highest rate of crossing district boundaries. In 1995, when the settler population in West Bank was less than 135,000, 71.5% of them worked within the "Green Line," which means that only 28.5% worked in the West Bank. As the settler population increased, and more workers were needed to fill the public sector jobs that were created in the West Bank (in part to attract Israelis to settle there), the proportion of commuters among them declined, but not by much. As late as 2008, over half the women and nearly two-thirds of the men of the West Bank commuted to Israel for employment. Many commuter-settlers reside in settlements near the 1967 border. They moved to the West Bank not so much for ideological reasons as for the generous subsidies and the availability of cheap housing, while keeping their jobs within the Green Line. Apparently, in 2008 as in 1995, there was not much of a Jewish private economic base in services, manufacturing or agriculture in the West Bank that could provide employment to most of the settlers.

### Household Income

The income information available by districts is for household income from all sources including work, social assistance, and capital income. Households are divided into 20 income groups, each accounting for approximately 5% of the households in 2008. All income figures are expressed in 2008 New Israeli Shekels (NIS). The figures provided in Table 16 are midpoints of the median category for each district.

Table 16. Median Household Income by Year, Nationality and District (all figures are in 2008 NIS).

District / Year		1995	2008
Total	Palestinians	6,990	7,920
	Jews	11,650	14,750
	All	10,090	13,100
Jerusalem	Palestinians	4,270	6,850
	Jews	11,650	13,100
	All	8,540	10,280
Northern	Palestinians	6,990	9,050
	Jews	10,090	14,750
	All	8,540	11,620
Haifa	Palestinians	6,990	9,050
	Jews	11,650	14,750
	All	10,090	13,100
Central	Palestinians	6,990	9,050
	Jews	13,200	18,900
	All	11,650	18,900
Tel-Aviv	Palestinians	6,990	10,280
	Jews	11,650	14,750
	All	11,650	14,750
Southern	Palestinians	5,440	6,850
	Jews	10,090	14,750
	All	8,540	13,100
West Bank	Jews	11,650	14,750

Source: Israel Census 1995, 2008 (Public use files – PUF).



The median household monthly income in Israel was 10,090 NIS in 1995. It increased by 30% to 13,100 NIS (about 2,700 Euro) in 2008. In both years, household income was highest in the Central district and lowest in Jerusalem.

That median household income increased among the settler population during a period in which the proportion of ultraorthodox Jews increased and labour force participation of men decreased, suggests that sources other than labour income are responsible for the rise in their median household income.

Median income tells us about the typical household located in the middle of the distribution. The proportion of households in a district with incomes in the top 10% (decile) of all Israeli households is informative of the inequality level and concentration of wealth and power in the country. By this measure, the Central district stands out as the place where the most affluent Israeli families reside. In 2008, 16.2% of households in this district belonged to the top 10% of all Israeli households.

The median household income of Palestinian families in 1995 (6,990 NIS) was only about 60% of the median income of Jewish households in Israel, and it declined in the following 13 years – in 2008 it was 54%. Median household income among Palestinians is about the same in the North, Haifa and Central districts (about 9,000 NIS in 2008), and much lower (less than 7,000 NIS) in occupied East Jerusalem where most Palestinians are non-citizens, and in the South where the impoverished Bedouin population resides. The ratio of Palestinian to Jewish income varies from 46% in the Southern district to 70% in Tel Aviv district where very few Palestinians reside.

The Jewish/Palestinian gaps in household income are underestimates of the “true” gap in economic wellbeing between the two groups, because they are not adjusted for household size. The average family size of Jews is between 3 and 4 persons, and between 4 and 5 in the West Bank. Among Palestinians the typical family includes between 4 and 5 persons, and over 6 in Bedouin families in the South. Although families and households are not identical, we can safely assume that adjusted for household size, the Jewish/Palestinian income gap is greater in all districts, especially in the South.

#### Computer and Internet in Households

Table 17. Percent Households with Computer or Internet by Year, Nationality and District.

District		Computer		Internet
		1995	2008	2008
Total	Palestinians	9.9	49.8	73.6
	Jews	30.1	75.0	92.9
	All	27.4	70.8	90.6
Jerusalem	Palestinians	3.8	44.6	62.4
	Jews	33.9	69.4	84.7
	All	26.1	62.3	80.2
Northern	Palestinians	10.9	57.1	78.5
	Jews	28.4	75.5	94.1
	All	21.4	67.5	88.4
Haifa	Palestinians	14.5	57.5	77.0
	Jews	28.6	73.5	94.9
	All	26.5	70.5	92.2
Central	Palestinians	12.7	51.8	75.8
	Jews	35.2	79.8	95.2
	All	33.7	78.5	94.6
Tel-Aviv	Palestinians	13.0	54.9	85.3
	Jews	28.4	74.2	93.2
	All	28.2	74.1	93.1
Southern	Palestinians	4.2	23.5	49.9
	Jews	23.3	71.6	92.4
	All	21.9	64.4	90.1
West	Jews	47.8	80.5	86.6

Source: Israel Census 1995, 2008 (Public use files – PUF).

In 2008 most Israeli households had a computer at home, and the vast majority had an internet connection. Specifically, 75% of Jewish and nearly 50% of Palestinian households had a computer. The respective numbers for an internet connection were even higher, nearly 93% among Jews and over 73% among Palestinians. There were no major variations between districts with the exception of Jerusalem and the South, where the penetration of computers lagged slightly behind the rest of the country. The low figures for settlers and Jerusalem Jews are due to the large ultraorthodox community in these districts, which instructs its members, for religious reasons, not to keep televisions, computers and internet connections in their homes. Jerusalem's Palestinians, too, are less likely to have computers and Internet connections, but among Palestinians the reasons are most likely to be economic rather than cultural. Bedouins in the South are least likely of all Palestinians to have computers and internet connections, probably because they are poor, less educated, and suffer from the poor infrastructure in some "unrecognized" Bedouin communities and households that at times are not connected to the electric grid.

## 5. Summary and Conclusions

This report presents and discusses socioeconomic and demographic trends in Israel's seven administrative districts between 1995 and 2012 (depending on data availability, some comparisons use different years). The report follows Israel's definition of its territory and population, which includes not only the territory recognized by the international community but also the entire territory and population of occupied East Jerusalem and the Golan Heights, as well as the Jewish settler population (but not the Palestinian population) in the occupied West Bank. Given the well-known socioeconomic differences between Israel's Jewish majority and Palestinian minority, the data for all districts are presented by nationality (Jewish and Palestinian). One advantage of following Israel's definition of its territory is that it enables a systematic analysis of the socioeconomic and demographic characteristics of the settler population in the West Bank.

The Israeli settlement map is informed by four related features governing Israel's territorial policies. These features are not new. They have been shaping Israeli spatial policies for the past 65 years, as well as Israel's settlement project in much of the Occupied Territories since 1967. The first feature is Israel's attempt to Judaize the land. This is achieved by restricting the creation of new Palestinian localities and the attempt to limit the land under Palestinian control and/or ownership. The nearly total freeze in the Palestinian settlement map since 1949 stands in stark contrast to the proliferation of hundreds of new Jewish localities, especially in the North, South, and the West Bank where Jews are a minority and/or their share of the population has declined in recent years. Indeed, as a result of this land regime, Palestinian citizens of Israel are effectively prevented from residing in most of Israel's territory. The second feature is Israel's goal—even if partially unachieved—to create and maintain a solid Jewish majority not only in the country's entire territory (which by Israel's official definition also includes about 70 squared km of the West Bank [annexed to Jerusalem], and the Golan Heights), but also in each and every district. The third is the extreme territorial segregation between Jewish and Palestinian localities, where over 99% of Israel's 1,200 localities in 2012 are either exclusively Jewish or exclusively Palestinian. Finally, there is a systematic preference of Jewish over Palestinian localities in funds and investment in infrastructure. Much of the social and economic gaps between Jews and Palestinians within Israel's districts as well as the differences among districts discussed in this report are rooted in these four related features, which reflect the policies of the Israeli government.

National (Jewish-Palestinian) differences within districts with respect to indicators of well-being, education, labour force characteristics and income reflect districts' population composition. In general, the higher the proportion of weakened groups in a district (Palestinians and especially Bedouin and non-citizens Palestinians, as well as ultraorthodox Jews and Mizrahi Jews), the higher are rates of infant mortality and the lower the educational, employment and income levels. The findings do not point at a systematic reduction in socioeconomic gaps since the 1990s between districts or between Jews and Palestinians within districts. Rather, some indicators suggest that the gaps have actually widened over time. For example, while infant mortality declined in all districts among both Jews and Palestinians, the gaps have not appreciably narrowed in most districts, and in the Southern district,

where the rates are the highest, the Jewish/Palestinian gap in infant mortality has widened significantly between 1995 and 2013.

Educational level is arguably the most important characteristic for socioeconomic advancement. The Israeli population has made major gains in educational attainment between 1995 and 2008. Gaps in high school graduation between Jews and Palestinians have slightly decreased in all districts, especially in the Northern and Haifa districts. However, gaps between Jews and Palestinians in the proportion of university graduates, the educational level that is increasingly required to join the Israeli middle and upper-middle classes, were in all districts greater in 2008 than they were in 1995. Likewise, among Jews, the gaps in higher education between the peripheral districts of the North and South and the other districts have increased between 1995 and 2008.

The two districts along the coast (Central and Tel Aviv) are more developed economically than the peripheral districts of the South and North, as well as the district of Jerusalem, where ultra-orthodox Jews and non-citizen Palestinians comprise (together) over half of the district's population. Although Israel does not publish GDP data by district, the economic advantage of the Central and Tel Aviv districts is evidenced by their occupational and industrial structures (e.g. a lower proportion of blue collar workers in manufacturing industries), and of course, by the higher educational and income levels of their residents.

Commuting to work to a different district, which was in the past prevalent among less educated Palestinian men from the Northern and Haifa districts who were forced to seek employment outside their districts, is now most prevalent among highly educated Jews, and in particular settlers that tend to commute to workplaces outside the West Bank, reflecting the lack of a Jewish economic base in this district. Settlers' patterns of work are unique in other respects: despite their relatively high level of education, their labour force participation rate is relatively low, reflecting the rising share of ultraorthodox Jews among them (reaching about 30% in 2013). Consequently, in contrast to all other districts, labour force participation rate in the Jewish West Bank is greater among women than men. When they do participate in the labour force, settlers tend to work in the West Bank's well-funded public sector, providing educational and other services to the settler population. Finally, and somewhat surprising, average household income among settlers is as high as in the more affluent districts, probably due to the lack of single person households and transfer income from social programs such as children allowances.

Finally, there were some important demographic trends during the 1990s and 2000s. The highest population growth rates between 1999 and 2012 were in the Jewish settlements in the West Bank and the Bedouin population in the South, both growing at an annual average rate of 5.3%, compared to less than 2-3% among Jews and Palestinian in all other districts. Natural increase explains most of these high growth rates, as the settlers of the West Bank and the Bedouin of the South are young and have extremely high fertility rates. Interestingly, since the late 1990s there is a trend towards convergence in total fertility rate of Palestinians and Jews – the rate has been declining significantly among Palestinians (including those under occupation in the West Bank and Gaza Strip), while it has increased slightly among Jews, probably due to the rise in the share of the ultraorthodox population whose fertility rate is very high. The implications of these divergent trends in fertility for the demographic race between Jews and Palestinians cannot be exaggerated, for in the long run they imply a decisive Jewish majority in Israel's territory even if it includes significant parts of the occupied West Bank, which appears to be the territorial goal of right-wing parties in the government, although not the official policy of the government.

## References

- Azulai, L. V. Dmri Madar, and G. Eliassy-Widerman. 2009. *Municipal Land Jurisdiction: A Mere Economic Issue?* Policy Paper. Jerusalem: The Van Leer Jerusalem Institute
- Abu Sitta, Salman. 2004. *Atlas of Palestine 1948: Reconstructing Palestine*. Palestinian Land Society, UK.
- Bachi, Roberto. 1974. *The Population of Israel*. Jerusalem: the Institute of Contemporary Jewry.
- Hamdan, H. 2005. "The Policy of Settlement and "Spatial Judaization" in the Naqab." *Adalah's Newsletter*, Volume 11, March 2005. <http://adalah.org/newsletter/eng/mar05/ar2.pdf>
- B'tselem - The Israeli Information Center for Human Rights in the Occupied Territories <http://www.btselem.org/jerusalem>
- Central Bureau of Statistics (CBS). different years. *Statistical Abstract of Israel*. <http://www.cbs.gov.il/reader>.
- Cohen, Y. 2002. "From Haven to Haven: Changes in Immigration Patterns to Israel" pp. 36-56 in Levy D. and Y. Weiss (eds), *Challenging Ethnic Citizenship: German and Israeli Perspectives on Immigration*. New York: Berghahn Books.
- Cohen, Y. 2009. "Migration Patterns to and from Israel." *Contemporary Jewry* 29: 115–125.
- Forman, G. and A. Kedar. 2004. "From Arab land to `Israel Lands': the legal dispossession of the Palestinians displaced by Israel in the wake of 1948" in *Environment and Planning D: Society and Space* 22(6) pp. 809–830.
- Gilis, R. 2009. "Now They, Too, are Settlers: the Ethnic Morphology of the Settlements. MA Thesis, Department of Sociology, Tel Aviv University. (Hebrew)
- Gutwein, D. 2004. "Comments on the Class Foundations of the Occupation." *Theory and Criticism* 24: 2013-211 (Hebrew)
- Gordon, N. 2012. *London Review of Books*, Vol. 34: 6, March 2012.
- Gordon, N. and Y. Cohen. 2012. "Western Interests, Israeli Unilateralism, and the Two-State Solution." *Journal of Palestinian Studies* XLI (3): 6-18.
- Kedar, S. and O. Yiftachel. 2006. "Land Regime and Social Relations in Israel". *Realizing Property Rights: Swiss Human Rights Book*. H. de Soto and F. Cheneval. Zurich, Ruffer&Rub Publishing House. 1: 129-146.
- Kimmerling, B. 2001. *The Invention and Decline of Israeliness – State, Society and the Military*. Berkeley: University of California Press.
- Lustick, I. 1980. *Arabs in the Jewish State: Israel's Control of a National Minority*. Austin, Texas: University of Texas Press.
- Morris, Benny. 1987. *The Birth of the Palestinian Refugee Problem, 1947-1949*. Cambridge: Cambridge University Press.
- OECD, 2010. *Review of Labor Market and Social Policies -- Israel*. Paris: OECD Publishing.
- Okun, 2013. "Fertility and marriage behavior in Israel: Diversity, change, and stability." *Demographic Research* 28: 457-504.
- Physicians for Human Rights 2008: [http://www.phr.org.il/uploaded/8\\_febc09.doc.pdf](http://www.phr.org.il/uploaded/8_febc09.doc.pdf)
- Paltiel, Ari, et al. 2012. "Long Range Population Projections for Israel: 2009-2059." Jerusalem: CBS, Demography and Census Department
- Portnov B. and E. Erell. 2003. *Interregional Inequalities in Israel: 1948-1995 Population and Housing Census Data*. Jerusalem: CBS
- Tzfadia, E. 2008. "Geography and Demography: Spatial Transformations". Pp xx in Ben Porat G. et al. (eds). *Israel After 1980*. Cambridge: Cambridge University Press.
- Sa'di and N. Lewin-Epstein. "Minority Labour Force Participation in the Post Fordist Era: The case of Arabs in Israel." *Work, Employment and Society* 15(4), 2001, pp. 781-802.
- Sikron, M. 2004. *Demography: Israel's Population – Characteristics and Trends*. Jerusalem: Carmel.
- Yiftachel, Oren. 2006. *Ethnocracy*, Pennsylvania: University of Pennsylvania Press.
- Yiftachel, O. (2009). "Ghetto Citizenship: Palestinian Arabs in Israel" in Rouhana, N. and Sabagh, A. eds *Israel and the Palestinians – Key Terms*. Haifa: Mada Center for Applied Research.

Yiftachel, O. (2009) "Democracy and the Israeli state" in Encyclopedia of the Israeli-Palestinian Conflict. Ed. Rubenberg, C. Boulder, CO: Lynne Rienner Publishers.

Yiftachel, O. (2013). "The Unrecognized Bedouins space: The development of a strategic issue", In pedazur, R. (ed). The Bedouins in the Negev - strategic Challenge to Israel. Netanya: S. Daniel Abraham Center for Stratigic Dialouge.

## **Occupied Palestinian Territory (OPT)**

by Jane Hilal and Issa Zboun  
April 2013

### ➤ **Technical report - Demography**

#### 1. General Objective

The ESPON ITAN (Integrated Territorial Analysis of the Neighbourhoods, 2012-2014) project will work for two years on building a sustainable database and developing territorial analyses for the European Neighbour Regions (from Morocco to the Russian Federation). Within this geographical framework, the oPt is included in the Mediterranean Neighbourhood.

The data sets covered the data from 1990 to 2011 time period for all the 16 governorates of the oPt.

#### 2. Data collection

The Harmonized datasets for population core data contain the following:

- Population (sex, age, urban and rural)
- Deaths (sex, age)
- Births (sex and by mother age)
- Fertility rate
- Infant mortality (sex)
- Life expectancy (sex)
- Domestic and international migration (sex, age, education level, and cause).

The data were collected according to the three recommendations as follows:

1. Time period coverage: 1990-today ; and only for total population the time period coverage is 1950s-1990 (decades);
2. Territorial units' coverage: governorates;
3. Metadata filling: following recommendations for sources, definitions and explanations about calculation methods whenever needed.

#### 2.1. Data Source

##### Population and Migration data:

Before the first Census conducted by the Palestinian Central Bureau of Statistics (PCBS) in 1997, all the available data related to the total number of population in the occupied Palestinian territory (oPt) are considered in the datasets as following:

- Data for the Years 1950, 1960, 1970, 1980 and 1990 are taken from the Palestine remembered website: PalestineRemembered.com<sup>121</sup>.
- Data for the years 1991 and 1993 was unavailable. No source was found for these data even in the Israeli statistics data.
- Data for the Years 1992, 1994, 1995 and 1996 was taken from the Palestinian Central Bureau of Statistics; these data are preliminary estimates which published in November 1994.

---

<sup>121</sup> PalestineRemembered.com : is a non-profit organization whose main objectives are: 1) To preserve the memories and the experiences of Palestinians around the world, 2) To create an easy medium to present, document, and share experiences among the Palestinian refugees, among others objectives

- Data for the Years from 1997 until 2011, all are taken from the Palestinian Central Bureau of Statistics.

### Demographic data

The Data for the other Demographic data namely; Death, Births, and infant mortality were obtained from the Palestinian Ministry of Health. Whereas the data related to the Life expectancy and Fertility rate were obtained from the Palestinian Central Bureau of Statistics.

### 2.2. Definitions according to the PCBS

- Governorate: Governorates were defined according to the official administrative division of the Palestinian Territory for the end of 1997. There are (16) governorates and each governorate consists of Number of localities.
- Urban: Any locality whose population amounts to 10,000 persons or more. This applies to all governorates/districts centers regardless of their size. Besides, it refers to all localities whose populations vary from 4,000 to 9,999 persons provided they have, at least, four of the following elements: public electricity network, public water network, post office, health center with a full – time physician and a school offering a general secondary education certificate.
- Rural: Any locality whose population is less than 4,000 persons or whose population varies from 4,000 to 9,999 persons but lacking four of the following elements: public electricity network, public water network, post office, health center with a full – time physician and a school offering a general secondary education certificate.
- Camp: It refers to any locality referred to as a refugee camp and administered by the United Nations Refugees and Work Agency in the Near East (U.N.R.W.A.).

### 3. Main Barriers to reliable and available data

The evaluation of Palestinian population data before 1990 presents unique difficulties. Foremost of these is a lack of data. Because of the following reasons:

1. There was no census taken by the Palestinian before 1997 because of the Israeli occupation.
2. Israel didn't transfer the data and information to the Palestinian covering the 46 years of occupation; before the Palestinian Authority took the administration in 1994, as was agreed in Oslo II agreement<sup>122</sup>. In spite of difficulties in data gathering during the period of occupation where Palestinians were prevented from accessing Israeli databases and information, some serious efforts have been made by different governmental and non-governmental institutions to generate Demography data for that period.

### 4. The changes that occurred in dividing the oPt over the last decades

#### 4.1. The Historical Period of Palestine between 1917 and 1948

Over the years, and depending on one's political affiliations, the word "Palestine" has acquired various meanings. Generally, "Palestine" refers to that political unit designated by the British Mandate that took possession of the region from the vanquished Ottoman Empire in the First World War. That 27,090 km<sup>2</sup> area lying between the river Jordan and the Mediterranean Sea is what the word "Palestine" mostly refers to. However, after the 1948 war, Jewish forces took control of 20,700 km<sup>2</sup> and established the State of Israel on that area. Then in 1967, Israel occupied the remainder of the 27,090 km<sup>2</sup> plus the Golan Heights and the Sinai Peninsula. Thus all of "Mandate Palestine" (Map 1)

<sup>122</sup> In 1993, the PLO signed the Oslo Accords with the State of Israel and Oslo II interim agreement signed in September of 1995.

came under Israeli control. In 1988, the Palestinian National Assembly (Parliament in exile) adopted the two-state solution as a settlement of the Palestinian-Israeli conflict and to establish the State of Palestine in the West Bank and Gaza Strip (the two areas occupied by Israel after the 1967 war). Hence, "Palestine" started to refer to the West Bank and Gaza, albeit very few endorsed this definition. With the advent of the Oslo agreements, a new term was added to the conflict's lexicon: "Palestinian Territories". This term came to mean the areas in which the Palestinian National Authority has jurisdiction; that is area "A" and area "B" according to the Oslo Accords. In sum, "Mandate Palestine" refers to the 27,090 km<sup>2</sup> area, the "Palestinian State" refers to the West Bank and Gaza areas as they were before the 1967 war, and the "Palestinian Territories" refer to those areas over which the Palestinian National Authority exercises some level of self-rule. (POICA - ARIJ, 2004)

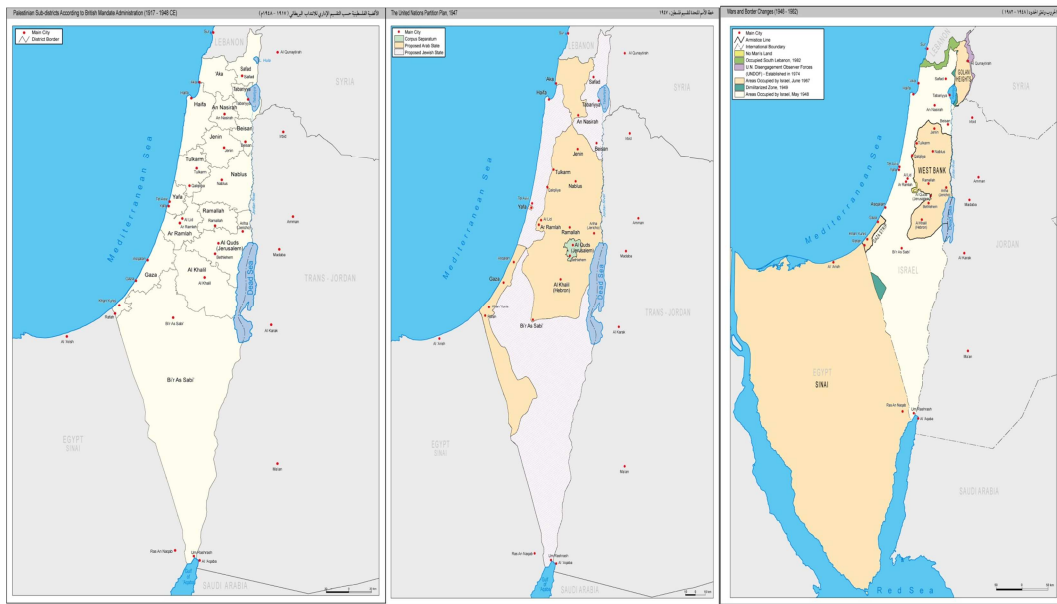
Map 1: Mandate Palestine, West Bank and Gaza Strip





During the World War 1, British forces entered Palestine in October 1917 and defeated Turkish troops. As a result of the war, Palestine was occupied by Britain. On November 2nd, 1917, British responded to Zionist demands through Arthur Balfour, the British Foreign Secretary, by declaring their support for a Jewish homeland in Palestine. This came to be known as the 'Balfour Declaration'. During and after the 1948 war, a transfer policy was carried out and four out of every five Palestinians in the area inside Israel became refugees. At least 418 Palestinian villages were depopulated and demolished. On June 5th, 1967 Israel occupied the West Bank, including East Jerusalem, the Gaza Strip, Sinai and the Golan Heights Map 2.

Map 2: The Historical Period of Palestine between 1917 and 1948



#### 4.2. West Bank and Gaza Strip governorates according to Jordanian and Egyptian Administrations between 1948 and 1967 (Map 3)

*West Bank* was under the Jordanian Administrations and divided into 3 Districts:

- Nablus District which include : Nablus, Jenin, Tulkarm, Tubas, Qalqiliya and Salfit
- Jerusalem District : Jerusalem, Ramallah, Jericho and Bethlehem
- Hebron District

*Gaza Strip* was under the Egyptian Administrations and included : Jabaliya, Gaza, Deir al Balah, Khan Yunis and Rafah

The total number of population in the West Bank for the period 1950-1960 was estimated to 799,000 and in Gaza Strip 302,000 (Palestine remember website: [www.palestineremembered.com](http://www.palestineremembered.com)).

Map 3: West Bank and Gaza Strip governorates according to Jordanian and Egyptian Administrations between 1948 and 1967



#### 4.3. West Bank & Gaza Strip governorates according to Israeli Administration after 1967-1994, (Map 4)

*West Bank* was divided into 8 governorates namely: 1) Jenin and Tubas, 2) Tulkarm, Qalqiliya, and Salfit, 3) Nablus, 4) Ramallah and Al-Bireh, 5) Jericho, 6) Jerusalem (East Jerusalem), 7) Bethlehem, and 8) Hebron.

*Gaza Strip* was divided into and 5 governorates namely: North Gaza, Gaza, Deir al Balah, Khan Yunis, and Rafah.

The total number of population in the West Bank in the 1994 was estimated to 1,395,455 and in Gaza Strip was 842,575 (PCBS, 1994).

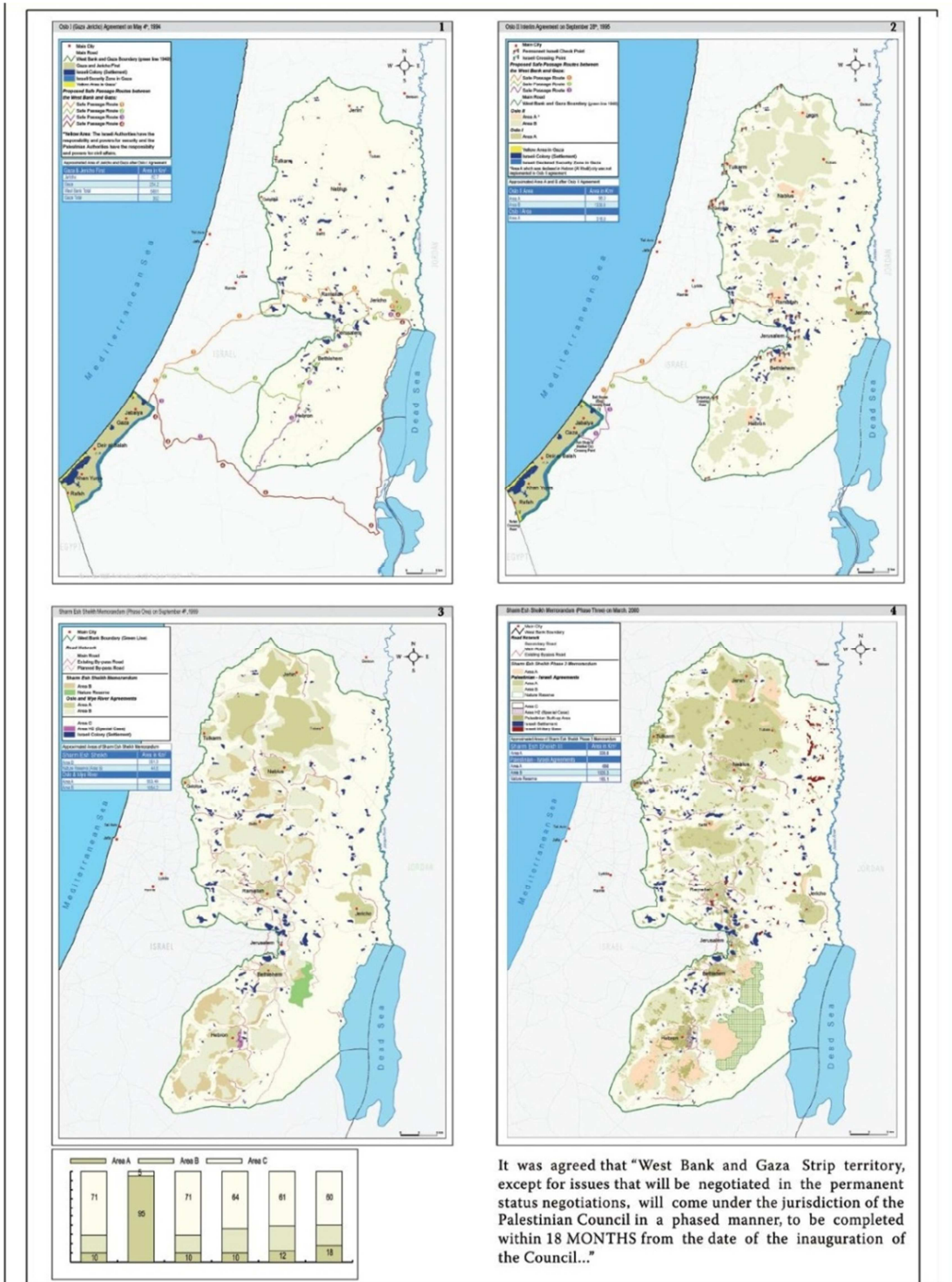
Map 4: West Bank and Gaza Strip governorates according to Israeli Administration after 1967



#### 4.4. West Bank and Gaza Strip governorates according to the Palestinian Authority Administration after 1994

In 1993, the PLO signed the Oslo Accords with the State of Israel, accepting just 22% of Mandate (Historical) Palestine (the West Bank (including East Jerusalem) and the Gaza Strip, as the basis for a Palestinian State, with Jerusalem as its Capital. The "Oslo II" Interim agreement, signed in September of 1995, sets out the interim stage for Palestinian Autonomy in the West Bank and Gaza Strip, pending "final status negotiations" which were scheduled to begin in May 1996 and end by May 1999. Hence, the OPT was divided into Areas "A," "B," and "C," which designate varying levels of control (Map 5) (see Section 5 West Bank and Gaza Strip under the Israeli Occupation for more details

Map 5: oPt after Oslo Agreement

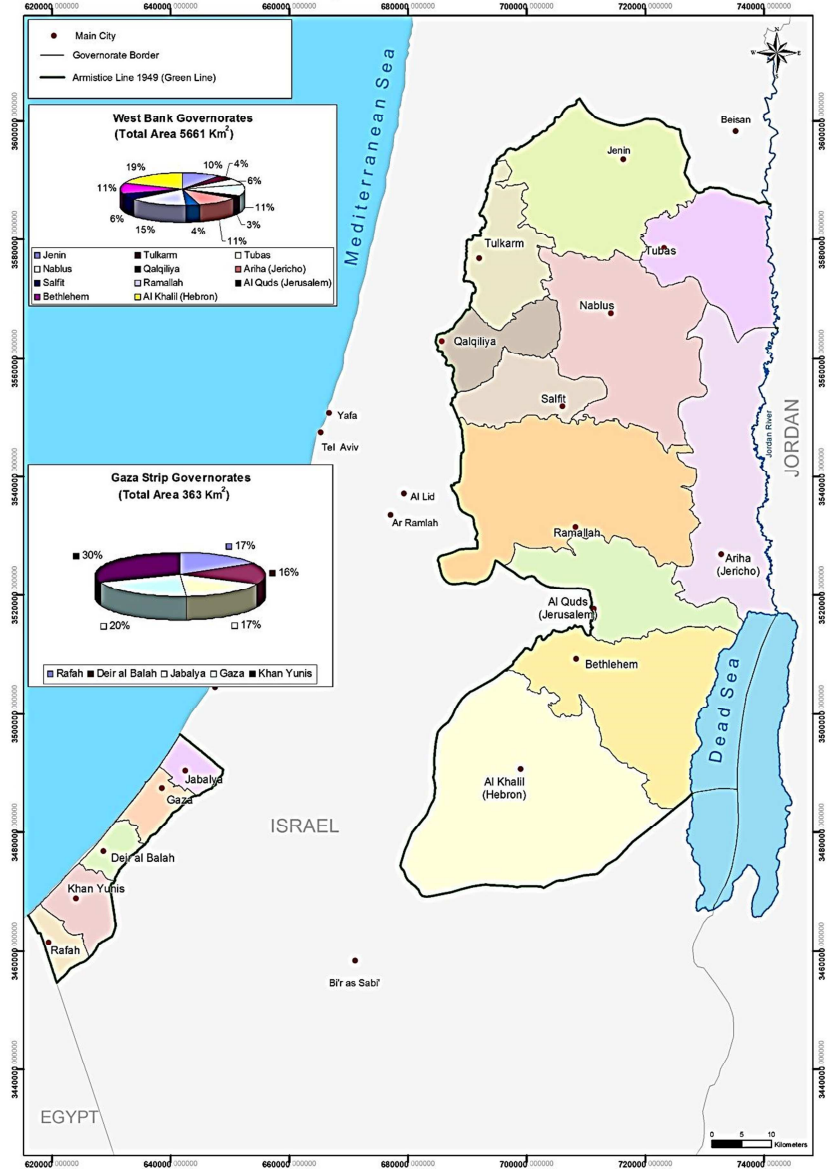


The occupied Palestinian territory (oPt) as it stands today consists of two physically separated land masses, namely the West Bank and Gaza Strip, with a total area of 5,661 km<sup>2</sup> and 362 km<sup>2</sup>, respectively. The total population of the oPt in mid-2011 was estimated at 4.2 million, of which 2.6 million are living in the West Bank and 1.6 million living in the Gaza Strip. The West Bank is

surrounded by Israel to the west, north, south (Green line<sup>123</sup>; and the Jordan River to the east. Gaza Strip is a coastal zone at the eastern extreme of the Mediterranean Sea on the edge of the Sinai Desert. It is surrounded by Israel to the east and north, Egypt to the south and the Mediterranean to the west.

When the Palestinian Authority (PA) take the Administration in the West Bank and Gaza Strip in 1994, It divided the West Bank into eleven governorates namely: Jenin, Tubas, Tulkarm, Nablus, Qalqiliya, Salfit, Ramallah and Al-Bireh, Jericho, Jerusalem (East Jerusalem), Bethlehem, and Hebron. The Gaza Strip was divided into five governorates namely: North Gaza, Gaza, Deir al Balah, Khan Yunis, and Rafah. Map 6 shows the West Bank and Gaza Strip governorates according to the PA.

Map 6: West Bank & Gaza Strip governorates according to the Palestinian National Authority



<sup>123</sup> Green Line After the cessation of hostilities between the Arab countries and Israel in 1948, an Armistice agreement was signed in 1949. The agreement delineated the borders of each party and designated the "No Man's" land between them according to the location of their respective armies. This line demarcated the borders between Israel and the West Bank and Gaza Strip as recognized by the international community. It is worth mentioning here that Israel does not specify the boundaries of its state. Although the line became known later as the "Green line", its proper name is the "1949 Armistice Line" map 3 Shows the Mandate Palestine, west bank, and Gaza Strip.

## 5. West Bank and Gaza Strip under the Israeli Occupation

Since the occupation of the West Bank including East Jerusalem and Gaza in 1967, Israeli governments, regardless of their political affiliation, have supported the construction of settlements and used various methods to amend existing laws to confiscate lands in the West Bank.

Today, there are 179 settlements in the West Bank including East Jerusalem with total area of 189 km<sup>2</sup> in 2011 and with more than 628,000 settlers (ARIJ GIS Department, 2011).

Upon the Israeli withdrawal from the heart of the Gaza Strip in 2005, the main urban areas of Gaza constitute a single territorial unit, with the exception of an unpopulated security buffer zone along the northern and eastern borders of Gaza that remains under the Israeli occupation control. In the West Bank Israel has managed to turn the governorates there into Bantustans only connected through an Israeli controlled (Area C) territory (ARIJ, 2011).

From 1967, Israel's aim has been, not only to control as much empty and vast lands as possible, but also cutting off Palestinian localities and governorates from each other. To this end, in 1991, Israel marked a master plan for every single Israeli settlement in the occupied West Bank, as a precautionary measure to evade eventual implications of the peace negotiations with the Palestinian side. Accordingly, the Israeli settlements in oPt have dramatically increased by more than 600% since 1991 and 2011. In the past two decades the Israeli settlements' built-up areas have increased a 173% (from 69 km<sup>2</sup> in 1990 to 189 km<sup>2</sup> in 2011), exceeding those of the Palestinians in the oPt, that remained pretty much the same. Of course this has led to a rise of the number of Israeli settlers, from 240,000 in 1990 to more than 628,000 in 2011, which represents an increase of 143% (ARIJ GIS Department, 2011).

Nevertheless, distinctions per governorates have to be made, as this is not true for all of them. An analysis conducted by the Applied Research Institute – Jerusalem (ARIJ) in 2010 showed that the Israeli settlements' built-up area exceeded that available for the Palestinians in 5 of the 11 Palestinian Governorates: Jerusalem, Jericho and the Jordan Valley, Qalqiliya, Salfit and Tubas. Furthermore, the Israeli master plan of 1991 allowed the settlers to exceed the Palestinians built-up areas in 8 of the eleven governorates: the 5 mentioned plus Nablus, Bethlehem, and Ramallah (Table 1)

Table 1: Israeli Settlements built-area/ master plans VS Palestinian built-up area in West Bank Governorates

Governorate	Governorate Area (km <sup>2</sup> )	Palestinian Built-up Area (km <sup>2</sup> )	Israeli Settlements Built-up Area (km <sup>2</sup> )	Israeli Settlements Master Plan Area (km <sup>2</sup> )
Jenin	573	28	4	23
Tubas	366	5	8	13
Nablus	614	25	16	26
Tulkarm	245	19	4	5
Qalqiliya	174	8	12	25
Salfit	202	9	18	38
Jericho	609	8	23	77
Ramallah	849	48	31	61
Jerusalem	354	36	41	119
Bethlehem	608	25	18	41
Hebron	1,068	83	14	59
<b>Total</b>	<b>5,661</b>	<b>295</b>	<b>189</b>	<b>486</b>

Source: ARIJ GIS Department, 2010

According to the Interim agreement (Oslo II of the year 1995), the Palestinian territory was divided into areas A, B and C, designating various level of control as shown in Map 5 and Map 7. Area A, designates the Palestinian National Authority (PNA) complete autonomy over administrative and security issues, Area B, granted Palestinians only civil/ administrative responsibilities, whilst in Area C, Israel had full control over this area which constitutes 61% of the total West Bank area. Table 2 clarify the West Bank land classification:

Table 2: West Bank land classification

West Bank Land Classification – Oslo II - 1995	Area in km <sup>2</sup>	% from the West Bank Area
Area A	1,005	17.7
Area B	1,035	18.3
Area C	3,456	61
Natural Reserve Area	165	3
Total area for West Bank	5,661	100
<b>Israeli Build Up Area (in km<sup>2</sup>) in Area C</b>		
Israeli Settlements (within master plan definition)		486
Military Bases		49
Total		535
<b>Palestinian Build Up Area</b>		
	55	

Source: ARIJ GIS Department, 2011

The vast majority of the Palestinian population (83.5%) - live in areas A and B where population density there soars to 8,730 people per km<sup>2</sup> (ARIJ GIS Department, 2010). The vacant land available for construction to cope with the Palestinian population growth and for investment opportunities is situated in the bulk area (61%) of the West Bank defined as Area C that is scarcely populated with Palestinians because of the long term restrictions imposed by the Israeli occupation to any kind of Palestinian development; particularly construction of residential homes. In contrast, the population density of the Israeli settlements in the West Bank stands at 1,160 Israeli settlers per km<sup>2</sup>, according to the Israeli settlements master plan.

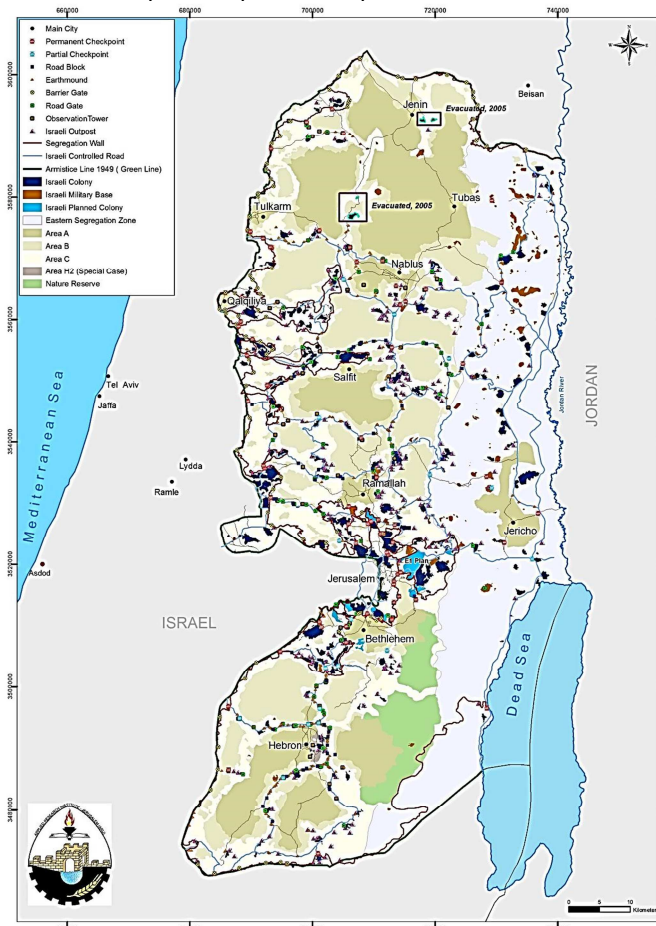
It is easily concluded that both areas A and B (36% of the West Bank) are already congested and the only remaining area available for the Palestinians to realize a sustainable and able state is what defines as area C today; where more than 628,000 Israeli settlers (10%+ of the Israeli population).

Area C constitute a major disruption to any Palestinian plan for state on various levels, most notable of which are sovereignty, contiguity, planning and development, and economically. However, this should not have happened if the terms of the Oslo accord went through as agreed upon, thus Palestinian areas A and B would not have serviced as alternative space to compensate the much needed areas to cope with population growth, or for industrial purposes, waste lands and other uses, which may very much be made available in area C, hence bypassing the negative implications, causing land prices to increase, thus effecting housing cost, and moreover hindering development and investment and employment opportunities.

In addition to the 72 checkpoints, 26 partial checkpoints, 94 road blocks, 163 earth mound, 121 road/ iron gates, 71 watchtowers and 113 Wall/ agricultural gates, (ARIJ GIS Department, 2011) that Israel set-up throughout the West Bank to control Palestinians' movement and life, Israel initiated in 2002 its so-called "defensive" wall, destroying their homes and crop fields and completely disturbing their daily life, as shown in Map 7. By May 2011, Israel had already completed 473 km (61%) of wall, 247 km (32%) are still in the planning-revision stage and 54 km (7%) at the time was under construction. Once completed, the Wall will isolate 66 Palestinian localities (320,601 people), including 30 localities in Jerusalem (274,481 people). In other terms, it will end up isolating 733 km<sup>2</sup> (733 thousands Dunums/73300 hectare) which means 13% of the total area of the West Bank (ARIJ GIS Department, 2011).

The fact that the Palestinian territory has been experiencing occupation for decades, at least since the early beginning of last century, makes it difficult to have a balanced and strategic distribution of services regardless of the population ration or based on the needs of each area. Many sectors within the Palestinian community were literally deprived of essential services, which could only be found in the main urban centers or sometimes not even that.

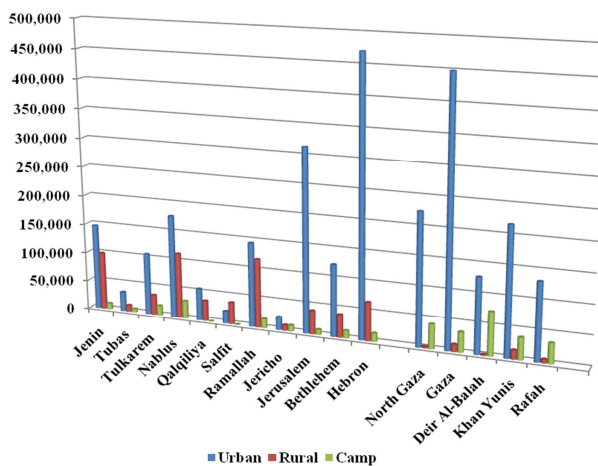
Map 7: Geopolitical Map of the West Bank



## 6. Urbanization

Within the Palestinian context, statistics show that the Palestinian societal development is being “forcibly” urbanized, as almost three-quarters of the oPt inhabitants live in urban areas (69% in the West Bank and 81% in the Gaza Strip) (PCBS, 2009) (Figure 1). According to PCBS (2009) the rate of natural annual growth in the oPt reached 3.3%, and it is considered high when compared with other countries.

Figure 1: Palestinian Governorates According to Locality Type (Urban Vs. Rural vs. Camp) Source: PCBS (2009)

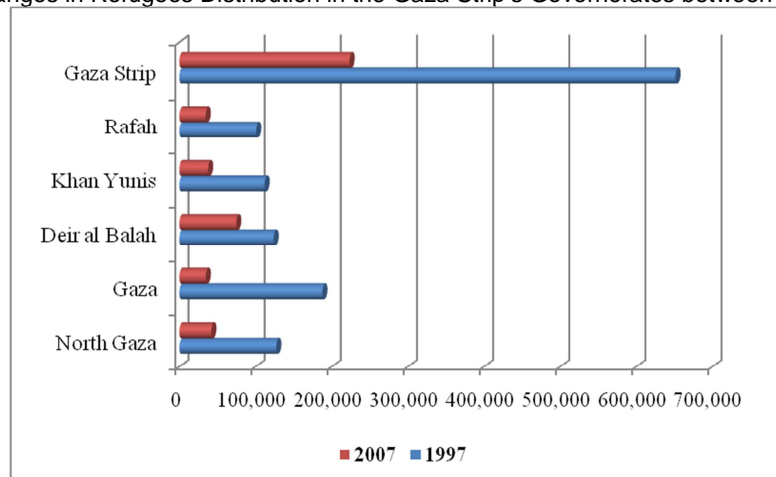




In 1997 the distribution of housing units in the West Bank territory for urban, rural and camps were 48.0%, 45.5%, and 6.5%, respectively (PCBS, 1999). However, this distribution has drastically changed as reported in the PCBS's census for the year 2007, where the housing units for urban, rural and camps became 69.6%, 25.0%, and 5.4%, respectively (PCBS, 2009). This entails that the rate of urbanization in the housing units in the West Bank territory increased by 46% in the rural and camps areas. This reflects the silent rural-urban migration or the geo-demographical disturbance induced in the West Bank (El-Atrash, 2009). A 'housing unit' is a building or part of a building constructed for one household only. The tenure of the housing units has been also changed as the reported household resided in owned housing units for the year 1997 and 2007 were 75.4% and 81.1%, respectively. (PCBS, 1999 & 2009).

By the same token, the Gaza Strip has witnessed an unconventional urbanization trends. In 1997, the population of Gaza Strip calculated about 1 Million in comparison to the year 2007 that calculated 1.4 Million (PCBS, 1999 & 2009). A striking example on the radical change in the urbanization trends in the Gaza Strip is the plummet rates in the numbers of war refugees. The percentage of war refugees of the total population of Gaza Strip in 2007 was 15.77%, in comparison with the year 1997 that calculated 65.12% (PCBS, 1999 & 2009) (Figure 2).

Figure 2: Changes in Refugees Distribution in the Gaza Strip's Governorates between 1999 and 2009



Source: PCBS 1999 & 2009

### 6.1. Limitations on Palestinian Urbanization

Following more than five centuries (1516-to present) of occupation in Palestine it has been unfortunate fact that the development of any kind of state structure in the country has been tabooed. This could explain the Palestinian people's weakened capacity for planning the development of land and resources in a sustainable manner.

The inefficient existing laws, regulations, and decrees which make up the legal planning system in the oPt, include the Ottoman Turks (1516-1917); British Mandate laws (1917-1948); Jordanian laws in the West Bank Governorates and the Egyptian laws in the Gaza Strip (1948-1967); Israeli military orders since 1967; Decrees issued by the PNA since its inception in 1994.

During the period of Ottoman rule in Palestine, a Land Register Law known as the "Tabu" was introduced in 1858 to establish rights of land ownership. Accordingly, the Land Settlement Ordinance to the year 1928 that was introduced during the British Mandate also tried to solidify rights of land ownership (Halabi, 1997). However, both approaches failed to document the situation of land ownership in, what is now the oPt, as the Arab family-based communal farmers who formed the majority of the landowners resisted those systems for several reasons, including: Both systems neglected the tradition of collective ownership adopted by the farmers at those times; and the Turkish

Land Register Law forced high taxes on the registered cultivated lands that were classified as the land of the emirate (El-Atrash, 2007).

Nevertheless, Israel - as a consequence of 1948 war - took control of 78% of Mandate Palestine (ARIJ, 2007). Up until the 1967 war, the West Bank came under the Jordanian administration and Egypt took the overriding responsibility in the Gaza Strip. Since land ownership has always been the key issue in the Palestinian-Israeli conflict, Israel neither recognized nor authorized the traditional communal based system of ownership that had existed for many generations on the land that covered almost the entire Palestinian rural areas.

## 7. Population in the oPt

The political changes and Israeli imposed restrictions have affected all aspects of life for the Palestinian people in the oPt and within the Palestinian Diaspora. The region has witnessed demographic and social changes; as a result of the 1948-war, 78% of Mandate Palestine was taken to form what is presently known as the State of Israel, where around 800,000 Palestinians were evicted from their lands and homes, while Palestinians who stayed in their homeland were effectively naturalized (against their will) (McDowall and Palley, 1987).

The first census of the population in the oPt was done in October 1922, during the British Mandate, and counting about 752 thousand people. The second census conducted By the British in November 1931, where it was counted 1.033 million people. In 1944 a demographic survey showed that there was about 1.74 million people living in oPt. After that and during the Management Hashemite Kingdom of Jordan to the West Bank, population counting were done and counted about 667 thousand people in the West Bank in the census 1952. Another census was done in 1961 and was counted about 805 thousand people in the West Bank.

Then during the Israeli occupation a comprehensive inventory of the population of the West Bank and Gaza was done in September 1967, showing that there were approximately 599 thousand inhabitants in the West Bank and about 400 thousand people in the Gaza Strip. Note that there were about 400 thousand people have been displaced directly from the occupied Palestinian territory after the occupation in 1967 was not covered by this inventory process.

In 1997, the Palestinian Central Bureau of Statistics (PCBS) conducted the First Palestinian Census in the oPt. The results indicated that the actual total population living in the oPt was 2,895,683 inhabitants, of which 1,873,476 inhabitants were living in the West Bank, including East Jerusalem, and 1,022,207 were living in the Gaza Strip.

In 2007, the Palestinian Central Bureau of Statistics (PCBS) conducted the Second Census in the oPt. The results indicated that the estimated total population living in the oPt at the end of 2010 was about 4.1 million inhabitants, of which 2.5 million inhabitants were living in the West Bank, including East Jerusalem, and 1.6 million were living in the Gaza Strip (PCBS, 2010c). Based on the 2007-Census data, the PCBS projected the total population of the oPt until the year 2016. The projected population of the oPt in the mid of 2011 was 4,168,858 inhabitants, with an annual growth rate of 2.9% (PCBS, 2010a est.). Table 3 shows the total number of population in the oPt during the years from 1922 until 2011

Approximately 73.8% of the total Palestinian population were documented in mid- 2011 to be living in urban areas, 16.9% of the population in rural areas and 9.3% in refugee camps (PCBS, 2011a est.). It is noted however that lack of irrigated lands is not the sole reason that has made Palestinians leave agricultural lands (Human Rights Watch, 2010); Israeli occupation practices have also had a major impact on Palestinian emigration, through a number of measures such as forced land grab, annexing of Palestinian lands through the construction of the Segregation Wall and the expansion of the Israeli settlements amongst others

Table 3: Total population in the oPt during the years from 1922 until 2011

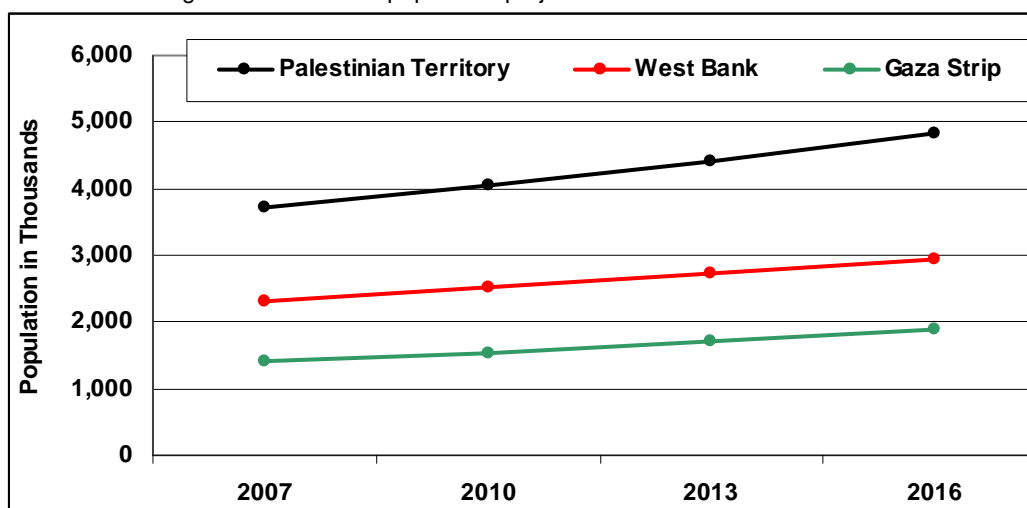
No.	Year	Population in the oPt	Population in the West Bank	Population in Gaza Strip
1	1922	752,000		
2	1931	1,033,000		
3	1944	1,740,000		
4	1952		667,000	
5	1961		805,000	
6	1967*	999,000	599,000	400,000
7	1970	1,045,000	677,000	368,000
8	1980	1,461,000	964,000	497,000
9	1990	1,599,700	957,000	642,700
10	1997	2,895,683	1,873,476	1,022,207
11	2007	3,767,122	2,350,583	1,416,539
12	2010	4,108,631	2,546,725	1,561,906
13	2011	4,168,858	2,614,594	1,616,490

Notes. \* year 1967 : the total number of population in the West Bank is less than the year before 1961 that's because there were about 400 thousand people have been displaced directly from the occupied Palestinian territory after the occupation in 1967 was not covered by this inventory process.

### 7.1. Population Projections

According to the PCBS projections, the population of the oPt increased by 12.1% for the period 2007-2011. In the West Bank, the population increased by 11.0% and by 13.8% in the Gaza Strip. The projection indicated that the Palestinian population will increase to reach 4.8 million by the year 2016; with an increase of about 29.5% between 2007 and 2016. The projection indicated that the population will reach 2.9 million in the West Bank and 1.9 million in the Gaza Strip by 2016 with an increase of 26.3% in the West Bank and 34.8% for Gaza in the same period. (Figure 3.1.1.2) This population growth will have a significant impact on the quality of life-style and rights' protection of a number of Palestinians within the oPt. For example, services will be stretched, resources limited and poverty potentially increased (if adequate economic systems are not put in place to ensure financial growth matches population increase).

Figure 3: Palestinian population projection in the oPt from 2007-2016



Source: (PCBS, 2007)

According to PCBS data, the growth rate in the oPt reached 2.9% in the mid- 2010. This percentage is high compared to other countries. The crude birth rate reached 32.8 births per 1,000 people and the crude death rate reached 4.1 deaths per 1,000 people in 2011 (PCBS, 2010a). Gaza Strip had the highest rates at 29.2 per 1,000 live births compared to the West bank at 22.1 per 1,000 live births (PCBS, 2011b)

Fertility rate is declining in both the West Bank and the Gaza Strip, but still considered relatively high. The total fertility rate in the oPt declined from 4.6 in 2007 to 4.2 in 2010. In the West Bank, the fertility rate was 4.2 in 2007 and down to 3.8 in 2010. In Gaza Strip, it was 5.4 in 2007 and decreased to 4.9 in 2010 (MoH, 2008; 2011). The fertility rate is high in the oPt, which is due to a variety of cultural factors, such as son preference, early marriage and a low percentage of women in the labour force (PCBS, 2010b).

Within the last 4 years the life expectancy increased from 70.2 years in 2007 to 72.2 years in 2010 (MoH, 2011). The average life expectancy at birth for Palestinians increased to reach 70.8 years for males and 73.6 years for females in 2010 (PCBS, 2010d). In comparison with the world average, which for 2009, is set at 69; the oPt clearly fares better (World Bank, 2010).

## 7.2. International and Domestic migration

Dynamic changes have affected the Palestinian community since the beginning of the Palestinian-Israeli conflict

Many Palestinians forced to leave their homes have taken residence or refuge in neighbouring Arab states. The West Bank has been greatly affected by emigration of its population. These trends are, however, difficult to study due to lack of comprehensive data.

According to a BADIL study conducted in the period between 2010 and 2012, the total number of displaced Palestinians by the end of 2011 was at least 7.4 million, which represent 66% of the entire Palestinian population (11.2 million) worldwide. Among them were:

- 5.8 million Palestinian 1984 refugees; 4.8 million are registered for assistance with the UN Relief and Works Agency for Palestinian refugees (UNRWA), and one million unregistered refugees.
- More than one million refugees were displaced in 1976 and;
- 519,000 internally displaced persons on both sides of the Green Line (1949 armistice line)

As a result, Palestinian refugees are the largest (and longest standing) single group of refugees in the world. Moreover, PCBS statistical data also shows that refugees in the oPt constitute 44.0% of the total Palestinian population in the oPt. These refugees were recorded as being distributed in the following regions; 60.4% living between Jordan, Syria, Lebanon, 16.3% in the West Bank, and 23.3% in Gaza Strip (PCBS, 2011e). Furthermore, approximately 29.4% of Palestinian registered refugees live in the 58 refugee camps, of which 10 are in Jordan, 9 in Syria, 12 in Lebanon, 19 in the West Bank, and 8 in Gaza Strip (PCBS, 2011d).

The Palestinian population all over the world was estimated at the end of 2010 to total around 10.97 million, compared with 10.1 million at the end of 2006; distributed across the oPt, Israel and abroad (PCBS, 2010a est.). 37.5 % of Palestinians live in the oPt; 62% of which live in the West Bank and 38% in the Gaza Strip, 44.4% lives in Arab countries, 12.4% inside the Green Line, and 5.7% lives in foreign countries (PCBS, 2010a est.).

In terms of emigration, the PCBS provides the following data; Tables 4 and 5:

Table 4: Number of Emigrants and Returnees, 2005 – 2009

Year	Returnees	Emigrants
2005	7,077	5,841
2006	6,054	5,205
2007	5,000	7,290
2008	5,854	7,390
2009	6,426	7,122

Source: PCBS, 2009a

Table 5: Percentage and distribution of Palestinian Emigrants by Year of Emigration and Sex, 2010

Year of Immigration	Sex		
	Females	Males	Both Sexes
Before 2000	55.8	48.3	51.2
2000 – 2004	16.4	15.5	15.9
2005 - 2010	22.6	32.2	28.4
Not Stated	5.2	4.0	4.5
Total	100	100	100

Source: PCBS, 2011c

This highlights more clearly the extent of emigration and the scale of the Palestinian Diaspora. Unfortunately the national statistic database provides emigration figures by broad time frames and one cannot see in a more disaggregated sense where fluxes of emigration occurred. For example, it would be interesting to see in further details, which specific times (which months/years) emigration peaked at in the pre-2000 period<sup>124</sup>.

The internal movement or migrations of Palestinians between the West Bank and Gaza is extremely limited, given the geographical separation and the policies of Israeli occupation. Very limited percentage of Palestinians living now in Gaza Strip had previous place of residence in the West Bank and vice versa. Most of the internal migration of the population is within the same governorate from villages to the main cities, and to nearby ones.

Regarding main causes of internal migration are, to improve living conditions, lack of job opportunities, for education and studying and for marriage purposes.

## 8. Data Reliability

Census during the Mandate period: Data regarding the Palestinian population are limited and estimated in most of the census during the Mandate time. However these data are sufficient to provide reasonable approximations of total Palestinian population.

The most valuable data on population come from the census taken by the British in 1931. It provides the sort of data needed for accurate demographic calculation, and the statistics are more reliable than any others taken in Ottoman or Mandate times (Palestine remember website: [www.palestineremembered.com](http://www.palestineremembered.com)). Another Mandate census, that of 1922, is both less accurate and less detailed, and thus is of less value. (Palestine remember website: [www.palestineremembered.com](http://www.palestineremembered.com)).

The quality of Mandate statistics declined after the 1931 census. Civil unrest, followed by World War II, made it impossible for the British to take another census. They were forced to adopt unreliable statistical procedures, such as estimating the total population by adding registered births and subtracting registered deaths. Because neither births nor deaths were properly recorded, the results were unsatisfactory (Palestine remember website: [www.palestineremembered.com](http://www.palestineremembered.com)).

Census during the Israeli occupation: After 1948, the statistical situation deteriorated even further in the West Bank and Gaza Strip. The Jordanians took censuses of the West Bank in 1952 and 1961. The second was more complete than the first, but neither was complete. Gaza's citizens were not enumerated between 1931 and 1967, when the Israelis made a census of both Gaza and the West Bank.

The Israeli census in 1976 provided the most valuable data yet collected. Israeli demographers have made valuable surveys and studies of demography and fertility in West Bank and Gaza Strip. Israeli counts of Palestinians within the 1948 borders are accurate, given the usual limitation of any census taking.

<sup>124</sup> This is of obvious interest as this is the period of great geographical and territorial change and political challenges (i.e. notably, the 1967 war, the first intifada, and physical changes in the Palestinian territory)

Enumerating Palestinian numbers after 1948 is a difficult proposition. In order to know the numbers of any population accurately, the population must be counted, and the Palestinians outside Mandate Palestine borders were counted poorly and sporadically. Often, Palestinians arrived in countries, including most of those in the Middle East immediately after 1948, which did not take accurate censuses. Political situations made the picture all the more obscure. Some who estimated the Palestinian population greatly over - or underestimated numbers in accordance with the estimators' political intentions.

After 1967 No census was taken.

Census after the Palestinian Authority: When the Palestinian Authority take the administration in West Bank and Gaza Strip in 1994, it established the Palestinian Central Bureau of Statistics which aims to develop and enhance the Palestinian official statistical system based on legal grounds that organize the process of data collection and utilization for statistical purposes.

Moreover, in October 2005 the Palestinian Cabinet approved the adoption of the Fundamental Principles of Official Statistics by Palestine as set out in ECE decision C (47), but incorporating a revised preamble.

The First census taken by In the Palestinian Central Bureau of Statistics (PCBS) in the oPt was conducted in 1997, and in 2007 it conducted the Second census.

The data of the census and surveys in the PCBS underwent a series of tests and editing procedures to ensure data reliability in all its phases of execution, in addition to the intensive and continuous follow-up that aimed to ensuring data accuracy and comprehensiveness. Also Active steps were taken to improved validity and reliability of the collected data. For example, conducting training for the field workers and pilot study to test and improve validity and reliability of the data collected.

In addition, the process of compilation data in the PCBS depends heavily on processing system that minimizes human errors by applying validation procedures. These procedures aim to ensure minimal non-statistical errors that are probable during any stage of the project including data collection (non-response errors) and data processing (data entry errors).

## ➤ **Technical report – Society and economy**

### 1. General Objective

The ESPON ITAN (Integrated Territorial Analysis of the Neighbourhoods, 2012-2014) project will work for two years on building a sustainable database and developing territorial analyses for the European Neighbour Regions (from Morocco to the Russian Federation). Within this geographical framework, the oPt is included in the Mediterranean Neighbourhood.

The data sets covered the data from 1994 to 2011 time period for all the 16 governorates of the occupied Palestinian territory oPt.

### 2. Data collection

The Harmonized datasets for social and economic core data contain the following:

- Education (total, sex, age, and educational level)
- School enrolment (total, sex, age, level)
- Unemployed population (total, sex, age, educational level)
- Income (average daily wages)
- Minorities

- Active population (total, sex, age, and educational level)
- Employment (total, sex, age, educational level, economic sector, place of work and place of living)
- GDP (total, economic activity and added value)

The data were collected according to the three recommendations as follow:

1. Time period coverage: from the year 1994- up to date
2. Territorial units' coverage: governorates;
3. Metadata filling: following recommendations for sources, definitions and explanations about calculation methods whenever needed.

## 2.1. Data Source

### Education and School enrolment data:

The Data related to the education level reached by total population in the oPt, education level by sex and by age and the total school enrolment by sex and age for the year 1997 was taken from the results of the first Census conducted by the Palestinian Central Bureau of Statistics (PCBS) in 1997. And the data for the year 2007 was taken from the results of the second census conducted by PCBS in the year 2007.

### Unemployment, employment and Active population data

All the data related to the Unemployment population, employment population and the Active population for the year 1997 was taken from the results of the census conducted by PCBS in the year 1997 and the data for the year 2007 taken from the results of the second census in 2007.

### Income data

Data for the Average daily wages for the years 1995 – 1999 was taken from the Annual report of the labour force survey in 1999 and the Average daily wages for the years from 2000 until 2011 was taken from the PCBS website

[http://www.pcbs.gov.ps/Portals/\\_Rainbow/Documents/Average%20Daily%20Wage.htm](http://www.pcbs.gov.ps/Portals/_Rainbow/Documents/Average%20Daily%20Wage.htm)

### Minorities data

The data regarding the total population of the minorities in the oPt for the years 1994 to 2011 is not available from reliable resources. However, the general information regarding the minorities were taken from <http://www.circassianworld.com/Israel.html> and <http://www.thisweekinpalestine.com/details.php?id=2211&ed=144&edid=144>

### GDP data

All the Data related to total Gross Domestic Product GDP and Contribution to GDP by Economic Activity and the Value Added by Economic Activity for the years from 1994 until 2011 was taken from the PCBS website: [http://www.pcbs.gov.ps/site/lang\\_\\_en/507/site/741/default.aspx](http://www.pcbs.gov.ps/site/lang__en/507/site/741/default.aspx)

## 2.2. Definitions according to the PCBS

- Governorate: Governorates were defined according to the official administrative division of the Palestinian Territory for the end of 1997. There are (16) governorates and each governorate consists of Number of localities.
- Urban: Any locality whose population amounts to 10,000 persons or more. This applies to all governorates/districts centers regardless of their size. Besides, it refers to all localities whose

populations vary from 4,000 to 9,999 persons provided they have, at least, four of the following elements: public electricity network, public water network, post office, health center with a full – time physician and a school offering a general secondary education certificate.

- Rural: Any locality whose population is less than 4,000 persons or whose population varies from 4,000 to 9,999 persons but lacking four of the following elements: public electricity network, public water network, post office, health centre with a full – time physician and a school offering a general secondary education certificate.
- Camp: It refers to any locality referred to as a refugee camp and administered by the United Nations Refugees and Work Agency in the Near East (U.N.R.W.A.).
- Education level: It refers to the highest successfully completed educational attainment level. The educational level for persons aged 10 years and above is classified as follows:

Illiterate: It applies to persons unable to read or write in any language and who were never awarded a certificate from any formal education system

Can read and write: It applies to persons who are able to read and write without completing any of the educational stages. Such persons are generally able to read and write simple sentences.

Qualification (The highest successfully completed educational attainment):

It refers to the highest educational attainment level (elementary and higher) the person successfully completed. Elementary is the educational level for persons who successfully completed the sixth elementary grade. Those who successfully completed the ninth grade shall be classified under the preparatory level. Likewise, persons who successfully completed the general secondary certificate examination shall be classified under the secondary level. As for the rest of levels, they are as follows: Associate diploma, bachelor degree (BA/BS), higher diploma, masters degree (MA/MS), doctorate (Ph.D)

As for the specialization, it refers to the name of the subject the person successfully completed. Educational attainment and majors were classified according to the majors and educational levels manual adopted by the PCBS.

- School enrolment

Attendance means registering the person in any formal education stage irrespective of whether it took the form of continuous attendance or distant learning. Formal education stages include the elementary stage, preparatory stage, (both of which are referred to as the basic stage), secondary stage, and higher education stage (universities, colleges, vocational institutes ...etc.).

Enrolment categories are as follows:

1. Attending: It applies if the person is currently enrolled in a regular education stage,
  2. Attended and left: It applies if the person unsuccessfully left a regular education stage, i.e. without obtaining any degree.
  3. Attended and graduated: It applies if the person successfully graduated from a regular education stage and did not enrol in any stage after that.
  4. Never attended: It applies if the person is not currently enrolled and was never enrolled in any regular education stage.
- Unemployed population: It refers to all persons who did not work at all during the reference period, who were not engaged in a certain work (although they are able to work) and were available for work and actively seeking work during the reference period. Those temporarily absent from work are considered unemployed although they are expected to resume work or ready to return to work upon demand. The unemployed persons are normally divided into two categories: Unemployed ever worked and unemployed never worked.



- **Employed population:** It refers to the person engaged in a certain productive activity or work, irrespective of whether he \ she was an employer, self-employed, wage employed, unpaid family member or other. The employed person is normally classified in one of two categories according to the number of weekly working hours, i.e. 1 – 14 working hours and 15 working hours and above.
- **Income:** Income covers international transactions associated with income on factors of production, i.e. labour and capital. In the balance of payments, income on capital is referred to as income on financial assets
- **GDP:** Gross Domestic Product or GDP is intended to be a measure of the value created by the productive activity of resident institutional units during a certain period in time. Estimate of GDP, like the output and the value added, can vary according to taxes and subsidies taken into consideration. GDP is usually estimated at market prices, producers' prices, or basic prices. There are three approaches to estimate the GDP: Output or Production approach, Expenditure approach, and Income approach.
- **Economic Activity:** It refers to the type of the main activity initiated in the establishment in which the employed person works or the unemployed person use to work. The main economic activity for persons employed outside the context of establishment is determined by the type of work they perform. Referring to a process consisting of actions and activities carried out by a certain entity that uses labour, capital, goods and services to produce specific products (goods and services). In addition to that, the main economic activity refers to the main work of the enterprise based on the (ISIC, rev1) and that contribute by the large proportion of the value added, whenever more than one activity exist in the enterprise.

### 3. Main Barriers to reliable and available data

All the data available was mainly for the years 1997 and 2007 because there was a census in these years taken by the Palestinian Centre Bureau of Statistics (PCBS), so there was available detailed data regarding the Social and Economic indicators.

### 4. The Social Trends

#### 4.1. Education level and School enrolment in the oPt

Education in the oPt was in the domain of the Israeli military governor and the civil administration since the Israeli occupation of the West Bank and Gaza in 1967, when, upon the establishment of the Palestinian National Authority (PNA) in the year 1994, education fell under its control. Since then, the Ministry of Education and Higher Education (MOHE) has tried to modify the system to match current needs and to develop the curriculum to an acceptable standard. Education in the oPt was initially run from two separate offices; the Palestinian Ministry of Education (MoE) and the Ministry of Higher Education (MoHE). Since 2002 they merged to become the Ministry of Education and Higher Education (MoEHE) until 2012 which again they were separated to date. In terms of schooling, Data from 2010/2011 shows that of all schools in the oPt, approx 74.3% are government run, 12.65% are run by the United Nations Relief and Works Agency for Palestine Refugees in the Near East (UNRWA) and 13.1% are private schools (PCBS, 2011).

The main supervising authority for schools in the oPt is the governmental sector although some schools are supervised by the UNRWA and some are private. All the Palestinian localities have governmental schools, while the private schools are mainly distributed in the cities. The statistics of the scholastic year 2011/2012 indicated that there were about 2,707 schools with a total number of students 1 129 538 in the oPt. (MoEHE website: <http://www.moehe.gov.ps/Uploads/admin/t1.pdf> and <http://www.moehe.gov.ps/Uploads/admin/t5.pdf>). In the Palestinian territory's education system, compulsory basic education includes Grades 1 to 10, this is divided into:

1. The preparatory stage (Grades 1 to 4),
2. The empowerment stage (Grades 5 to 10).
3. Secondary education (general secondary education and a few vocational secondary schools) covers Grades 11 and 12.
4. In tertiary or higher education, there are 13 universities (8 public, 3 private and 2 governmental). The two most recently established Universities are located in the Gaza Strip; The Gaza Women's University and Palestine University, opened in 2007 and 2008, respectively (PCBS, 2010a). Additionally, there are 15 University Colleges which offer vocational colleges (4 are private, 9 are governmental and 2 are UNRWA) (PCBS, 2010a). Further to this, there are 20 Community Colleges (offering specialised programs i.e. tourism or nursing qualifications). 8 of these are private, 9 are public and 2 Governmental (PCBS, 2010a). Finally, there is one Open University operating in the oPt (PCBS, 2010a).

The Ministry of Education and Higher Education (MoEHE) was first established and took responsibility in 1994 (MOEHE website: <http://www.mohe.gov.ps/ShowArticle.aspx?ID=180>). It has a responsibility for the whole education sector from pre-primary to higher education and for recruiting and training teachers as well. The MoEHE works as the liaison on training issues with the education directorates (Matar & Bisharat, 2008). The MoEHE is also in charge of managing governmental educational institutions and supervising private educational institutions and institutions run by UNRWA (MOEHE, 2008)

Education in Palestinian territory is centralized in regard to its curriculum, textbooks, instructions, and regulations. The administrative structure of the general education is composed of 22 fields' directorates (districts offices) of education, including 16 in the West Bank and 6 in Gaza. At present, the PNA has taken some measures to create a nation-wide education program, and has enshrined the right to education in both constitutional and national law.

#### Expenditure on Education:

This amounts to the total public expenditure on education as a percentage of gross domestic product (GDP). Current and capital expenditures on education by local, regional and national governments, including municipalities (household contributions are excluded), expressed as a percentage of GDP (UN, 2007). UNSECO's world education profiling<sup>125</sup> also fails to provide any data for public expenditure on education as percentage of GDP (within the oPt). Nation Master's education expenditure statistics also fails to provide any accurate data on this matter,<sup>126</sup> the UNDP also shows 'data unavailable' for this indicator<sup>126</sup>.

#### 4.2. Nationalism (Ethnic) Minorities<sup>127</sup>

There are two ethnic minority groups in Mandate Palestine; the Circassians group which are living in Mandate Palestine and the Armenians group which are living in both oPt and Mandate Palestine.

##### Circassians

The Circassians are a small ethnic minority in Mandate Palestine that has lived in the region since the days of the Ottoman rule.

([http://www.myjewishlearning.com/israel/Contemporary\\_Life/Society\\_and\\_Religious\\_Issues/Circassians\\_in\\_Israel.shtml?ISCL](http://www.myjewishlearning.com/israel/Contemporary_Life/Society_and_Religious_Issues/Circassians_in_Israel.shtml?ISCL))

Circassians arrived to Mandate Palestine from Balkans in year 1880 after 10 years of residence at Marvel-border of Greece and Bulgaria. The Circassians are Sunni Muslims; they tend to put an emphasis on the separation between their religion and their nationality. The Circassians are mainly live in two villages inside Israel namely Kfar Kama and Rehaniya with a total population of about 4,000

<sup>125</sup> Available at: [http://www.childinfo.org/files/MENA\\_Palestine.pdf](http://www.childinfo.org/files/MENA_Palestine.pdf)

<sup>126</sup> Available at: <http://hdrstats.undp.org/en/indicators/38006.html>

<sup>127</sup> A part of a population that is different in race, religion, or culture from most of the population.

Circassians. The Circassians exiles established the village Rehaniya in 1873, and the village of Kfar Kama in 1876.

Kfar-Kama the larger village has Jewish settlements as neighbours. Children graduate from village school and continue their education at Jewish schools. They learn Hebrew, English and Circassian at school; National Circassian Alphabet of Caucasus is used in teaching Circassian. Reyhaniye village is closer to Arab settlements as neighbours and children are able to go both Arab and Jewish schools. The Circassian community in Israel is well integrated into the Israeli society, they serve in the army and employed in the border and regular police force. Municipal and public services are wide open to the Circassians. Circassians living in these two villages communicate in own Circassian language. (Source: <http://www.circassianworld.com/Israel.html>)

### Armenians

The Armenian presence in the Holy Land predates the life of Jesus Christ, when Armenia and Palestine were part of a common empire. The Armenian Great King Tigran 11 (95 to 55 BC) conquered the northern part and extended his influence over Palestine. Ever since Armenia became the first nation to adopt Christianity as its official state religion (301 AD). Armenian pilgrims began travelling to Jerusalem, and some remained to establish a permanent community (<http://www.thisweekinpalestine.com/details.php?id=2211&ed=144&edid=144>).

In the seventh century, the Caliph Omar Ibn el-Khattab gave the Armenian Patriarch of Jerusalem "Abraham", a charter that guaranteed the rights, safety, and security of the properties, holy places, and lives of the Armenians in Jerusalem. Subsequently, Armenians began to settle in the Armenian Quarter and around various holy sites and churches, including St. James Cathedral. A further charter by Salaheddin, during the Muslim rule, endowed Armenians with the freedom to worship and the right to keep their holy places.

During the Crusader era, the Armenian Queen, Melisend, ruled over the Holy Land. She became the Jerusalem Kingdom's ruler from 1143 to 1152. Her interest in Jerusalem's Armenian community compelled her to become a patron of its arts and ecclesiastical affairs. Melisend initiated many architectural projects, renovated the Jerusalem markets and the Holy Sepulchre, and rebuilt St. James Cathedral, around which the Armenian Quarter of the Old City had already begun to form. During the same period, the Armenians were also present in other Palestinian cities, including Acre, Caesarea, Gaza, Nablus, and Kerak.

Under the Ottomans, the population flourished. By 1690 Armenians comprised 23 percent of Jerusalem's Christians. In 1915, more than one million Armenians were massacred at the hands of the Turks. With the arrival of refugees from Turkey after World War I, the Armenian population in Palestine under Turkish rule grew to 20,000. Some have since been repatriated to Armenia, and some have emigrated to the United States. The Armenian refugees were known by the local Armenian community as zoowar (newcomers) and settled in the Armenian Quarter. They were assisted by the native people of the Armenian community, who were known as kaghakatsi (of the town), and by the local Arab community, even though they were not Arabic speakers. Some refugees also fled to the neighbouring countries of Lebanon, Syria, Iran, and Iraq. The refugees were assisted by the Armenian Convent in securing shelter, food, and other necessities. During the British Mandate (1917-1948), the Armenians continued to be successful. They were well established and many were entrepreneurs, administrative officers, and civil servants. Harmonious relations with local Palestinians were developed. Armenians worked with many relief agencies, including UNRWA and the Red Cross.

The Armenians in the Middle East have witnessed many conflicts in the region, including the Arab-Israeli wars, the Lebanese Civil War, the Iran-Iraq war, and the Gulf wars. In 1948, the Armenian Quarter was bombarded several times, and many people were killed. During the wars of 1948 and 1967, many Armenians, like Palestinians, lost their businesses and homes and fled to nearby countries. Many Armenians sought refuge within the Armenian Quarter and the St. James Convent of the Old City. As a result of the 1948 Arab-Israeli conflict, many Armenians left the cities where they

were residing (Jaffa, Haifa, Nazareth, Gaza, etc.), which further reduced the number of Armenians in the Holy Land.

The Armenian Quarter is one of the four surviving quarters of Jerusalem's Old City and, although tiny, provides the Armenian community with churches, a seminary, a school, social institutions, historical monuments, priests' quarters, a library, a museum, a printing press, youth and social clubs, and a health clinic. One of the central reasons for the existence of an Armenian quarter is the religion and ethnicity of the Armenians. Armenians, unlike the majority of Christians in Palestine, are not Arab, rather they are ethnically and religiously Armenian. They have remained a homogeneous group, intermarrying over the years and keeping their culture intact.

Throughout their long history, the Armenians have enriched the cultural fabric of the Holy Land with their distinct identity. During various periods, individual Armenians managed to acquire prominent positions in the private and public sectors of Palestinian society. History bears witness that many Armenians were traders and businessmen, many of whom established industries, mainly in the West Bank, which created economic opportunities for the local population.

Even within Palestinian society, the Armenians have retained and preserved their own cultural identity, traditions, customs, cuisine, and language. It is an ongoing process that continues with each new generation. The Armenians are an integral part of Palestinian society. They remain intact and empathize with the Palestinian cause. Due to the political and economic upheavals in this region, the number of Armenians and Palestinians has dwindled. Armenian communities share common problems with Arabs who are being forced to migrate. This was illustrated in the old Armenian village in Atlit (Sheikh Brak) near Haifa. Armenian farmers settled in this village in the 1920s. Since then, however, they were denied the right to be provided with paved roads, electricity, water, and a sewage system. Armenian farming families had no alternative but to leave in the 1980s. The declining Armenian communities face serious threats to their existence in the Holy Land. During the first Intifada, many Armenian businesses were forced to close, which resulted in the further migration of Armenian families. (Source: <http://www.thisweekinpalestine.com/details.php?id=2211&ed=144&edid=144>)

## 5. The Economic Trends

The Palestinian economy has been intensely affected by the Palestinian-Israeli conflicts. Since 1967, the Israeli Occupation has succeeded in turning the West Bank and the Gaza Strip into a dependent economy and reservoir of cheap labour. Following the 1993 Oslo Accords, the economic situation in the West Bank and the Gaza Strip continues to experience inherent instability. The decline in household incomes, the sharp increase in unemployment, and the general spread of poverty all pose serious challenges to achieving economic sustainability. In addition, the outbreak of the Second Intifada in 2000, brought with it severe economic and social consequences upon the Palestinian population in the West Bank and the Gaza Strip. The intensification of closures and the resultant restrictions placed on the movement of people and goods (not just within the oPt but between the West Bank, the Gaza Strip and Israel), have had the double-edged effect on both local economies and the export of Palestinian goods to the world. Israeli military and economic aggression against the Palestinians continued, and losses as a direct result of Israeli closures, are estimated at hundreds of millions of dollars.

The Palestinian economy lacks autonomy, national strategic control and a self-monitoring system. This is due to the fact that the Israelis' control the economy either directly or indirectly and it has never been under full Palestinian control. The status of the Palestinian economy in the West Bank and the Gaza Strip is clearly characteristic of underdeveloped countries. The agricultural, services and public sectors constitute the main components of the Gross Domestic Product (GDP).

### 5.1. Current Economic Situation in the oPt

Real (GDP) per capita has widely fluctuated since the mid-1990s. Responding to the Second Intifada and consequent Israeli imposed trade restrictions in 2000-2002, GDP per capita sharply decreased

from 1,477 US\$ in 2000 to 1,140.8 US\$ in 2002, while rebounding to 1994 levels (1,320.4 US\$) in 2003-2005, when restrictions were slightly relaxed. With the onset of the Gaza Strip blockade, GDP per capita then dipped once more before recovering in 2007 with the advent of Prime Minister Fayyad's government. By 2009, it had returned to its 1994 levels (IMF, 2010).

There existed a wide divergence in output paths between Gaza Strip and the West Bank with Gaza's GDP per capita showing a downward trend from 1,057.5 US\$ in 2006 to 959.5 US\$ in 2008, as a result of the Israeli imposed blockade, and the West Bank's per capita growth steadily rising since 2007. Recovery in Gaza Strip only began in 2009, while the West Bank's GDP per capita is projected to reach 60% above its 1994 levels by 2013 (IMF, 2010; UNESCO, 2011).

The West Bank's improved macroeconomic conditions can be explained by two factors: the solid economic management by the PNA which boosted business and investor confidence, and the relaxation of Israeli restrictions on movement and access of goods and people. Since growth has mostly been confined to the non-tradable sector, it has been noted by the World Bank that donor aid inflows have played a substantial role in driving economic growth; thereby also making it unsustainable in the long run (World Bank, 2010).

In Gaza Strip, the situation is still difficult regardless of the mid-2010 lifting of restrictions on the imports of consumer goods and investments in donor-supervised projects. Restrictions on exports and private sector imports of raw materials and capital goods, as well as movement of people across external borders, has led to unemployment rates (reached to 28.7 %) comparable to some of the highest in the world (World Bank, 2011b).

Overall, the situation in the oPt has a marked potential for economic progress and ability to participate in the international market, so long as sound economic policies are successfully implemented by the PNA, to help generate long term sustainable growth. The uncertainty caused by the surrounding political situation and ongoing occupation has inhibited the PNA's ability to deliver such plans. In addition, the Palestinians' dependence on aid, (they receive the highest amount of aid per capita in the world) has also inhibited sustained economic growth (Portland Trust, 2011a). For the economy to reach its potential, the Israeli restrictions on economic activity need to be annulled, and the development and implementation of an international trade regime to facilitate closer ties between the private sector and educational institutions must be developed (IMF, 2011; World Bank, 2011a).

Table 1: GDP, GNI, and GDI in the oPt

Year	Region	GDP (US\$ Million)	GNI (US\$ Million)	GDI (US\$ Million)
2007	oPt	4,554.1	4,993.9	6,907.1
	West Bank	3,317.2	3,676.8	4,825.9
	Gaza Strip	1,236.9	1,317.1	2,081.2
2008	oPt	4,878.3	5,409.8	8,308.5
	West Bank	3,716.7	4,159.4	5,897.3
	Gaza Strip	1,161.6	1,250.4	2,411.2
2009	oPt	5,239.3	5,709.0	7,688.6
	West Bank	3,979.6	4,367.0	5,551.6
	Gaza Strip	1,259.7	1,342.0	2,137.0
2010	oPt	5,724.5	6,089.2	7,378.6
	West Bank	4,315.4	4,646.5	5,428.8
	Gaza Strip	1,409.1	1,442.7	1,949.8
2011	oPt	6,421.4	6,812.8	7,568.7
	West Bank	4,764.7	5,121.6	5,573.6
	Gaza Strip	1,656.7	1,691.2	1,995.1

Source: PCBS website: [http://www.pcbs.gov.ps/Portals/\\_Rainbow/Documents/MajorCurrentE1994-2011.htm](http://www.pcbs.gov.ps/Portals/_Rainbow/Documents/MajorCurrentE1994-2011.htm)

According to the Palestinian Central Bureau of Statistics (PCBS) in 2012, the real GDP rising to US\$ 6,421million in 2011 with US\$ 4,764.7 million in the West Bank and US\$ 1,656.7 million in Gaza Strip (base year 2004) (PCBS website:

<http://www.pcbs.gov.ps/Portals/Rainbow/Documents/MajorCurrentE1994-2011.htm>). Real terms growth reached 12.2 % of GDP in 2011 compared with 2010, with Gaza Strip experiencing an overall annual growth rate of nearly 17.6% of GDP albeit starting from a very low point, and the West Bank reaching 10.4% growth of GDP. Table 2 presents the national GDP, Gross Disposable Income (GDI), and Gross National Income (GNI).

As from the table and the national accounts' estimates for 2011, the national GDP in the oPt has shown a yearly increase over the years from 2007-2011, and hence an increase in the GNI. This was as a result of the West Bank's figures where the figures have shown an increasing pattern over that period, while the situation is different in Gaza Strip as a result of the Israeli siege and war on Gaza Strip. This is indeed due to the existence of the military Israeli occupation, but also due to the aid fatigue, failure and ineffectiveness. These factors are coupled with a Palestinian economy that suffers from structural deficiencies and distortions and remains a contained or dependent economy.

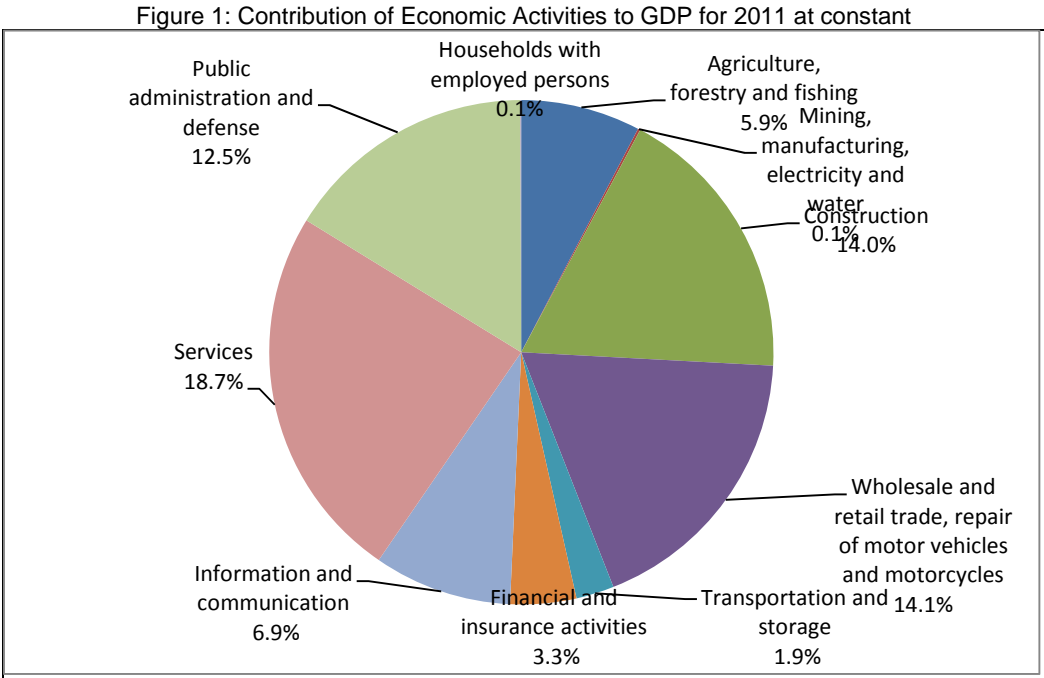
Per capita GDP in the oPt increased by 67.8%, from US\$ 1,483 in 2007 to US\$ 2,489 in 2011, it was US\$ 1,809 in the West Bank, and US\$ 992 in the Gaza Strip in 2007, Per Capita GDP has increased over the period from 2007-2011 in the West Bank, and Gaza Strip to be US\$ 3,137 in the West Bank an US\$ 1,534 in the Gaza Strip. (PCBS website:

<http://www.pcbs.gov.ps/Portals/Rainbow/Documents/percapitacurrentE1994-2011.htm>)

5.2. Economic Activities Contribution to GDP:

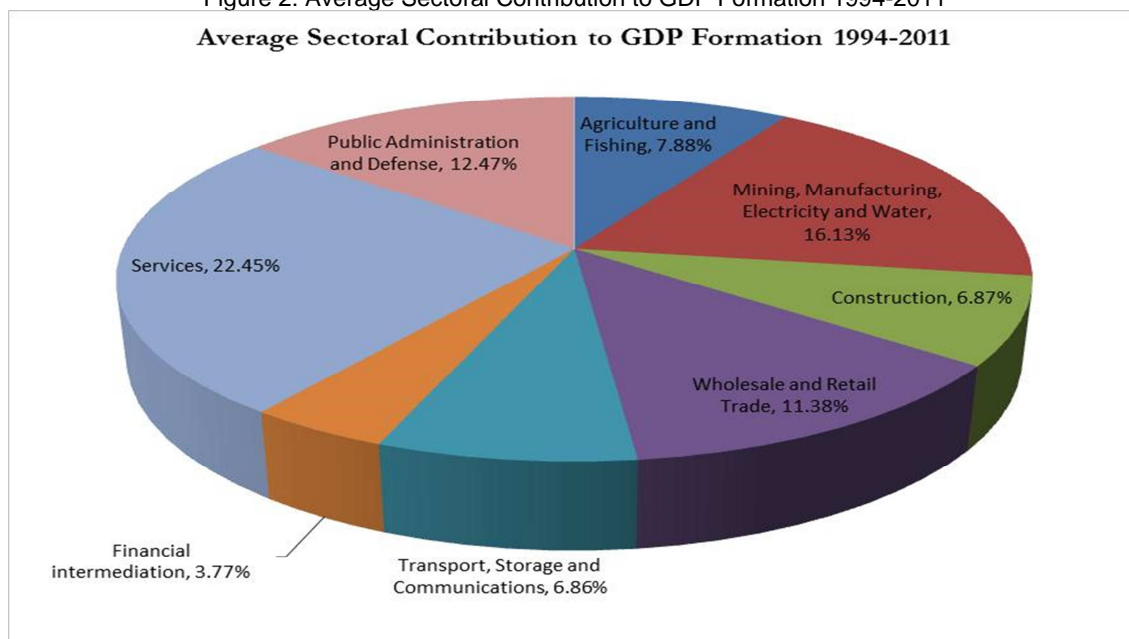
Although the relative size of services sector has shrunk in the past years, it continues to dominate Palestinian economic activity, contributing US\$ 1,202 million to GDP in 2011. The next biggest sector was wholesale and retail trade, repair of motor vehicles and motorcycles (US\$ 905 million), followed by construction (US\$ 896.8 million), and public administration and defense (US\$ 803.5 million) and mining, manufacturing, electricity and water (US\$ 773.5 million) Figure 1 and figure 2 shows the average sectoral contribution to GDP formation 1994 - 2011 (PCBS website:

<http://www.pcbs.gov.ps/Portals/Rainbow/Documents/B1CurrentE2009-2011.htm>)



Source: PCBS website: <http://www.pcbs.gov.ps/Portals/Rainbow/Documents/B1CurrentE2009-2011.htm>

Figure 2: Average Sectoral Contribution to GDP Formation 1994-2011



The value of external donations (Aid) exceeded US\$ 3billion in 2009 increasing by almost 500% in the last decade. On a per capita basis this means the Palestinian population received one of the highest levels of aid in the world. With a GDP of only US\$ 6.2billion in 2009, aid effectively represented just less than half of the economy. It is a dominate source of finance for the PNA's budget, covering 42% of recurrent government spending in 2009 and accounting for 38% in 2010 (Portland Trust, 2011b).

### 5.3. Labour Force

The participation rate in labour force in the oPt in 2011 was 43% compared with 41.1% in 2010 (PCBS, 2012). The West Bank always has higher participation rates in the labour force than in the Gaza Strip. The labour force participation rate in the West Bank was 45.5%; of which 71.4% for males and 19.0% for females. The results indicated that the labour force participation rate in Gaza Strip is much lower than in the West Bank. The rate in Gaza Strip reached 38.4%; 63.9% for males and 12.4% for females.

During the period from 2007 to 2011 the number of workers has increased by 21% from 691 thousands to 837 thousands (PCBS, 2012). Table 3 below presents some selected labour force indicators over that period.

Table 2: Labour Force Indicators in the oPt (2007-2011)

Indicator	2007	2008	2009	2010	2011
Size of labour force (thousands)	882	908	951	976	1059
Participation rate in labour force	41.7	41.2	41.6	41.1	43
Workers (thousands)	691	666	717	744	837
% Change in number of workes	8.5	-3.5	7.6	3.7	12.5
Nominal average daily wage (NIS)	81.9	87	91.3	91.7	91.7

Source: PCBS, 2012

The unemployment rate in the oPt has decreased from 23.7 in 2010 to 20.9 in 2011. The unemployment rate in the West Bank was 17.3%; with 15.9% for males and 22.6% for females. The

highest unemployment rate was found in Tulkarm governorate at 22.2%, followed by Qalqilya 21.8%, Hebron 21.0%, Bethlehem 19.2%, Ramallah & Al- Bireh 16.4%, and then Salfit 16.0%. The lowest unemployment rate was in Jerusalem 13.2%.

In the Gaza Strip, unemployment rate was 28.7%; with 25.8% for males and 44.0% for females. The highest unemployment rate in the Gaza Strip by governorate was in Rafah with 33.0%, followed by Khan Yunis 32.0%, then North Gaza 28.5%. While the lowest unemployment rate was in Deir Al-Balah governorate with 26.1% (Table 4), the highest daily wage is registered in Jerusalem Governorate with 109 NIS where the lowest is in Khan Younis Governorate with 55.9 NIS (PCBS, 2012).

Table 3: Employment, Underemployment, Unemployment, and average daily wages for 2011 by Governorate (\*Excluding Israel and Settlements)

Region/Governorate	Employment Rate	Underemployment Rate	Unemployment Rate	Average Daily Wages *
<b>oPt</b>			<b>20.9</b>	<b>77.8</b>
<b>West Bank</b>	<b>74.4</b>	<b>8.3</b>	<b>17.3</b>	<b>85.0</b>
Jenin	75.7	10.8	13.5	78.0
Tubas	71.2	13.8	15.0	79.8
Tulkarm	92.9	14.9	22.2	71.0
Nablus	76.2	9.0	14.8	78.3
Qalqilya	61.2	17.0	21.8	70.8
Salfit	81.4	2.6	16.0	85.6
Ramallah & Al-Bireh	81.8	1.8	16.4	100.3
Jericho & Al-Aghwar	81.8	4.9	13.3	79.7
Jerusalem	85.8	1.0	13.2	109.0
Bethlehem	64.1	16.7	19.2	93.9
Hebron	70.7	8.3	21.0	75.8
<b>Gaza Strip</b>	<b>64.9</b>	<b>6.4</b>	<b>28.7</b>	<b>61.6</b>
North Gaza	64.5	7.0	28.5	66.2
Gaza	68.2	5.4	26.4	60.2
Dier Al-Balah	69.9	4.0	26.1	68.1
Khan Younis	59.4	8.6	32.0	55.9
Rafah	59.2	7.8	33.0	61.3

Source: PCBS, 2012

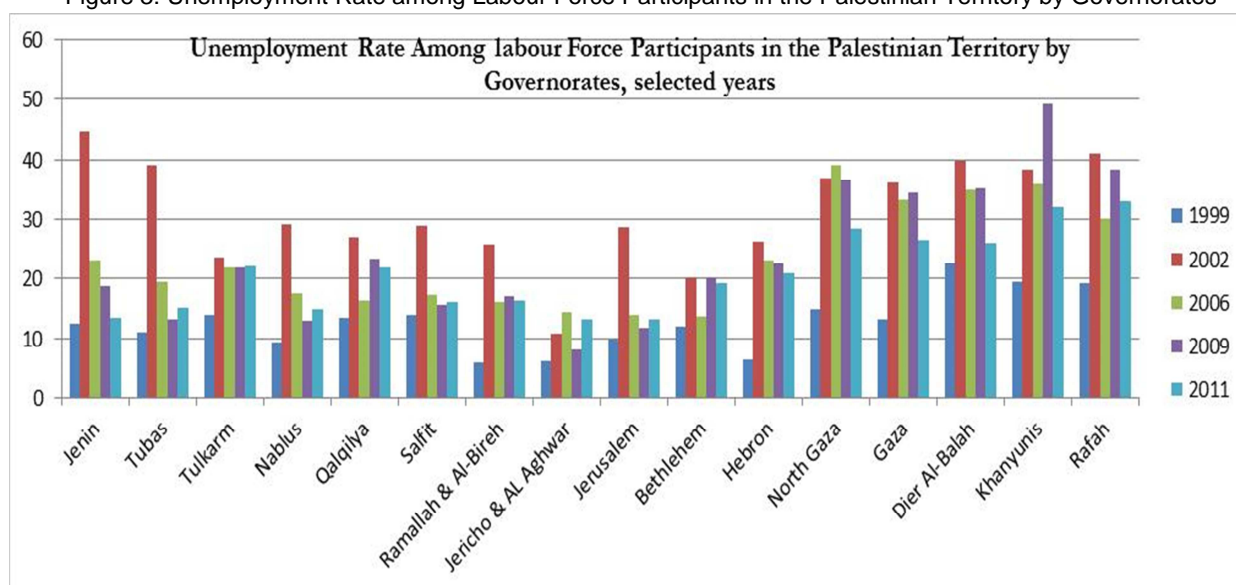
Over the selected five years, Figure 2 depicts the fluctuation of unemployment rate. It is clear that unemployment is high in Gaza and also it is clear that it is directly related to the severity of the political conditions. For instance year 1999 witnessed one of the lowest levels of unemployment, while 2002 with the eruption of the second intifada and the incursion and re-occupation of the West Bank the unemployment level increased dramatically. This is just an additional evidence that unemployment in the oPt is not only because of the lack of job creation but also because it is a politically constructed problem.

In relation to the women status in the labour force in the oPt, the participation rate for males was 68.8% compared to 16.2% for females while the unemployment rate for males was 16.4% compared to 28.6% for females. This showed that the participation of women in the formal labour force is limited with higher rates of unemployment rates compared to the males. The statistics of the year 2010 showed that women depend more on agriculture for employment, as 21.4% of working women were active in this sector, compared to only 9% of working men (PCBS, 2011). Moreover, women only compose 16.2% of the labour force in the oPt and 21.4% of them contribute to the agricultural sector actively (as formal workers). Most of women's labour in the informal sector remains uncalculated or



considered and thus their contribution to the agricultural home-based activities is much higher than what is officially reported.

Figure 3: Unemployment Rate among Labour Force Participants in the Palestinian Territory by Governorates



The distribution of employment by sector reveals that the private sector in the oPt is by far a more important employer than the public sector representing 67.5% of employed persons working in the private sector in 2011 (PCBS, 2012). In the West Bank 70.6% of the employed persons are working in the private sector, while in Gaza Strip its around 60.4%. The average daily wage in the Gaza Strip in 2011 was 61.6 NIS and in the West Bank 102.1 NIS (PCBS, 2012).

Regarding the distribution of the employed persons in the oPt by economic activity for 2011, the highest rate of employed persons is found in services and other branches with 36% of the employed persons working in this sector, followed by commerce, hotels and restaurant with 20.3%, then construction sector with 13.9% (PCBS, 2012).

Table 4: The distribution of the Palestinian employees by sector and the average daily wages (NIS)

Year	Sector	Percentage Distribution	Average Daily Wage (NIS)
2007	Public Sector	22.7	79.3
	Private Sector	68.4	69.0
	Israel & Settlements	8.9	130.0
2008	Public Sector	24.2	79.2
	Private Sector	65.7	74.7
	Israel & Settlements	10.1	138.3
2009	Public Sector	25.2	84.4
	Private Sector	64.6	77.0
	Israel & Settlements	10.2	148.1
2010	Public Sector	24	85.2
	Private Sector	65.5	74.3
	Israel & Settlements	10.5	158.0
2011	Public Sector	22.5	89.1
	Private Sector	67.5	72.6
	Israel & Settlements	10.0	162.2

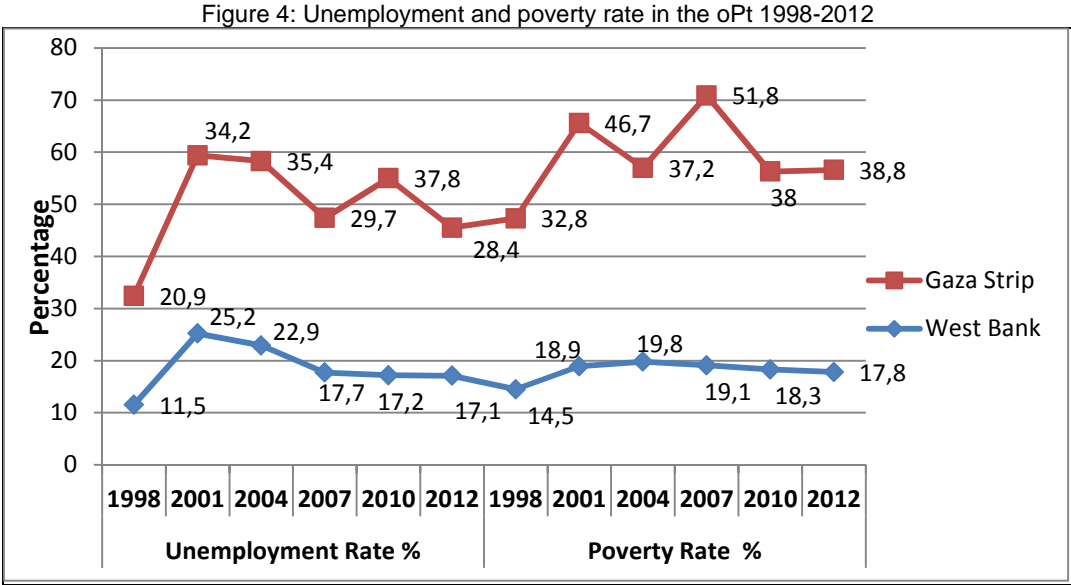
Source: PCBS, 2012

In the Gaza Strip and West Bank, the services sector is the highest employer with around 52.9% in Gaza Strip and around 32.8% in the West Bank. Construction and transportation, storage and communication sectors registered the highest wages in 2011, with daily average wages at 119.3 NIS and 101.9 NIS, respectively for all regions employing the Palestinian labour force (PCBS, 2012).

In 2011 around 10% of the entire Palestinian labour force was employed in Israel and the settlements, with 100% of them coming from the West Bank as the blockade on Gaza Strip inhibits the movement of workers across external borders. Employment in Israel and the settlements is dominated by construction, registering nearly 51.9% of total Palestinian employment in these areas in 2011. The average daily wage for those employed in Israel and the settlements was substantially higher than those who are employed within the oPt registered at 162.2 NIS in 2011 (PCBS, 2012). This is almost double the daily wage of the employees working at the West Bank, and triples the daily wage of those working in the Gaza Strip; table 5 shows the distribution of the Palestinian employees by sector and the average daily wages.

5.4. Poverty

Economic growth is among the necessary conditions for a sustainable solution to poverty and food insecurity. Growth will raise incomes and the ability of the poor to gain access to food, health, care, services and deal with adversities, but will also provide the necessary means to undertake anti-poverty policies and interventions that would make growth itself more equitable (World Bank, 1991). Loss of business and jobs is synonymous to greater pressure for the breadwinners to cover their food and non-food expenditures. Figure 3 illustrates the unemployment and poverty rate where the fluctuation in the labour force and high unemployment rates directly impact Palestinian households as their main source of income is provided by regular wage work.



Female-headed households display an incidence of poverty 1.3 times higher than households headed by men” with nearly 30% of families headed by women falling below the poverty line (UN-ESWOM, 2010). ‘Female-headed households are also among the poorest in Palestine (Freedom House, 2009). Such households represent 9.5% of all households and that 73% of them live in extreme poverty, struggling to meet the basic needs of nutrition, housing, and clothing (Freedom House, 2009).

The rising poverty and unemployment is affecting school attendance across the oPt. Taken the worsening of the level of poverty in the oPt over the last decade; an increasing number of Palestinian

children is now working to support their families instead of attending school. In 2011, 4.0% of children between 10-17 years of age (mainly in the West Bank 5.5 % West Bank) are employed (Palestine Monitor, 2012)

The high growth rate, population density, dependency ration, poor environmental conditions, unemployment, and poor economic conditions; all contributed negatively on the health and nutrition of the Palestinians and mainly children and women (WFP/ARIJ, 2010). The Palestinian population is going through an epidemiological and demographic transition. Much suffering lies behind the standard health indicators. People often report being negatively affected by the conflict and economic deterioration. These are contributory factors to the epidemic of chronic diseases. Life expectancy reached to 72.2 years in 2010 (PNA-MoH, 2011). The total fertility rate in the oPt in 2010 is 4.6 (PNA-MoH, 2011). According to the Infant Death the total number in the oPt was 1261 cases in the year 2010, where main causes are prematurity and low birth weight, and congenital malformations (PNA-MoH, 2011). However, it is worth noting that life expectancy and literacy rates in the West Bank and Gaza are much higher than in countries with similar per capita incomes. In fact, Palestinian measures are on par with its much richer neighbours in the region, which have seven and three times the per capita income of the West Bank and Gaza (World Bank, 2011)

5.5. Palestinian Trade

The main problem with the Palestinian trade is that Israel is by far its largest trading partner. From 1976 until the signing of the Oslo Accords in the year 1994, 80-85 % of the Palestinian exports and 80-90% of its imports were to and from Israel. This pattern persisted well after the Oslo Accords and the signing of the Paris Protocol, which reaffirmed Israel’s control over Palestinian borders and trade regulations (UNCTAD, 2012).

The sudden intensification of movement restrictions, Israel’s withholding of tax revenues due to Palestinian Authority, the lack of imported inputs and the closure of borders with the outside world, led to a sudden decline in trade activities inside the oPt. With exports declining much faster than imports, the Palestinian trade deficit has grown substantially (UNCTAD, 2012).

Figure 4, 5, and 6 basically show the level of dependency on the Israeli economy and also the massive trade gap showing how is the Palestinian economy contained by the Israeli one and how the power dynamics play in the fora. The trade and the ability to trade are framed within a structure that does not allow any sovereignty for the Palestinian side and indeed entrench the dependency status and one way custom union.

Figure 5: Total Value of Registered Palestinian Exports by SITC-Rev.3 Section in 1996-2010

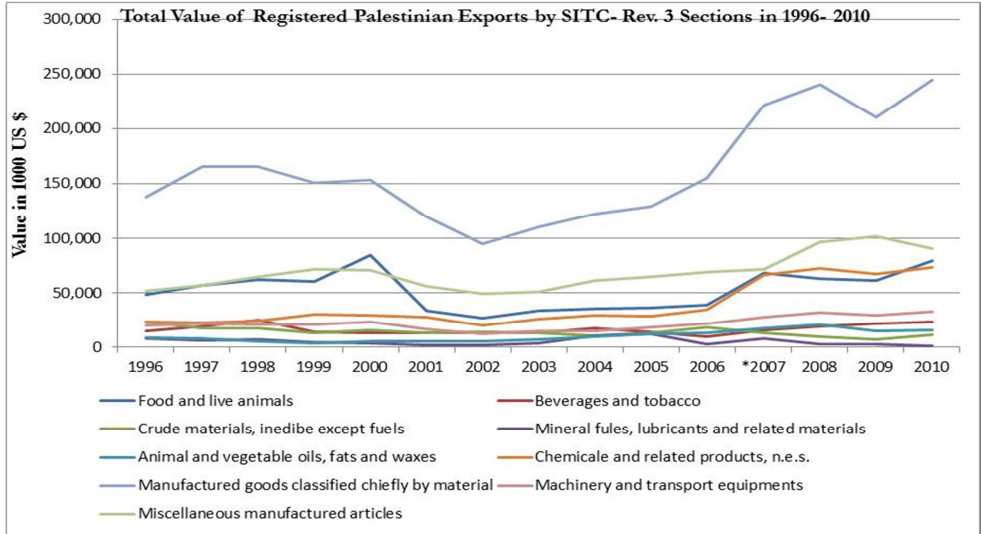


Figure 6: Total Value of Registered Palestinian Exports and Import 1996-2010

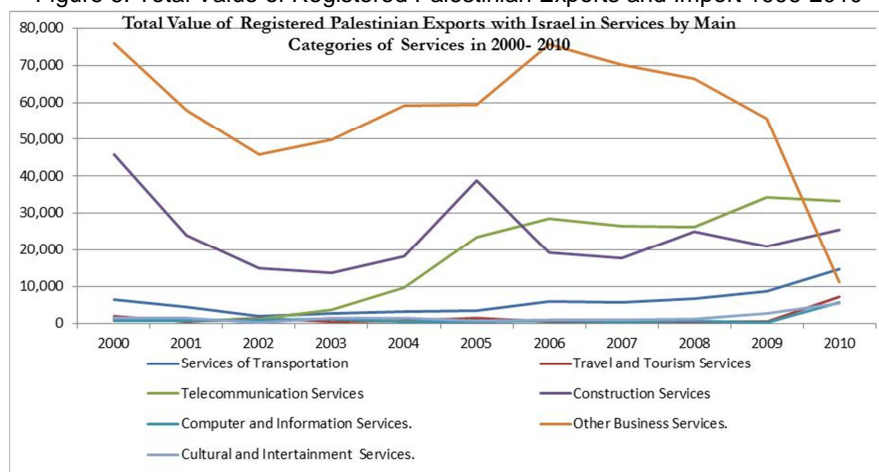
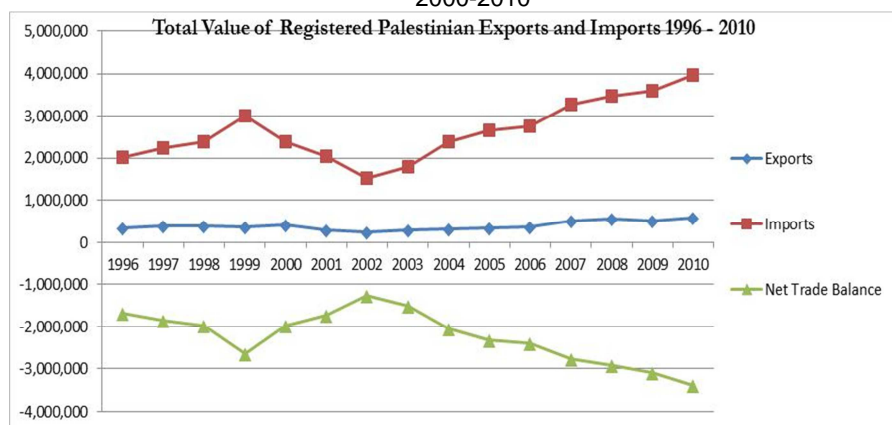


Figure 7: Total Value of Registered Palestinian Exports with Israel in Services by Main Categories of Services, in 2000-2010



### 5.6. Impact of the Israeli occupation on the Palestinian Economy and the economic cost of the Israeli occupation

It is clear that the major obstacle and barrier for the Palestinian development is the Israeli Occupation. This occupation has different sorts of costs including human but also economic costs. These economic costs are partially paid by the international community's funds which are creating one of the cheapest occupations and reveal Israel from its duties and responsibilities as an Occupying Power and therefore helping Israel in breaching the Fourth Geneva Convention and sustaining its military occupation and apartheid rule (Tartir 2011). Throughout the Israeli military occupation of the Palestinian territory, a systematic policy has been followed to exploit the Palestinian resources and properties. Actually, this occupation has been characterized by enormous damages, destruction and loss of the Palestinian life and properties, which without doubt has imposed a huge price tag to the Palestinian economy. The imposed Israeli measures and activities have prevented Palestinians from accessing much of their land and from exploiting most of their natural resources; it isolates the Palestinians from global markets, and fragments their territory into small, badly connected, "cantons". These facts have been recently highlighted to some extents, but remains without teeth, by international financial institutions, including the World Bank, UNCTAD and the IMF. These reports were able to demonstrate parts of the damages inflicted by such occupation. However, a detailed and comprehensive quantification of the losses resulted from this occupation still needed that goes beyond the technical terms and the set of base, best and worst scenarios.

In this regards, ARIJ with cooperation with the Ministry of National Economy (2011) were able to trace some of the economic costs for the Israeli occupation in 2010. It was found that the total costs

imposed by the Israeli occupation on the Palestinian economy which we have been able to measure was USD 6.897 billion in 2010, a staggering 84.9% of the total estimated Palestinian GDP. In other words, had the Palestinians not been subjected to the Israeli occupation, their economy would have been almost double in size than it is today. For quantifying purpose, the inflicted damages were classified as direct and indirect ones, and their corresponding costs were arranged according to this classification as shown in Table 8 below. In this regard, direct costs are referring to those directly borne by the Palestinian economy due to Israeli restrictions; these include higher costs of electricity, water, and the movements of goods and people, whereas indirect costs are those concern the foregone revenues from production that have yet to be realized, due to the restrictions imposed by the occupation and they form the major part of the costs of occupation. These revenues would have materialised had Palestine been a free and sovereign country.

While appreciating the limitations of the estimations below since it does not represent the true costs of the occupation and it is not inclusive of all costs, however what remains vital to highlight is that the majority of the costs does not have any relationship with security concerns but rather come from the heavy restrictions imposed on the Palestinians in the access to their own natural resources, many of which are exploited by Israel itself, including water, minerals, salts, stones and land. Over USD 4.5 billion per year, a full 56% of GDP is the cost (in terms of both foregone revenues and higher costs of raw materials) for the Palestinians for not being able to access their own resources.

Table 5: Costs of the Israeli occupation on the Palestinian economy, USD '000 and % of GDP (2010)

	Cost ('000 USD)	% GDP
Gaza blockade	1,908,751	23.5%
Indirect costs of water restrictions	1,903,082	23.4%
Value Added from irrigation	1,219,667	15.0%
Jordan Valley agriculture	663,415	8.2%
Health costs from water	20,000	0.2%
Natural resources	1,837,738	22.6%
Dead Sea salts and minerals	1,102,869	13.6%
Value added from quarries	574,869	7.1%
Gas marine reserve	160,000	2.0%
Direct utility costs	492,788	6.1%
Direct electricity costs	440,876	5.4%
Direct water costs	51,912	0.6%
Intl. Trade restrictions	288,364	3.5%
Dual use (excl agriculture)	120,000	1.5%
Dual use agriculture	141,972	1.7%
Cost of trading	26,392	0.3%
Movement restrictions	184,517	2.3%
Dead Sea tourism	143,578	1.8%
Uprooted trees	138,030	1.7%
Direct costs	3,012,451	37.1%
Indirect costs	3,884,398	47.8%
TOTAL	6,896,849	84.9%
Fiscal costs	1,795,685	
<i>Memo item</i>		
Nominal Palestinian GDP (2010)	8,124,000	

Source: ARIJ and the Palestinian Ministry of National Economy (2011)

Obviously, the huge costs of the Gaza blockade are determined by a myriad of Israeli restrictions, including the almost complete closure to international trade, the disruption caused to the electricity production, the limited access to the sea resources and the continued shelling of infrastructure. These restrictions have led to the collapse of the economy. The restrictions on access to water and on access to natural resources deprive the Palestinians of enormous sources of revenues associated with the economic activities based on these natural resources. These include the expansion of irrigated agriculture, the extraction of salts and minerals from the Dead Sea, which is off limits to the Palestinians while is carried out by Israeli and settlers' companies alike, the mining of much of the gravel and stone available in the West Bank, most of which is used by Israel, and the development of

the Gaza offshore gas field. Similarly the lack of access to the Dead Sea has made the development of a high potential Palestinian tourism industry along its shores impossible.

Other losses imposed by the occupation include the extra costs of electricity and water provision faced by the Palestinians, who are dependent on Israeli supplies for such provision due to the restrictions imposed on the electricity generation and on the access to water, the costs imposed by the restrictions on exports and imports, which translate into unavailability of inputs and higher production costs, the costs associated with the barriers to the movement of goods and people within the West Bank, and the destruction of productive assets, particularly the uprooting of trees.

Finally, not only does the occupation maintains the Palestinian economy small but it also hinders Palestinian fiscal balance by reducing its fiscal revenues in two ways: directly, by preventing an efficient collection of taxes mainly due to the prohibition of the PA to operate at the international borders; and indirectly, by artificially reducing the size of the Palestinian economy and therefore its tax revenues' base. The estimations for the direct fiscal costs of the occupation amounted to USD 406 million per year while the indirect fiscal costs amounted to USD 1.389 billion per year. This implies that, theoretically, without the occupation, the Palestinian Authority would run a healthy fiscal surplus without the need of donors' aid, and would be able to substantially expand fiscal expenditure to spur further social and economic development<sup>128</sup>.

To conclude the oPt is still totally dependent to Israel's economy, and has very little freedom to open new paths to diversify its economy in the trading field, mainly because of Israeli's control of Palestinian borders and crossing points. Israel's dependence in the oPt has reduced nearly 8% in the last years meaning that the oPt does not have the same opportunity to diversify the market and create a competitive business environment.

6. Electricity

Electricity is considered the main source of energy, whereby the vast majority of the oPt's electrical energy needs are imported. The only Palestinian electricity generation is from The Gaza Strip Power Plant (GPP), which started the operation of generating 140 MWh on 2002. It is noted however that this project received extensive damage as a result of Israeli air strikes in 2006. GPP generates just about 10% of the electric power consumed in oPt, while the rest is imported from Israel, Jordan and Egypt. In reality, oPt is completely dependent on the Israeli Electric Company (IEC) for their electricity needs.

The quantity of electricity purchased from the IEC in the year 2011 was equal to 4,427,426 MWh, which is 95.8% of the total purchased energy in the oPt. While 194,260 MWh (4.2%) of electricity was purchased from Jordan and Egypt. Table 7 shows the trends in some main indicators in the years from 2009 until 2011 (PCBS website: [http://www.pcbs.gov.ps/Portals/Rainbow/Documents/Enr\\_2011\\_A\\_tab3.htm](http://www.pcbs.gov.ps/Portals/Rainbow/Documents/Enr_2011_A_tab3.htm)).

Table 6: Production and Utilization of Electricity in the oPt in MWh

Production and Utilization	2009	2010	2011
Imports <sup>1</sup>	3,982,940	4,158,848	4,621,686
Electricity Generation	500,661	473,321	569,332
Notes: (1) Imports report the quantity of electricity obtained from other countries. Amounts are considered as imported when they have crossed the political boundary of the country, whether customs clearance has taken place or not			

Source: [http://www.pcbs.gov.ps/Portals/Rainbow/Documents/Enr\\_2011\\_A\\_tab3.htm](http://www.pcbs.gov.ps/Portals/Rainbow/Documents/Enr_2011_A_tab3.htm)

<sup>128</sup> Despite all of these costs, however they still don't include other major costs such as the costs associated with obstacles to the international movement of people; loss of investments in Area "C" due to Israeli control and restrictions; indirect losses from import restrictions in industry and ITC ("dual use items" list); indirect losses from restrictions on telecommunications; losses from the construction of the Wall; and losses from restrictions to the East Jerusalem market; especially for pharmaceuticals and telecommunications.

The cost of electricity is very high in the oPt and is the most expensive in all the countries in the Middle East. It is higher than in Israel, despite the fact that the standards of living in Israel are high, compared with that in the oPt. The cost of electricity for industry and commercial use is higher than domestic use; a situation opposite to most other countries. The approximate cost of electricity for domestic use is about 15 U.S cent/KWh, while it is about 19 U.S cent/KWh for industry and commercial use in the oPt (Jerusalem District Electricity Corporation, 2010).

In June 2011, Council of Ministers approved a new electricity tariff system (Table 8) submitted by the PERC, which aims to organize and unify electricity prices for the consumer to ensure the reduction of the electricity tariff for the various segments of consumers and the productive sectors. Before, the tariff system was not unified in oPt and each electric utility had its own tariff system (PENRA, 2011).

Table 7: New Electricity tariff system

Sector	Price (NIS/MWh)	Decreased rate
Domestic 1 – 100 KWh / month	0.4085	15 – 37 %
Domestic 101 – 200 KWh / month	0.4546	
Domestic > 200 KWh / month	0.4795	
Commercial	0.5181	2 – 22 %
Industrial (low – voltage)	0.4279	22 – 36 %
Industrial (medium – voltage)	0.399	
Water pumping	0.4666	20 – 24 %
Agricultural	0.4084	27 – 37 %
Roads and squares lightening	0.407	

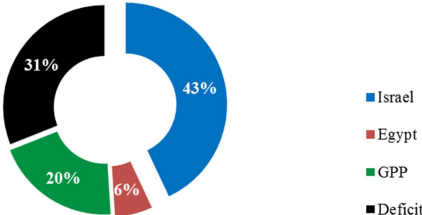
Source: MoLG, 2011

In general, electricity tariffs decreased for all sectors and segments at an average rate of 20%. For Jericho and the Jordan Valley, tariffs based on cost price of the Jordanian network have been adopted for the importance of development for this region, as the total reduction is about 40%. For the other categories of consumers, the tariffs have decreased for domestic consumption by 15-37%, 2-22% for commercial consumption, 22-36% for industrial consumption, 27-37% for agricultural consumption and 20-24% for water pumping (PENRA, 2011). The Gaza Strip receives electricity mainly from IEC and GPP. In October 2006, the Gaza Strip was connected to the Egyptian electricity network, from which it started to import electricity at a lesser rate than from Israel. The Egyptian Electric Company is now supplying the southern part of the Gaza Strip (Rafah Governorate) with electricity.

GPP, which began operating in 2002, was designed to operate at maximum potential of 140 MW to meet electricity demand at peak hours, as well as to meet future needs for the anticipated development. In June 2006, the Israeli Air Force bombed the power plant and destroyed its four transformers. In 2007, the damage was repaired only partially and gradually, the plant reached a generation capacity of 78 MW. However, the plant needs 3,300 cubic meter of diesel per week in order to function well, but Israel allows for 2,200 cubic meters per week to be transferred to Gaza Strip, and with this amount of fuel, the plant generates 55 MW only (GEDCO, 2011).

Gaza Strip presently needs a total electricity supply of approximately 280 MW. One hundred twenty MW are transferred through lines from Israel, 17 MW are transferred from Egypt to Rafah Governorate and the rest of the needed electricity is planned to be supplied by the GPP. Because of the insufficient amounts of industrial diesel it receives, the supply deficit reaches 31%. The chart below shows the sources of electricity in Gaza Strip (GEDCO, 2011).

Figure 8 : Electricity sources in Gaza Strip, 2010



Source: GEDCO, 2011

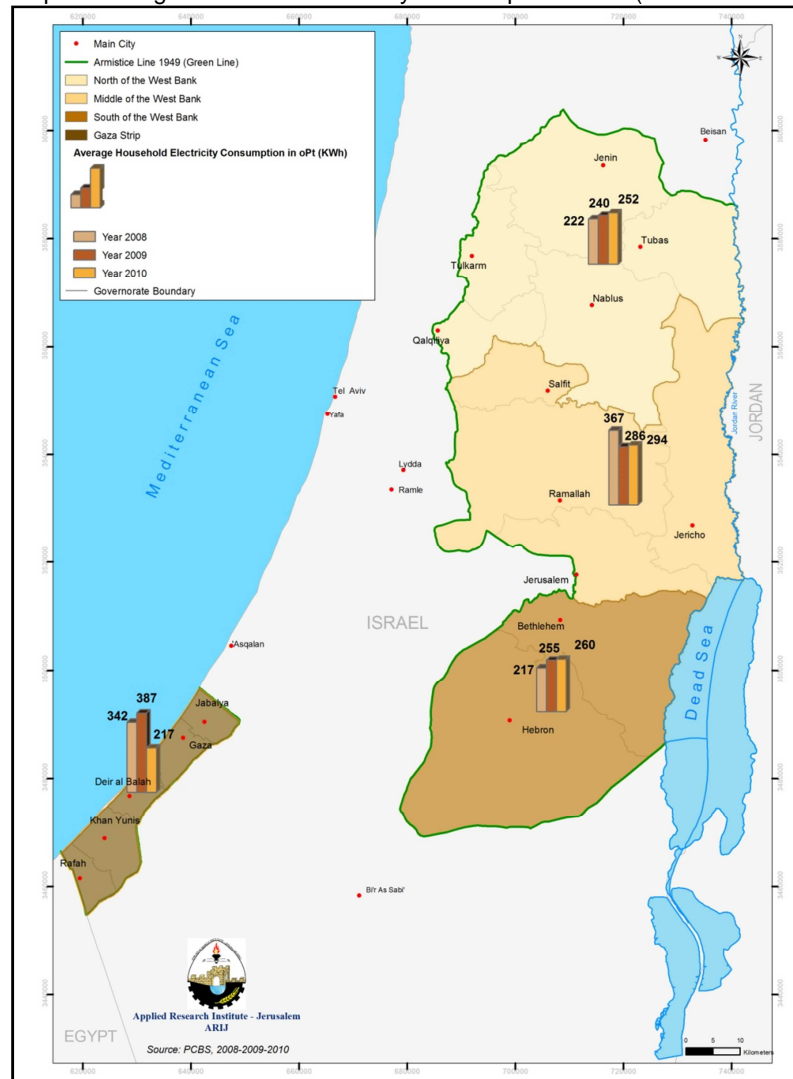
Presently, the whole Gaza Strip had no electricity for at least 8 hours per day, except in Rafah which is supplied by Egypt. There is no Palestinian power plant in the West Bank and it depends almost entirely on IEC for electricity supply; supplied by three substations. However, the Palestinian electric company (Jerusalem District Electricity Corporation) signed an agreement with the Jordanian Electric Company in August 2006 to supply electricity to Jericho Governorate in the Jordan Valley, which started in June 2007.

In 2009, the total quantity of imported electricity in the West Bank reached 2,807,601 MWh, 98% (2,751,186 MWh) of this amount was imported from Israel and 2% (56,415 MWh) was imported from Jordan (PCBS, 2011b).

### Consumption of Electricity

The average electricity consumption of a household (from the households that used electricity) in the oPt during July 2010, was 250 KWh, compared with 247 KWh in July 2009; while it reached 294 KWh in the Middle of the West Bank but did not exceed 217 KWh in Gaza Strip (Map 1) (PCBS, 2010b).

Map 1: Average Household Electricity Consumption in oPt (Source: PCBS)



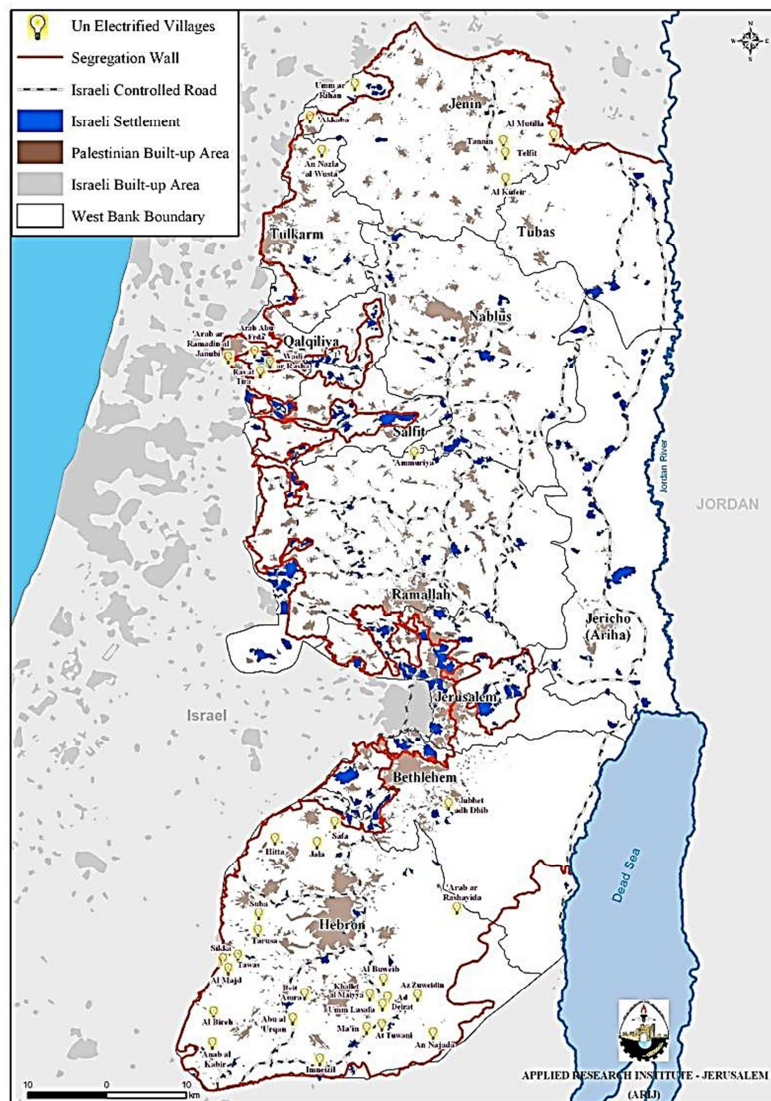


## Access to Electricity and Electricity Tariffs

According to the LSP, the main objective of Palestinian Energy and Natural Resources Authority (PENRA) is to provide the Palestinian citizens with reliable electricity supplies and to do so at a price that is affordable.

Nevertheless, thirty five localities (7%) out of 510 in the West Bank do not have access to electricity network, which means that more than 20,000 citizens are still suffering from the unavailability of electricity to light their houses and roads, or even meet their daily needs (Map 2). According to the PCBS, 100% of the households in Gaza Strip are connected to the electricity public network, while all of them suffer from power blackouts lasting up to sixteen hours a day (PCBS, 2010b).

Map 2: Localities without access to Electricity in West Bank



Since PENRA has been established, the electricity prices are very high compared with other countries, and with the average income for the household, moreover the tariff is not unified. In 2011, PERC has issued a new tariff system which is based on social and development policies, since it takes into consideration the social situation as it is an ascending system, starting at low prices for low consumption rates for those with limited incomes, and get higher with the rise in consumption for those with good incomes (MoLG, 2011).

The new electricity tariffs system is unified for all the governorates in the oPt except Jericho and the Jordan Valley, which is supplied by a Jordanian company. Electricity tariffs in this Governorate has decreased the most at total reduction of 40% (MoLG, 2011), which is the highest reduction percentage among all sectors and governorates. However, the Council of Ministers justified this by stating that “The new system aims to support the citizens in Jericho and Jordan Valley and the productive sectors there by taking into account the participants in these sectors including industrial, agricultural, and tourism sectors, to enhance their characteristics competitiveness”.

One of the most challenges facing the electricity sector in the oPt is that PENRA depends on buying power from Israel to supply it to the Palestinians. Any rise in electricity price in Israel will affect the electricity price in the oPt. In August 2011 Israel decided to raise the electricity price by 9.2%, as a result the electricity price will raise by 7% in the oPt.

## References

- Applied Research Institute – Jerusalem (ARIJ), 2004. POICA website : <http://www.poica.org/glossary/glossary.php>
- Applied Research Institute – Jerusalem (ARIJ), 2007. Policy Tools Towards Sustainable Land Use and Urban Environmental Management at Municipal Level under a Transitional Political Context-Urban Area of Bethlehem, Palestine.
- Applied Research Institute- Jerusalem (ARIJ), and the Ministry of National Economy (2011) The Economic Costs of the Israeli Occupation for the occupied Palestinian Territory, the Applied Research Institute - Jerusalem (ARIJ), [Online], Available: <http://www.arij.org/programs/116-new/488-economic-cost-of-occupation.html>
- Applied Research Institute-Jerusalem (ARIJ) database, 2010. Geo-informatics Department Database. Bethlehem, oPt.
- BADIL Resource Center for Palestinian Residency and Refugee Rights, 2012. Survey of Palestinian Refugees and Internally Displaced Persons Vol VII 2010-2012. Bethlehem, Palestine
- El-Atrash A., 2009. Master Thesis entitled: Promoting Sustainable Urban Growth Strategies to Curb Sprawl in the Urban Area of Bethlehem Governorate. Bethlehem, West Bank.
- El-Atrash A., Isaac J., and Salem H., 2007. Planning Towards a Sustainable Land Transportation System in the Future Palestinian State. *Journal of Natural Science and Sustainable Technology*.
- Gaza Electricity Distribution Company Ltd (GEDCO), 2011. Retrieved on April 2011. From <http://www.gedco.ps/e/main.php>
- Halabi, O., 1997. Legislations of Regulations and Buildings (In Arabic). Institute of Law at Birzeit University.
- Hareuveni, Eyal, 2011. Dispossession and Exploitation: Israel's policy in the Jordan Valley & Northern Dead Sea. B'Tselem. Retrieved July 13, 2011. From, [http://www.btselem.org/Campaigns/2011\\_Jordan\\_Valley/English/index.html](http://www.btselem.org/Campaigns/2011_Jordan_Valley/English/index.html)
- Human Rights Watch, 2010. "Separate and Unequal: Israel's Discriminatory Treatment of Palestinians in the Occupied Palestinian Territories." December 19th, 2010. New York.
- International Monetary Fund (IMF), 2010. "The Role of the IMF in the West Bank and Gaza". IMF WBG Program Note. Retrieved April 14, 2011. From, <http://www.imf.org/external/np/country/notes/wbg.htm#top>
- International Monetary Fund (IMF), 2011. "Macroeconomic and Fiscal Framework for the West Bank and Gaza: Seventh Review of Progress," Staff Report for the Meeting of the Ad Hoc Liaison Committee. Retrieved August 4, 2011, from <http://www.imf.org/external/country/WBG/RR/2011/041311.pdf>.
- Jerusalem District Electricity Company (JDECO), 2011. Retrieved on April 2011. From <http://www.jdeco.net/>.
- Matar, M & Bisharat, K (2008) "Palestinian National Authority" In Ina V.S. Mullis, Michael O. Martin, Joh F. Olson, Dbra R. Berger, Dana Milne, and Gabrielle M. Stanco ed., *TIMSS 2007 Encyclopedia: A Guide to Mathematics and Science Education Around the World, Volume 2*, Boston: TIMSS & PIRLS International Study Center.
- Maya, R. 2004. 'Confronting the occupation: work, education, and political activism of Palestinian families in a refugee camp', Stanford University Press, 2004, p.213.
- McDowall, David; Claire Palley, 1987. The Palestinians. *Minority Rights Group Report no 24*. p. 10.
- MoEHE. (2008). Development Strategic Plan 2008-2013. Palestinian National Authority 2008.
- Nicolai, S. (2007) 'Fragmented Foundations: Education and Chronic Crisis in the Occupied Palestinian Territory', Paris: UNESCO International Institute for Educational Planning and Save the Children UK.
- Palestine remembered website :[www.palestineremembered.com/Acre/Palestine-Remembered/Story559.html](http://www.palestineremembered.com/Acre/Palestine-Remembered/Story559.html)
- Palestinian Central Bureau of Statistics, 1994. Palestinian population the West Bank and Gaza Strip. Ramallah-Palestine.
- Palestinian Central Bureau of Statistics (PCBS), 1999. Population, Housing, and Establishment Census – 1997. Final Results – Population Report, Palestinian Territories, First Part. Ramallah-Palestine.
- Palestinian Central Bureau of Statistics (PCBS), 2007. Tables about Energy Consumption in Palestinian Territory, 2005. Ramallah. Palestine
- Palestinian Central Bureau of Statistics (PCBS), 2008. Household Energy Survey: Main Results (July 2008). Ramallah - Palestine.

Palestinian Central Bureau of Statistics (PCBS), 2009. Population, Housing and Establishment Census 2007, Final Results- Housing Report – West Bank. Ramallah - Palestine.

Palestinian Central Bureau of Statistics (PCBS), 2009a. Energy Balance in the Palestinian Territory 2007. Ramallah. Palestine.

Palestinian Central Bureau of Statistics (PCBS), 2009b. Energy Consumption in the Palestinian Territory Annual Report 2008. Ramallah. Palestine

Palestinian Central Bureau of Statistics (PCBS), 2010a. Palestinian Higher Education Institutions (2010).

Palestinian Central Bureau of Statistics (PCBS), 2010b. Household Energy Survey: Main Results (July, 2010). Ramallah. Palestine.

Palestinian Central Bureau of Statistics (PCBS), 2011. Number of schools per region, supervising authority and school's sex, 2010/2011. Palestinian Central Bureau of Statistics.

Palestinian Central Bureau of Statistics (PCBS), 2011a. Energy Balance in the Palestinian Territory, 2009. Retrieved on May 2011. From [http://www.pcbs.gov.ps/Portals/\\_pcbs/Energy/48728824-cb69-49ff-a98b-7b0b970d03d6.htm](http://www.pcbs.gov.ps/Portals/_pcbs/Energy/48728824-cb69-49ff-a98b-7b0b970d03d6.htm)

Palestinian Central Bureau of Statistics (PCBS), 2011b. Quantity of Imported Energy in the oPt by type of Energy and Region 2009. Retrieved on May 2011. From [http://www.pcbs.gov.ps/Portals/\\_pcbs/Energy/06dc083d-7976-42e4-94b7-f062869767e5.htm](http://www.pcbs.gov.ps/Portals/_pcbs/Energy/06dc083d-7976-42e4-94b7-f062869767e5.htm)

Palestinian Central Bureau of Statistics (PCBS), 2011c. Quantity of Electricity Purchases (MWh) in the West Bank by Source and Month, 2009. Retrieved on May 2011. From [http://www.pcbs.gov.ps/Portals/\\_pcbs/Energy/384fe3cc-ede5-46e7-a32d-d6ab16017d79.htm](http://www.pcbs.gov.ps/Portals/_pcbs/Energy/384fe3cc-ede5-46e7-a32d-d6ab16017d79.htm)

Palestinian Central Bureau of Statistics (PCBS), 2012. Labor Force Survey: Annual Report: 2011, Palestinian Central Bureau of Statistics, Ramallah, Palestine.

Palestinian Central Bureau of Statistics, 2007. Estimated Population in the Palestinian Territory Mid-Year by Governorate, 1997-2016. Available at: [http://www.pcbs.gov.ps/Portals/\\_pcbs/populati/GOV1997-2016.htm](http://www.pcbs.gov.ps/Portals/_pcbs/populati/GOV1997-2016.htm).

Palestinian Central Bureau of Statistics, 2009a. On the Eve of the International Population Day 11/07/2010. Ramallah – Palestine. Available at: [http://www.pcbs.gov.ps/Portals/\\_pcbs/PressRelease/PeopleDay\\_2010E.pdf](http://www.pcbs.gov.ps/Portals/_pcbs/PressRelease/PeopleDay_2010E.pdf).

Palestinian Central Bureau of Statistics, 2010a. Press Release on the Palestinian in the World. 2010. Ramallah - Palestine. Available at: [http://www.pcbs.gov.ps/Portals/\\_pcbs/PressRelease/palpeople2010\\_E.pdf](http://www.pcbs.gov.ps/Portals/_pcbs/PressRelease/palpeople2010_E.pdf).

Palestinian Central Bureau of Statistics, 2010b. Women and Men in Palestine: Issues and Statistics, 2010. Ramallah - Palestine. Available at: [http://www.pcbs.gov.ps/Portals/\\_PCBS/Downloads/book1723.pdf](http://www.pcbs.gov.ps/Portals/_PCBS/Downloads/book1723.pdf).

Palestinian Central Bureau of Statistics, 2010c. Palestinians at the End of 2010. Ramallah - Palestine.

Palestinian Central Bureau of Statistics, 2011a. Revised estimate based on the final results of Population, Housing and Establishment Census 2007. Ramallah-Palestine.

Palestinian Central Bureau of Statistics, 2011b. Annual Report. Palestine Children–Issues and Statistics. Child Statistics Series (No. 14). Ramallah–Palestine.

Palestinian Central Bureau of Statistics, 2011c. Migration Survey in the Palestinian Territory, 2010 Main Results. Ramallah - Palestine. Available at: [http://www.pcbs.gov.ps/Portals/\\_PCBS/Downloads/book1734.pdf](http://www.pcbs.gov.ps/Portals/_PCBS/Downloads/book1734.pdf).

Palestinian Central Bureau of Statistics, 2011d. Special Statistical Bulletin On the 63rd anniversary of the Palestinian Nakba. 5/12/2011. Available at: <http://www.pcbs.gov.ps/DesktopModules/Articles/ArticlesView.aspx?tabID=0&lang=en&ItemID=1745&mid=12235>

Palestinian Energy and Natural Resources Authority (PENRA), 2011. Retrieved on May 2011. From [http://pea-pal.tripod.com/transmission/letter\\_of\\_sector\\_policy.htm](http://pea-pal.tripod.com/transmission/letter_of_sector_policy.htm)

Palestinian Ministry of Health (MoH), 2011. Annual Health Report 2010. Ramallah.

Palestinian National Authority, Ministry of local government, 2011. From the website: [http://www.molg.pna.ps/news\\_details.aspx?id=3239](http://www.molg.pna.ps/news_details.aspx?id=3239)

Paltrade, 2010c. "Trade Agreements between, Vision, Implementation, and Impact". Palestinian Trade Center. June 2010. [http://docs.google.com/viewer?a=v&q=cache:fKdpXVLKNFJs:www.paltrade.org/cms/images/enpublications/Trade%2520Agreements%2520and%2520impediments.pdf+paltrade+trade+agreements+june+2010&hl=en&pid=bl&srcid=ADGEEsguvquqQp1xKft-Od9iY3Bm2zxHTaqCYbrR28HVuazzoanZorbp83T9a3gZemJ\\_szijivOpeJMRphqaZvUZewGTLSMOqXCAtiINopl0viwnJM9qW--pVcKqNcQYbVOWBWeX28s&sig=AHIEtbS5L3TbiM5Jb-7AcXl7XLH5aqmcdQ](http://docs.google.com/viewer?a=v&q=cache:fKdpXVLKNFJs:www.paltrade.org/cms/images/enpublications/Trade%2520Agreements%2520and%2520impediments.pdf+paltrade+trade+agreements+june+2010&hl=en&pid=bl&srcid=ADGEEsguvquqQp1xKft-Od9iY3Bm2zxHTaqCYbrR28HVuazzoanZorbp83T9a3gZemJ_szijivOpeJMRphqaZvUZewGTLSMOqXCAtiINopl0viwnJM9qW--pVcKqNcQYbVOWBWeX28s&sig=AHIEtbS5L3TbiM5Jb-7AcXl7XLH5aqmcdQ) Accessed May 21, 2011.

- Portland Trust, 2011a. "Palestinian Economic Bulletin". April 2011, Issue 55.  
<[http://www.portlandtrust.org/documents/pdfs/bulletins/Issue56\\_May\\_2011.pdf](http://www.portlandtrust.org/documents/pdfs/bulletins/Issue56_May_2011.pdf)> Accessed May 28, 2011.
- Portland Trust 2011b. "Reducing Aid Dependency in the Palestinian Territory". May 2011  
<[http://www.portlandtrust.org/documents/pdfs/bulletins/Special\\_Economic\\_Feature\\_May\\_%202011.pdf](http://www.portlandtrust.org/documents/pdfs/bulletins/Special_Economic_Feature_May_%202011.pdf)>  
Accessed May 28, 2011.
- Tartir, A. (2011a) The Role of International Aid in Development: The Case of Palestine 1994-2008, LAMBERT Academic Publishing, Germany.
- Tartir, A. (2011b) Neo-liberalism for Development and Statehood in Palestine: Fayyadism, Aid Dependency and State Building, Paper presented at 'The Middle East in the Middle: Dynamics and Emerging Changes' Conference, hosted by Middle East Centre, LSE, 15 September.
- The Palestinian Central Bureau of Statistics, 2010d. On the occasion of the World Elderly Day, 01/10/2010. Ramallah – Palestine. Available at: [http://www.pcbs.gov.ps/Portals/\\_pcbs/PressRelease/Elderly2010E.pdf](http://www.pcbs.gov.ps/Portals/_pcbs/PressRelease/Elderly2010E.pdf).
- UN. (2007). Child Info Methodology- Available at: [http://www.childinfo.org/education\\_methodology.html](http://www.childinfo.org/education_methodology.html).
- UNESCO, 2011. "Socio-Economic Report February 2011". Office of the United Nations Special Coordinator for the Middle East Peace Process.
- United Nations Conference on Trade and Development (UNCTAD), 2012. The Palestinian economy: Macroeconomic and trade policymaking under occupation. New York and Geneva, 2012.
- World Bank Group, 2010. Country stats-Occupied Palestinian Territories. Available at: [www.worldbank.org/country/westbank-gaza](http://www.worldbank.org/country/westbank-gaza)
- World Bank, 2010. "Economic Monitoring Note."World Bank Data and Statistics West Bank and Gaza.  
<<http://siteresources.worldbank.org/INTWESTBANKGAZA/Resources/EconomicUpdateJune2010newsletterfinal.pdf>> Accessed April 14, 2011.
- World Bank, 2011a. "Building the Palestinian State: Sustaining Growth, Institutions and Service Delivery". Economic Monitoring Report to the Ad Hoc Liaison Committee. April 13, 2011.  
<<http://siteresources.worldbank.org/INTWESTBANKGAZA/Resources/AHLCReportApril2011.pdf>> Accessed April 14, 2011.
- World Bank, 2011b. "Mobility Restrictions and Labor Market Dynamics in Conflict Affected West Bank and Gaza". Social and Economic Development Department, Middle East and North Region, World Bank. March 31 2011.  
<<http://go.worldbank.org/OQPDBFEC00>> Accessed April 14, 2011.

## Jordan

by Myriam Ababsa  
July 2013

### ➤ Technical report - Demography

Jordan is a small country of 6,5 million inhabitants in 2012 (DOS). This figure was calculated after the 2004 census by applying a 2,2% annual growth rate. The former census was in 1994 and the next one will be in 2014. But more than one million persons are not counted: according to the minister of work, Nidal Katamine, foreign workers, mostly Egyptians, and Iraqi and Syrian refugees (Jordan Business March 2013 and <http://www.albawaba.com/business/jordan-illegal-workers-459326>). Jordan is an exception in the Middle East due to the political stability that has reigned since the country's Independence in 1946, despite the challenge of integrating several waves of Palestinian (100 000 in 1948, then 350 000 in 1967, 300 000 in 1991), Iraqi (500 000 between 2003 and 2013) and - more recently - Syrian refugees (a total of 430 000 in April 2013). Thanks to this stability and the peace accord signed with Israel in 1994, Jordan is one of the first countries in the world for development aid per capita. Its economy is driven by remittances from its 260,000 expatriate workers in the Gulf (600,000 with their families), by revenues from tourism as well as by foreign aid from the United States, Saudi Arabia and the European Union.

Jordan population is mostly urban (82% in 2004). According to the Department of Statistics, an urban locality is a locality that gathers more than 5000 inhabitants. Until 1994, a centre of nahiya was counted as a urban locality even if its population was less than 5000. But in 2004 census, the nahiya level was deleted. Jordan's population became significantly urbanized during the sixties, reaching a rate of urbanization of over 80% in 2011. The two main reasons were rural depopulation and the arrival of waves of Palestinian refugees and displaced persons who mostly settled in the larger towns of Amman, Zarqa, Irbid and Ruseifa, where UNRWA camps and services had been set up.

Jordan's population is undergoing major changes in its demography and its family structure. The country started its demographic transition in the sixties, and has maintained a high fertility rate with 3.6 children per woman in 2007. This high fertility rate is even more surprising considering that 90% of women are educated and 80% of the population lives in urban areas, as shown by the study of urbanization and population distribution. The Jordanian social model is urban and poor (nearly a quarter of households) and both Transjordanians and Jordanians of Palestinian origin continue to arrange marriages within extended families.

#### 1. The Administrative Division of Jordan

Since 2004, Jordan is divided into 12 governorates (*muhafaza*), 51 districts (*liwa*) and 89 subdistricts (*caza*). Until 1994, it counted nahiya, that was a subdivision of a *caza*. Historically, during the ottoman time, the Middle East was divided into *wilaya*, that included several *liwa*, subdivided into nahiya<sup>129</sup>. The level of governorate (*muhafaza*) was added in the twentieth century, while nahiya were gradually transformed into *qada* (subdistricts).

For centuries, the settling of communities in modern Jordan was concentrated in the highlands and in the Jordan Valley (in the north-west of the country) leaving arid regions unpopulated. From the twentieth century, natural population growth and migration as well as improved irrigation techniques and road networks led to the settling of more than a hundred communities beyond the Ma'mura, in areas with less than 250 mm annual rainfall, which do not allow rain-fed dry farming. During the twentieth century, the implantation of communities spread considerably in the Jordan Valley with the

---

<sup>129</sup> In the sixteenth century, the most populated administrative entity in the territory of modern Jordan was the *liwa* of Ajlun, under the *vilaya* of Damascus, divided into several *nahiya* (Kura, Ajlun, Banu Alwan, Banu al-A'sar, Banu Juhma and Banu Kinana), to the south of which lay the *nahiya* of Salt, Kerak, Jabal al-Kerak and Shawbak. During the Tanzimat, two *qada* were created in Ajlun (administered by the *mutasarifiyya* of Hawran) and Salt, then in 1892 *qada* were created in Kerak, Tafila and Ma'an (administered by the *mutasarifiyya* of Balqa'). In 1895 the *mutasarifiyya* of Kerak was formed, and included the *qada* of Salt (which was detached from Hawran) as well as the *qada* of Tafila and Ma'an (ROGAN 2002).

arrival of Palestinian refugees and improved irrigation techniques. Settlements also spread towards the east, with the proliferation of well drilling in the areas of Mafraq and Azraq, and along the road to Iraq. So although most communities still settled in areas with sufficient rainfall, this was no longer always the case.

Until 1985, Jordan had five governorates: Irbid, Amman, Balqa, Kerak and Ma'an, separated by the wadi Zarqa (between Irbid and Balqa) and the wadi Mujib (between Amman and Kerak). Amman and Irbid were the two main governorates in terms of population size and economy. Yet governorate divisions reflected political rather than economic considerations (Doan 1992). In 1985 three new governorates were created by dividing up those already in existence. Amman governorate was split into Amman (with one million inhabitants) and Zarqa (425,000); Irbid governorate was split into Irbid (632,000) and Mafraq (93,000); and Kerak governorate was split into Kerak (112,000) and Tafila (37,000). However, whereas Zarqa was heavily urbanised and able to attract investments for industry and services, and Mafraq was strategically located on the road to Syria (with the market town of Ramtha) and Iraq, Tafila - with only four districts with over 2,000 inhabitants and only 6.5% of the country's industry (compared to 10% in Mafraq and 16% in Zarqa in 1985) - badly needed state and private investments (DOAN 1992).

In 1994, new divisions were introduced with the creation of the four governorates of Madaba (with its booming agriculture and industry), Jerash (focussed on the development of tourism in its ancient city), Ajlun (for the development of tourism in its nature reserve) and Aqaba, the country's only port, in full economic boom since the 1980s and the decline of Lebanese ports. Since the 1994 reform and the king's speech in 2002, the role of governorates has been strengthened for the purposes of decentralisation. Their budgets have been increased, with priority given to security.

Table 1 : Jordan administrative divisions evolution between 1994 and 2004

Governorate	District 1994	Subdistrict 1994	Nahia 1994	District 2004	Subdistrict 2004
AMMAN	Qasabet Amman	Amman	<i>Um Elbasatien</i>	Qasabet Amman	Amman
		Wadi Essier		Marka	Marka
		Sahab		Quaismeh	Quaismeh
		Jizah		Jami'ah	Al-Jami'ah
		Muaqqar		Wadi Essier	Wadi Essier
		Na'uur		Sahab	Sahab
				Jizah	Jizah
				Muwaqqar	Muwaqqar
				Na'ur	Rajm al-Shami
					Na'ur
BALQA	Qasabet al-Salt	Salt Balqa	<i>Ardha</i> <i>Zay</i>	Qasabet al-Salt	Salt
					Al-Ardha
					Allan & Zay
		Dair Alla			Ira & Yargha
		Shunah Janubiyah			Shoonah Janubiyah
					Dair Alla
					Ain al-Basha
ZARQA	Qasabet al-Zarqa	Zarqa	<i>Azraq</i> <i>Bierain</i>	Qasabet al-Zarqa	Zarqa
					Bierain
					Dhlail
					Azraq
					Russeifa
					Hashemiyah
MADABA	Madaba	Madaba		Madaba	Madaba
		Dieban			Jrainah
					Maeen
					Faisaliah
					Dieban

<b>IRBID</b>	Qasabet Irbid Kurah Bani Kenanah Ramtha Al Ghawr al-	Irbid Kurah Bani Kenanah Ramtha Al Ghawr al-	<i>Hariema</i> <i>Wastiyyah</i>	Qasabet Irbid Ramtha Kurah Bani Kenanah Al Ghawr al- Bani Obeid Mazar Shamali Tayybeh Wasatiyyah	Areedh Mlaih Irbid Ramtha Kurah Bani Kenanah Shunah Shamaliyah Bani Obeid Mazar Shamali Tayybeh Wasatiyyah
					Qasabet Mafraq Sabha Rwaished
<b>MAFRAQ</b>	Qasabet Mafraq Sabha Rwaished	Mafraq Sabha Rwaished	<i>Bal'ama</i>	Qasabet Mafraq Mafraq Bal'ama Irhah Manshiyah Badiyah Shamaliyah Salhiya Sabha Um Al-Jemal Dair Al Kahf Om-Elqotain Badiyah Shamaliyah	Serhan Hosha Khaldiyah Rwaished Jerash Mestabah Borma Ajlun Sakhrach Orjan Kufranjah Karak Mazar Mo'aab Qasr Mowjeb Safi Ghawr Almazra'a Ayy Faqo'e Qatraneh Tafiela Bsaira Hasa Ma'an Iel Jafr Mraighah Athroh Petra Shobak Husseiniya Aqaba Wadi Araba Quairah Diesah
					<i>Sama Serhan</i>
<b>JERASH</b>	Qasabet Jerash	Jerash		Rwaished Qasabet Jerash	
<b>AJLUN</b>	Qasabet Ajlun	Ajlun	<i>Kufranjah</i>	Qasabet Ajlun	
<b>KARAK</b>	Karak Mazar Janubi Qasr	Karak Ayy Safi Mazar Janubi Qasr	<i>Ghawr Almazra'a</i> <i>Faqo'e</i>	Kufranjah Karak Mazar Janoobi Qasr Al Ghawr al- Ayy Faqo'e Qatraneh Qasabet Tafiela Bsaira Hasa Qasabet Ma'an	
					<i>Hasa</i> <i>Iel</i>
<b>TAFIELA</b>	Qasabet Tafiela	Tafiela Bsaira		Qasabet Tafiela Bsaira Hasa Qasabet Ma'an	
<b>MAAN</b>	Qasabet Ma'an	Ma'an		Qasabet Ma'an	
<b>AQABA</b>	Qasabet Aqaba	Petra Shobak	<i>Husseiniya</i>	Petra Shobak Husseiniya Qasabet Aqaba	
		Quairah	<i>Wadi Araba</i>	Quairah	

Sources: Census 1994 and 2004, Conception Ababsa 2013



Between 1994 and 2004 census, the division of the country into 12 governorates was not changed. But an administrative level, the nahiya, has disappeared. The former nahiya were all converted into subdistricts. Table 1 gives a detail about these changes. Most of Jordan 1994 subdistricts have been transformed into districts in 2004, while all nahiya were transformed into subdistricts.

The limits of Jordan's administrative divisions have gone through three major changes. The first was the integration of the West Bank between 1949 and 1988. From the 2000s, during the period of neoliberal privatization and attraction of foreign capital, the existing administrative divisions (governorate, district and sub-district) were progressively phased out and replaced by Special Economic Zones. The best example is the Aqaba Economic Zone, which comes directly under the Prime Minister's Office and functions as an extraterritorial entity. The third change occurred in 2001 in the context of democratic opening- up; the amalgamation of municipalities brought their number down from 328 to 99, and gradually endowed them with new powers and their own budgets. In the autumn of 2011, this process was reversed and more than one hundred municipalities were created under pressure from the public.

Nearly half of Jordan population is concentrated in the agglomeration of Amman-Russeifa-Zarqa (2378048 in 2004 and 1838085 in 1994) (table 2). The number of medium sized towns has tripled (from 15 to 45), mainly in the North and the Jordan Valley. The number of large towns with between 50,000 and 100,000 inhabitants remained stable (five towns) between 1994 and 2004, because in 2004 the Greater Amman Municipality incorporated the eleven fast-growing outlying communities of Abu Nusayr, Shafa Badran, Jubeiha, Sweileh and Tareq in the north, Tala Ali, Badr Jadida and Wadi Sir in the west, Um Qusayr and Kherbet al-Souq in the south and Quweisma in the East.

Table 2 : the population of Jordan Main cities in 1994 and 2004

	2004		1994
Amman	1 746 741	Amman	1 307 017
Zarqa	402 141	Zarqa	350 849
Irbid	255 083	Irbid	210 094
Russeifa	229 166	Russeifa	180 219
Aqaba	80 135	Wadi Sir	105 905
Salt	72 581	Quweisma	76 879
Madaba	69 925	Aqaba	62 785
Ramtha	65 482	Al Baq'a Camp	58 592
Baqaa Camp	62 872	Salt	58 222

Source: National Population and Housing Census 1994 and 2004

The only city with more than one million inhabitants is Amman. Between 2007 and 2011, Amman expanded by integrating seven municipalities in its municipal territories (Marka, Quaismeh, Al Jami'ah (University), Wadi Essier, Sahab, Jizah and Naur) up to 1662 km<sup>2</sup>. But in the autumn 2011, these municipalities became autonomous again, under the pression of its notables who wanted to keep a better control over land issues and services.

The urban population of Amman has tripled and that of Ruseifa has risen tenfold since the early 1980s - which coincided with the implementation of structural adjustment policies, with the rise of youth unemployment and the arrival of 300,000 Jordanians of Palestinian origin expelled from the Gulf in 1991. The town of Irbid has expanded and absorbed outlying communities. In contrast, the southern cities of the country have remained stagnant: Kerak's population rose by only 800 inhabitants between 1994 and 2004 (rising from 18,866 to 19,696), Tafila's rose by 2,500 (from 20,881 to 23,420) while Ma'an's fell from 26,731 to 26,124 inhabitants over the same period, reflecting the population drift towards urban areas as well as the crisis in southern Jordan.

Jordan urban population increased considerably between 1979 and 2004. In Jordan the urban threshold is set at a population of 5,000. Note that the localities that are caza (subdistrict) centres are considered as towns, regardless of their size. Jordan is characterized by a dense implantation of small towns (with populations of 5,000 to 10,000), which have more than doubled in number over twenty-five years (rising from 26 to 67 towns) (table 3).

Table 3 : The distribution of population according to locality size.

Locality size	1979	1994	2004
> 250 000 inhabitants	1	2	3
100 000 - 250 000	2	2	1
50 000 - 100 000	0	5	5
10 000 - 50 000	15	33	45
5 000 - 10 000	26	53	67
1 000 - 5 000	205	268	298
< 1000	898	723	524
	1137	1102	1032

Source: National Population and Housing Census

The number of medium sized towns has tripled (from 15 to 45), mainly in the north and the Jordan Valley. The number of large towns with between 50,000 and 100,000 inhabitants remained stable (five towns) between 1994 and 2004, because in 2004 the Greater Amman Municipality incorporated the eleven fast-growing outlying communities of Abu Nusayr, Shafa Badran, Jubeiha, Sweileh and Tareq in the north, Tala Ali, Badr Jadida and Wadi Sir in the west, Um Qusayr and Kherbet al-Souq in the south and Quweisma in the east.

## 2. Migrations

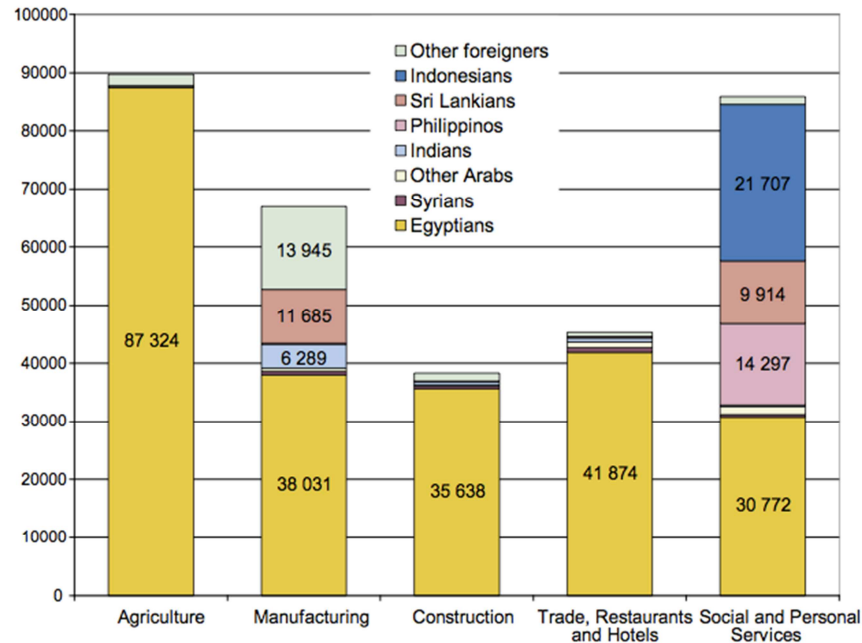
Jordan is a regional and international migratory crossroads. Two kinds of migrations are directed to Jordan: forced migrations (refugees from Palestine, Irak and Syria) and work migrations. At the end of 2012, the « number of guest workers in the Kingdom with valid work permits stood at 235,258 at the end of 2012, the Ministry of Labour's end-of-year statistics showed. According to the ministry's figures, 66.21 per cent of these workers (175,415) are Egyptians, mostly concentrated in the service, agriculture and manufacturing sectors. The report also showed that around 40,000 women from the Philippines, Sri Lanka, Bangladesh and Indonesia are working legally as domestic helpers in the country, while nearly 39,000 others are living in the Kingdom with expired work permits and residency visas ». <http://www.albawaba.com/business/jordan-guest-workers-461069>

« The number of Jordanians working abroad is estimated at between 260,000 (around 600,000 with their families according to the Department of Statistics in early 2008). The majority of expatriates are resident in the oil producing Gulf countries: mainly Saudi Arabia (260,000), but also the United Arab Emirates (250,000), Kuwait (42,000) and Qatar (27,000) (estimates of Jordanians working in the Gulf in early 2009, Jordanian press). Thus the Gulf region is home to about one tenth of the population of the kingdom, counting workers and their families.

From 1973 to the mid-1980s, this region, especially Kuwait, remained the favoured destination for Jordanian workers. However, they have gradually been replaced by Asian workers. The first Gulf War closed these employment areas off to Jordanians, who during the 1990s then turned to North America (mainly the United States and Canada). September 11, 2001, marked a turning point with the tightening of immigration policies in the West. At the same time, however, the Gulf markets re-opened to Jordanian professionals. A sharp rise in oil prices, which boosted huge investment projects in the region, led to a strong demand for skilled labour. A political closing of ties between Jordan and the governments of the Gulf countries, the ratification of sectoral bilateral agreements and the establishment of administrative measures promoting the employment of Jordanian nationals in these countries (the opening of recruiting offices in Jordanian embassies abroad) as well as the continuing policy of acceptance of emigration, provided job opportunities for Jordanian technicians and experts

outside the kingdom, where economic reform measures resulted in underemployment and wage stagnation. In the Gulf, Jordanians are present in sectors such as engineering, medical and pharmaceuticals, media and information technology, education and research, banking and finance » (De Bel Air in Atlas of Jordan 2013).

The following graph was built using statistics included in the ITAN Demographic D report.



Source : Statistical Yearbook 2009

Figure V.20 — Legal Migrant Workers per nationality and sector activity in 2009.

This figure of the Atlas of Jordan (V.20) shows the main sectors of employment of foreign workers registered with the Jordanian Ministry of Labour. In manufacturing (assembly, textiles etc.), the Qualifying Industrial Zones (QIZ) employ 36,807 foreign workers, about half of all workers in the sector. These men and women are mainly Asian (Sri Lankan, Indian, Bengali, Chinese, Vietnamese, etc.).

The women, mostly employed in domestic work (85% of migrants holding work permits) are also almost exclusively from South Asia and South East Asia (the Philippines, Indonesia and Sri Lanka). Many of them are employed illegally. Approximately 73% of workers are Arabs: 222,716 in 2007, making up 84% of the men and 71% of the total legal foreign workforce, Egyptians are the most numerous. Their actual numbers are still underestimated.

Largely marginalized in Jordanian society, foreign workers and, more particularly, servants, who are extremely vulnerable, have recently been protected by measures imposed by international institutions for the protection of workers and human rights. Since 2008, the sectors of domestic work and agriculture are covered by the Jordanian Labour Law from which they were previously excluded. After the outbreak of a scandal involving abuse of workers in QIZs, control of working conditions is slowly improving. The representation of foreign workers within trade unions is currently under discussion in Parliament.

« According to official estimates only 176,000 of the half-a-million Egyptians working in several sectors, mainly construction, hospitality and agriculture, hold valid work permits. »

<http://www.albawaba.com/business/jordan-workers-456080>

Internal migrations:

The 1994 national census showed that the Amman and Zarqa cities were the main “importers” of rural population (+56 %); ten years later, the 2004 census showed that Aqaba, which was turned in 2001 into a liberalized, low tax duty-free and multi-sector development zone (the Aqaba Special Economic Zone Authority - ASEZA) recorded the highest immigration rate (25.7 %) (DOS, October 2006:5).

The three governorates of Amman, Zarqa and Irbid account for two thirds of the Kingdom’s population (4.4 million out of 6.3 million in 2010). They are the economic driving force of the country with over 80% of domestic firms. Their population growth rate is the highest at over 3% per year compared to 2.3% for the country as a whole. The three governorates also attract the most foreign workers and internal migrants.

“The Department of Statistics has conducted the first specialized survey on Internal and Returned Migration in 1986, where the results of the mentioned survey indicated that 6.2 % of the Jordanian population were considered as lifetime migrants, while about 9 % were considered as current migrants due to the change of their previous place of residence. The results of the Accompanying Survey in 1994 census indicated that 10.4 % of the total Jordanian population changed their place of birth and resided in other governorates. In addition, the survey showed that Amman and Zarqa Governorates were the most pulling in-migrants and pushing out migrants, where they pulled together about 56 % of the total migration and contributed to about 50 % of the total out migrants. Economic factors such as availability of job opportunities and different services represent the attracting power for the in-migrants.

The analytical statistical studies showed the existence of a relationship between unemployment rate and the Migration Effectiveness Index. These studies showed that there was a strong positive correlation (0.899) between the two variables, which means that people tend to migrate from governorates with high unemployment rate to other governorates with low unemployment rates. The results of the 2004. Census revealed that 9 % of the Jordanian population living in Jordan changed their governorate of birth and resided in other governorates. The results showed that the Aqaba Governorate has recorded the highest in-migration rate (25.7 %), while the lowest in-migration rate was recorded by the Irbid Governorate (3.7 %). The increase in the rate of in-migration for Aqaba Governorate is due to the transformation of Aqaba to a private economic zone which contributed to the creation of new work opportunities and constituted a pull factor for migrants.” Excerpt from “Social Trends in Jordan”, report published by the DOS in 2006,  
[http://www.dos.gov.jo/dos\\_home\\_e/Social%20Trends%20in%20Jordan.pdf](http://www.dos.gov.jo/dos_home_e/Social%20Trends%20in%20Jordan.pdf)

### 3. Jordan Demographic Transition

Jordan is currently in the final phase of its demographic transition. The country first began controlling mortality rates and improving health conditions with foreign aid during the 1950s.

The differences in fertility rates between urban and rural areas have gradually decreased; current fertility in rural areas declined between 2002 and 2007 (from 4.2 to 3.7 children per woman), while in urban areas fertility generally stagnated or increased slightly during the same five years (rising from 3.5 to 3.6 children per woman). The lowest fertility rate is found in the governorates of Amman (the most urbanized) and Madaba (with its large Christian population). The Governorate of Zarqa where 95% of the population live in urban areas, has a fertility rate of 3.9 children per woman in 2009, close to that observed in the governorate of Amman (3.7 children per woman). The spatial structure of fertility in 2009 thus defies traditional explanations in terms of background, health, education or socio-economic status.

The reduction in fertility in Jordan has been relatively slower than in other countries in the Middle East. According to the theory of demographic transition, fertility begins to decline when at least half of the female population is educated. In Jordan, education has progressed much faster than changes in behaviour concerning motherhood.

Life expectancy at birth in Jordan is continually improving. It stood at 73.4 years in 2011, up from 72 years in 2000, 70.4 in 1990 and 67 in 1980. Jordan has a very good student enrolment at 97.6% (up from 86.7% in 1990). As a result, illiteracy in over 15 year-olds dropped to 7.8% in 2008 (compared to 17% in 1990 and 68% in 1961). It has been eradicated for 15-24 year-olds (0.9%), and now only affects the elderly, especially rural women in Ma'an, Wadi Rum, Wadi Araba and near Mafraq. The highest rates of population with only elementary education are located in rural districts in the south (Tafila, Ma'an and Wadi Musa). Note that the top graduates are in the urbanized districts in west Amman, Irbid and Kerak. This is due to university quotas that favour children from military families and students from rural areas with predominantly Transjordanian populations, and Kerak is a region where military recruitment is common

#### 4. Jordan Statistics reliability

The statistics published by the Department of Statistics are reliable as its members are following regular training with the support of European Union and the International Monetary Fund. In 2004, 2 million JD were affected to upgrade the DOS. In 2008, the government of Jordan has published a National Statistical Strategy 2008-2013 that establish the strengths and the weakness of the statistic collections in Jordan. To quote it: « The most significant strength of the statistical system of Jordan is perhaps the existence of legislation that governs the statistical activities of data-producing institutions. Apart from the Department of Statistics, statistics are produced by a number of public institutions, as a by-product of their main activity. The most important institutions in this category are the Central Bank, the Ministry of Finance, the Ministry of Labour, the Ministry of Education, the Ministry of Health, the Ministry of Higher Education, the Department of Civil Service, the Civil Registry, the Department of Passports, the Land and Surveying Authority, the municipalities, and syndicates. The single most important piece of legislation related to the operation of the whole Jordanian statistical system is the Law of General Statistics (law Nr. 24 of 1950). In 2003, a new law was issued, Temporary Law Nr. 8 of 2003. The new law requires that respondents provide data as requested (article 9), and safeguards the confidentiality of individual data records (article 11). Furthermore, the regulations of many public institutions require that they provide statistical data. Such regulations also mandate collaboration in the statistical field, and the provision of statistics to users, as well as the establishment of databases maintained by such institutions.»

#### ➤ **Technical report – Economy, employment, social disparities and minorities**

Jordan is poor in natural resources and has repeatedly suffered from demographic surges caused by the Arab-Israeli conflict and by the wars in Iraq and Syria. The country's economic survival is due in large to external sources of income: international financial aid - especially from America and Europe, financial aid from the Gulf countries and remittances sent home by Jordanian migrant workers. Foreign aid and remittances account for nearly one third of the income of Jordanian households, while food accounts on average for one third of household expenditure. Therefore the population is very sensitive to variations in commodity prices and to the removal of subsidies on basic foodstuffs. The abrupt removal of subsidies is likely to lead to social unrest, as was the case during the spring of 1989 in the impoverished and neglected southern parts of Jordan, as well as in 1998 and 2002 in Ma'an, and recently mid November 2012 with huge demonstrations (ABABSA 2013).

Consequently, the Jordanian government has undertaken to study poverty and its prevalence within the Jordanian population in order to address it better. The first national survey on household expenditure and income, whose data is used to calculate the poverty line, was completed in 1987. Five similar surveys have since been carried out at five year intervals. These studies are essential for defining indicators of poverty in the Kingdom, and have identified «pockets of poverty», which have been the focal point of public policies for poverty reduction since 1989. This focus on the 'poor' by the Jordanian authorities has altered the representation of Jordanian society. The traditional, finer, representation of Jordanian society in the categories of wealthy, middle-income and poor families has been replaced by a dichotomy of poor versus non-poor. However, recent years have seen renewed interest in the middle classes, which were generally considered to be dying out. Roughly defined as

educated employees or entrepreneurial classes, they are more than ever perceived both as a potentially stabilizing and reformist force. It is estimated that the middle classes constitute between 20% and 40% of households. Situated between the poorest segments of society and the middle classes, more than a third of Jordanian households occupy insecure or poorly paid jobs, work illegally, and do their best to find housing. The government has set up a range of training and employment policies to help them, in an attempt to put an end to the country's paradoxical situation of having a high growth rate but a very low participation rate of the workforce in the economy.

## 1. The structure of the population and the minorities

As in the past, Jordan remains a regional and international migratory crossroads. In the late 2000s, it had about 6 million inhabitants, 6.3 million in 2012. This population is mostly urban (82% in 2004) and in majority Arab.

- For the foreign population in Jordan, I refer to section 2 in ITAN Jordan Report 1.
- Jordan and its two types of citizens (Transjordanian and of Palestinian origin)

The question of the minorities is very sensitive among the Jordanian population as (less than) half of the Jordanian citizens are of Palestinian ascent. The families who came from Palestine before 1948 are de facto Jordanian, and nobody contests it. The ones who came as refugees after 1948, gain full citizenship in February 1949 (to the « Arabs of Palestine », whereas they were living in the West Bank or Transjordan, the two components of the Kingdom of Jordan from 1949 to 1988, the West Bank being under occupation since 1967)<sup>130</sup>. The 1967 refugees were holder of the Jordanian citizenship (Ababsa 2011).

An « official » estimation of their number in a Faf/DOS report gave 45 % of the population of Palestinian origin. The figure is accepted by major demographers (Ph. Fargues, F. de Bel Air)<sup>131</sup>. « This figure, published in a widely publicized report in Jordan, is primarily a political construction, even though it is only slightly lower than estimates obtained by extrapolating the number of refugees in 1948, displaced persons in 1967- 70 and returnees in 1990-92. The figure is under 50%, and calms the fears of Transjordanian nationalists while rejecting the transfer theory dear to the Israeli right-wing. However, it is high enough to curb the ambitions of the nationalists and to justify Jordanian intervention in the negotiations on the final status of refugees and displaced persons » (de Bel Air in Ababsa 2013).

Citizenship is unequal in Jordan because for some members of the population it depends on the permanent status of Palestinian refugees. Since the severing of ties with the West Bank in July 1988, different colours of passports indicate unequal degrees of citizenship within the nation. The Palestinians who arrived as refugees in 1948 in the West Bank and in Transjordan acquired Jordanian nationality in 1949, which was then formalized in 1954, and they have a national number (al-raqm al-watani). The 1967 war and the occupation of the West Bank by Israel led to the arrival on the east bank of the River Jordan of 300,000 'displaced' Palestinians with Jordanian nationality. In July 1983 the Jordanian government introduced green and yellow travel documents for Palestinians - who became Jordanians in 1949 – from the West Bank (which has been occupied since 1967): green documents were for those who had stayed in the West Bank, yellow ones for those who had left and had settled on the east bank of the River Jordan (Ababsa 2011). These documents were supposed to facilitate crossing the Allenby Bridge in both directions (in to Jordan for green cards and to the West Bank for yellow cards)<sup>16</sup>. In 1988, following the royal decision to sever ties with the West Bank, only those Jordanians living on the east bank of the River Jordan were able to keep their Jordanian nationality; those who lived in the West Bank (and had green cards) lost it<sup>17</sup>. Following the Oslo

<sup>130</sup> « In February 1954, Jordanian law finalised regularizing the status of Palestinians living in Jordan: Paragraph 2 of Article 3 of the Nationality Act states that any person of Palestinian nationality prior to 15 May 1948, with the exception of Jews, residing in the Kingdom between 20 December 1949 and 16 February 1954 shall be considered a Jordanian national. A number of additional institutional measures were implemented to ensure the integration of Palestinian refugees. The Jordanian parliament enacted a new constitution in December 1952, promoting the equality of all Jordanians before the law (with equal opportunities), regardless of their race, language or religion. This constitution, still in force today, liberalized the Jordanian political system by making the government and its ministers accountable to parliament » (Al Husseini in Ababsa 2013).

<sup>131</sup> In 2003, a former prime minister announced that the figure was of 43 %.

peace accord in September 1993, West Bankers acquired papers from the Palestinian Authority in 1994 (the first step towards Palestinian nationality). As well as these groups there are also the refugees from Gaza who only have two-year Egyptian travel documents (EL-ABED 2005).

- Jordan Ethnic minorities

« Among the non-Arab minorities, there are Armenians: descendants of the first wave of survivors of the 1915 genocide from Anatolia, refugees who fled the Armenian quarter of Jerusalem after the Six Day War or more recent immigrants from ex-Soviet Armenia. This community is mainly settled in the capital (although it has gradually abandoned the district of Ashrafiyya, where many of its members resided) and to a lesser extent in Irbid, Aqaba, Madaba and Zarqa. Armenians make up less than 1% of the total population.

Originally from the Caucasus, the Circassians, Chechens and other non-Arab Muslim minorities are officially estimated at between 20,000 and 80,000 people. According to the 1994 census they make up “about 1.3% of the population”, i.e. 54,000 people. The Circassians, originally a mosaic of peoples with diverse languages and socio-political organizations gathered under the term Adyge, or “men”, were driven from the northwest Caucasus by Russia in the late nineteenth century towards the territories of the Ottoman Empire, which allocated them land. They were the first settlers on the fringes of the Empire, and remain concentrated in Amman, in its west and southwest suburbs (Na’ur, Wadi al-Sir, Sweileh) and in the region of Jerash. Zarqa and its surroundings (especially the oasis of Sukhna) are home to the oldest Chechen communities » (de Bel Air, in Ababsa 2013).

The first Circassians and Chechens were accepted by the Ottomans in Europe (Turkey and Bulgaria) and to a lesser extent in the Vilayet of Aleppo. Following the massacres carried out by Circassian mercenaries in Bulgaria in 1876, in February 1878 Circassians were sent by boat from Greece and Macedonia to the vilayets of Beirut and Damascus, via Beirut, Acre (to Nablus) and Tripoli (to Homs). Some arrived in Amman at that time. Overall, 25,000 Circassians settled in southern Syria and about 15,000 settled near Aleppo in 1878 (LEWIS 1987, p. 98). Many died of malaria and chickenpox, those who survived had to adapt their farming methods to the dry climate of the Middle East. The Ottoman government exempted them from tax and granted them access to miri land, which they defended fiercely against the Bedouins (Ababsa 2013).

In Jordan, the Circassians were responsible for border control and for developing agriculture on the steppe, where they created many new agricultural zones. They were supported by the Ottoman authorities and joined the ranks of the army, they later joined the troops of Emir Abdullah the 1st in the Transjordan Frontier Force and the Arab Legion. In the early 1920s, out of a total population of 300,000, there were only 7,000 Caucasians (6,000 Circassians and 1,000 Chechens). The first Chechens settled in Transjordan from 1902 in Zarqa, they subsequently founded Ruseifa in 1904, and Suweileh and Sukhna in 1905. In March 1906, European sources estimated the number of Circassians to be 1,949 families in Qunaytra, 2,250 families in Transjordan, 670 families near Homs, 550 families in the vilayet of Beirut (including the Sanjaks of Latakia and Acre) and a total of 25,000 people in the Vilayets of Damascus and Beirut. After the creation of the Kingdom of Jordan in 1949, Amman had 640 families (Shabsugh and Kabarday groups), Wadi al-Sir had 370, Zarqa 790, Jerash 400, Naur 170, Suweileh 120, Sukhna 20 and Azraq Shishan 20 (LEWIS 1987, p. 116).

- Jordan Christians and other religions

The Jordanian population is predominantly Muslim, Christians of various faiths represented “less than 4% of the population”<sup>1</sup> in the mid-1990s. But, the Christians do not consider themselves as a minority, as they are among the first inhabitants of the country (as the first churches were built in Jordan and Palestine in the 4th century). The proportion of Christians in the population is gradually decreasing because of the higher level of emigration and the lower fertility rates of this subpopulation, which are noted (but undocumented) in Jordan, as in other countries in the region. Unpublished data from the 1994 census on ethnicity and religion, cited in a confidential report to the UN in 1997 (TOUKAN, A. “Ministry report reveals lower than estimated figures on country’s minorities,” Jordan Times, August

17, 1998). Christians made up 3% of the population in the census of 1979, the last to publish such data. In the 2004 census, no questions were asked about religion, ethnicity or nation of origin of the population or their ascendants. In 2013, a Jordanian lawyer said to me that according to the Diwan (Royal court) estimation, the Christians were only 150 000 in Jordan now (Amman, Madaba). The only source I have found about this community is the number of marriages by governorate every year.

Almost all Jordanians are Sunni, although a Shiite community, composed mainly of Iraqi immigrants, of whom 17 to 26% are Shiites, is gradually growing in the region of Amman-Zarqa (respectively FAFO 2007 and UNHCR 2007).

There is a small Druze community settled in the North-East of the country (in the Azraq region) and there are some Baha'is.

#### - Jordan, a heaven for refugees

« After the settling of merchants, bureaucrats, artisans and soldiers from Syria, from the Hijaz and, mainly, from Palestine caused by the establishment of the Emirate of Transjordan in 1921, regional crises attracted Palestinian refugees to Jordan in 1948, the displaced population from the West Bank in 1967 and the returnees from the Gulf War in 1990-91. The 300,000 or so workers originally from Palestine, driven mainly from Kuwait in retaliation for the support shown by the PLO and King Hussein during the invasion of the emirate by Iraq, are also holders of Jordanian nationality. Refugees from the war in Lebanon (1975-1990) and from Iraq after the Gulf War also found refuge in the kingdom. Since the outbreak of the second Intifada in September 2000, the Syrian- Lebanese crisis and the assassination of Rafik Hariri have driven into Jordan new waves of nationals from the territories administered by the PNA and Syria, who are not necessarily permanent residents in Jordan. Finally, from March 2003, the second Gulf War, the fall of Saddam Hussein's regime and the sectarian violence that followed it generated a mass exodus of Iraqis to Jordan.

Similarly, the reliability of the estimated number of Iraqis, generally illegal residents in Jordan, may also be questioned. The revised figure of 750,000 Iraqis claimed by international parties at the beginning of the refugee "crisis" is based on a dubious methodology; in the absence of a reliable registry of Iraqis' entries and especially their exits from the country, but also a lack of knowledge of the number of Iraqis who arrived before 2003. The figure may be overestimated, and is high enough to justify substantial foreign aid » (de Bel Air in Ababsa 2013). The total number of Iraqis refugees since 2003 is estimated around 450 000.

Since the civil war started in Syria in March 2011, refugees started to come to Jordan. By mid July 2013, UNHCR estimates the number of refugees in Jordan to 486 972 persons, nearly a thousand a day entered the country since January 2013. <http://data.unhcr.org/syrianrefugees/country.php?id=107>

## 2. Education in Jordan

Jordan has a very good student enrolment at 97.6% (up from 86.7% in 1990). As a result, illiteracy in over 15 year-olds dropped to 7.8% in 2008 (compared to 17% in 1990 and 68% in 1961). It has been eradicated for 15-24 year-olds (0.9%), and now only affects the elderly, especially rural women in Ma'an, Wadi Rum, Wadi Araba and near Mafraq. The highest rates of population with only elementary education are located in rural districts in the south (Tafila, Ma'an and Wadi Musa). Note that the top graduates are in the urbanized districts in west Amman, Irbid and Kerak. This is due to university quotas that favour children from military families and students from rural areas with predominantly Transjordanian populations, and Kerak is a region where military recruitment is common (Ababsa 2013).

« Jordan has invested considerably in education since the onset of educational reform in mid 80s. During the years between 1990 and 2001, Jordan spent on average JD 32 million each year on basic education (World Bank, 15 June 2002). Through educational reforms, the government is improving the educational standards of the youth. With English introduced as a foreign language from grade 1 in



basic education and computer science from grade 7, young Jordanians will be better qualified to meet the requirements of the modern labour market. In addition to changing the curriculum, Jordanian authorities have focused as much on expanding the number of schools in the Kingdom so that access to school is more or less equal for all children. In 2003/2004, there were 2,814 elementary schools in Jordan, compared to 2,575 in 1996 (Ministry of Education, Naja Hasan, in e-mail 21 November 04). As a consequence, fewer children have to attend double shift schools, and more children have a school closer to their homes. The number of secondary schools has expanded from 928 to 1,228 during the same period (ibid.). » (Faf0 2004 : 51)

#### Education level definitions

		Explanation by the expert
illiterate	Percentage of persons 15 years and above who cannot read and write a simple description about himself in any language	
read and write	Percentage of persons 15 years and above who read and write a simple description about himself in any language	
elementary	Percentage of population 15+ years with elementary education out of the total population 15 + years	elementary is from 6 to 10-11 years of age
preparatory	Percentage of population 15+ years with preparatory education out of the total population 15 + years	preparatory is from 10-11 to 16 years of age
basic education	Percentage of population 15+ years with basic education (elementary and preparatory) out of the total population 15 + years	
apprenticeship	Percentage of population 15+ years with vocational Apprenticeship education out of the total population 15 + years	
secondary	Percentage of population 15+ years with secondary education out of the total population 15 + years	three years (two years and tawjihi : high school diploma)
intermediate diploma	Percentage of population 15+ years with intermediate diploma education out of the total population 15 + years	two years of university
bachelor	Percentage of population 15+ years with bachelor education out of the total population 15 + years	three years of university
higher diploma	Percentage of population 15+ years with higher diploma education out of the total population 15 + years	more than three years of university
Magister	Percentage of population 15+ years with magister education out of the total population 15 + years	Magister
doctorate	Percentage of population 15+ years with doctorate education out of the total population 15 + years	PhD

« Seen over a time, there has been a sharp increase in reading and writing skills since the 1970's when only 47 percent of the adult population were literate compared to 86 percent in 1996. In 2000, the government established a target for 2003 at 94 percent literacy, but this has not yet been reached as only 86 percent of the surveyed population in the MPHS claim that they are able to both read and write » (Faf0 2004 : 52)

« Although younger people are more literate than older people, it is still quite alarming that only 94 percent males aged 15 to 19 years old are literate, leaving as many as six percent without proper reading and writing skills. Females in this age group fare better as 97 percent are literate. If we look at the 15 to 24 years age group, UNESCO's target group for the Millennium Development Goals (MDG), we find 95 percent literacy among males and 97 percent among females. Jordan ranks highest among all Arabic countries in youth literacy (The Millennium Development Goals in Arab Countries, UNDP, 2003: 8). From age 40 and upward, the sex difference is more apparent and also opposite compared to the younger age groups. Eleven percent more females than males are illiterate in the 40 to 44 years age group, and the gap increases further with age. » (Faf0 2004 : 52)

« The lowest adult literacy rates are found in Mafraq and Karak governorates (80 percent), while Amman rates highest with an 89 percent literacy rate, three percent above the national average. All governorates have lower rates for women than men, but the difference is smallest in Aqaba and Amman (eight percent difference) and highest in Ma'an (16 percent).

The governorates of Madaba, Karak and Tafila rank highest on literacy in the age group 15 to 24 as 97 percent are literate. Amman has 96 percent, equal to the national average for this age group. The lowest rate (94 percent) is found in Mafraq. Although the differences between the governorates are not that significant in this age group, there are greater varieties in the older age groups. » (Faf0 2004 : 53)

### 3. Jordan's Economy

Jordan is a small country lacking in natural resources and with little useful land area. Since the 1970s the country has had a rentier economy. Its income is both direct, in the form of remittances from the hundreds of thousands of emigrants in the oil producing Gulf countries, and indirect, due to its geopolitical position as a pivotal country for peace in the Middle East, which guarantees generous international aid to ensure stability. Jordan is a developing country that aspires to become an emerging country. With a GDP per capita of \$ 4,326 in 2011 (International Monetary Fund) compared to \$ 2,596 in 2006, its social indicators are favourable: population growth is under control at 2.3%, the number of poor is reducing (13.3% in 2008 down from 21.3% in 1997) and the unemployment rate is 13.5% (but over 25% for youth). Unemployment is structural in Jordan; it is linked to the development of an economy of welfare dependency and to the importing of 250,000 Egyptian and Asian workers who accept unskilled jobs for very low wages (the minimum wage was JD 150 in 2011). These immigrant workers represent almost a quarter of Jordan's workforce (Ababsa 2013).

The Jordanian economy is dependent on remittances (\$ 3.2 billion in 2010, i.e. 12% of GDP, compared to 20% in 2000), revenue from tourism (\$ 2.4 billion in 2010 down from \$ 2.9 billion in 2008), foreign direct investment (\$ 1.5 billion in 2010 down from \$ 1.9 billion in 2008) and external financial assistance (\$ 854 million in 2010 compared to \$ 1 billion in 2008). In 2010, Jordan's GDP was \$ 26.5 billion (JD 19 billion). In 2011, the United States and Saudi Arabia increased direct aid to the Hashemite kingdom, which reached \$ 1.02 billion to compensate for falling revenues from tourism and foreign direct investment following the Arab Spring.

Jordan imports 96% of its energy in the form of crude oil, oil products and gas, amounting to JD 2.1 billion in 2010. The second largest sector of imports is transport equipment and spare parts (over one billion JD), followed by steel, textiles and pharmaceuticals. Exports doubled following the implementation of trade agreements, particularly with the United States in 1995 (fig. VII.4). They increased by 190% between 1996 and 2008. Exports consist essentially of clothing manufactured in the QIZs, followed by potash, medical and pharmaceutical products, vegetables, fertilizers and phosphates.

One third of imports come from Arab countries (mainly oil), but for manufactured goods, Europe is Jordan's largest trading partner with 19.8% of imports (9.7% come from Germany). China provides only 10.9% of imported goods. 50% of exports are sent to Arab countries, especially Iraq (18.5%), but most products are re-exported, with Jordan serving as a transit country. The U.S.A. receives 15.6% of exports and Europe only 3.7%. In the end of the 1990's, Jordan undertook a process of market liberalization and signed several free trade agreements: Qualifying Industrial Zones in 1996, GAFTA (Great Arab Free Trade Agreement) in 1997, free trade agreements with the United States in 2000 and the Euro-Mediterranean partnership in 2002.

Jordan's public finances are in deficit: revenues and donations totalled \$ 6.56 billion in 2010, while expenditures amounted to \$ 8.02 billion; leaving a shortfall of \$ 1.46 billion (30.42% of GDP) (Central Bank of Jordan 2011). Bilateral and multilateral grants recorded in the balance of payments reached JD 854 million in 2010, compared to an average JD 686 million from 2006 to 2010. Arab aid counted for one third (JD 283 million), but was zero in 2007 (an average of JD 365 million during the period 2006-2010). U.S. aid (JD 280 million) represented another third (on average JD 239 million). Aid from the European Union was 11.5% of the total with JD 97.7 million.

Foreign direct investment was only JD 1.2 billion in 2010, one-third down on the 2006-2010 average. Most of these foreign investments were for the tourism industry for which the country's stability is essential. They represented only 6.4% of GDP in 2010, compared to a record 22.7% in 2007 .

### Remittances

« The integration of Palestinians in the Kingdom of Jordan also generated another source of economic prosperity: remittances from emigrants employed as mostly of Palestinian origin, managers, particularly in the prosperous oil economies of the Arabian Peninsula from the late 1950s. According to Jordanian government departments, between 1961 and 1983 the number of Jordanians working abroad increased fivefold, rising from 64,000 to 312,000, of which over 85% worked in the Gulf. In addition, half a million family members accompanied these workers. Remittances reflect these demographic changes: from \$ 16 million in 1970 (2.7% of GNP), the sums transferred to Jordan by emigrants rose to over US\$ 1 billion between 1981 and 1986 (approximately 25% of GNP). The flow of economic migrants and their remittances dropped slightly from the mid-1980s, in response to the crisis faced by the countries of the Arabian Peninsula, and then fell more sharply after the 1991 Gulf War, when some 300,000 workers were expelled from Kuwait and Saudi Arabia (fig. VII.15). Remittances recovered in the mid-1990s (through other forms of expatriation), but did not return to pre-war levels (260,000 Jordanians were working abroad in 2001). However, remittances bounced back in the early 2000s reaching almost U.S. \$ 2 billion. According to a 2008 estimate by the Department of Statistics, around 260,000 Jordanians work abroad (600,000 with their families). The majority of expatriates reside in oil producing countries in the Gulf: mostly in Saudi Arabia (260,000 people), but also in the UAE (250,000), Kuwait (42,000) and Qatar (27,000) (estimates of the number of Jordanians in the Gulf in early 2009, Jordanian press). The Gulf region is therefore home to about a tenth of the kingdom's population; workers and their families (de Bel Air in Ababsa 2013).

Remittances from expatriate workers are growing steadily: they continued to rise in 2007 and 2008, and reached US\$ 2.6 billion in 2006, according to data from the Central Bank of Jordan, for Gross Domestic Product (GDP) or 16% of GDP. Thus, although mass migration causes a "brain drain" that is detrimental to the country's future in the long term, in the short term it generates income that is essential for the kingdom's economy. In addition, it plays a role for social and political stability by ensuring access to capital for young professional Jordanians and their families, which is increasingly difficult in the kingdom since the economic deregulation process started. A drop in oil prices could therefore have social and political consequences in Jordan as well as an impact on the economy » (de Bel Air in Ababsa 2013).

In 2010, Jordan was ranked 16th worldwide amongst countries receiving remittances from nationals abroad. However, in proportion to its population size it was second worldwide after Lebanon and ahead of Morocco and Egypt. Thus, a substantial proportion of its GDP comes from remittances from Jordanian expatriates.

### The Structure of the Economy Business Sectors

Jordan's economy is mostly services (71.3% of GDP in 2010) driven by the tourism sector, followed by transport and telecommunications, then finance and real estate. The telecommunications market is booming and the 6,000 Jordanians who graduate from the six universities specialized in information and communication technology (the country has 22 universities in total) are insufficient for the Jordanian market (Oxford Business Group 2010, p. 86). While the number of land-lines is decreasing, households with an internet connection increased from 13.7% to 29% between 2006 and 2009 (Oxford Business Group 2010). However, there are still very few websites in Arabic, so the internet is of limited interest to most non-English speaking Arabs (Ababsa 2013).

2010 was a record year for tourism and revenues, but the Arab Spring greatly affected tourism from Europe and the U.S., which was offset by a greater number of Arab tourists, mainly from the Gulf.

Airport traffic consequently declined, while the port of Aqaba benefited from a boom driven by re-exports to Iraq.

Jordanian industry is driven by large textile companies located in the Qualifying Industrial Zones (QIZ), that employ mostly Asian workers engaged in social dumping by accepting wages below the minimum salary of JD 150 per month (this practice was made legal for QIZ in 2009). The manufacturing of medical equipment and the pharmaceutical industry (the Al-Hikma Company for example) are thriving sectors that contribute to exports. The construction sector developed rapidly between 2005 and 2007, with major projects like the new Amman downtown in Abdali (Mawared joint venture) and gated communities in Aqaba (fig. VII.5). These projects were suspended by the economic crisis, while two gigantic new projects were launched: the new town of King Abdullah bin Abdel Aziz in Zarqa (for 500,000 residents in 2020, financed with Saudi capital) and the huge Marsa Zayed project in Aqaba costing \$ 10 billion. (Ababsa 2013).

The mining sector is booming, driven by phosphate (6.5 million tons) and potash exports (1.9 million tons in 2010). However the drop in world prices has led to a decline in revenues. Agriculture accounts for only 3% of GDP, due to limited farmland (only 252,000 irrigated hectares) and in spite of substantial aid from the state in 2011: \$ 42 million to support small producers and \$ 56.6 million for fodder.

38.6% of Jordanians over the age of fifteen work the public sector (HEIS 2008), but over one third of the workforce is employed in the armed forces and the civil service in the governorates that are sparsely populated and traditional supporters of the regime: Kerak (31.7%), Tafila (36.6%), Aqaba (35.4%) and Ajlun (38.8%) .

The regional distribution of the working population shows regional production structures. Thus the governorates of Amman and Zarqa have far higher rates of employment in the service sector (in Amman: finance 5%, trade 15.7% and communications 7.8%), and in industry (11.7% in Zarqa and 8.1% in Amman). They are the country's centre of production. Tafila governorate has a sizeable mining sector (15%) with its phosphate mines (however this high percentage is partly the result of the area's small population). Finally, 40% of workers in the governorate of Aqaba were employed at the port and in the transport sector in 2008. (Ababsa 2013).

The oversized public sector employs 38.6% of the workforce (452,180 people out of 1,172,701 in 2010). The private sector consists of 147,327 businesses: 620 with over 100 employees, 516 with 50 to 99 employees, 1,830 with 20 to 49 employees, 13,085 with 5 to 19 employees and the vast majority (131,276) with only one to four employees (small grocery stores, small repair shops, self-employed artisans etc.) (DOS 2006, UNDP 2011). The Jordan Human Development Report of 2011 focuses on the role in economic growth of small businesses (with between 1 and 49 employees according to the department of statistics, but with between 1 and 19 employees for the UNDP) and medium-sized enterprises (between 50 and 99 employees for the DOS, but between 20 and 99 for the UNDP). These small and medium-sized businesses represent 60% of the private sector and employ 37% of Jordanians (HDR 2011, p. 15). 85% of these SMEs are in commerce and services, and 80% are located in Amman, Zarqa and Aqaba (where they enjoy tax exemptions). The governorates of Balqa' and Aqaba have a high number of medium-sized enterprises, their illiteracy and unemployment rates are the lowest in the country (HDR 2011, p. 20) (Ababsa 2013).

The tourism sector accounted for 13% of GDP in 2010 and employs nearly a quarter of the workforce, placing Jordan just after Lebanon in tourism receipts as % of GDP, but far ahead of Morocco, Syria and Egypt. The bulk of tourism comes from the Arab world, mainly the Gulf, followed by Asia, Europe and the Americas. Out of the 9.5 million people who entered Jordan in 2009 (a figure that includes tourism, but also business tourism), 8 million people came from Arab countries (including 2.6 million Jordanians, 2.2 million Syrians, 1.2 million Saudis, half a million Egyptians and 380,000 from the Palestinian territories); 609,983 came from Asia (including 233,000 Israelis and 159,000 Turks - tourists and businessmen); 582,000 came from Europe (UK, Russia, France, Germany and Italy) and only 243,000 from north America (184,000 from the USA and 35,000 from Canada).

Amman and Aqaba airports had a total of 6.6 million passengers in 2010, of which 4.5 million were tourists (ACI and WTO 2011). These figures are quite low compared with those of Turkey (Istanbul had 32 million passengers in 2010 up from 18 million in 2002) and booming Dubai (47 million passengers in 2010 up from 17 million in 2002) (Ababsa 2013).

#### 4. Poverty Alleviation programs and Social Disparities

The poverty rate is defined as the percentage of the population living below the poverty line. Based on different poverty lines, the incidence of poverty has been found to be at levels as different as 18.2% (officially adopted figure in 1997) and 33% (study by MoSD/DFID). Currently, the official national poverty rate (based on a 2008 survey) stands at 13.3%; up from 13% in 2006. In absolute numbers, 75,000 more people had become poor between 2006 and 2008 (see MANSUR 2010, DOS 2010). In 2008, the poverty line stood at JD 56.7 /month (JD 680/year) per capita or JD 323/month (JD 3,876/year) for an average sized family of 5.7 members. This means that a household needs to spend at least JD 3,876 per year or JD 323 per month in order to meet its assumed basic needs. Due to differing food and living costs in the different governorates, the national poverty line is broken down to governorate level, where it varies. It is highest in Amman (JD 703) and lowest in Mafraq and Jerash (JD 656) (see DOS 2010).

« It is only since 2002 that the periodic national Household Expenditure and Income Survey (HEIS) became representative on a sub-district level. Since then the spatial distribution of poverty has become a much-debated issue. A joint report by the Ministry of Planning and the World Bank, published in 2004, stated that the overall poverty rate had declined but noted that in several sub-districts – henceforth termed poverty pockets – severe poverty remained. Those poverty pockets were subsequently defined as sub-districts where the poverty rate is above 25%, and 20 of them were identified. The report noted that most poverty pockets are located in ‘thinly populated desert areas’ (HKJ/WB 2004 : 34) » (Lenner in Ababsa 2013).

#### In search of the middle classes

In 2008, the Economic and Social Council (ESC), a national institution composed of members of civil society and government, and responsible for informing and advising the relevant authorities on economic and social matters, published a study of social groups in Jordan. The results of this study indicate that, contrary to widespread belief that the middle class had become part of the poor classes, it still forms 41% of the population and participates fully in its patterns of consumption and economic drive (Ababsa 2013).

The study's authors assume that Jordan has a large middle class, based on the fact that 67% of households own their homes, 48.6% pay Social Security contributions and 40% own a car (TABBA 2008). Yet such factors are insufficient to identify the middle class given that half the residents of Amman's poorest informal settlements are home-owners, and one third of the population benefits from social security since they are refugees registered with UNRWA. Car ownership is a better indicator, but of course it also characterizes the upper classes. Hence the authors studied in detail household income and expenditure weighting them by size.

The ESC study was based on the statistics of the 2008 Household Expenditure and Income Survey (HEIS). Starting from the poverty line: JD 56.6 expenditure per person per month (JD 680 per year), the study considered that any individuals whose annual per capita expenditure was at least twice but no more than four times the Department of Statistics' general poverty line formed the middle class, i.e. between JD 1,360 and 2,720 per person per year, or JD 7,752 and 15,504 per year for a family of 5.6 people. Three classes of household expenditure can be identified: the poverty line at JD 4,800 and the middle class between JD 8,000 and JD 12,000 annual expenditure (defined by the 2008 HIES).

The ESC researchers' method is unique in that it takes into account average household size, which decreases as spending levels rise, then multiplies this figure by expenditure per head to calculate rates per class. According to this method, the percentage of poor is 13.3%, that of the population

below the middle-class 37.5%, the middle class 41.1% and the upper-class 8.2% (TABBAA 2008). The study found that the middle classes make up one third of urban households, but only a quarter of rural households. Contrary to popular belief, the middle classes do not consist of public sector employees but rather of licensed professionals and employees of the booming private sector: mainly working in finance, transport, telecommunications and real estate, whose salaries are relatively high.

This study was criticized by several ministers and experts who estimate that the middle class makes up 20% of the population, based on income rather than expenditure (AZZEH 2010).

According to the 2008 HEIS, salaries only count for half of income on average, the rest consists of undeclared income (self-employment), income from rents (13%) and transfers (remittances from family members living abroad, pensions, state benefits and charitable donations). The lowest average incomes per family are found in Madaba, Balqa' and Zarqa where wages are low and where households' own resources are limited. On average, 21% of Jordanian household income comes from transfers and remittances (one third among the poorest families).

## 5. Challenges Facing Jordan's Labour Market

Despite relatively high GDP growth rates in the 2000s, (between 5% and 8% from 2000 to 2008 and 3 to 4% since the outbreak of the global economic crisis in late 2008 (World Bank d)), Jordan's labour market indicators have been alarming. The participation rate of Jordan's workforce has remained one of the lowest in the world at about 40%, and the country's unemployment rate is high, stagnating at about 12 to 15% since the year 2000 (DOS 2000-2010). Data and predictions indicate that despite downward demographic trends, the pressure on the local labour market will remain severe during the next decade due to the current 15-24 age group which is still large due to the higher fertility rates of the past. The Department of Statistics forecasts that by 2020 more than two-thirds of the population will be at working-age (DOS 2007). Other major specificities of the Jordanian labour market, not fully taken into account in DOS Employment and Unemployment Surveys, are the influx of some 300,000 low-skilled foreign workers (MOL 2009) and the emigration of over 260,000 skilled and/or experienced Jordanian workers toward the Gulf (DOS 2008, 2009); under-employment, in both its visible (part-time official jobs) and invisible (low productivity) forms; and informality, with an informal economy that is said to cover one-fifth to one-sixth of the Jordanian workforce (World Bank c) (Al Hussein in Ababsa 2013).

### Low participation in general, but more so in rural areas and amongst women

In 2010, the proportion of working aged Jordanians (aged 15 +) actively participating (either as employed persons or as job seekers) in the local labour market was estimated at 39.5% (DOS 2010). In absolute numbers, about 1.4 million Jordanians were economically active, including 1.2 million employed (of whom 1 million were men) and 182 thousand unemployed (118 thousand men) (AL MANAR 2009). Such figures do not compare favourably with the average Middle East participation rate that stands at about 51.5% (in 2009) and with the global average at about 64.7% (in 2009) (ILO 2010).

Available statistical data points to much lower economic activity rates amongst Jordanian women (14.7%) than amongst Jordanian men (65%). In 2010, the male population reached almost universal participation in the 25-39 age group (93.4%), while the rate for women in the same age group (their maximum rate) reached only 25.2% (DOS 2010). This difference was noted regardless of the level of education. While the participation of both Jordanian women and men increased with their level of education, 84.1% of male university graduates were economically active compared to 61.8% of women of the same educational group. At the other end of the educational spectrum, 25.6% of illiterate male Jordanians were economically active compared to 1.5 % of illiterate female Jordanians (Dos 2010) (Al Hussein in Ababsa 2013).

Yet, longitudinal analysis shows that women's economic activity rates have grown steadily over the past decades, from a low 6.4% in 1979 to 15% since 2007, mainly as a result of lower fertility rates (from 7.4 in 1976 to 3.2 in 2004, according to national censuses) and women's higher level of

education: In recent years, the number of female students in Jordan's public and private universities has overtaken that of male students (in 2009/2010, 28,457 of the 54,721 BA/Bsc students were women (MOHE 2011)). Conversely, men's economic activity rates have declined since the late seventies, thus closing the participation gap between men and women from 69.9 percentage points in 1979 to 48.8 percentage points in 2010.

#### Persisting high unemployment rates

The unemployed are officially defined as persons aged over 15 who have not worked for one hour or more during the seven-day period before the day of the interview and have been actively searching for work (DOS 2010). They do not include "discouraged workers"; unemployed persons who are not looking, or have stopped looking for work because they believe that "no work is available" (26% mostly in rural governorates) or that there are "no suitable jobs" (23% mostly in urban governorates) or because they are tired of seeking work (16%) (DOS 2010).

Despite job opportunities that match the number of new entrants on the labour market (about 65,000-70,000 yearly), official unemployment rates have exceeded the 12.5% mark since the 1990s, compared to an average of 6% in the 1980s and 8% in the 1970s (DOS 2010 and previous years; RATROUT F. et al. 2004). Experts have warned that under current labour market conditions, unemployment could reach 20% by the year 2015 (National Agenda 2005). The global financial and economic crisis has revived these fears since late 2008 (Al Hussein in Ababsa 2013).

## References

- ABABSA M. (dir.), 2013, Atlas of Jordan. History, Territories and Society. Atlas al Urdunn. Al-tarikh, al-ardh, al-mujtama', IFPO, Beyrouth, 485 p., <http://books.openedition.org/ifpo/4560>
- ABABSA M., DAHER R., 2011, Villes, pratiques urbaines et construction nationale en Jordanie. Cities, Urban Practices and Nation Building in Jordan, IFPO, Beyrouth, 327 p. <http://ifpo.revues.org/1675>
- ABABSA Myriam (dir.), 2013, Atlas of Jordan. History, Territories and Society. Atlas al Urdunn. Al-tarikh, al-ardh, al-mujtama', IFPO, Beyrouth, 485 p., <http://books.openedition.org/ifpo/4560>
- ABU ODEH, Adnan, 1999, Jordanians, Palestinians and the Hashemite Kingdom in the Middle East Peace Process, Washington D.C.: United States Institute of Peace Press.
- AL HUSSEINI, Jalal, 2010, Labour Markets Policies and Institutions, with a Focus on Inclusion, Equal Opportunity and the Informal Economy. The case of Jordan, National background paper, ILO.
- AL-KHALDI, Mwafaq, 2006, "Educational Attainment of Jordan's Population and Labor force", Journal of Social Sciences 2/1, p. 1-6. <http://www.scipub.org/fulltext/jss/jss211-6.pdf>
- AMAWI, Abla, 1993, State and Class in Transjordan: A Study of State Autonomy, Washington, Georgetown University.
- ASSAAD, Ragui et al., Labor Market Conditions in Jordan, Al Manar Project, 2008.
- AZZEH, Laila, 2010, "Poverty Rises Slightly from 2006 to 2008 – DOS Study", Jordan Times, 13/7/2010.
- CONTE, Edouard, & VALENTOWITZ, Saskia, 2010, "Kinship Matters. Tribals, Cousins and Citizens in Southwest Asia and Beyond", in BONTE Pierre, BEN HOUNET Yazid, 2010, La tribu à l'heure de la globalisation, Etudes rurales, juillet-décembre 2009, n°184, EHESS, Paris, p. 217-248.
- DE BEL-AIR, Françoise, 2003, "Migrations internationales et politique en Jordanie", Revue européenne des migrations internationales (REMI), 19, p. 9-41.
- DE BEL-AIR, Françoise, 2003, Population, politique et politique de population en Jordanie (1948-1998), thèse de Doctorat en Démographie et sciences sociales, EHESS Paris, sous la direction de Philippe Fargues.
- Fafo, (2004 ?), Chapter 3 Education in Jordan, 56 p. , <http://www.fafo.no/ais/middeast/jordan/sss/Chapter%203%20-%20Education.pdf>
- LAYNE, Linda L., 1994, Home and Homeland – The Dialogics of Tribal and National Identities in Jordan, Princeton - Chichester: Princeton University Press.
- LEWIS Norman Nicholson, 1987, Nomads and Settlers in Syria and Jordan: 1800-1980, Cambridge: Cambridge University Press (Cambridge Middle East Library).
- MRYAN, Nader, Labour Market Functioning – The Case of Jordan (an ETF study), NCHRD, Amman, Jordan (date not specified, in: <http://www.almanar.jo/AlManarWeb/Portals/0/PDF/1388.PDF>)
- WILSON, Mary, 1987, King Abdullah, Britain and the Making of Jordan, Cambridge: Cambridge University Press.

### *Governmental reports*

- DOS (Departement of Statistics), 2004, 1994, 1979, NPHC National Population and Housing Census.
- DOS (Departement of Statistics), 2007 and 2009, Demographic and Health Survey.
- DOS (Departement of Statistics), 2005, 2006, 2010, Jordan in Figure, <http://www.dos.gov.jo>
- DOS (Departement of Statistics), 2006, 2010, Employment Survey, <http://www.dos.gov.jo>
- GAM (Greater Amman Municipality), 2008, Greater Amman Municipality Master Plan, 4 vol. <http://www.ammancity.gov.jo>
- MIT (Ministry of Industry and trade), Industry, trade and investment bulletins. <http://www.mit.gov.jo>
- MOL (Ministry of Labour), Annual Report 2009 and 2010, <http://www.mol.gov.jo>
- MOPIC (Ministry of Planning and International Cooperation), 2011, Millenium Development Goals Jordan 2010. <http://www.mop.gov.jo>

### *Other reports*

- Al Manar, Labor Force Database - Employment and Unemployment Survey, <http://www.almanar.jo>
- Al Manar, Labor Force Database – Social Security Corporation, <http://www.almanar.jo>
- ILO, 2011, Statistical Update On Arab States And Territories and North African Countries



May -2011, in: [http://laborsta.ilo.org/sti/DATA\\_FILES/20110525\\_Arab\\_States.pdf](http://laborsta.ilo.org/sti/DATA_FILES/20110525_Arab_States.pdf).  
ILO, 2010, Global Employment Trends, January 2010, <http://www.ilo.org>  
IMF (International Monetary Fund), 2011, Regional Economic Outlook Middle East and Central Asia.  
IMF (International Monetary Fund), 2012, Jordan 2012 Article IV Consultation, 70 p.  
Oxford Business Group, 2011, The Report. Jordan 2010, 216 p.  
UNDP, 2012, Explanatory note on 2011 HDR composite indices, 5 p.  
UNDP, 2011, Jordan Human Development Report 2011. Small Businesses and Human Development. References

## **Lebanon**

by Ghaleb Faour  
August 2013

### ➤ **Technical report - Demography**

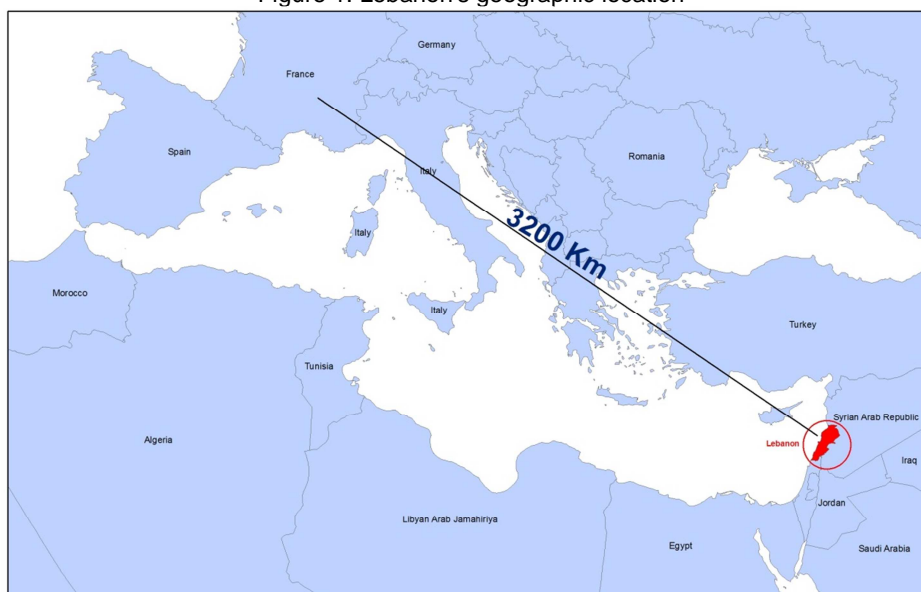
#### Abstract

Given the absence of comprehensive population surveys, and with the last census held in 1932, sample studies provide the only option for estimating the number of residents in Lebanon, as well as to identify their demographic, health, immigration and other characteristics. Moreover, they aren't periodic and depend each time of international funds. Source of data is mainly from Lebanese Central Administration of Statistics (CAS), The National Council for Scientific Research (CNRS), Ministry of Social Affairs and Ministry of Health. Lebanon is somehow unique in the Arab context. It has reached a mature stage of the second phase of demographic transition from high to very low birth rate after the fall of its death rate. Decreasing fertility along with lengthening life expectancy has reshaped the age structure of the population by shifting relative weight from younger to older groups. We examine demographic trends of population in Lebanon between different years and provide projections until some years to come. Variations in population ageing within the country are also considered. We also assess the relationship between human development and migration. It examines this issue from both ends: local migration and international migration including the sending and the receiving countries.

#### 1. Introduction

Lebanon (Fig. 1) is located on the eastern shore of the Mediterranean Sea, bordered by Syria to the north and east, and by Israel to the south. The terrain is a narrow coastal plain. Lebanon's last population census was conducted in 1932 indicated that the population was 875,252 with around 53 percent as Christians. Other censuses were conducted unofficially; for example in 1956 it was estimated that the population was 1,411,416, with around 54 percent Christians and 44 percent Muslims. According to recent statistics done by the World Factbook, the Christians constitute around 39 percent of the population and Muslims constitute around 59.7 percent. Conducting a census has been a very sensitive issue due to the sectarian divisions in the country and due to the pressure that some groups could practice in case statistics showed a wide shift in the population demographics [1]. All population estimates have since been based on surveys and extrapolations. The most reliable source of population data in Lebanon therefore remains the Central Administration of Statistics (CAS). CAS conducted in 1996 a national survey (not a census) of population data and living conditions and revised their data in 2008. In fact, in 1996 two surveys were completed: the first by CAS and the other by the Ministry of Social Affairs. We tend to discard statistics from CAS for the Ministry of Social Affairs since in a second survey in 2004, CAS found less population than what was founded in 1996. Anyhow, According to the 2008 update, Lebanon's resident population in 2007 was 3.7 million, excluding an estimated 425,000 Palestinian refugees. The total population in 2008 including refugees was therefore about 4.2 million. Compared to the year 1996, the total population (including refugees) increased by about 170,000, which is equivalent to an annual growth rate of about 0.4 percent. In reality, the real growth rate is probably higher but it is inhibited by concurrent emigration [2]. However, the Lebanese represent 93.4 percent of the population, with 6.6 percent being non-Lebanese [3].

Figure 1: Lebanon's geographic location



Population growth in Lebanon, as with many of the other demographic parameters, is uncertain. The World Bank quotes a current rate of 1.2 percent per annum. In the National Land Use Master Plan (SDATL), the population will grow from 4,005,025 in 1997 to 5,230,000 in 2030, or 0.92 percent per annum. The Ministry of Energy and Water (MOEW) assumes a growth rate of 1.75 percent between 2007 and 2009. All these estimates remain significantly lower than the region (2.5 percent in Syria and 2.4 percent in Jordan in 2009). Real growth is difficult to determine with a higher level of certainty due to Lebanese emigration which is rooted in its history, during peace time as well as during conflict [2].

Lebanon is divided into six governorates which are further subdivided into twenty-five districts. The districts themselves are also divided into several municipalities, each enclosing a group of cities or villages.

Besides, it is important to note that there is a significant difference in the size of the selected samples between two surveys: the Population and Housing Survey of 1995 included a sample of around 65,000 households (with 61,580 respondent households); its results were indicative at the national level, at the level of the six Mohafazas and for the twenty-five Caza. The Multipurpose Survey of 2004, however, sampled around 14,000 households (with 13,003 respondent households), and its results were indicative at the national and Mohafaza level. Thus, the comparison in this study is carried out only on these two levels.

## 2. Data source

Source of data, including statistics and surveys, are mainly a combination between:

- The Central Administration of Statistics (CAS) is a public Administration within the Presidency of the Council of Ministers. Their mission is to collect, process, produce and disseminate social and economic statistics at the national level and to provide all users with evidence-based information for decision making. They are also in charge of the technical supervision of statistics produced by other ministries and public administrations as well as improving methods and harmonizing statistics;
- The National Council for Scientific Research (CNRS) is a public institution reporting directly to the President of the Council of Ministers established in 1962 and assigned with the task of formulating national science and technology policy, initiating, guiding, supporting and conducting scientific research programs and activities in Lebanon. It advises the Government

on all science and technology issues. The CNRS conducts research through its specialized centres and supports research projects having an impact on the socio-economic development of the country;

- The Ministry of Social Affairs-Lebanon and in cooperation with the United Nations Population Fund (UNFPA), prepared and carried out a sample survey project of population and housing with a view to use the results in the elaboration of an action strategy and applied programs in the fields of development and social services. The execution of the project took around two and a half years, as work began in mid-March 1994 and lasted until the end of September 1996.
- The Ministry of Interior which have the most accurate and yearly basis data;
- Directorate of Geographic Affairs;
- University St-Joseph-Beirut, Lebanon.

### 3. Lebanon's administrative regions

Lebanon is divided into six administrative regions (called Mohafaza) and twenty-five sub-regions (called Caza), not including Beirut. Each Caza is made up of many cadastral zones (called Manateq iikarieh) (Fig. 2). There are about 1,500 cadastral zones in Lebanon. The largest Mohafaza is the Beqaa and the smallest is the capital Beirut. In 2003, the Parliament approved Law 522 (dated 16/07/2003) to establish two new Mohafazas by splitting the Mohafaza of the North into North and Akkar and the Beqaa into Beqaa and Hermel, bringing the total number of Mohafazas to eight. The corresponding application decrees however were never developed and the political will to implement the administrative division seems lacking [2]. Beirut and its suburbs, in addition to the coastline of Lebanon, make up the basic concentration areas of population allocation. The survey's data from 1996 reveal that Lebanon's middle regions, consisting of the governorates of Beirut and Mount Lebanon, comprise 1,542,314 citizens (49.9 percent of Lebanon's residents) with the rest of the population distributed among the remaining four governorates accordingly: 21.5 percent in North Lebanon, 12.9 percent in the Beqaa, 9 percent in South Lebanon and 6.7 percent in Nabatiyeh (Table 1). Guideline of the classification of the administrative division names were prepared by CAS and distributed for the different true institutions in Lebanon. Areas derived from the administrative GIS layers were produced by Directorate of Geographic Affairs (DAG).

Figure 2: Lebanon's Administrative map.

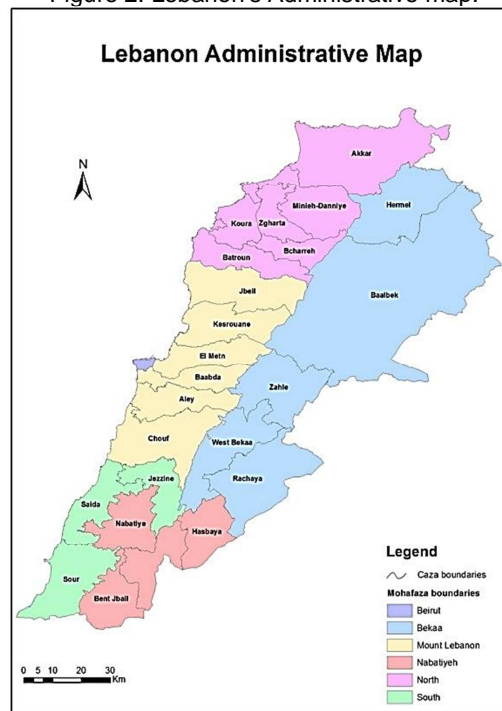


Table 1: Administrative regions and population in 1996

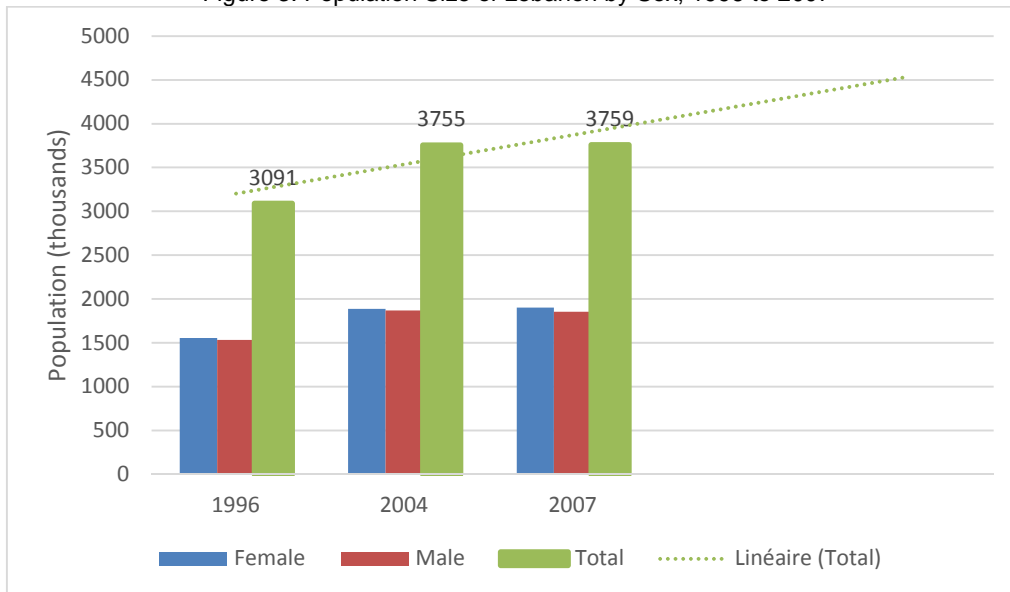
<i>Governorate</i>	<i>District</i>	<i>Area in km<sup>2</sup></i>	<i>Population</i>
<i>Beirut</i>	Beirut	21.2	404635
<i>Total</i>		21.2	404635
<i>Mount Lebanon</i>	Jbayl	423.3	61983
	Kesrouan	342.9	122759
	Matn	265	364657
	Baabda	194.9	369357
	Aley	263	99267
	Chouf	480.8	119655
<i>Total</i>		1969.9	1137678
<i>North Lebanon</i>	Akkar	788.4	196829
	Tripoli	27.2	226309
	Minie-Danniyeh	362	95760
	Zgharta	177.3	48641
	Bcharré	163.8	16717
	Koura	175.7	47217
	Batroun	278.7	34579
<i>Total</i>		1973.1	666052
<i>Beqaa</i>	Hermel	528.9	38709
	Baalbek	2318.4	155984
	Zahlé	436	123492
	Beqaa-West	425.4	55314
	Rachaya	549.7	23677
<i>Total</i>		4258.4	397176
<i>South Lebanon</i>	Jezzine	241.7	14527
	Saida	273.9	137411
	Sour	408.3	129200
<i>Total</i>		923.9	281138
<i>Nabatiyeh</i>	Nabatiyeh	303.9	91736
	Hasbaya	263.8	19327
	Bent Jbayl	270	52352
	Marjayoun	261.8	40601
<i>Total</i>		1099.5	204016
<i>Grand total</i>		10246	3090695

#### 4. Lebanon's demographic profile

##### 4.1. Population size of Lebanon

The population size of Lebanon increased from around 3 million in 1996 to 3.7 million in 2007. It is expected that the population will keep on increasing to reach a maximum of 4.5 million in the following years. Female population showed slightly a higher value than male population (Fig. 3).

Figure 3: Population Size of Lebanon by Sex, 1996 to 2007



Mount Lebanon contains the largest population in Lebanon. The number of inhabitant increased from nearly 1.3 million in 1996 to 1.5 million in 2004 and declined slightly in 2007. In the second place came North Lebanon, the largest Governorate of Lebanon, with a population that keep on rising from 1996 to 2004. Actually, the others Governorate show the same pattern except for Beirut: it has almost 400,000 dwellers in 1996, 390,000 in 2004 and shockingly 360,000 resident in 2007 (Fig. 4 and Fig. 5). Is Beirut still attracting inhabitant from others Governorate? How about the demographic profile of Lebanon's capital? We will find out in the coming sections.

Population Growth rate refers to the change in the estimated resident population over a period of time. It can come from only two sources: natural increase and net overseas migrations. It is determined by the equation below:

$$\frac{\frac{\text{Population of 2007} - \text{Population of 1996}}{\text{Population of 1996}} \times 100}{\text{Number of years}} = \frac{\frac{3759135 - 3090696}{3090696} \times 100}{11} = 1.96\%$$

Therefore, Lebanon has an annual change of 1.96 percent. However, according to a World Bank report published in 2012, the Population growth in Lebanon was last reported at 1 percent in 2012 [4]. For 1996, data were extracted from hardcopy collection of 5 booklets printed by the ministry of Social Affairs in Arabic language. Statistic tables are not published in the internet. For 2004 and 2007, data were extracted from the final report and the statistic tables provided by CAS.

Figure 4: Lebanon's population map.

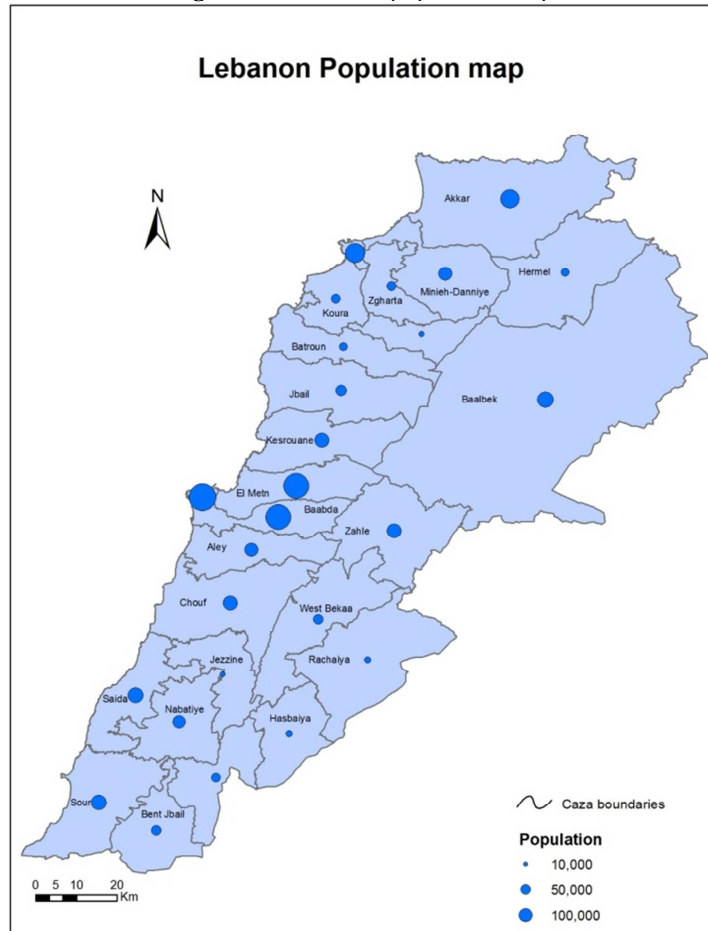
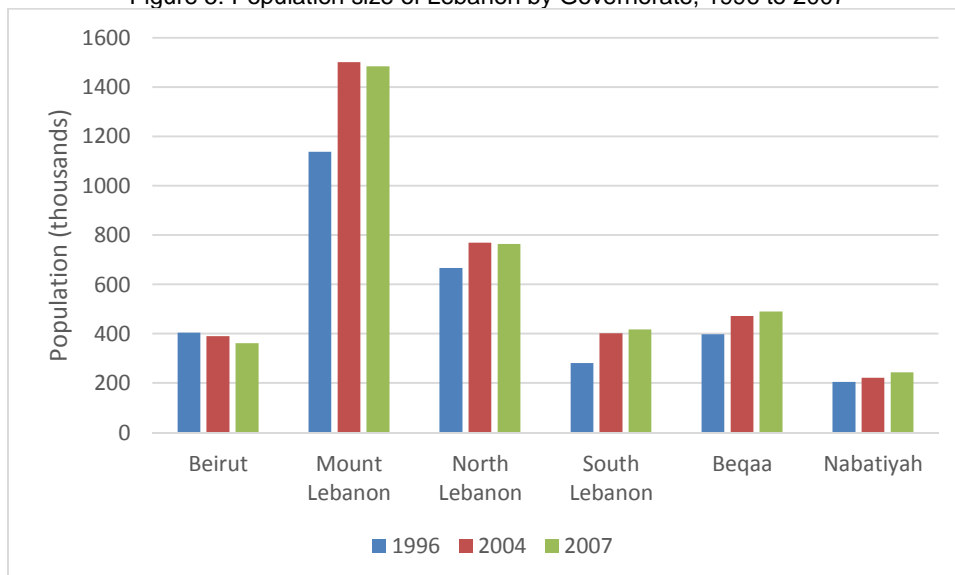


Figure 5: Population size of Lebanon by Governorate, 1996 to 2007



#### 4.2. Sex ratio composition of Lebanon

Female population overcome male population in Lebanon. In fact, 50.4 percent of total population in Lebanon are female on average between three years (i.e. 1996, 2004 and 2007) (Table 2). Female population tend as well to be stable in these years with a margin of 0.2 percent only. As per governorate, Mount Lebanon holds the largest number with 38.8 percent. This governorate is proximate to the capital, Beirut, and it is one of the largest areas in Lebanon. Next come North Lebanon with 20.8 percent. Nabatiyeh is on the last position with 6.3 percent of the total population. Beirut, North Lebanon and Nabatiyeh represent a decline in female and male population. First, Beirut is already overcrowded, overpopulated and polluted. People tend to refuse these conditions, and usually change their habitat location. Second, North Lebanon and Nabatiyeh are the most abandon region in Lebanon where opportunities are limited. Individuals run away from these situations as well. However, in each governorate, female and male show a relatively close numbers that doesn't exceed 0.6 percent at most cases. For 1996, data were extracted from hardcopy collection of 5 booklets printed by the ministry of Social Affairs in Arabic language. Statistic tables are not published in the internet. For 2004 and 2007, data were extracted from the final report and the statistic tables provided by CAS.

Table 2: Percentage distribution of population according to sex by governorate.  
(F= Females and M= Males; trend is the percentage of Females and Males in 2007 minus 1996.)

Governorate	1996		2004		2007		Trend	Average Females	Average Males	Total
	F	M	F	M	F	M				
Beirut	6.7	6.4	5.6	4.8	5.2	4.4	↘	5.8	5.2	11.0
Mount Lebanon	18.5	18.4	19.7	20.3	20.1	19.4	↗	19.4	19.3	38.8
North Lebanon	10.8	10.7	10.3	10.2	9.9	10.4	↘	10.3	10.5	20.8
South Lebanon	4.6	4.5	5.5	5.2	5.7	5.4	↗	5.3	5.0	10.3
Beqaa	6.4	6.5	6.2	6.4	6.5	6.6	↗	6.3	6.5	12.8
Nabatiyeh	3.4	3.2	3.0	2.9	3.3	3.2	↘	3.2	3.1	6.3
Lebanon	50.4	49.6	50.2	49.8	50.6	49.4	-	50.4	49.6	100.0

#### 4.3. Household size in Lebanon

The overall average household size in Lebanon has declined from 4.8 individuals per household in 1996 to 4.3 individuals in 2004 (Table 3). The minimum discrepancy is 3.8 individuals in Beirut, and the maximum discrepancy is 5.1 individuals in North Lebanon governorate. Even in mountains and agriculture areas (i.e. North Lebanon, South Lebanon and Beqaa) where Household size should increase in a way to assist in agriculture work, we note a major decreasing, for instance, of 0.8 in North Lebanon. Economic situation is to blame. However, the average household size is 4.55 individuals per household. For 1996, data were deduced from numbers given in the CAS studies on numbers and assembled by the UNDP. For 2004, Data were collected by the League of Arab States, the United Nations Organizations and assembled by CAS.

Table 3: Distribution of households and average household size by governorate, 1996 and 2004.

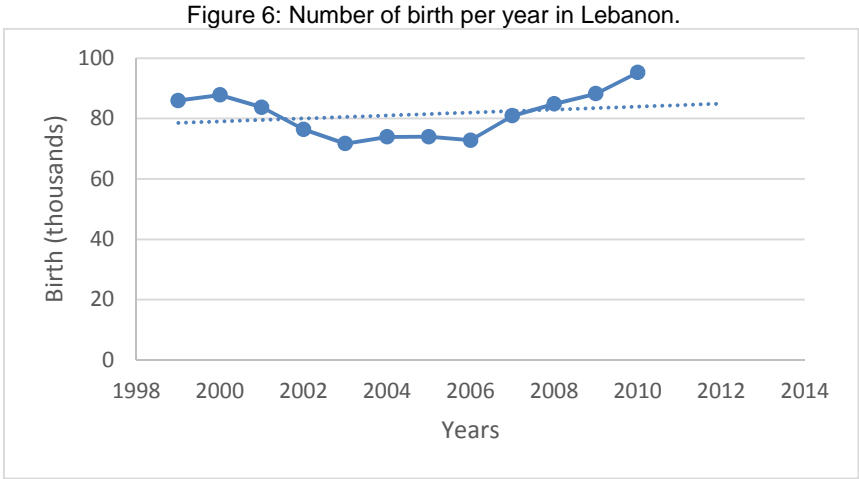
Governorate	1996	2004	Trend	Average household size
Beirut	4.3	3.8	↘	4.1
Mount Lebanon	4.5	4.1	↘	4.3
North Lebanon	5.5	4.7	↘	5.1
South Lebanon	5	4.5	↘	4.8
Beqaa	4.4	4.4	-	4.4
Nabatiyeh	5	4.2	↘	4.7
Lebanon	4.8	4.3	↘	4.55



4.4. Birth transition in Lebanon

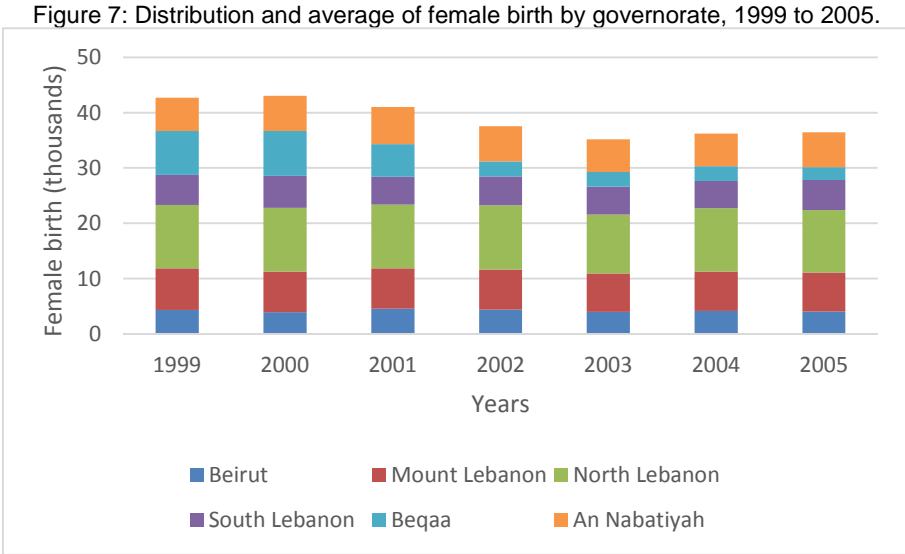
4.4.1. Total number of birth

In Lebanon, total number of birth fluctuates between 70,000 to 95,000 births each year. The maximum was attained in 2010. From 2003, total number of birth keeps on rising. It was showing a decrease between 1999 and 2002. However, a linear trend line forecast an increasing of number of birth per year in the years to follow but in a slightly reduced rate. This increase is obviously the impact of the population growth (Fig. 6). Data were collected by the Ministry of Interior, General Directorate of Civil Status and assembled by CAS.



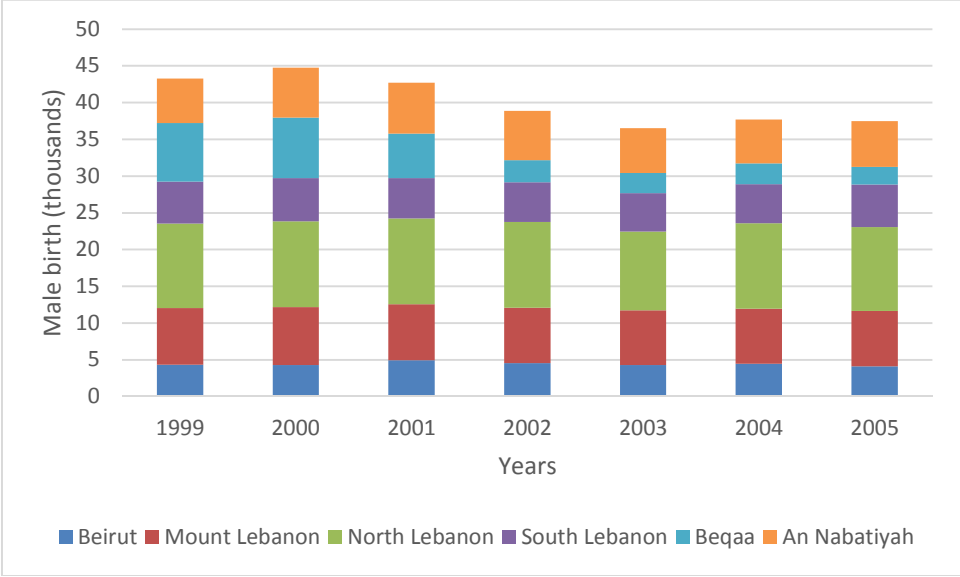
4.4.2. Number of birth by sex

Female birth attends his maximum in three consecutive years: 1999, 2000 and 2001. Almost 42,000 new female births have been showed. Female births fluctuate with a decreasing since 2000 and an increasing in 2004 and 2005 (Fig. 7). North Lebanon incorporates nearly 25 percent of the total female birth which is the highest value. Next come Mount Lebanon with approximately 7,000 female birth in average. Beirut was holding the lowest value from 1999 to 2001 with nearly 4,000 female birth. Later, Beqaa took the last place in the contribution to the total female birth with just about 2,500 female birth only in average. An interrogation mark should be placed on the reliance of Beqaa data after 2002.



Similar to female birth, male birth attend his maximum in three consecutive years: 1999, 2000 and 2001. Almost 44,000 new male births has been presented. Also like female, male birth fluctuate with a decreasing since 2000 and an increasing in 2004 and 2005 (Fig. 8). North Lebanon include nearly 25 percent of the total male birth which is the highest value. Next come Mount Lebanon with approximately 7,500 male birth in average. Beirut was holding the lowest value from 1999 to 2001 with nearly 4,400 male birth. Later, Beqaa took the spot with just about 2,800 female birth only in average. An interrogation mark should be placed on the reliance of Beqaa data after 2002. This most likely error generates an inaccuracy in results. All data were collected by the Ministry of Interior, General Directorate of Civil Status and assembled by CAS.

Figure 8: Distribution and average of male birth by governorate, 1999 to 2005.

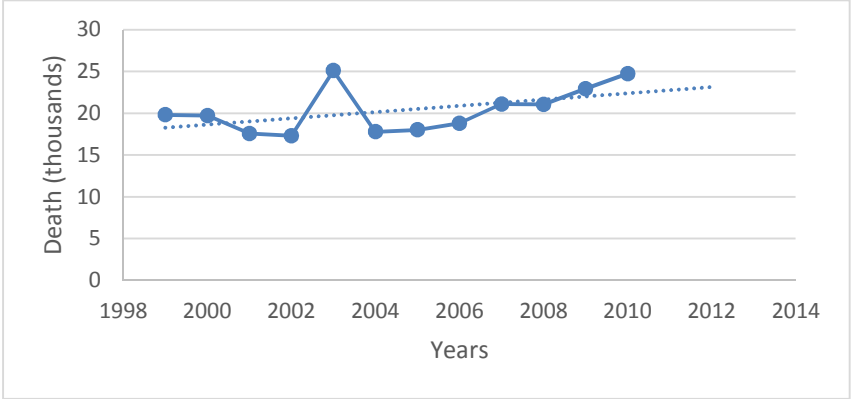


4.5. Mortality transition in Lebanon

4.5.1. Total number of death

In Lebanon, total number of mortality fluctuates between 17,000 to 25,000 deaths each year. The maximum was attained in 2003. From 2006, total number of mortality keeps on rising. However, a linear trend line forecast an increasing of number of death per year in the years to follow but in a slightly reduced rate. This increase is obviously the impact of the population growth (Fig. 9). Data were collected by the Ministry of Interior, General Directorate of Civil Status and assembled by CAS.

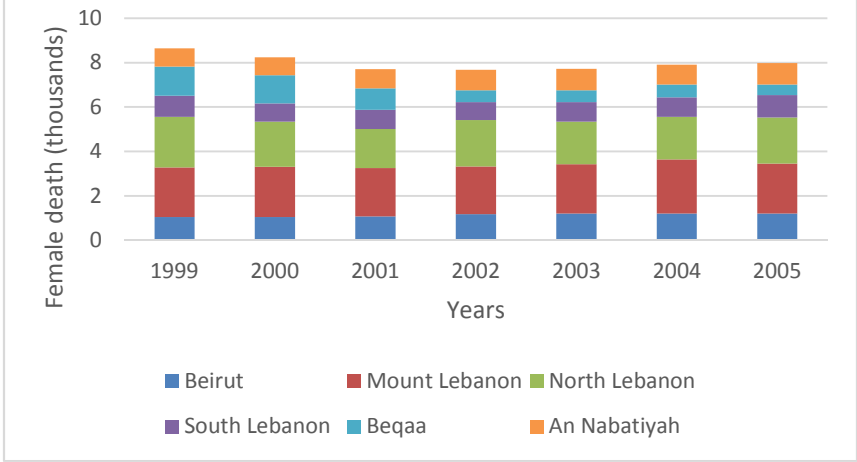
Figure 9: Number of death per year in Lebanon.



4.5.2. Number of death by sex

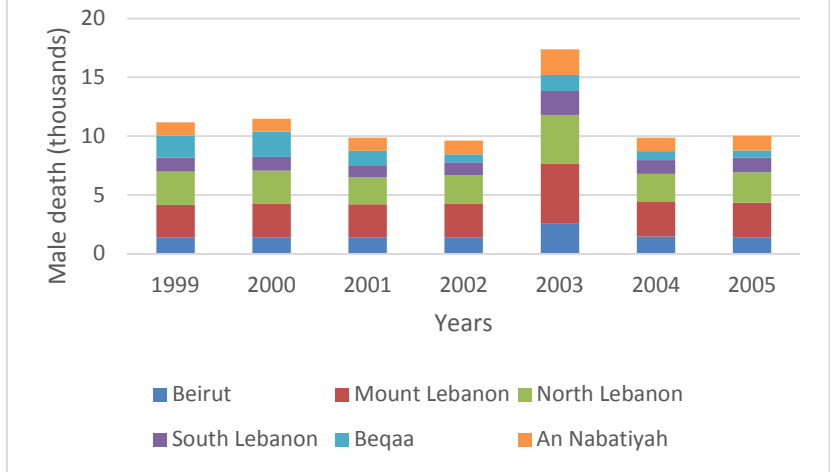
Female death per year could reach a maximum of approximately 8,500 deaths in 1999. Nevertheless, this number varies in the following years and reaches 8000 in 2005. As per governorate, Mount Lebanon and North Lebanon represent the highest value, around 2,000 deaths per year each. The rest is distributed among the remaining four governorates accordingly: about 1,100 deaths in Beirut, 900 in South Lebanon, 850 deaths in Nabatiyeh and 800 in Beqaa. It is important to mention that only in Beqaa a significant decrease of death per year is shown (i.e. 1,300-477) (Fig. 10). An interrogation mark should be placed on the reliance of Beqaa data after 2002.

Figure 10: Distribution and average of female death by governorate, 1999 to 2005.



Male death per year could reach a maximum of approximately 17,000 deaths in 2003. Nonetheless, this number is only seen in those years. Others years indicate approximately 10,000 deaths per year. As per governorate, Mount Lebanon and North Lebanon represent the highest value, same as female death, of around 2,800 and 2,500 deaths accordingly, excluding the year 2003. The rest is distributed among the remaining four governorates: about 1,400 deaths in Beirut, 1,100 in South Lebanon, 1,100 deaths in Nabatiyeh and 1,100 in Beqaa, not including the year 2003. Same as Female death, Beqaa present a noteworthy declining result (i.e. 2,166-618) (Fig. 11). However, male death represents a higher number of death than female (i.e. 10,000 vs. 8,000). An interrogation mark should be placed on the reliance of Beqaa data after 2002. This most likely error generate an inaccuracy in results. All data were collected by the Ministry of Interior, General Directorate of Civil Status and assembled by CAS.

Figure 11: Distribution and average of male death by governorate, 1999 to 2005



#### 4.5.3. Infant Mortality

The Infant Mortality Rate of the Lebanese Population was estimated at about 29.9 infant deaths per 1,000 live births in 1996 and decreased to 20.8 infant deaths per 1,000 live births in 2004. As per governorate, only Beirut shows an increasing in the Infant Mortality Rate. Contributing factors are essentially the. Nabatiyeh represent almost a stable value of 30 as Infant Mortality Rate between 1996 and 2004. Though, in any other governorate Infant Mortality Rate decrease considerably. Universal access to care must be the main reason (Table 4). The minimum discrepancy is 17 infant deaths in Mount Lebanon, and the maximum discrepancy is 30.4 individuals in Nabatiyeh governorate. However, the average infant mortality is 25.35 infant deaths per 1,000. For 1996, data were collected by the Arab States League, Ministry Of Social Affairs, Pan Arabic Project for Family Health-2004, and assembled by CAS. For 2004, data were deduced from numbers given in the CAS studies on numbers and assembled by the UNDP.

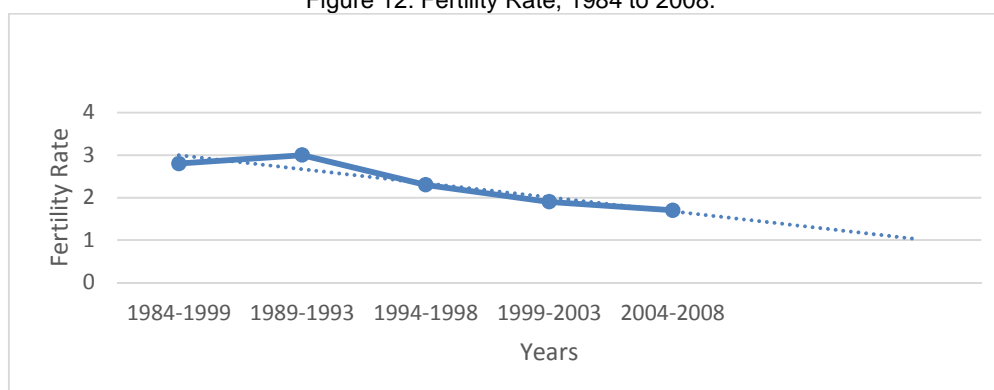
Table 4: Distribution of infant mortality and average infant mortality size by governorate, 1996 and 2004.

<i>Governorate</i>	<i>1996</i>	<i>2004</i>	<i>Trend</i>	<i>Average infant mortality</i>
<i>Beirut</i>	19.6	39.2	↗	29.4
<i>Mount Lebanon</i>	27.6	6.4	↘	17
<i>North Lebanon</i>	48.1	11.1	↘	29.6
<i>South Lebanon</i>	27.2	21.8	↘	24.5
<i>Beqaa</i>	27.2	15.6	↘	21.4
<i>Nabatiyeh</i>	29.8	31	↗	30.4
<i>Lebanon</i>	29.9	20.8	↘	25.35

#### 4.6. Fertility transition in Lebanon: Fertility Rate

Total Fertility Rate in Lebanon declined from 2.8 children per woman in 1984-1989 to 2.3 children per woman in 1994-1998 and 1.7 children per woman in 2004-2008. Projections show that total fertility will decline further to reach 1.4 children per woman in the upcoming years. In 1989-1993, Lebanon civil war was ended. Fertility Rate increase because of people feeling safe again and living conditions seems more stable (Fig. 12). Data were collected by the League of Arab States, the United Nations Organizations and assembled by CAS.

Figure 12: Fertility Rate, 1984 to 2008.



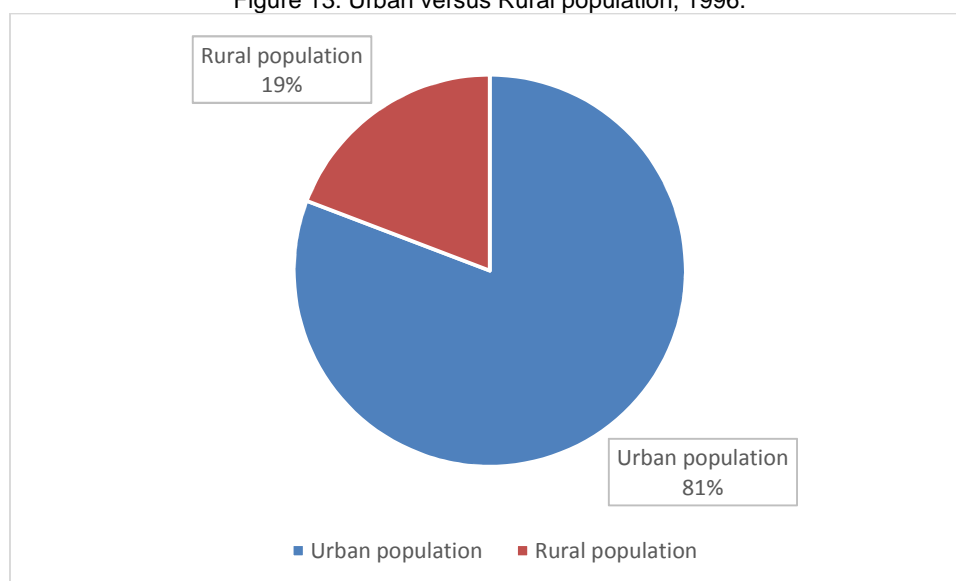
## 4.7. Migration transition in Lebanon

### 4.7.1. Internal migration

The percentage of urban dwellers was estimated at 81 percent in 1996 (Fig. 13). Major drives has caused this gap. The most important are as follow:

- A lack of employment opportunities in the countryside, essentially by the introduction of industrialization;
- Better paid jobs in the cities, an expected higher standard of living, and more reliable food are all pull factors;
- People who migrate to towns and cities tend to be young and so have higher birth rates in that age range;
- Better medical conditions compared to the countryside mean more successful births and a better life expectancy.

Figure 13: Urban versus Rural population, 1996.



Citizens tend to leave their area and go settle in Beirut, the capital and the most advanced city in Lebanon. Figure 14 illustrate that all Lebanese Governorate, except of Beirut, are increasing the number of domestic migrants leaving from it. Only Beirut shows a decreasing from 68,000 migrants in 1996 to 50,000 in 2004. In contrast, in the total number of domestic migrants to the Lebanese Governorate, Beirut is holding the highest value of acceptance of migrants exceeding 312,000 migrants in 2004. In 1996, it also show the highest value between others Governorates with almost 140,000. Therefore, the number of migrants to Beirut has at least doubled in less than a decade. Next is the Governorate of Mount Lebanon, which is located approximate to Beirut, with almost 200,000 migrants in 2004. North Lebanon has the lowest value in 1996 and 2004 with 28,000 and only 10,000 accordingly (Fig. 15). All data were extracted from:

- Hardcopy collection of 5 booklets printed by the ministry of Social Affairs in Arabic language;
- The final report and the statistic tables provided by CAS;
- The report and the statistic tables provided by Choghig Kasparian and the University St-Joseph in Beirut-2009.

Figure 14: Number of domestic migrants from Lebanese Governorate.

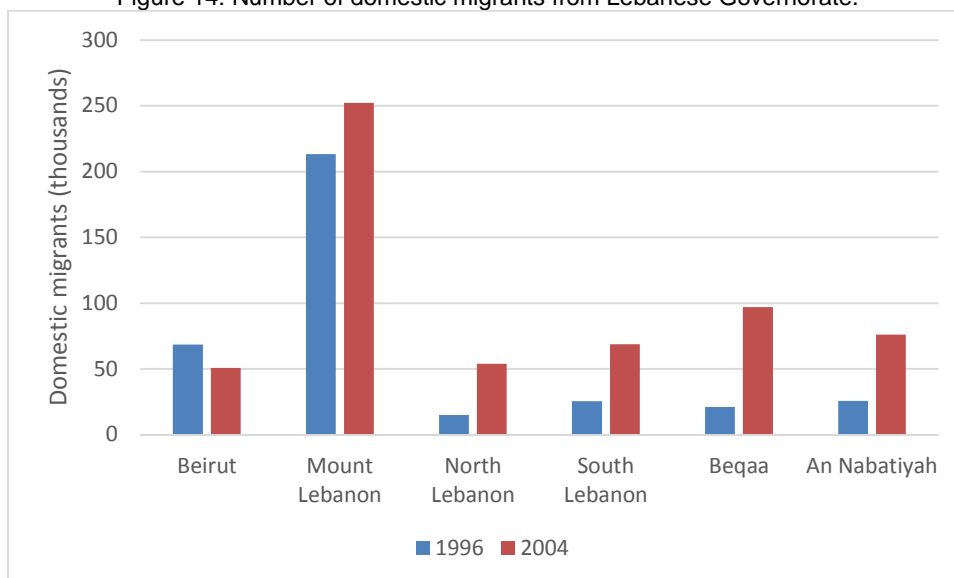
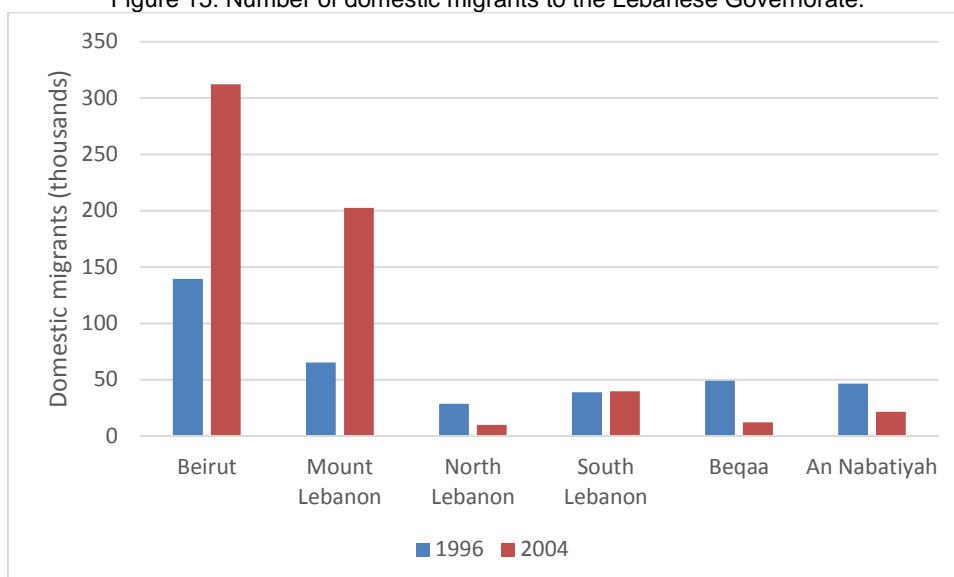


Figure 15: Number of domestic migrants to the Lebanese Governorate.



#### 4.7.2. International migration

Around 120,000 international migrants has emigrate from Lebanon between 1992 and 1996. In 200-2007, almost 210,000 immigrants has left this country, representing 5.3 percent of the total Lebanese population. Female migrants represented merely 32 percent of all migrants for 1992-1996, and 25 percent for 2002-2007. Therefore, Male are representing always the largest number of international migrants, with that gap increasing through the years. Additionally, total number of international migrants are increasing from 120,000 in 1992-1996 to 220,000 immigrants in 2002-2007 accordingly (Fig. 16).

As per Lebanese Governorate, Mount Lebanon is credited to have largest number of international migrants, which doubled in 2002-2007 in correspondence to 1997-2001. Almost 90,000 immigrants are showed in 2002-2007. In every Governorate, the total number of international migrants has increased, except for Nabatiyeh which hold almost a stable value of 12,000 immigrants (Fig.17).

Figure 16: Total number of international migrants by sex.

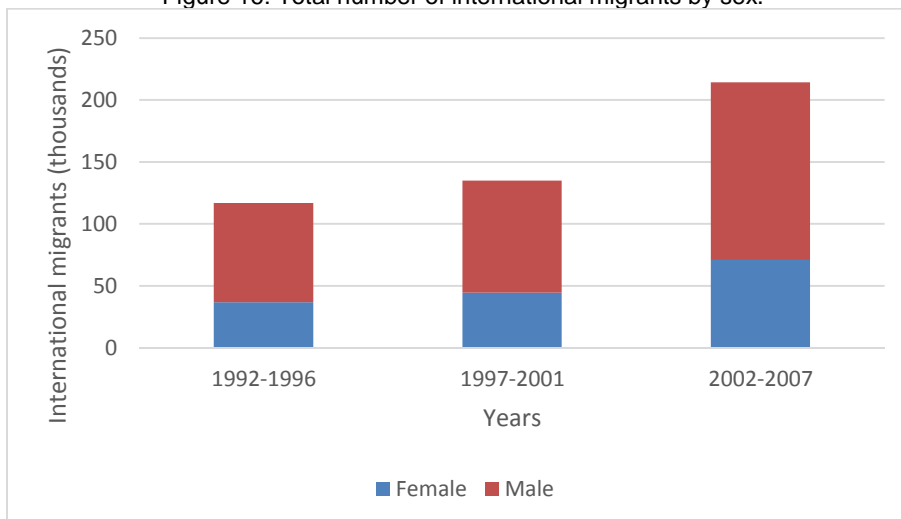
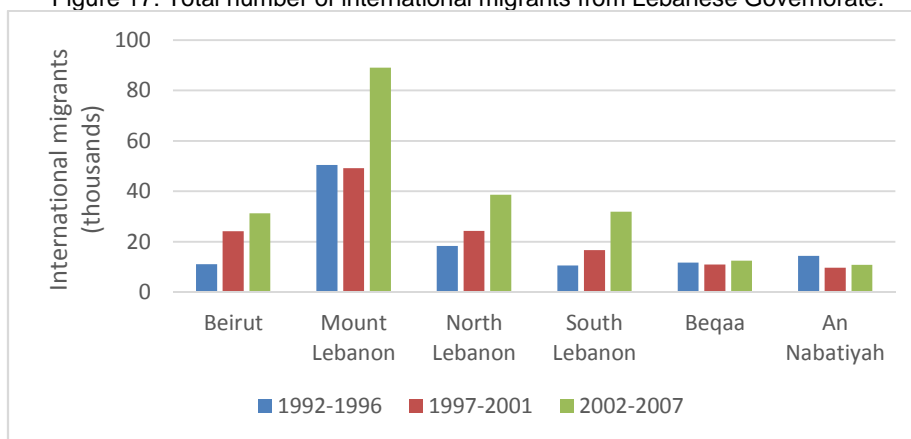


Figure 17: Total number of international migrants from Lebanese Governorate.



Percentage of international migrants indicates 81 percent of all immigrants are between 25 and 54 years. Only 4 percent are more than 55 years old. Less than 25 years old show 15 percent. In fact, the middle age class (i.e. 25-54) is the most accepted in the foreign countries: individual should have finished their studies and wish to immigrate abroad in searching of new opportunities. This workforce can as well enriched this foreign countries not like the others categories (Fig. 18). For that, they are more accepted. This can be confirmed by interpreting Figure 19, in which work seems the primary motive to immigrate. Just about 260,000 citizens left Lebanon in search of work. Family reunion came second with approximately 130,000 individuals. "Obtaining another nationality" is at the last place with almost 8,000 immigrants.

Figure 18: Percentage of international migrants by class age, 1992-2007.

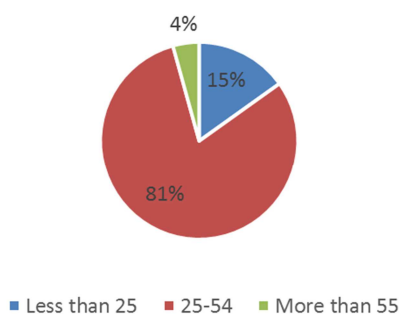
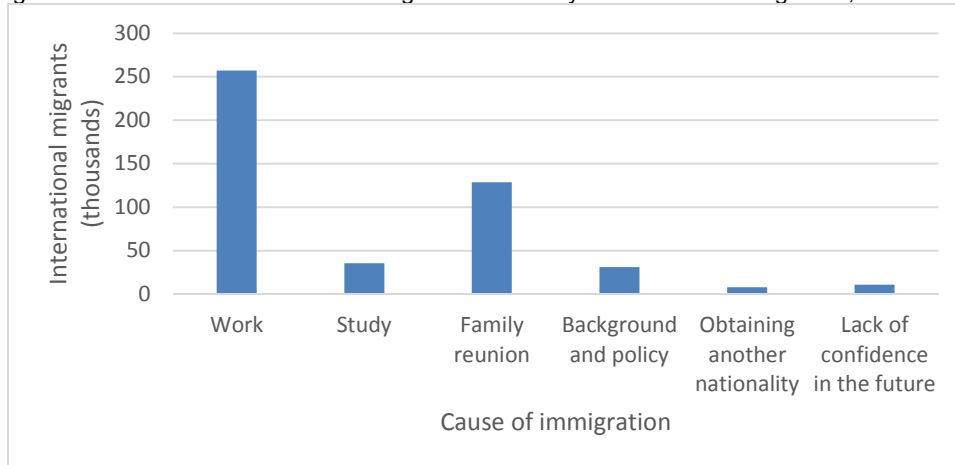
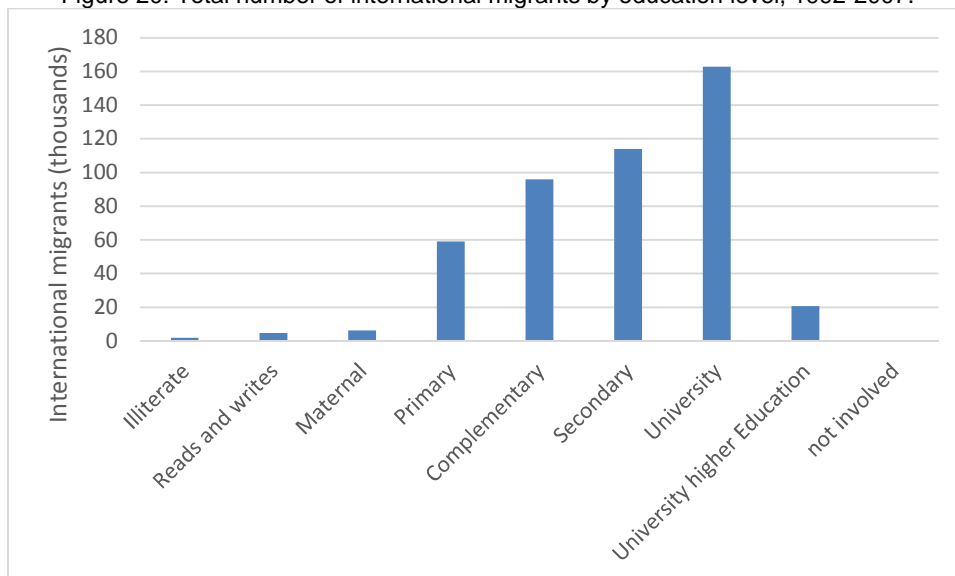


Figure 19: Numbers of international migration sorted by the cause of immigration, 1992-2007.



By education class, “university” category shows the highest amount of around 163,000 international migrants. As long as education class progress, from illiterate to university, it seems that total number of international migrants keep on rising. Only “university higher education” seems to disobey this rule, with almost 21,000 immigrants (Fig. 20). In fact, the more an individual advance in education, it became more eager and always tend to earn more. With the country of Lebanon having limited opportunities and salary, international migrants are likely to migrate to foreign country. Unemployment may also interfere with their decision. This case isn’t found in “university higher education”; from a side, a minority of citizens has attended this stage, and in other side, their employment is generally meeting their expectation economically and sociologically.

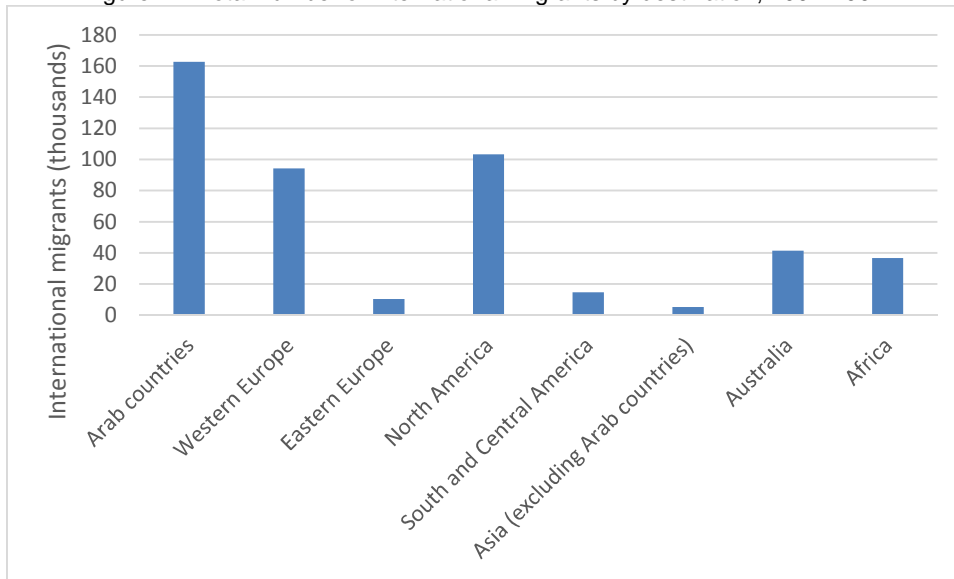
Figure 20: Total number of international migrants by education level, 1992-2007.



Arab countries are the highest countries to accept Lebanese immigrants (Fig. 21). Their proximity to our country and their high salary produce a big attraction. Next come North America with approximately 104,000 international migrants and Western Europe follow with almost 95,000 immigrants. The lowest value is shown in Asia (excluding Arab countries). Low salary and the toughness to start up a business should be the main cause. Data were extracted from the report and the statistic tables provided by Choghig Kasparian and the University St-Joseph in Beirut-2009.



Figure 21: Total number of international migrants by destination, 1992-2007.



Syrians hold the highest number of arrivals by nationality if we summarize five years between 2007 and 2012 (Fig. 22). In 2012, a Syrian civil war took place which forced citizens of Syria to migrate to proximity nations. Nearly four million and a half Syrians enter Lebanese borders in 2012. If we summarize these years, Lebanese immigrants represent the second highest value from 2007 to 2012. This is normal since immigrants go back to mother-country for a family reunion or driven by a nostalgia. Arabs excluding Lebanese and Syrians came third. In 2011, Arabs excluding Lebanese and Syrians represent an astonishing arrivals number of six and half million. 2011 was a stable year for Lebanon. That stability is rarely found in this country in general and in the region in particular.

Figure 22: Total number of arrivals by nationality, 2007 to 2012.

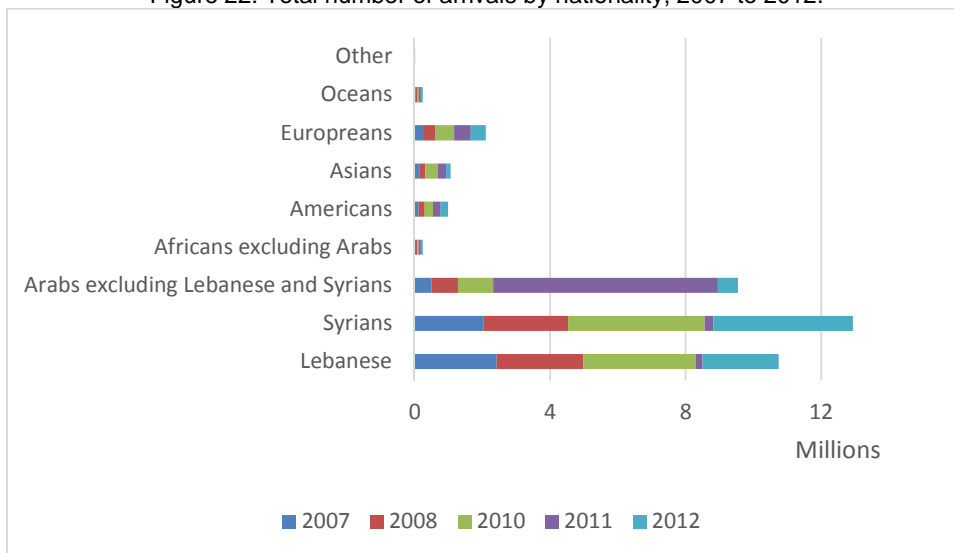
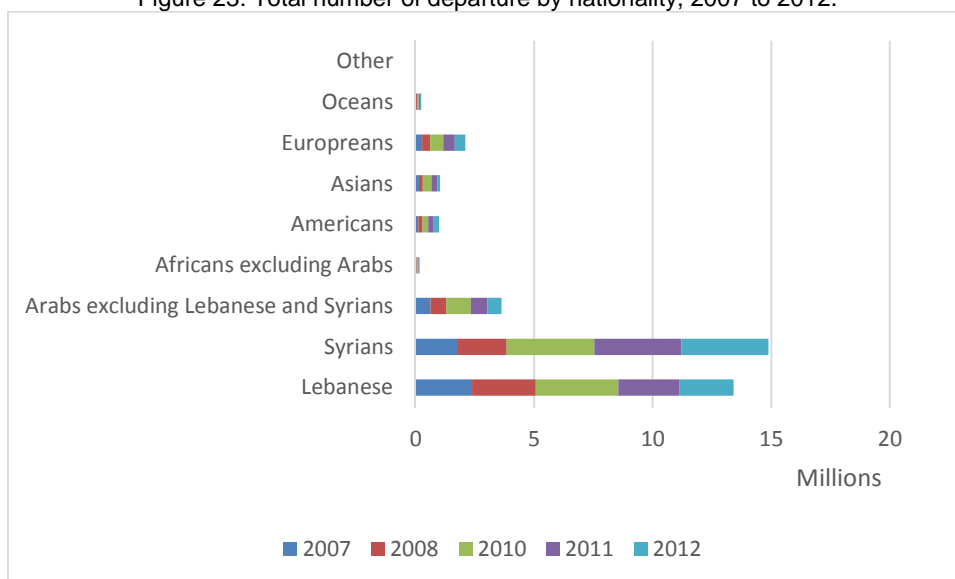
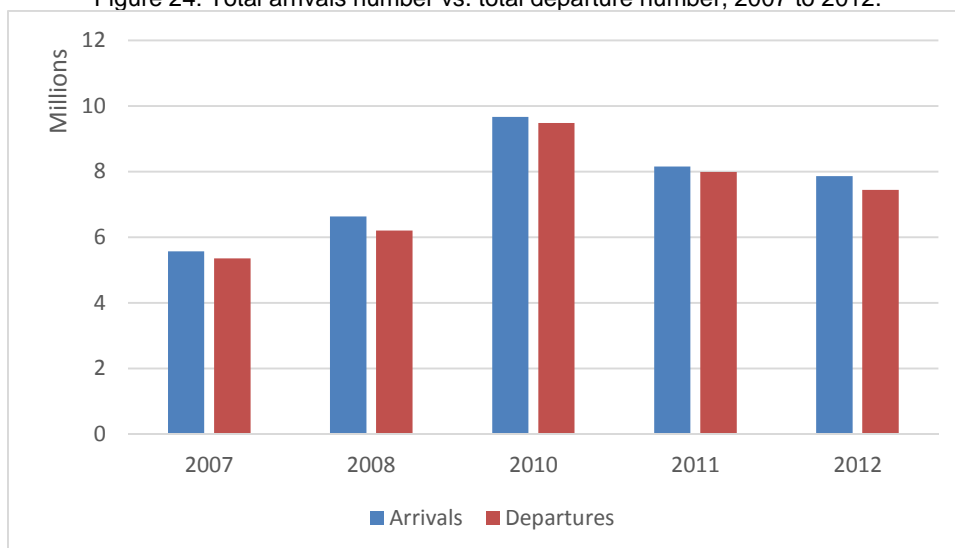


Figure 23: Total number of departure by nationality, 2007 to 2012.



While holding the highest number of arrivals, Syria holds also the highest number of departure. Eventually, year 2012 show the maximum number of departure of approximately three and a half millions. Same as arrivals, Lebanese immigrants came second and has its peak in 2010 with almost three and half million. Arabs excluding Lebanese and Syrians, Europeans, Americans and Asians are to follow (Fig. 23). In conclusion, Syrians and Arabs are the main players in the Lebanese tourist.

Figure 24: Total arrivals number vs. total departure number, 2007 to 2012.



In comparison between arrivals and departure, we can assume that virtually the same number is held by both in any selected year. 2010 was the year with the most arrivals of about ten million persons, but with the most departures with nearly nine and half million person. Since our tourism is falling behind: the arrivals number is decreasing (Fig. 24).

#### 4.8. Population Age Composition in Lebanon

Lebanon is witnessing numerous demographic changes in the patterns of births, deaths and external immigration, which is reflected in the demographic structure. The age pyramid for Lebanon portrays these changes clearly, marking significant demographic traits including the population distribution according to age groups. Figure 25 and Table 5 show the distribution of individuals in Lebanon according to age groups and the relevant age pyramid, and discloses the following basic demographic traits:

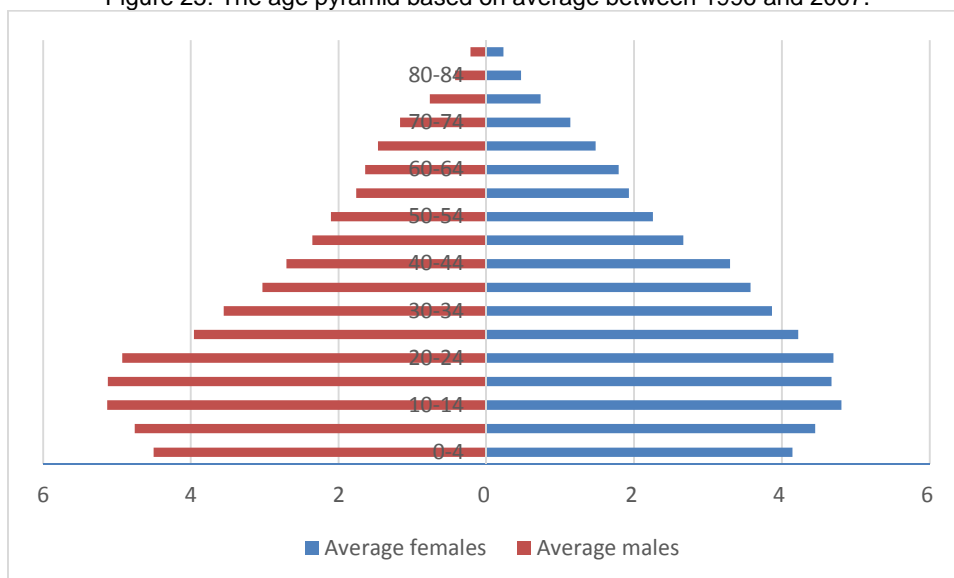
- A decline within the age groups (0-4) and (5-9) is related to the later categories (10-14), (15-19) and (20-24), as a result of a reduction in fertility during the past ten years.
- A great difference exists between percentage of males in the (20-24) age group, and those in the (25-29) age group and above, which may be due to the immigration abroad of the latter age groups [3].

For 1996, data were extracted from hardcopy collection of 5 booklets printed by the ministry of Social Affairs in Arabic language. Statistic tables are not published in the internet. For 2004 and 2007, data were extracted from the final report and the statistic tables provided by CAS.

Table 5: Percentage distribution of population according to age, sex, and age groups. (F= Females and M= Males; trend is the percentage of Females and Males in 2007 minus 1996.)

Age group	1996		2004		2007		Trend	Average females	Average male	Total
	F	M	F	M	F	M				
0-4	5.4	5.6	3.7	4.2	3.3	3.6	↘	4.1	4.5	8.6
5-9	5.0	5.3	4.3	4.7	4.1	4.3	↘	4.4	4.8	9.2
10-14	4.9	5.2	5.0	5.3	4.5	4.9	↘	4.8	5.1	9.9
15-19	4.7	5.0	4.8	5.1	4.5	5.2	-	4.7	5.1	9.8
20-24	4.5	4.6	4.9	5.1	4.7	5.1	↗	4.7	4.9	9.6
25-29	4.3	4.1	4.1	3.8	4.2	3.9	↘	4.2	4.0	8.2
30-34	4.0	3.6	3.8	3.6	3.8	3.5	↘	3.9	3.6	7.4
35-39	3.4	3.0	3.7	3.1	3.7	3.0	↗	3.6	3.0	6.6
40-44	2.7	2.4	3.7	3.0	3.5	2.7	↗	3.3	2.7	6.0
45-49	2.3	2.1	2.7	2.4	3.0	2.5	↗	2.7	2.4	5.0
50-54	2.0	1.9	2.2	2.2	2.5	2.2	↗	2.3	2.1	4.4
55-59	1.8	1.8	1.9	1.7	2.0	1.8	↗	1.9	1.8	3.7
60-64	1.6	1.6	1.8	1.6	2.0	1.7	↗	1.8	1.6	3.4
65-69	1.3	1.3	1.5	1.5	1.7	1.6	↗	1.5	1.5	2.9
70-74	0.9	0.9	1.1	1.2	1.4	1.4	↗	1.1	1.2	2.3
75-79	0.7	0.6	0.7	0.7	0.9	1.0	↗	0.7	0.8	1.5
80-84	0.4	0.4	0.4	0.4	0.6	0.6	↗	0.5	0.4	0.9
85 and above	0.3	0.3	0.1	0.1	0.2	0.3	-	0.2	0.2	0.4
<i>Whole population</i>	50.4	49.6	50.2	49.8	50.6	49.4	-	50.4	49.6	100.0

Figure 25: The age pyramid based on average between 1996 and 2007.



## 5. Conclusion

Since the last comprehensive population census dates back to 1932, there continues to be no agreement on the actual size of the Lebanese population today. The two latest government surveys have produced significant differences in their estimates, from 3.1 million (1996) to 4 million people (1996-97), as explained next, up from 793,000 in 1932 [5]. Most of the population is resident on the coastal zone which is characterized by being very narrow and comprised between the west mountainous chain and the sea. Around 1.5 million people live in the region known as Greater Beirut. Other major cities are Tripoli (250,000), Saida (80,000), Zahle (80,000) and Tyre (30,000) [6]. We conclude that:

- Lebanon's population is keep rising, same as all Third World Countries and developing countries with an annual change of 1.96 percent;
- Female population showed somewhat a higher value than male population (i.e. 50.4 to 49.6);
- The overall average household size in Lebanon has declined by 0.5 in eight years;
- Total number of birth fluctuates greatly in the past decade. Anyhow, it shows an increasing in the past years;
- Total number of mortality fluctuates in the past decade. Also, it shows an increasing in the past years;
- Total Fertility Rate in Lebanon has dropped by 1.1 in the past two decades;
- The percentage of urban dwellers was estimated at 81 percent in 1996: Beirut is holding the highest value of acceptance of migrants exceeding 312,000 migrants in 2004;
- Male are representing the largest number of international migrants, with that gap between female and male are growing incessantly.
- A decline within the small age groups and a great difference exists between percentage of males in the (20-24) age group, and those in the (25-29) age group and above.
- This survey reflects the situation of Lebanon's administrative regions and demographic profile. However, up-to-date investigations and census should be held. Resolution of any problem or even bypassing some other begins with up-to-date references and statistics.

## ➤ Technical report – Lebanon’s sociologic and economic assessment

### Abstract

The historic and cultural heritage of Lebanon dates back over six thousand years to the Phoenicians and the subsequent civilizations that were established in or interacted with the Lebanese. Throughout its history Lebanon has been a contact center between various cultures and civilizations; this renders the Republic a highly cosmopolitan country enjoying a great deal of tourism. The Lebanese economy, characterized by freedom of exchange and transfers, is based on private initiative. The private sector is estimated by the National Accounts Committee to contribute over 85 percent to national expenditures and includes industries such as agriculture, manufacturing, construction, trade and tourism, in addition to services such as banking and finance, hotels and restaurants, media and advertising, and consulting and engineering. The manufacturing, industrial and construction sectors are estimated by the National Accounts Committee to contribute approximately one-fifth of GDP. They are provided only with a limited level of protection from international competition. We examine sociologic trends in Lebanon between different years, including educational status, unemployment and income. Also, we study economic trends in this same country in different years, including dependency ratio, employment and GDP.

### 1. Introduction

Lebanon did not come into existence until 1920, when the French -governing the region under a League of Nations mandate- annexed the peripheral coastal area, the Biqaa Valley, the northern region, and Jabal Amil (southern Lebanon) to the mutasarrifiyah of Mount Lebanon to create Greater Lebanon. Before the creation of the republic, Lebanon was politically and socially fragmented among the various Ottoman vilayets (provinces) and the confessional communities that sought refuge in its rugged mountains to avoid persecution.

Lebanese society is divided into numerous sects that are separated from each other by recognizable geographical lines of demarcation and perhaps even more by fear and suspicion. Some communal groups have resisted the changes associated with secularization and modernity by identifying more closely with their own sects and by vehemently opposing the existing political system. In 1987, after twelve years of civil war, Lebanon continued to be confessionally organized. Furthermore, the military battles had reinforced the distances between sects by causing demographic changes through the eviction of members of a whole sect from one region to another. This movement has not only affected Christian-Muslim relations, but also sects of the same faith [1]. The Lebanese Republic, which gained independence from France in 1943, is located in Southwest Asia, at the eastern edge of the Mediterranean Sea. With a relatively small area of 10,452 km<sup>2</sup>, the population has reached 4.1 million in 2007 with a population growth rate of 1 per cent and a population density of 392 per km<sup>2</sup> [2].

Lebanon boasts a solid, open and promising economy, supported by a highly educated and skilled labour force, placing it at the top tier Arab GDP per capita. The financial system, the oldest in the region and one of the most developed, has long been a source of pride for the country [3]. In fact, the Lebanese economy is service driven with tourism and banking activities leading as its most important pillars. As such the majority of the Lebanese workforce takes employment in the services. The GDP contribution, accordingly, is very large and amounts to roughly 67.3 per cent of the annual Lebanese GDP. Lebanon lacks raw materials for industry and it depends heavily on the Arab countries for oil. This has made it difficult for the Lebanese to engage in significant industrial activity. As such, industry in Lebanon is mainly limited to small businesses concerned with reassembling and packaging imported parts [4].

Lebanon’s three major coastal cities, Beirut, Saida and Tripoli, are engaged predominantly in commerce due to their location on the seafront and the presence of seaports. Lebanese industry is located in Mount-Lebanon as well as in the cities of Beirut and Tripoli, and several industries on the coastal strip in North Lebanon. The fact that most of the industrial activity is located at the vicinity of cities (Beirut, Tripoli, Chekka, and Zouk) gives a rise to air pollution problems in the areas. Pollution from industrial effluents is also a concern for North, Mount Lebanon and South Lebanon regions [4].

## 2. Data source

Source of data, including statistics and surveys, are mainly a combination between:

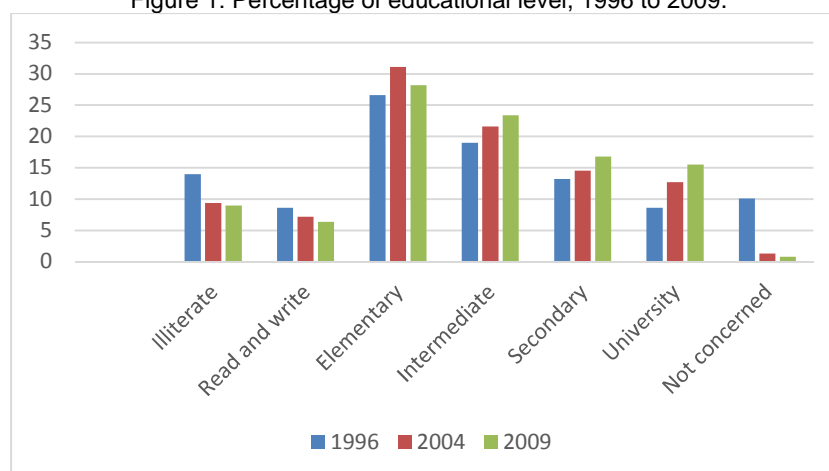
- The Central Administration of Statistics (CAS) is a public Administration within the Presidency of the Council of Ministers. Their mission is to collect, process, produce and disseminate social and economic statistics at the national level and to provide all users with evidence-based information for decision making. They are also in charge of the technical supervision of statistics produced by other ministries and public administrations as well as improving methods and harmonizing statistics;
- The National Council for Scientific Research (CNRS) is a public institution reporting directly to the President of the Council of Ministers established in 1962 and assigned with the task of formulating national science and technology policy, initiating, guiding, supporting and conducting scientific research programs and activities in Lebanon. It advises the Government on all science and technology issues. The CNRS conducts research through its specialized centres and supports research projects having an impact on the socio-economic development of the country;
- The Ministry of Social Affairs-Lebanon and in cooperation with the United Nations Population Fund (UNFPA), prepared and carried out a sample survey project of population and housing with a view to use the results in the elaboration of an action strategy and applied programs in the fields of development and social services. The execution of the project took around two and a half years, as work began in mid-March 1994 and lasted until the end of September 1996.
- Directorate of Geographic Affairs. Public Institute is a part of the Lebanese army that is in charge of mapping and geodetic network.

## 3. Lebanon's sociologic assessment

### 3.1. Educational status in Lebanon

The Lebanese, along with the Palestinians, had one of the highest literacy rates in the Arab world. The rate was estimated at nearly to 80 percent in the mid-1980s, but like most other spheres of Lebanese life, communal and regional disparities existed. In general, Christians had a literacy rate twice that of Muslims [1]. Lebanon has witnessed commendable progress in the education field since the end of the war in 1991. In fact, "Illiterate" and "Read and write" classes has decreased from 1996 to 2009. Furthermore, from "Intermediate" category to "University" an impressive increase is seen. "Elementary" group has the highest values over the years. It is ranging between 26 and 31 percent. Actually, since at least 1955, the Lebanese Government has adopted a policy of providing free education at the primary level to all Lebanese children. And above, in 1998 a Lebanese law (Law Number 686 of 1998) which indicate that primary education up to age twelve is mandatory (Fig. 1).

Figure 1: Percentage of educational level, 1996 to 2009.



A comparison between female and male concerning the education level shows that there are more illiterate female than male, and, female are competing male in “Secondary” and “University” classes. In fact, the roles of women have traditionally been restricted to those of mother and homemaker which justify the more illiterate female. Lebanese Illiterate people are generally in the old category. Now, in Lebanon, unlike others countries in the region, women enjoy equal civil rights which means they are more accepted socially to study at higher level and to get a work afterward. Moreover, male in this country should play a key role in his family later as an economic unit, in which the father is the property owner and producer on whom the rest of the family depend. Because of that it should have earned and saved some pennies before the marriage. Thus, and with the economic status is deteriorating lately, male tend to quit school and university with the aim of finding a job. An impressive phenomenon recently is that young males join the army, Internal Security Forces (ISF) or others. Anyhow, “Illiterate” and “Read and Write” classes has been shrinking in both sex from 1996 to 2009. It confirm the development of education level in Lebanon (Fig. 2 and Fig. 3).

Figure 2: Percentage of education level by sex in 1996.

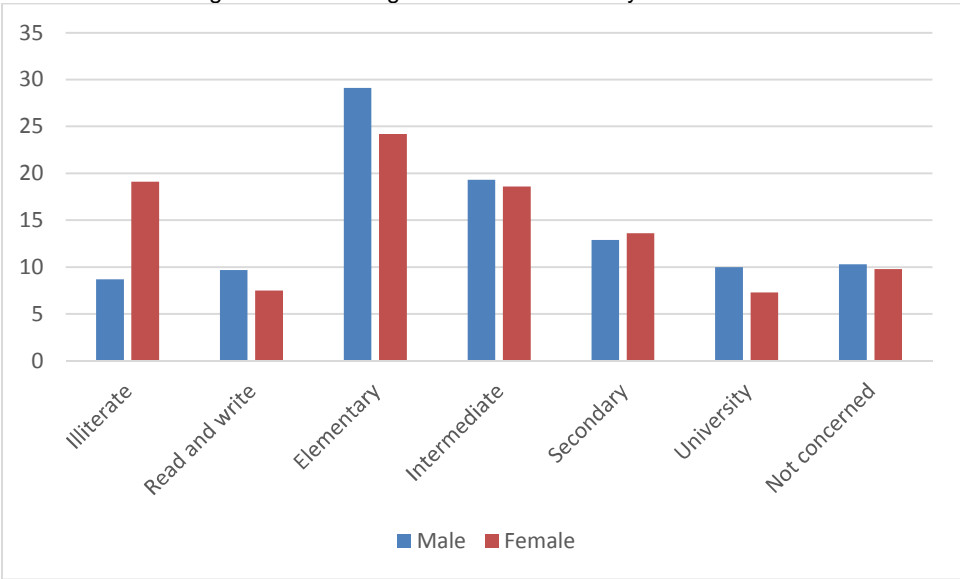


Figure 3: Percentage of education level by sex in 2009

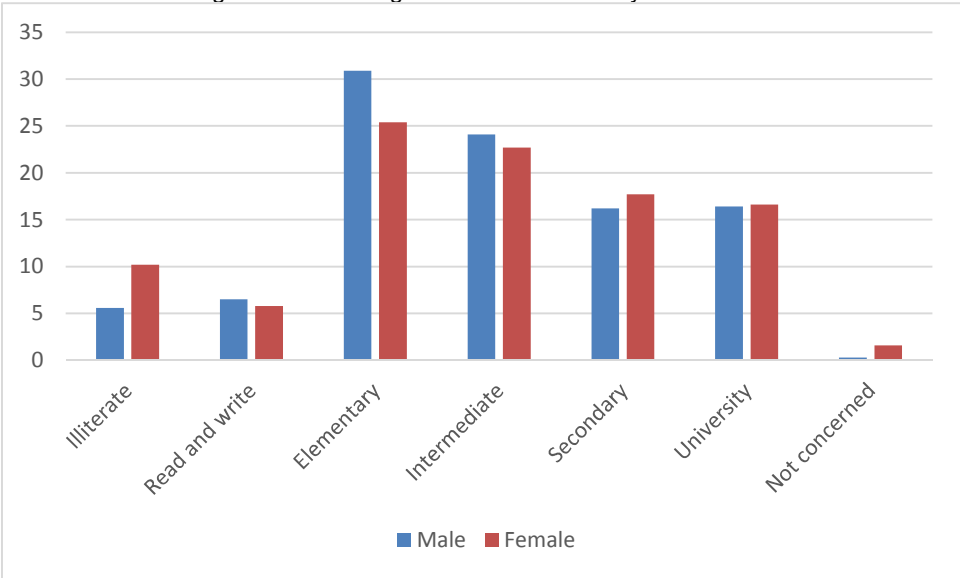
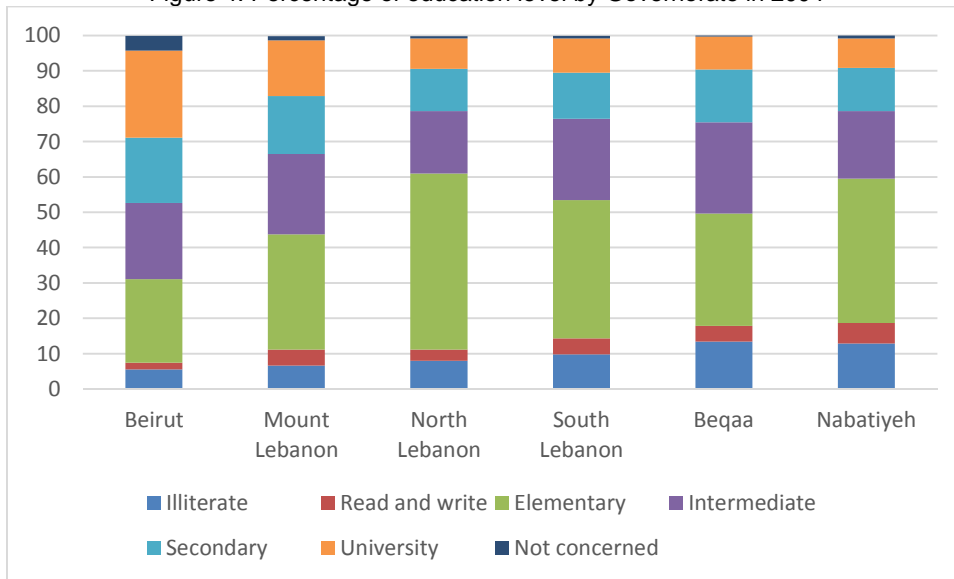
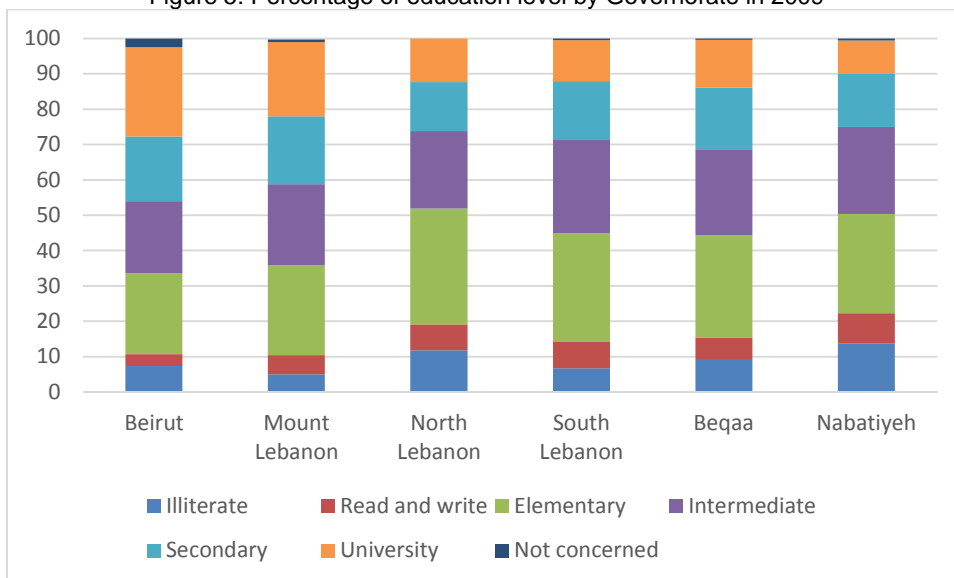


Figure 4: Percentage of education level by Governorate in 2004



Between 2004 and 2009 virtually no change in the percentage of education level is registered. As per Governorate, Beirut came in the first place. It contains the largest number of schools and universities; for instance, the American University of Beirut is the oldest university in the country and the region, the Lebanese American University (LAU), the University of Balamand, Université Saint-Joseph and much more. They are the most recognized universities in the nation and in the neighbourhood. Followed by Mount Lebanon with nearly 40 percent of total education level are in “Secondary” and “University” classes. North Lebanon has the lowest value in the most advance educational level. As for Nabatiyeh, unfortunately, it has the most percentage of illiterate people of 13.3 percent as average between 2004 and 2009. Yet, Beqaa show a relatively close number of 11.2 percent. It is important to mention that Beqaa has a largest population which make it the area with the most illiterate people in Lebanon (Fig. 4 and Fig. 5).

Figure 5: Percentage of education level by Governorate in 2009





In age group between (0-4) years old, "Read and write" category dominate. It is obvious because children can't enter school yet. With age progress, classes keep on moving ahead. Groups of (20-24) and (25-29) attain the climax of this advancement with the highest percentage of people entering university, with 31 percent and 24.7 percent respectively. Afterward, education level begin to fall behind as age group progress. Above 60 years old, "Illiterate" category take over. Therefore, more than 60 years ago, education in Lebanon was having only a little attention. But with an amazing percentage in the younger class age, it is easy to forecast a brightness future for Lebanese education, which already shows her fruit: "Secondary" group is dominated by the age group (15-19), and "University" class by (20-24) class age respectively (Table 1).

Table 1: Rates of education level by age group based on average between 1996, 2004 and 2009

Age group	Illiterate	Read and write	Elementary	Intermediate	Secondary	University	Not concerned
0-4	13.1	45.2	0.0	0.0	0.0	0.0	41.7
5-9	6.6	14.2	54.7	0.2	0.0	0.0	23.8
10-14	8.9	7.1	48.3	33.3	0.9	0.0	1.3
15-19	2.8	3.7	25.7	25.5	32.7	8.9	0.5
20-24	2.3	2.4	21.6	24.0	16.7	31.0	1.1
25-29	3.1	2.4	23.6	24.7	18.7	24.7	2.8
30-34	4.0	3.0	25.0	27.5	20.7	18.5	1.2
35-39	5.0	3.9	26.5	26.7	21.3	15.9	0.3
40-44	7.5	4.6	28.2	25.8	18.2	15.2	0.2
45-49	10.0	6.3	27.9	23.6	17.2	14.4	0.4
50-54	15.1	7.7	29.3	20.9	13.9	12.9	0.1
55-59	20.8	10.2	29.4	16.4	12.5	10.6	0.1
60-64	29.6	13.6	27.4	12.6	9.1	7.4	0.1
65 and above	42.6	17.7	22.0	7.8	5.3	4.1	0.3

Table 2: Rates of school enrolment by education level and sex.

Education level	Years	Females	Males	Average
Elementary	1996	37.8	39.9	38.8
	2004	92.7	92.7	92.7
	2007	93.4	92.8	93.1
Average		74.6	75.1	74.9
Intermediate	1996	26.6	25.1	25.9
	2004	72.5	65.0	68.8
	2007	75.1	69.2	72.2
Average		58.1	53.1	55.6
Secondary	1996	12.9	11.5	12.2
	2004	45.6	39.2	42.4
	2007	45.6	39.2	42.4
Average		34.7	30.0	32.3

The school enrolment rate at the elementary level in Lebanon, for both males and females, is very high. Table 2 reveals results touching 93 percent and 92 percent respectively for years 2004 and 2007, which decline to approximately 39 percent for the year 1996. In 1996, Lebanon was still curing from the civil war: many private and public school buildings were occupied by displaced families. Furthermore, the departure of most foreign teachers and professors, especially after 1984, contributed to the decline in the standards of academic institutions. It is worth noting that school enrolment rates for females and males are very similar in Lebanon at all educational levels, with a slight increase in female enrolment at certain levels.

School enrolment rates according to age groups among the governorates are relatively similar for age groups (5-9) and (10-14). However, a gap exists in school enrolment rate among governorates for the age groups 15 years and above, where the rate of enrolment in Beirut and Mount Lebanon for age groups (15-19) is much greater than that of the other governorates. Few people above 25 enrol themselves in school, with a rate attending a maximum of 7.8 percent in Beirut (Table 3). All data from 1996 were extracted from hardcopy printed by CAS in French. Statistic tables are not published in the internet. For 2004 and 2009, data were extracted from the final report and the statistic tables provided by CAS: The National Survey of Household Living Conditions 2004 and The Multiple Indicators Cluster Survey- round 3-2009 (MICS3).

Table 3: Rates of school enrolment by governorate and age based on average between 1996, 2004 and 2007.

<i>Governorate</i>	<i>5-9</i>	<i>10-14</i>	<i>15-19</i>	<i>20-25</i>	<i>25 and above</i>
<i>Beirut</i>	98.4	96.8	77.6	39.4	7.8
<i>Mount Lebanon</i>	98.3	96.8	76.1	38.1	3.8
<i>North Lebanon</i>	96.2	90.9	60.6	28.1	4.3
<i>South Lebanon</i>	97.6	94.2	65.1	27.6	6.1
<i>Beqaa</i>	98.0	95.4	70.4	29.5	5.7
<i>Nabatiyeh</i>	99.3	96.8	70.3	31.8	5.2
<i>Lebanon</i>	98.0	95.2	70.0	32.4	5.5

### 3.2. Unemployment rate in Lebanon

The Unemployment Rate can be defined as the number of people actively looking for a job divided by the labour force. Changes in unemployment depend mostly on inflows made up of non-employed people starting to look for jobs, of employed people who lose their jobs and look for new ones and of people who stop looking for employment. The Unemployment rate in Lebanon keep on decreasing for males and increasing for females; in 1996, 9 percent of adult male faces unemployment as opposed to female with almost 7 percent. In 2004 and 2009, adult female had the highest value of Unemployment Rate (Fig. 6).

In 1996, North Lebanon scored the highest Unemployment Rate with nearly 10 percent. Beqaa came in the second position with a rate slightly the same. Mount Lebanon managed to attain only 7 percent of Unemployment Rate and came in the last place. In 2004, a major improvement is seen in both North Lebanon and in Beqaa which was able to diminish the percentage to half of what it was. In that year, both Governorates are in the last place with simply 5 percent of Unemployment Rate. In fact, many projects has took place in these regions in aim to improve Livelihoods and develop life conditions for the inhabitants - for instance "improved Livelihoods for Underprivileged Women in North Lebanon" project, "Professional Training and Integrated Rural Development" project, " UNDP ART GOLD Lebanon" program etc. In any other Governorates it wasn't the case: Beirut, Mount Lebanon and Nabatiyeh show an increase in the Unemployment Rate (Fig. 7).

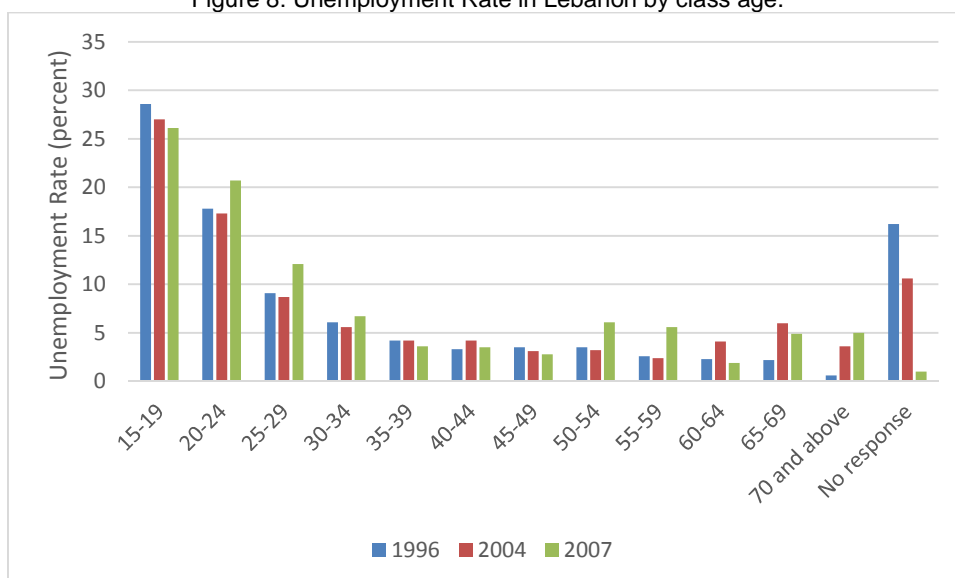
Figure 6: Unemployment Rate in Lebanon by sex.



Figure 7: Unemployment Rate in Lebanon by Governorate.



Figure 8: Unemployment Rate in Lebanon by class age.

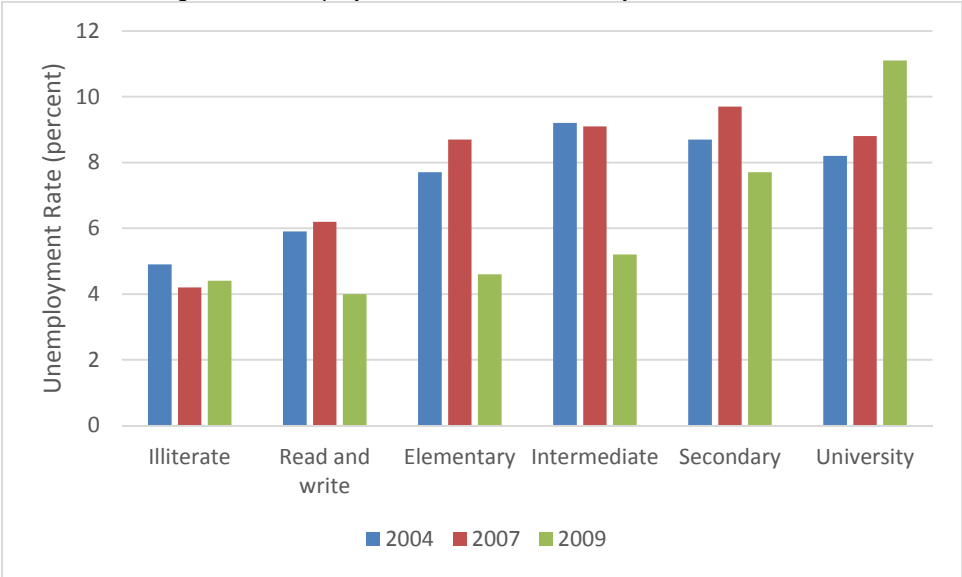


A high rate of Unemployment in Lebanon is shown in groups age of (15-19) and (20-24). It is related to the minor experience built by these groups age: they still fresh and consequently undesirable by companies and employer. Above 30 years old, the rate of Unemployment fluctuates a little with a percentage continuously below 6 percent. Concerning these three years (i.e. 1996, 2004 and 2007),

some main changes could be identified: between 20 and 29 years old Unemployment rate seems to increase in 2007. Company's fear of failing could be the reason especially in this unpredictable economy and politic situation: they hire more experienced people in a way to conserve their company. An increase is also noticeable in group age from 50 to 59 years. In that case, people after building a strong experience tend to quit their limited job with their limited salary and start their own. Also, their wages could be high enough for the company to get rid of them and hire new coming with basic and low payment (Fig. 8).

With technological revolution advancing at a high rate, "Illiterate" people feel lost in the society. All their work's experience seems unnoticed and unrepresentative. Despite that, "Illiterate" and "Read and write" groups has generally the lowest Unemployment Rate. Maybe they have their own work, for instance in agriculture. Or maybe our society is saturated enough with high level workers. But after all their populations are low in comparison with the others groups age. "Intermediate" had the highest rate of Unemployment in Lebanon in 2004 with nearly 9 percent. In 2007, "Secondary" category came first with approximately 10 percent of Unemployment Rate. "Intermediate" came second. In 2009, all categories seems to decrease expect for one: "University" which also score a record breaking rate of 11 percent. It is pathetic and dangerous in Lebanon that a graduate student could face the highest Unemployment Rate (Fig. 9). All data from 1996 were extracted from hardcopy printed by CAS in French. Statistic tables are not published in the internet. For 2004, 2007 and 2009, data were extracted from the final report and the statistic tables provided by CAS: The National Survey of Household Living Conditions 2004, The National Survey of Household Living Conditions 2007 and The Multiple Indicators Cluster Survey- round 3-2009 (MICS3).

Figure 9: Unemployment Rate in Lebanon by education level.



### 3.3. Income distribution in Lebanon

Wages in all Governorates are likely to decline between 1996 and 2004. Only in North Lebanon it isn't the case: a growth from almost 4.2 million LBP (equally to 2,778 USD) in 1996 to approximately 6.6 million LBP (equally to 4,366 USD) in 2004. Still, this income is the smallest along with the Governorate of South Lebanon in 2009. Beirut and Mount Lebanon succeed to have the highest mean of annual salary with 10.6 million LBP (equally to 7,012 USD) and 9 million LBP (equally to 5,964 USD) in 2009 respectively. In fact, prices in Lebanon go crazy from 1996 to 2004. And at different occasions, there has been a wage hike; the latest was on May 2013. Therefore, wages decrease over the years is correlated to labour supply: a troubling reality is that even for those unemployed people fortunate to find a new job, that new job often means a decrease in wages and living standards (Fig. 10).

Figure 10: Mean of annual salary by Governorate.

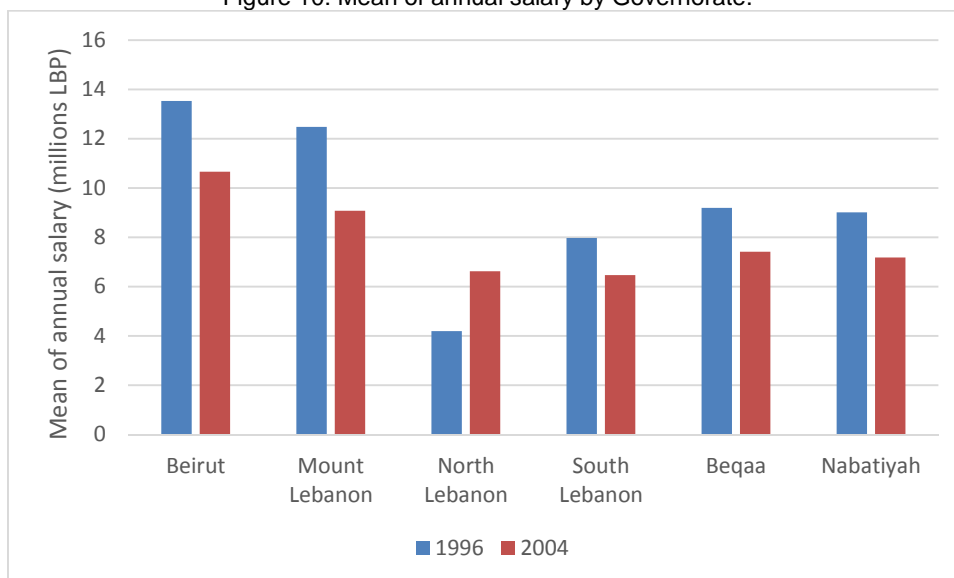
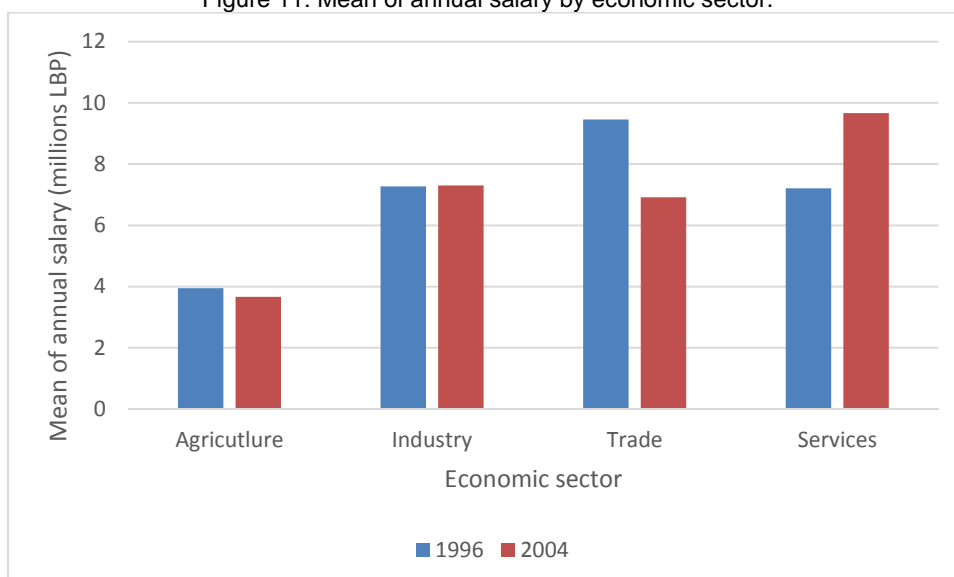


Figure 11: Mean of annual salary by economic sector.

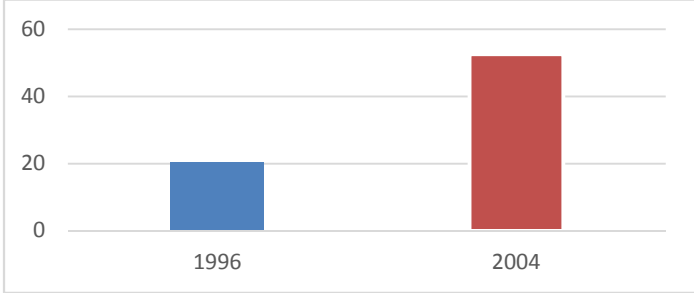


In 1996, “Trade” sector had the largest mean of annual salary with 9.4 million LBP (equally to 6,218 USD). Followed by “Industry” which manage to reach nearly 7.2 million LBP (equally to 4,763 USD). “Agriculture” was in the last place in both years 1996 and 2004 with approximately 3.8 million LBP (equally to 2,514 USD). It is the almost the half of any other sector. In 2004, “Trade” was able to score the highest mean of annual salary with 9.4 million LBP (equally to 6,218 USD). “Services” and “Industry” are to follow. Actually, the Lebanese economy is based primarily on the service sector. Major subsectors are commerce, tourism and financial services. Other components include health care and higher education. An important thing to mention is that poverty is related primary to low level of income: we estimate that “Agriculture” sector contains the highest number of people that are or could be facing poverty (Fig. 11). All data from 1996 were extracted from hardcopy printed by CAS in French. Statistic tables are not published in the internet. For 2004 data were extracted from the final report and the statistic tables provided by CAS: The National Survey of Household Living Conditions 2004.

3.4. Vehicles per household in Lebanon

Since 1996, percentage of households which own at least one car has increased tremendously by 150 percent. In 2004, almost 52 percent of the whole Lebanese population own at least one car. An increased economic prosperity as well as a growth in the number of people with driving licenses maybe the main reasons (Fig. 12). All data from 1996 were extracted from hardcopy printed by CAS in French. Statistic tables are not published in the internet. For 2004 data were extracted from the final report and the statistic tables provided by CAS: The National Survey of Household Living Conditions 2004.

Figure 12: Percentage of households which own at least one car, 1996 and 2004.



4. Lebanon’s economic assessment

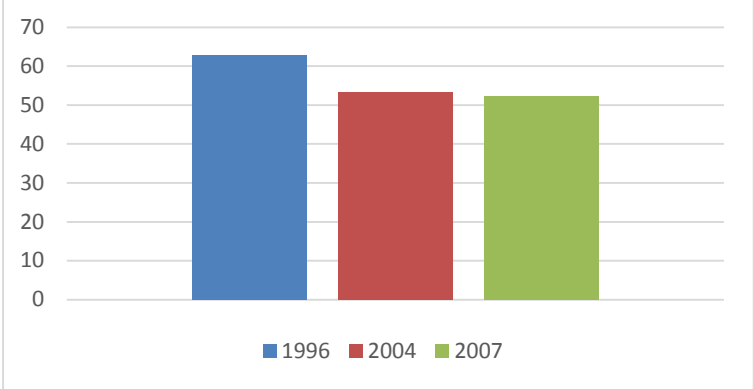
4.1. Active population in Lebanon

Dependency Ratio is a measure of the portion of a population which is composed of dependents (people who are too young or too old to work). The dependency ratio is equal to:

$$\frac{\text{number of individuals aged below 15 or above 64}}{\text{number of individuals aged 15 to 64}} \times 100$$

A rising dependency ratio is generally shown in countries that are facing an aging population. Anyhow, in Lebanon the Dependency Ratio keeps on decreasing from 1996 to 2007: in the first it was about 62 percent and in the last the ratio is only 52 percent. It is mainly due to the decrease in Fertility Rate. All data from 1996 were extracted from hardcopy printed by CAS in French. Statistic tables are not published in the internet. For 2004 and 2007, data were extracted from the final report and the statistic tables provided by CAS: The National Survey of Household Living Conditions 2004 and The National Survey of Household Living Conditions 2007.

Figure 13: Percentage of Dependency Ratio in Lebanon.



4.2. Employment status in Lebanon

Mount Lebanon attracts the highest number of total working population in Lebanon in 2004 and in 2007 as well. However, in 2004 male employees are at the top, with a difference of about 22,000 employees against the total number of working female. In 2007, female and male workers in Mount Lebanon represent approximately the same total number of working population which is 351,000 employees. In Beirut, which came in the second place, male workers number doubled between 2004 and 2008 and it is generally equal with female workers in 2007. For others Governorates, a dominance to men employees over women could be registered in both years. Anyhow, the numbers was at least tripled from 2004 to 2007 (Fig. 14 and Fig. 15). Still, between 2004 and 2007, a same pattern in both genders is shown: female and male workers are having a slight increase across Lebanon in general (Fig. 17).

Figure 14: Total number of working population by sex, 2004.

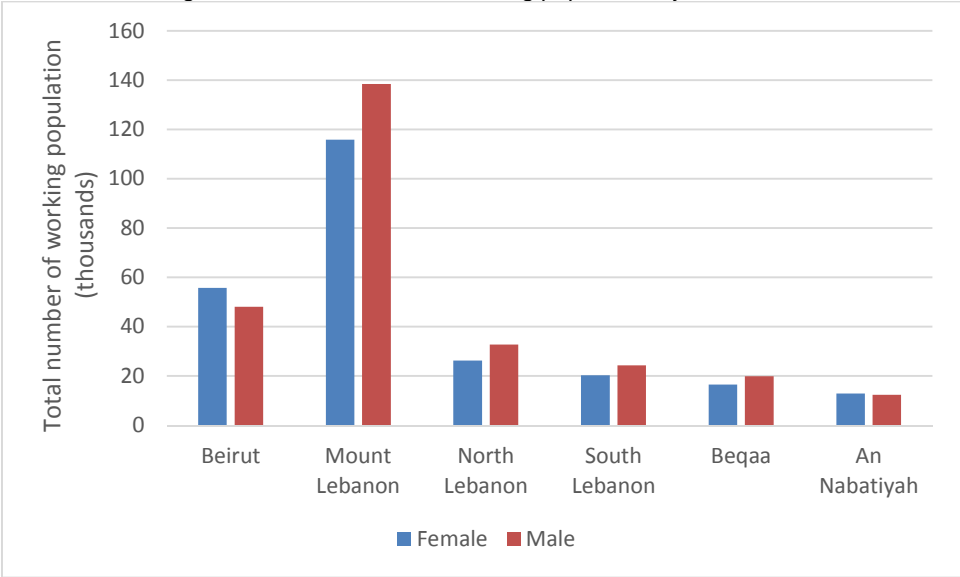


Figure 15: Total number of working population by sex, 2007.

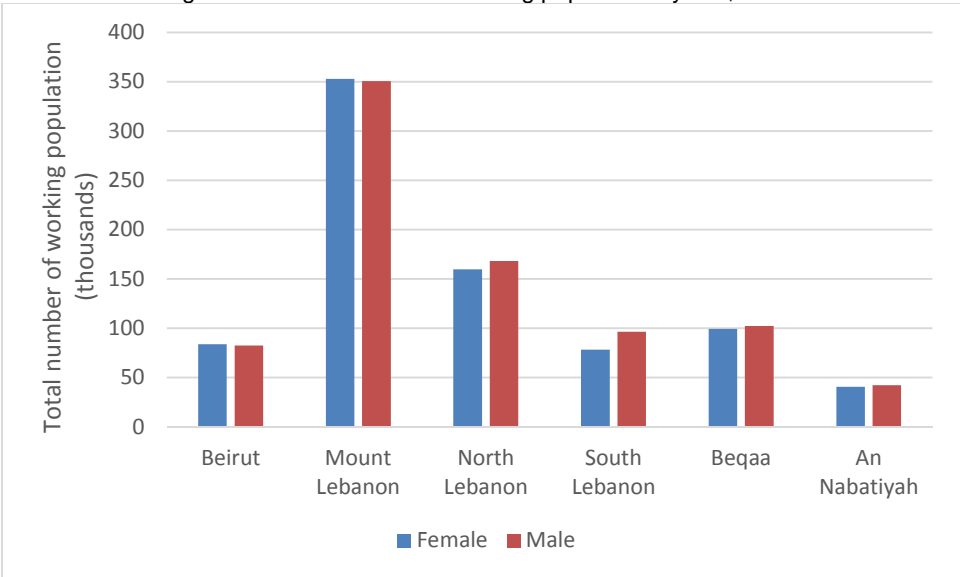


Figure 16: Total number of working population by sex, 2004 and 2007.

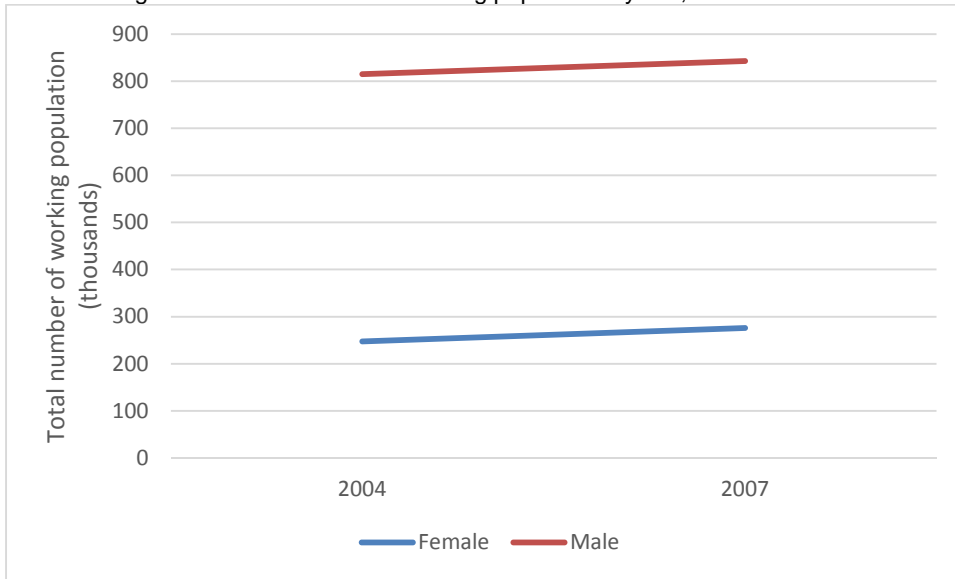


Figure 17: Total number of working population by age, 2004 and 2007.

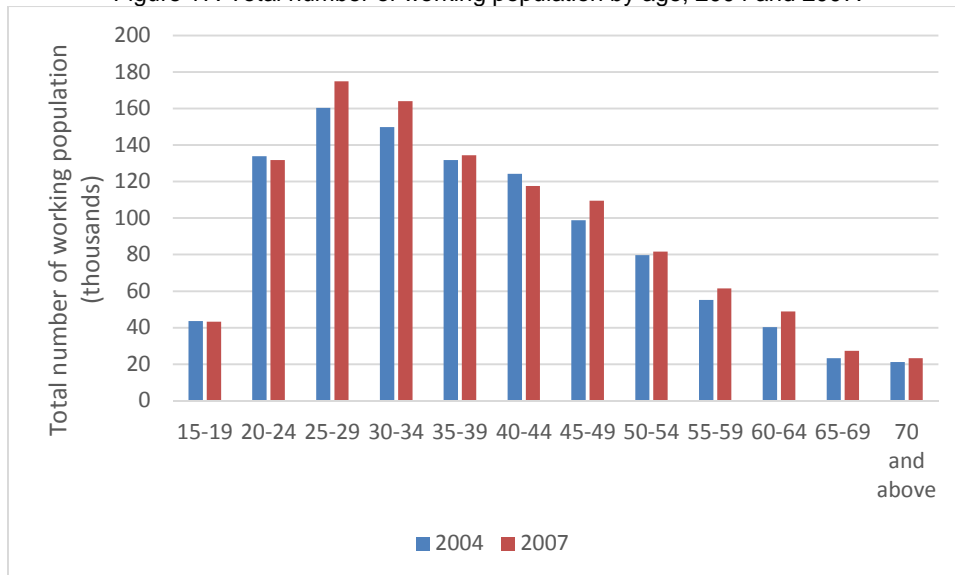


Figure 18: Total number of working population by education level, 2004 and 2007.

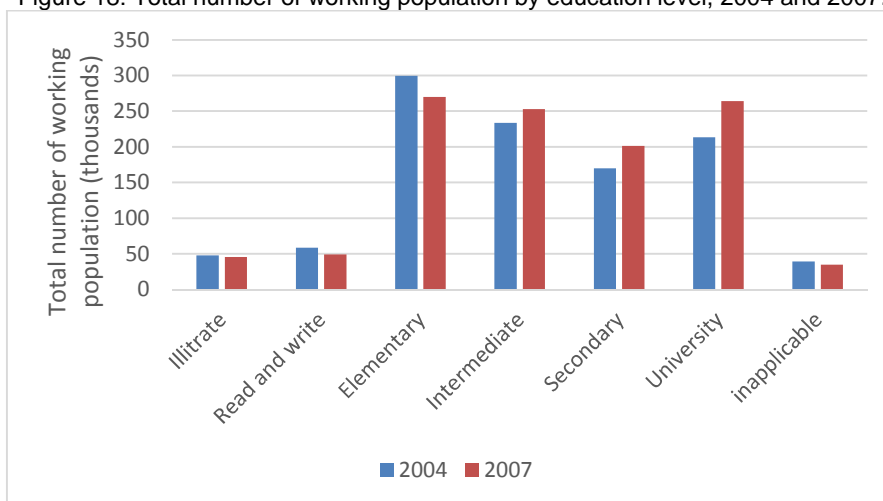




Figure 19: Total number of working population by economic sector, 2004 and 2007.



As Figure 17 illustrate, the largest working population is between 20 and 65 years old. To be more specific, class age of (25-29) represents the highest value in 2004 and in 2007 also. This is related to the sociological constitution of Lebanon: this age group has the highest rate of the whole population. In fact, this histogram is very similar to the age pyramid of this country (Fig. 17). However, workforces in 2004 were mostly based on individuals with an “Elementary” education that reach nearly 300,000 workers. In 2007, workers with “Elementary” education still on top but with 270,000 employees against workers with “University” education that increase enormously to attain approximately 265,000 employees in that year (Fig. 18).

The Lebanese economy is service-oriented; main growth sectors include banking and tourism. For that, the largest number of working population is found in “Other Services”. “Construction” sector has the smallest workers, and their numbers even decrease from 2004 to 2007 (i.e. 95,000 versus 62,000 workers). “Agriculture” and “Industry” sectors maintain the same numbers: it’s almost zero the chance to find a new-comer to these sectors. “Trade” sector shows a minor increase between these two years (Fig. 19). Data from 2004 and 2007 were extracted from the final report and the statistic tables provided by CAS: The National Survey of Household Living Conditions 2004 and The National Survey of Household Living Conditions 2007.

#### 4.3. Gross domestic product (GDP) in Lebanon

Gross domestic product (GDP) is the monetary value of all the finished goods and services produced within a country's borders in a specific time period, though GDP is usually calculated on an annual basis. It includes all of private and public consumption, government outlays, investments and exports less imports that occur within a defined territory. GDP is commonly used as an indicator of the economic health of a country, as well as to gauge a country's standard of living. Since 1977, no official GDP calculations were made, with the exception of the GDP calculations for 1994 and 1995 published by CAS. Recognizing that statistical weaknesses and the absence of reliable and current information concerning GDP figures and other economic data constituted serious obstacles to the analysis of the Republic's economy, in 2002, the then Prime Minister founded a steering committee, headed by the Minister of Economy and Trade, for the establishment of a national accounts database for the years 1997–2002. The Government extended the project to include a national account database for the years 2003 and 2004 under the authority of the Presidency of the Council of Ministers. Technical assistance was provided by the French National Institute of Statistics and Economic Studies [5].

In Lebanon, total GDP keep on rising from 2000. In fact, in 2000 it was 25 billion LBP (equally to 16.5 million USD). As for 2010 it reaches almost 56 billion LBP (equally to 37 million USD). 2010 was a prosperous year that Lebanon enjoys an impressive stability. Investments, tourism and flow of capital was registered at high level in this same year (Fig. 20).

Figure 20: Total GDP in Lebanon, 2000 to 2010.

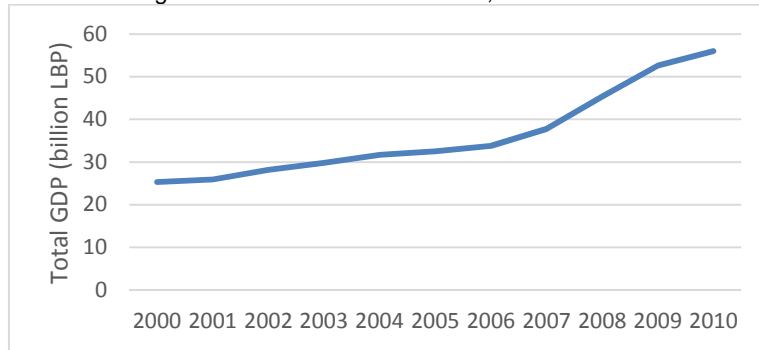
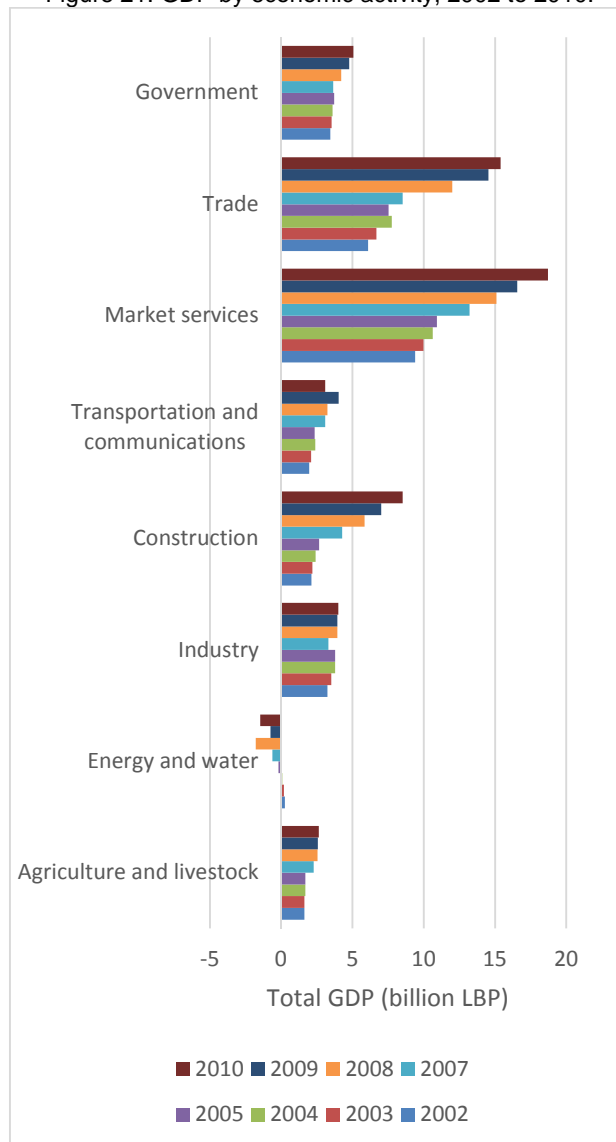


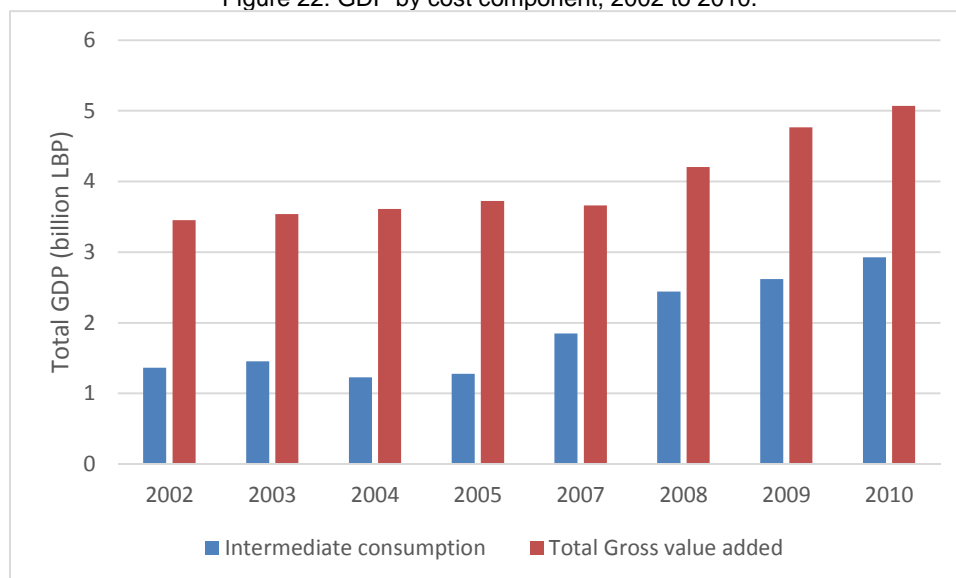
Figure 21: GDP by economic activity, 2002 to 2010.



By economic activity, “Market services” always has the highest value from 2002 till 2010. Next came “Trade” activity. “Government” took the third place till 2007 when “Construction” activity has acquired this position, especially after Israel-Lebanon war in 2006 and all the construction projects that take over. Almost all the activities keep on improving over the years expect for “Energy and water” activity:

it even went under zero after 2005. More water projects should take place. Recently, a North Lebanon dam project set to begin in Balaa, Tannourin. It will meet the water needs of more than 40,000 residents (Fig. 21).

Figure 22: GDP by cost component, 2002 to 2010.



“Intermediate consumption” is an accounting concept which measures the value of consumed market goods and services in the production process. “Total Gross value added” is a productivity metric that measures the difference between output and intermediate consumption. It provides a monetary value for the amount of goods and services that have been produced, less the cost of all inputs and raw materials that are directly attributable to that production. In Figure 22, “Intermediate consumption” keep on increasing generally between 2002 and 2010. “Total Gross value added” follows the same pattern reaching 5 billion LBP (equally to 3.3 million USD) in 2010. This increase is mainly due to population growth which results a higher need for markets goods and services. All data were extracted from the final report and the statistic tables provided by the Lebanese Republic Presidency of the Council of Ministers National Accounts mission.

## 5. Conclusion

By the end of the civil war, Lebanon’s economy was severely damaged and the public infrastructure destroyed. Not only was the country’s sovereignty in question and its government institutions paralyzed, but the civil war had also deepened the hatred between the numerous religious sects and communities. The Ta’if Agreement officially brought the civil war to an end in 1989. However, to this day, the country remains extremely vulnerable to outside influences.

Lately, Lebanon’s massive public debt rose to over \$59 billion and structural reforms and privatization are key priorities of government policies. The outlook of the economy is unpromising and we conclude that:

In society:

- Individuals with “Elementary” education has the highest rate in Lebanon over the years; It is ranging between 26 and 31 percent;
- There is more illiterate female than male, and, female are competing male in “Secondary” and “University” classes;
- Beirut came in the first place among Lebanese Governorate at high level education: 43% of its total population has “Secondary” or “University” education;
- It is easy to forecast a brightness future for Lebanese education: “Secondary” group is dominated by the age group (15-19), and “University” class by (20-24) class age respectively;

- School enrolment rates for females and males are very similar at all educational levels, with a slight increase in female enrolment at certain levels;
- Adult female had the highest value of Unemployment Rate;
- North Lebanon scored the highest Unemployment Rate in 1996 among Lebanese Governorate. In 2004, Beirut took place;
- “University” score a record breaking rate of 11 percent of Unemployment Rate in 2009;
- Wages in all Governorates are likely to decline between 1996 and 2004. Only in North Lebanon it isn’t the case;
- “Trade” sector had the largest mean of annual salary with 9.4 million LBP (equally to 6,218 USD);
- Almost 52 percent of the whole Lebanese population own at least one car.

In economy:

- Dependency Ratio keep on decreasing from 1996 to 2007;
- Mount Lebanon attracts the highest number of total working population in Lebanon;
- Female and male workers are having a slight increase across Lebanon;
- Workforces are mostly based on individuals with an “Elementary” education;
- The largest number of working population is found in “Other Services” including banking and tourism;
- Total GDP keep on rising from 2000 for 2010: it reach almost 56 billion LBP (equally to 37 million USD) in 2010;
- Almost all the activities keep on improving over the years expect for “Energy and water” activity;
- “Intermediate consumption” keep on increasing generally between 2002 and 2010. “Total Gross value added” follows the same pattern reaching 5 billion LBP (equally to 3.3 million USD) in 2010.

This survey reflects the situation of Lebanon’s sociologic and economic conditions. However, up-to-date investigations and surveys should be held. Resolution of any problem or even bypassing some other begins with up-to-date references and statistics.

## References

- [1] Federal Research Division of the Library of Congress. The Country Studies Series. 1988-1999. Lebanon - The Society. URL: [http://www.mongabay.com/reference/country\\_studies/lebanon/SOCIETY.html](http://www.mongabay.com/reference/country_studies/lebanon/SOCIETY.html)
- [1] Lebanese Information Center. January 14, 2013. The Lebanese demographic reality. URL: <http://www.lstatic.org/PDF/demographenglish.pdf>
- [2] Economic And Social Commission For Western Asia (ESCWA). 14 December 2009. National Profile Of The Information Society In Lebanon. URL: <http://www.escwa.un.org/wsis/reports/docs/Lebanon-09-E.pdf>
- [2] UNDP and MOE. 2010. State of the environment report 2010. URL: <http://www.moe.gov.lb/The-Ministry/Reports/State-Of-the-Environment-Report-2010.aspx>
- [3] Population and Development Strategies Program. Demographic characteristics of residents. URL: [http://www.pdslebanon.org/UserFiles/Chapter1\\_DemographicCharacteristicsOfResidents.pdf](http://www.pdslebanon.org/UserFiles/Chapter1_DemographicCharacteristicsOfResidents.pdf)
- [3] Soueid M. Mazen. BankMed. September 2006. The Lebanese Economy Before and After. URL: <http://www.bankmed.com.lb/SiteCollectionDocuments/Economic%20report%20september%202006.pdf>
- [4] DG environment. December 2006. Support to DG Environment for the development of the Mediterranean Depollution Initiative "Horizon 2020". URL: [http://ec.europa.eu/environment/enlarg/med/pdf/review\\_report08\\_en.pdf](http://ec.europa.eu/environment/enlarg/med/pdf/review_report08_en.pdf)
- [4] World Bank. Population growth (annual %). URL: <http://data.worldbank.org/indicator/SP.POP.GROW>
- [5] Lebanese Republic. Ministry Of Finance. 2011. Lebanon – Country Profile 2011. URL: <http://goo.gl/Zy5K6n>
- [5] Ministry of Environment/LEDO. Lebanon state of environment report. URL: [http://www.unep.org/dewa/westasia/Assessments/national\\_SOEs/west%20asia/Lebanon/Chap1Population.pdf](http://www.unep.org/dewa/westasia/Assessments/national_SOEs/west%20asia/Lebanon/Chap1Population.pdf)
- [6] DG environment. December 2006. Support to DG Environment for the development of the Mediterranean Depollution Initiative "Horizon 2020". URL: [http://ec.europa.eu/environment/enlarg/med/pdf/review\\_report08\\_en.pdf](http://ec.europa.eu/environment/enlarg/med/pdf/review_report08_en.pdf)
- Central Administration for Statistics (CAS). URL: [www.cas.gov.lb](http://www.cas.gov.lb)
- Directorate of Geographic Affairs-Lebanon. URL: [http://www.lebarmy.gov.lb/en/d\\_a\\_g/?100](http://www.lebarmy.gov.lb/en/d_a_g/?100)
- Ministry of Interior-Lebanon. URL: <http://www.moim.gov.lb/>
- Ministry of Social Affairs-Lebanon. URL: <http://www.socialaffairs.gov.lb/>
- National Center for Scientific Research (CNRS). URL: <http://www.cnrs.edu.lb/>
- University St-Joseph-Beirut, Lebanon. URL: [www.usj.edu.lb](http://www.usj.edu.lb)

# Syria

by the ITAN local expert for Syria (wants to be stay anonymous)  
June 2013

## ➤ 1. Main demographic trends in Syria

### INTRODUCTION

The purpose of this report is to demonstrate and analyse main demographic trends, social & economic transformations in Syria in addition to identify statistical sources, their credibility, reliability, and operational definitions used in the collection by focusing on the following topics: population and growth rates, demographic age and gender composition, geographical distribution, factors of population growth (births & fertility, death & life expectancy at birth, internal migration), inhabitants educational composition, educational services and enrolment rates in all educational levels. In addition, the report examines economically productive population, crude and revised economic growth, workers' properties and structure, unemployment rates and structure, Palestinian refugees in Syria, family income level, gross domestic product and its structure based on economic sectors as well as average share per person, immigration.

#### 1.1. Main sources for demographic data

Demographic data can be provided through three main sources which are: general census of population, demographic and health surveys sample and civil status records.

##### 1.1.1. General census of population

General census of population is considered a prime source of basic demographic, social and economic statistics collection in any society, and it is defined according to recommendations & guidance bulletins issued by the United Nations as the total process of collecting, compiling, evaluating, analysing and publishing or otherwise disseminating of demographic, social, economic data pertaining, at a specified time, to all living occupants thereof in a country or in a well delimited part of it.

The main features of the census, as identified in this definition, are clearly represented in the following principles:

- Individual enumeration: the term implies that each individual is enumerated separately and that the demographic, social & economic characteristics thereof are separately recorded. So these various characteristics can be cross-classified.
- Universality: the population census should include every person residing within a country's borders and/or a preciously defined territory without any shortage or duplication.
- Simultaneity: the data collected should refer to a well-defined reference period. The time-reference period need not, however, to be identical for all of the data collected. If the majority of data is assigned to the middle of the night count, other data like profession, economic activity and working condition is usually assigned to a day or a week prior to the count day. Also, fertility and mortality data is assigned to the years prior to census' date.
- Defined periodically: census should be taken at regular intervals so that comparable information is made available in a fixed sequence. A series of censuses make it possible to appraise the past, accurately describe the present and estimate the future of population size and properties. National census should be taken every ten years. The census data are of greater value if they can be compared with the results of censuses of other countries that were

taken at approximately the same time. Therefore, it is the norm today for countries to undertake a census in years ending in "0" or at a time as near to those years as possible.

The census' objectives are:

- Capturing society's image at a given moment through the provision of comprehensive and accurate data to show population size, geographical distribution, characteristics and structure in terms of gender, age, education, marital status, profession, economic activity and employment status.
- Identifying intercensal demographic indicators, social and economic phenomena trends' changes and comparing them to those of other countries and improving projection methods and population prediction in the future.
- Providing suitable framework for population sampling surveys for housing units and households.

The first comprehensive census took place in 1960, 4 more followed in the years 1970, 1981, 1994 and 2004. These were consistent with the modern definition of census, were highly reliable and their data was evaluated, analysed and published. Other censuses done in the years 1854, 1885, 1905, 1922 and 1947 aimed at; counting men for army recruitment or to establish civil records to prove citizenship, ownership, family lineage or inheritance rights or to reorganize these records, correct and audit them.

#### 1.1.2. Demographic & health surveys sample:

Census requires a big effort, time and money. The questionnaire used in general census allows only for a relatively limited demographic, social and economic data. Unlike the previous, sampling surveys are usually applied to monitor intercensal abrupt data changes or to obtain detailed data about a particular phenomenon allowing further in-depth analysis of its dimensions, diagnosis and interpretation. Sampling surveys firm and scientific design and execution leads to make their results as reliable and as accurate as censuses results if not surpass them by limiting its data's exposure to errors in kind or not in kind, by applying provisions to design and implementation, by providing researchers with good training as well as adjusting and intensifying field supervision.

After 1960 census in Syria, many health and population sampling surveys were completed where household frameworks extracted from previous population censuses were utilised to design and identify sampling units. The process of assessing and analysing these surveys' results has confirmed that they have high levels of accuracy and reliability.

#### 1.1.3. Civil status records

Most countries depend on civil records systems to obtain information regarding their citizens' population size and their life events such as births, deaths, marriage and divorce. The degree of accuracy and universality these surveys have reached made some developed countries think that general population census is dispensable. Civil status records remain the prime source for providing important data essential to calculate various demographic indicators such as crude birth rate, total fertility rate, age fertility rate, deaths rate, marriage and divorce rates, although census or survey questionnaires regarding woman's fertility and deaths can assist in estimating some of these results.

In Syria, civil records organization depended primarily on results accumulated from 1922 census to estimate the number of Syrian citizens. From that time on, the difference between births and newly acquired citizenships on one hand and recorded deaths on the other hand is added to population size in the beginning of the year to estimate the number of registered citizens by year's end.

The accuracy and reliability of civil records data increases yearly due to the increase of awareness amongst the population and the wide spread of civil records services centres in all administrative areas and regions. This caused deterioration in undisclosed cases of birth and death. The undisclosed

births percentage recorded yearly fell from 35% in 1970 to 21% in 1980 to 19% in 2010. Similarly, undisclosed deaths percentage recorded yearly fell from 28% in 1971 to 19% in 1980 to 15% in 2010.

1.2. Population size & growth rates

During the last five decades, the Syrian society witnessed important demographic changes which resulted in substantial population increase and big transformations in its composition, properties and geographical distribution.

1.2.1. Syrian population according to civil status records:

The number of Syrians registered in civil status records (inside & outside the country) increased from approximately 4.2 million towards the end of 1960 to 6.3 million in 1970, then to 9.8 million in 1981, to 15.4 million in 1991, to 20.5 million in 2005 and finally 24.5 million in 2011.

We can conclude from previous numbers that the population doubled five times during the period from 1960 to 2011 and the yearly increase jumped from 210 thousand in the sixties to 318 thousand in the seventies to 431 thousand in the eighties and the first half of the nineties to 510 thousand in the second half of the nineties and the first half of past decade in this century to 571 thousand in the last few years.

Figure (1-1) evolution of Syrian population registered in civil status records (Million people) 1960 – 2011

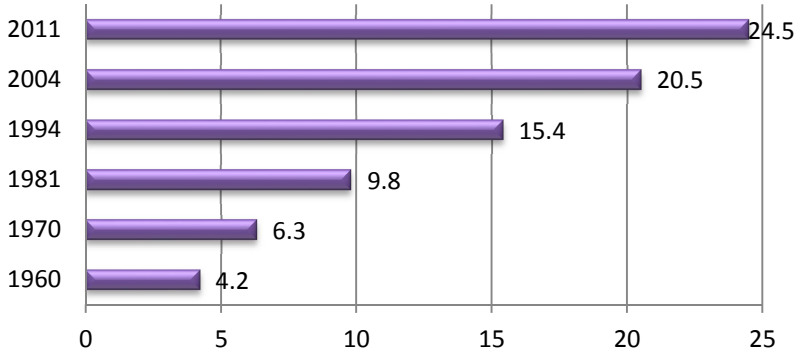
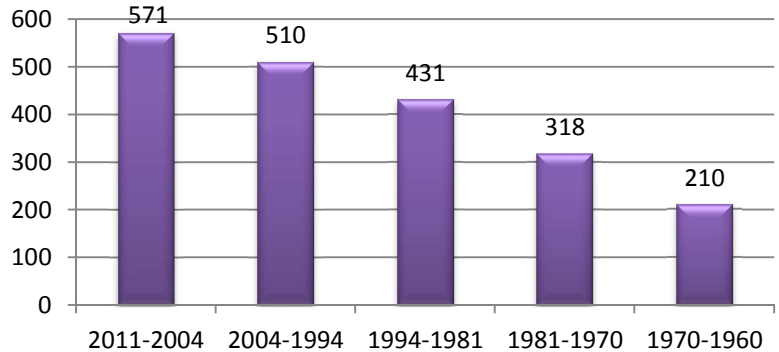


Figure (1-2) average yearly increase for Syrian population registered in civil status records (Thousands) 1960 – 2011



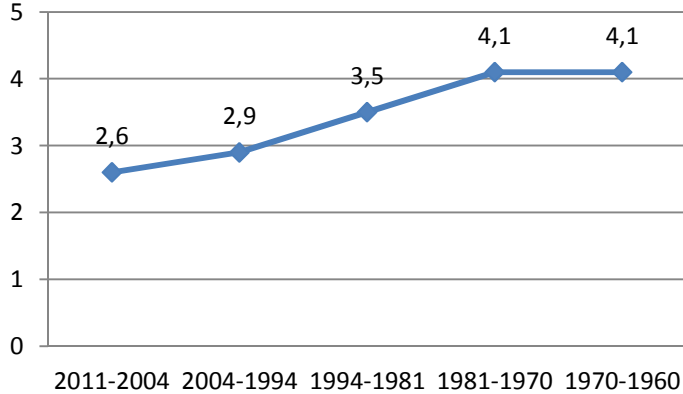
Reference: this figure has been constructed based on data provided by previous figure.



Alternatively, average population increase when compared with average percentage of annual population increase, is the natural growth resulted from difference between births and deaths on one side and net average of immigration resulted from difference between incoming immigrants and outgoing ones. Average annual growth for Syrians registered in civil status records has decreased from its highest level mounting to 4.1% in the sixties & seventies to 3.5% in the eighties & first half of nineties then it continued its gradual decline to reach 2.9% in the second half of the nineties and the first decade of this century to reach 2.6% in the last few years. This decline is a result of the positive transformations the Syrian society witnessed in economic, social and cultural affairs especially in education and specifically in woman's education which transformed the factors of population growth especially fertility.

Regardless of these substantial decreases in Syrian average annual population growth, it is still high and this steadiness in all these mentioned periods will result in adding more years to the gap separating the times when this population is doubled from 17 years to 20 years to 24 years. These, however, are considered short terms when compared to those of the developed nations and do not correspond to the time needed to achieve necessary development socially, economically and living standards wise.

Figure (1-3) average annual growth of Syrian population registered in civil status records (%) 1960 – 2011

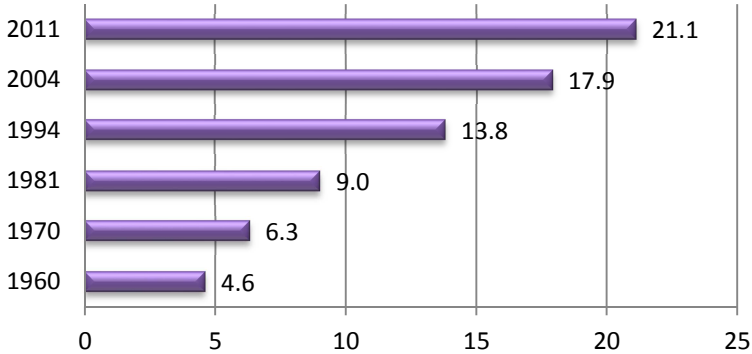


Reference: average was calculated based on accumulated interested formula (engineering)

1.2.2. Residents on Syrian territory:

The number of existing inhabitants on Syrian soil doubled 3.6 times between 1960 and 2011; it increased from 4.2 million in 1960 to 6.3 million in 1970, then to 9.0 million in 1981, to 13.8 million in 1994, to 17.9 million in 2004 and finally 21.1 million in 2011 with a total increase of 16.6 million in the last five decades.

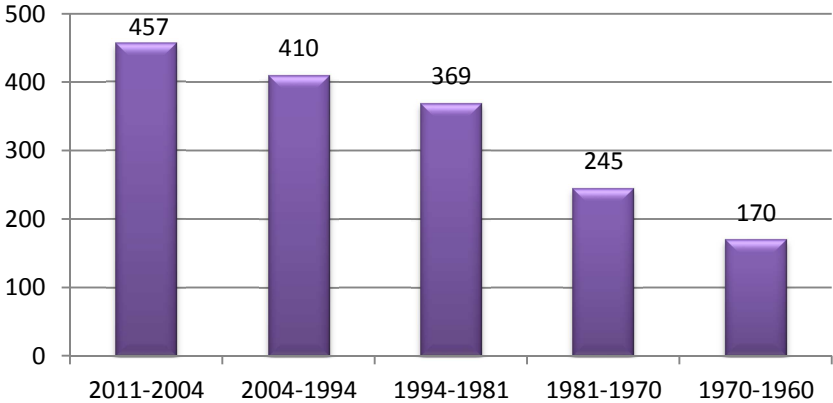
Figure (1-4) growth of existing population on Syrian soil (Million) 1960 – 2001



Reference: population census results, general yearly statistics – COS

From the above figure we can conclude that the upward pace of population growth of inhabitants on Syrian soil does not differ generally from what was mentioned earlier regarding continuous increase in Syrian population. For reasons related to net negative immigration factor, population growth was lower for inhabitants on Syrian soil than other Syrian inhabitants regardless of the intensification of population growth momentum. Average annual growth for inhabitants on Syrian soil increased from 170 thousand between 1960 and 1970 to 245 thousand between 1970 and 1981 to 369 thousand between 1981 and 1994 to 410 thousand between 1994 and 2011 which means that the population growth momentum is still going strong.

Figure (1-5) average annual increase of existing population on Syrian soil (Thousand) 1960 – 2001

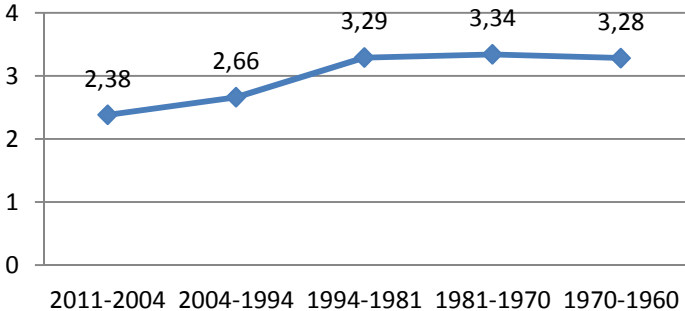


Reference: this figure has been constructed based on data provided by previous figure.

Alternatively, population census data in Syria indicates that the start of fast population growth was in the second half of the last century. Average annual growth for existing inhabitants reached its highest in the sixties, seventies, eighties and the first half of the nineties where it exceeded the threshold of 3%. Later, it began to slow down reaching 2.7% between (1994 and 2004) then 2.4% between (2004 and 2011). This in itself is a limited slow decline and it does not indicate a fundamental transformation in the population demographic behaviour. Despite the apparent resemblance in the general direction of population growth for existing inhabitants in Syria and Syrian inhabitants registered in civil status records, the latter scored higher numbers during all examined periods.

It is clear from all the above that average population growth increase is a prominent feature of population issue in Syria and decreasing it through effective internal policies in cooperation with stakeholders will eventually lead to fundamental changes in the age structure of population as well as accelerating demographic window opening.

Figure (1-6) average annual increase of existing population on Syrian soil (%) 1960 – 2001



Reference: this figure has been constructed based on data provided by previous figure.

Table (1-1) population growth in Syria (million) 1960-2011

Years	Based on civil status records		Based on population census	
	Size (million)	Record number (1960 = 100)	Size (million)	Record number (1960 = 100)
1960	4.2	100	4.6	100
1970	6.3	150	6.3	137
1981	9.8	233	9.0	196
1994	15.4	367	13.8	300
2004	20.5	488	17.9	389
2011	24.5	583	21.1	459
2012(1)	25.1	598	21.6	470

Reference: population census results, general yearly statistics – COS

(1) Researcher's estimation

Table (1-2) population size increase (thousand) &amp; average annual growth (%) in Syria 1960-2011

Years	Based on civil status records		Based on population census	
	Average annual increase (thousand)	Average population growth (%)	Average annual increase (thousand)	Average population growth (%)
1960	210	4.14	170	3.28
1970	318	4.10	245	3.34
1981	431	3.54	369	3.29
1994	510	2.90	410	2.66
2004	571	2.58	457	2.38
2011	600	2.45	500	2.37

Reference: the indicators in this table were calculated based on data from previous table.

### 1.3. Evolution of population structure in terms of age groups and gender

#### 1.3.1. Population structure in terms of gender:

Gender ratio is defined as the number of males against 100 females. At birth, it is usually 1.5 in all communities and it varies between one society to another and from one period of time and another because variations in deaths & immigration amongst males and females when measured against the entire population. Population censuses in Syria indicate ratio changes between 1960 and 2004. These changes were previously limited on national population level and significant on age group level.

Table (1-3) gender ratio growth as per age groups 1960-2004

Age groups	1960	1970	1981	1994	2004
0-14	111.4	108.4	105.1	105.7	105.8
15-64	100.3	110.0	103.7	103.1	103.2
65 +	106.7	101.5	106.4	118.7	110.8
total	105.6	105.2	104.4	104.7	104.5

Reference: population census results, general yearly statistics – COS

#### 1.3.2. Population structure in terms of age groups:

Age structure is considered one of the most important demographic traits. It assists in identifying properties & variations impacting population status in the past. In addition, it permits describing the present and deriving, analysing and explaining many current demographical indicators as well as forecasting its possible future trends. Today, Syrian society is still considered a young one regardless of big changes impacting its age pyramid when compared to the past. The large pyramid base in the sixties started to shrink due to changes in population growth factors in the last five decades. Age structural change was slow at first then it escalated in the last three decades which indicates possibilities of demographic window opening. This is manifested clearly through the decrease in

children, under the age of 15, ratio to the working age population from 15 to 64 or what is called the work force.

The ratio of Children under the age of 15 increased from 46.3% in 1960 to 49.3% in 1970 to reach gradually 39.5% in 2004 and soon after 37.1% in 2011. Alternatively, the ratio of working age population decreased in 1960 from 48.9% to 46.3% in 1970 to reach gradually 57.2% in 2004 and 58.8% in 2011. The rest is the aging population over 65 and more which is located at the top of the population pyramid.

Table (1-4) age structural growth for Syrian population 1960-2011 (%)

Years	0-14	15-64	65+	total
1960	46.3	48.9	4.8	100
1970	49.3	46.3	4.4	100
1981	48.3	48.5	3.2	100
1994	44.8	52.2	3.0	100
2004	39.5	57.2	3.3	100
2011	37.1	58.8	4.1	100

*Reference: population census results 2011, general yearly statistics – COS*

In the last four decades, the decrease in new born ratio is related to rapid decline in fertility levels compared to deaths ratio. These age structural changes resulted in average age dependency rate (children & seniors percentage to the total count of work force) dropping from 116% in 1970 to 91.6% in 1994 and 70.1% in 2011.

#### 1.4. Geographic distribution of population:

Diverse environments characterized Syria and formed, throughout history, geographical distribution map of its population. This diversity has led to large variations in population concentration levels and density from one environment to the other. Hence, the human geographical distribution map was impacted by a number of natural, historical, economic, social and demographical factors which resulted in disruption of current demographics' dispersion.

##### 1.4.1. Population distribution by province:

A bulletin of administrative divisions that divides the lands of the republic into departments, areas, townships, cities, villages, neighbourhoods and farms, is an important document used in every census. And this bulletin may vary depending on events resolutions issued by the ministry of local administration. The number of departments in 1960 reached 11 departments divided into 44 areas and 131 townships, while in 1970 the number was 14 departments divided into 55 areas and 171 townships and in 1981 the number of departments remained the same while the number of areas was 59 and townships was 217. In 1994 census 14 departments remained the same as well the number of areas at 61 but townships' number increased to 261. Then in the last census in 2004, 14 departments and 61 areas remained the same and the number of townships was raised again to reach 272.

Based on the last decisions made by the ministry lands in Syria were divided administratively into 14 departments, 69 areas and 295 townships. Each township includes a group of cities, towns, villages and farms. The number of cities is 141 cities, the number of towns is 323 towns, the number of villages is 6263 villages and farms reached 7287 farms. These divisions, however, will not be officially endorsed till next census.

Population of Syria is dispersed throughout the departments in different rates. In 1994, Aleppo, the most populated was 10 times bigger than Sweida, the least populated department in Syria (besides Quneitra where most residents are living outside its borders because of occupation). In 2004 & 2011 Aleppo became 12 times bigger and this is due to differentiation in population growth factors between both departments especially fertility followed by net migration. Departments' population dispersion

when compared to these departments areas show widening imbalance in Syrian population distribution map. 44% of the population resides in Damascus, Rural Damascus & Aleppo using a surface area that is not more than 19% of the country's area. Raqqa, Deir Ezzor and Hassakeh with a surface area of 41.1% house no more than 16.6% of the population. Tartous & Lattakia with an area of 2.2% of Syria has 9.6% of the population. These imbalances had reflections on all areas and townships.

Also, the five last decades saw changes in the geographical structure of inhabitants caused mainly by different levels of development most notably the net flow of migration and its directions during these decades. For instance, the population of Damascus decreased from 12.3% of Syria's population in 1981 to 10.1% in 1994 to 8.6% in 2004 to 8.3% in 2011. While rural Damascus population increased gradually from 10.1% to 11.9% to 12.8% to 13.2% respectfully. Population congestion reached its highest levels – due to limited surface area, high prices of property, rental and increasing pressure on services – and pushed many of its native residents to relocate to Rural Damascus especially in neighbourhoods adjacent to Damascus.

Finally, the imbalance of population growth from one department to the other due to inequalities in achievements accomplished demographically, socially and economically affected different levels of population growth factors such as reproductive behaviour where average was below 2% in Damascus, Tartous, Lattakia and Sweida. In Homs, Hama and Hassakeh the average was between 2 and 3%. The highest score was in Rural Damascus, Idleb, Aleppo, Raqqa, Der Ezzor, Dara'a and Quneitra where it surpassed these numbers. Thus, most departments have rapid population growth causing negative impacts on local development plans

Table (1-5) Syrian population disperse in departments and its annual growth rate (%)  
1994-2004

Governorate	1994		2004		Annual growth rate %
	Population by thousand	%	Population by thousand	%	
Damascus	1395	10.1	1552	8.6	1.07
Rural Damascus	1643	11.9	2273	12.8	3.30
Homs	1213	8.8	1529	8.6	2.34
Hama	1103	8.0	1385	7.8	2.30
Tartous	593	4.3	701	4.0	1.68
Lattakia	744	5.4	880	4.9	1.69
Idleb	911	6.6	1258	7.1	3.28
Aleppo	2982	21.6	4045	22.7	3.10
Raqqa	551	4.0	794	4.5	3.72
Deir Ezzor	717	5.2	1005	5.7	3.43
Hassakeh	1021	7.4	1275	6.4	2.25
Sweida	262	1.9	313	1.8	1.76
Dara'a	606	4.4	843	4.7	3.36
Quneitra	41	0.6	67	0.4	5.03
Total	13782	100	17921	100	2.66

Reference: population census results – COS

#### 1.4.2. General population density and population density in inhabited areas

Average population density means the number of inhabitants in one square kilometre of land and it is the result of dividing the number of inhabitants on land area regardless of its usage system. Population density in inhabited land means the average of inhabitants in one square kilometre of land and it is the result of dividing the number of inhabitants on occupied land area only.

It is only natural that the population density in inhabited land is higher than the average population density. The former is restricted to populated and exploited lands economically where most human activities reside, while the latter deals with all area of land occupied or not.

Average population density in Syria increased from 74 people /km<sup>2</sup> in 1994 to 96 people /km<sup>2</sup> in 2004 and 114 people /km<sup>2</sup> in 2011. And it is at its lowest rate in department where desert makes the biggest part of its surface like Deir Ezzor and Homs. Density there was at 37 people /km<sup>2</sup> in 2004 while in other department it was between (40 and 383) people /km<sup>2</sup>. In Damascus the highest density was scored at 13000 people due to high population and limited surface.

Population density in inhabited land increased from 233 people /km<sup>2</sup> in 1994 to 301 people /km<sup>2</sup> in 2004 to 315 people /km<sup>2</sup> in 2011. This density (besides Damascus) was between 77 people /km<sup>2</sup> in Hassakeh and 1080 people /km<sup>2</sup> in Rural Damascus in 2004 and in Damascus it reached 78000 inhabitants in the same year.

Table (1-6) average population density and population density in inhabited areas according to departments (people /km<sup>2</sup>), 1994-2004

Governorate	Average population density		Average population density in inhabited areas	
	1994	2004	1994	2004
Damascus	11813	13152	69716	77600
Rural Damascus	93	125	788	1080
Homs	28	36	356	448
Hama	124	137	232	294
Tartous	308	376	490	594
Lattakia	324	383	725	853
Idleb	148	207	259	362
Aleppo	160	218	242	328
Raqqa	28	40	66	95
DeirEzzor	21	30	349	497
Hassakeh	44	49	70	77
Sweida	48	56	136	159
Dara'a	161	225	271	374
Quneitra	16	36	31	42

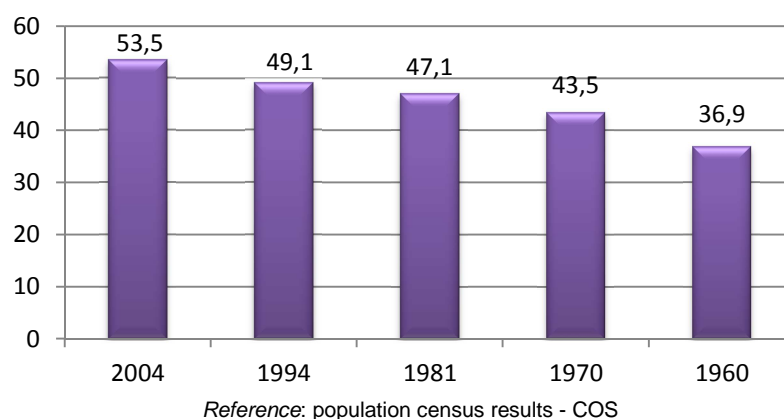
Reference: data extracted from yearly statistical group – COS

#### 1.4.3. Population distribution between urban & rural areas:

Syria took into consideration both administrative & quantitative aspects in defining the differences between urban and rural. Urban (cities) is defined as department centres, administrative areas and residential communities over 20000 inhabitants. Everything else is considered to be rural.

The workable definition of urban is very different from many other countries in the world. Some based their definition on specific size of population, others on economic activities dominating the community. This differentiation in definitions could obstruct proper comparison between nations and its accuracy. Urban inhabitants' percentage increased gradually from 36.9% in 1960 to 43.5% in 1970 to 47.1% in 1981 to 49.1% in 1994 to 53.5% in 2004.

Figure (1-8) development of urban inhabitants' percentage to overall population of Syria (%) 1960 – 2004

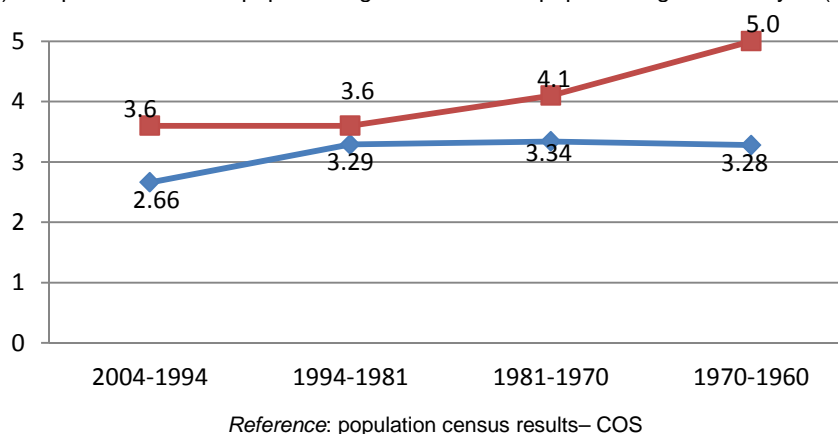


Additionally, even with the gradual decrease of annual growth rate for urban inhabitants from its high levels averaging 5% in the sixties to 3.3% in the second half of the nineties and the first half of this century, it is considered high. It is also considered higher than its equivalent on total population count in all examined periods. This, if any, indicates a continuous drainage of human resources in rural areas to the benefit of continuous growth in urban areas causing overpopulation and increasing pressure on service resources.

It is important to note that the continuous increase in urban population can be explained by:

- Unlike cities where economic activities are centred as well as services and administration, Inequality in distribution of development efforts on one side and lack of diversity in economic activities in rural areas caused migration to big cities first then to mid-size cities. This migration was high in the sixties then it slowed down a little in the seventies of the last century.
- Emergency changes to administrative divisions by creating new administrative centres considered as urban areas.
- The transformations of towns and villages to cities when population reaches the 20000 inhabitants limit which is due to population growth and continuous development.

Figure (1-9) comparison of urban population growth with total population growth in Syria (%) 1960–2004



Finally, urban population percentage differs from one department to the other. The lowest level was reached in Idleb & Tartous because of multiplicity of residential communities and lack of inhabitants while the highest level was reached in Rural Damascus & Aleppo.

Table (1-7) average urban population according to departments (%)  
1994-2004

Governorate	1994	2004
Damascus	100	100
Rural Damascus	43.7	64.2
Homs	53.3	53.4
Hama	33.8	37.1
Tartous	25.6	28.4
Lattakia	50.0	51.1
Idleb	28.2	28.3
Aleppo	61.1	63.4
Raqqa	37.4	37.5
DeirEzzor	34.2	43.3
Hassakeh	33.8	35.4
Sweida	30.6	30.7
Dara'a	38.6	45.9
Quneitra	-	-
Total	49.1	53.5

Reference: data extracted from population censuses in 1994 and 2004–COS

## 1.5. Population growth factors

Three factors contribute to population growth rate formation; births, deaths and net migration.

### 1.5.1. Births (fertility)

Births and fertility are the most important factors of population growth and the most contributing to its size and age composition and they reflect reproductive behavioural patterns in the community. Although reproduction is fundamentally a biological phenomenon, it is affected by many social, economic and cultural variables. Many indicators are used to measure fertility levels, most notably: crude birth rate, marital or total fertility rate and age fertility rate.

Crude birth rate is defined as the average mid-year number of living new-borns produced in a given year per 1000 inhabitants. Total fertility rate is defined as the average number of living new-borns produced by one woman during her productive years from (15 to 49) assuming she is exposed to average fertility age rates. Total fertility rate is considered to be more accurate and expressive of woman's reproductive behaviour than crude birth rate. Universality and undisclosed cases are still afflicting life events registration in Syria, especially births, despite continuous improvement in universality and shrinkage of undisclosed cases of birth. It has been possible to estimate fertility and deaths rates by including appropriate questionnaires within population census and household survey sampling forms.

#### *Crude birth rate:*

Crude birth rate declined from 29.4/1000 in 1994 to 27.6/1000 in 2004 averaging 1.8 new-born decrease in the last 10 years and 6.1% decline. The above mentioned rate fluctuates between one department (region) and the other. While it was registered as 18.1/1000 in Hassakeh and 43.4/1000 in Deir Ezzor in 1994, it was registered as 14/1000 in Quneitra and 40.5/1000 in Idleb in 2004.

Crude birth rate is considered very high in Deir Ezzor and Idleb when compared to their equivalents on national level. Gender ratio reached 1.4 amongst new-borns.



Table (1-8) crude birth rate according to departments (thousand)  
1994-2004

Governorate	1994	2004
Damascus	29.7	26.4
Rural Damascus	28.2	26.0
Homs	27.7	29.9
Hama	31.5	31.0
Tartous	19.5	19.1
Lattakia	21.9	21.1
Idleb	37.1	40.5
Aleppo	33.7	31.4
Raqqa	31.5	32.2
DeirEzzor	34.4	36.0
Hassakeh	18.1	16.9
Sweida	23.4	21.7
Dara'a	32.6	29.1
Quneitra	18.9	14.0
Total	29.4	27.6

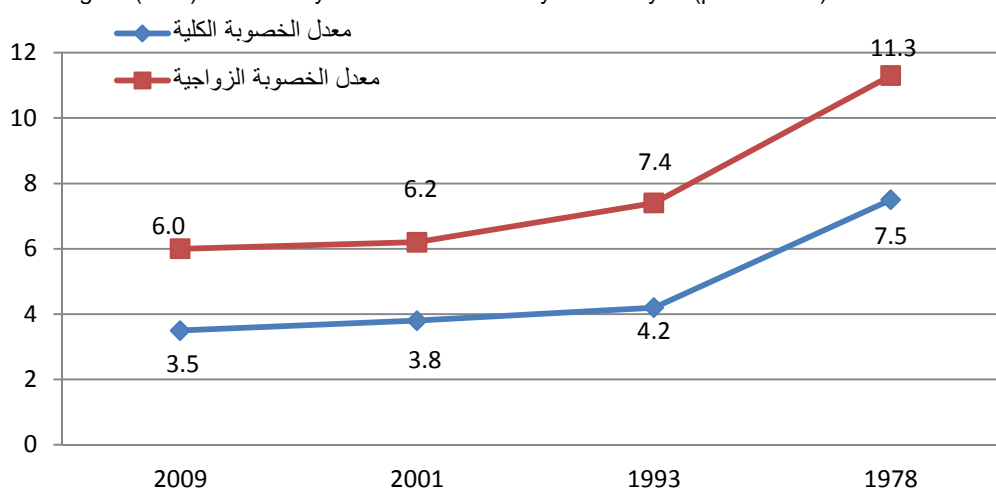
Reference: first national report 2008 (Syrian population status) – Syrian commission for family affairs

#### Fertility levels & differences:

Fertility rate declined sharply in Syria from 7.5 babies per woman in 1978 to 4.2 babies in 1993 averaging 3.3 babies and 44%. This decline slowed down significantly reaching 3.5 babies in 2009 averaging 17.7% in the period between 1993 and 2009. This decline is caused by a number of positive changes; socially, economically and culturally witnessed in Syrian society and impacted positively inhabitants' behaviour.

On the other hand, marriage patterns and related practices such as the use of family planning and couple reproductive health awareness have affected fertility rates. Marital fertility rate indicates the average number of living new-borns per married woman throughout her reproductive life. So, it is only natural that this rate is higher than average fertility rate given the fact that it includes single and married women. Marital fertility rate have declined from its highest level of 11.3 babies per married woman in 1978 to 7.4 babies in 1993 averaging 3.9 babies and 34.5% decrease. This decline slowed down significantly reaching 6 babies in 2009 averaging 1.4 babies and 18.9% decrease in the period between 1993 and 2009

Figure (1-10) total fertility rate & marital fertility rate in Syria (per woman) 1978 – 2009



Reference: Syrian fertility survey 1978, mother & child health survey 1993, family health survey 2001 and family health survey - COS

The decline of total fertility & marriage fertility rates has been associated with the decline of age fertility rate which reached its highest age group (25 to 29) then decreased gradually to reach its lowest age group (45 to 49).

Table (1-9) average age fertility trends (per thousand women)  
1978-2004

Age groups	1978	1993	2001	2009
15-19	124	62	58	57.4
20-24	302	166	165	164.6
25-29	341	213	189	187.4
30-34	312	179	177	158.6
35-39	246	137	121	99.0
40-44	135	68	42	33.1
45-49	42	14	17	5.4
Total fertility rate	7.5	4.2	3.8	3.5

Reference: same source as previous figure.

Due to differentiation in social, economic and cultural properties such as customs and tradition; preferred family size; level of education; females desired age of marriage; prevalence of family planning tools amongst married couples; economic activity and women's level of involvement in economic and social life, Fertility rates have been different from one department to another and from rural to urban environment.

Total fertility rate reached in some departments; Lattakia, Tartous, Damascus & Sweida, net reproduction rate (NRR) while in others it scored very high numbers surpassing 4 in departments like; Idleb, Deir Ezzor, Raqqa, Dara'a, Hassakeh & Quneitra where economic activity is dominant. Fertility rate in other departments is relatively moderate.

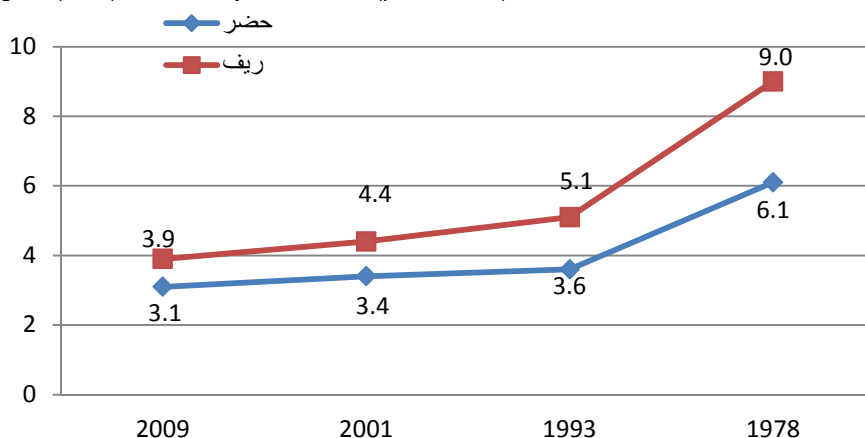
Table (1-10) total fertility rate (per one woman) according to departments  
1994-2009

Governorate	1994	2004	2009
Damascus	2.2	2.5	2.6
Rural Damascus	4.0	3.1	3.3
Homs	3.1	3.1	3.1
Hama	4.4	3.5	3.3
Tartous	2.3	2.2	2.3
Lattakia	2.5	2.1	2.2
Idleb	5.2	5.1	4.8
Aleppo	4.2	3.8	3.2
Raqqa	4.7	5.5	5.0
DeirEzzor	5.3	6.2	6.9
Hassakeh	5.3	4.1	3.5
Sweida	2.6	1.8	2.1
Dara'a	4.5	4.6	5.2
Quneitra	4.1	4.1	3.8
Total	3.9	3.6	3.5

Reference: First Syrian Report 2008 (Syrian Population Status), Syrian Commission for Family Affairs, family survey results 2009 - COS.

On the other hand, fertility rates do vary between rural & urban environments. In the country side these rates are much higher than urban areas, although this gap is shrinking gradually due to positive changes affecting the country side socially and economically.

Figure (1-11) total fertility rate trends (per woman) between urban & rural in 1978 – 2009



Reference: Syrian fertility survey 1978, mother & child health survey 1993, family health survey 2001 and family health survey - COS

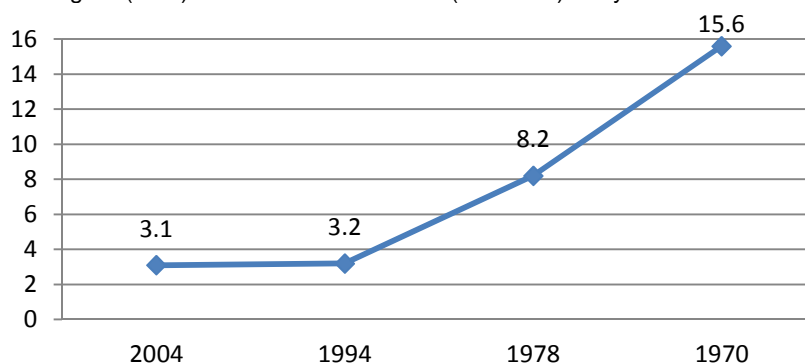
### 1.5.2. Deaths

Death rates are considered the second important factor in determining population growth rate. During the last five decades, death rates have decreased sharply and have reached unprecedented levels due to continuous spreading and quality improvement of accessible health services to all inhabitants, generally, and to mother and child health specifically. Therefore, achieving more success in this field became more challenging to the system of governance in the country.

#### Crude death rate:

Crude death rate is defined as the number of deaths within one year for every 1000 inhabitants in the middle of the same year. Population censuses & family sampling surveys in Syria indicate that crude death rate increased from 15.6/1000 in 1970 to 8.2/1000 in 1978 with a percentage of 47.4% to 3.2/1000 in 1994 with a percentage of 60% to 3.1/1000 in 2004 with a percentage of 3.1% only.

Figure (1-12) crude death rate trends (thousand) in Syria 1970 – 2004



Reference: population census 1970, 1994 and 2004 Syrian fertility survey 1978 - COS

Otherwise, the wide spread of health institutions in all departments (regions) especially health centres elevated to the level of services provided to inhabitants, which impacted positively their health condition and decreased significantly crude death rate in all departments regardless of marginal variations.

Table (1-11) crude death rate according to departments (thousand)  
1994-2004

Governorate	1994	2004
Damascus	4.4	4.4
Rural Damascus	3.4	3.0
Homs	3.2	3.1
Hama	3.1	3.1
Tartous	2.7	3.6
Lattakia	3.5	4.1
Idleb	3.6	3.6
Aleppo	3.2	3.0
Raqqa	3.1	2.9
DeirEzzor	3.2	2.8
Hassakeh	1.6	1.6
Sweida	3.4	4.3
Dara'a	2.4	2.3
Quneitra	3.2	2.0
<b>Total</b>	<b>3.2</b>	<b>3.1</b>

Reference: first national report 2008 (Syrian population status) – Syrian commission for family affairs

#### Children death rate:

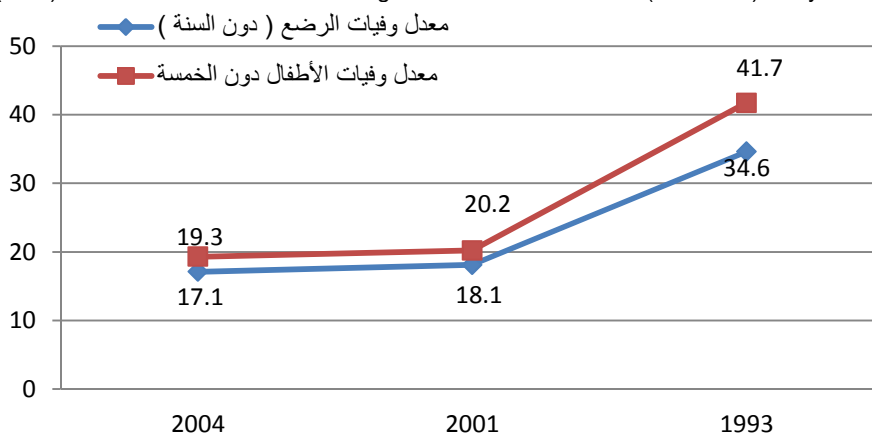
The decrease of crude death rate was accompanied by a decrease in new-borns & children under the age of 5 death rates. Infants' death rate went down from 34.6/1000 in 1993 to 18.1/1000 in 2001 with a percentage of 47.7% then to 17.1/1000 in 2004 in a decrease of 5.5% from the previous one. Also, children under 5 years of age death rate went down from 41.7/1000 in 1993 to 20.2/1000 in 2001 with a percentage of 51.6% then to 19.3/1000 in 2004 with a percentage of 4.5% from the previous one.

Table (1-12) infants under the age of 1 & children under the age of 5 death rates according to departments (thousand) 1994-2004

Governorate	Infants under the of 1 death rate		Children under the age of 5 death rate	
	1993	2004	1993	2004
Damascus	34.4	17.0	41.2	18.4
Rural Damascus	35.5	17.6	41.5	19.2
Homs	37.8	18.7	42.3	19.6
Hama	36.0	17.8	41.7	19.3
Tartous	34.3	17.0	38.5	17.8
Lattakia	31.2	15.5	41.3	19.1
Idleb	38.0	18.8	42.0	19.4
Aleppo	36.1	17.8	41.9	19.4
Raqqa	37.0	18.3	43.0	19.9
DeirEzzor	35.3	17.4	42.1	19.5
Hassakeh	39.6	19.6	42.3	19.6
Sweida	37.7	18.6	43.0	19.9
Dara'a	38.4	19.2	42.2	19.5
Quneitra	38.8	19.2	42.1	19.5
<b>Total</b>	<b>34.6</b>	<b>17.1</b>	<b>41.7</b>	<b>19.3</b>

Reference: first national report 2008 (Syrian population status) – Syrian commission for family affairs

Figure (1-13) infants & children under the age of 5 death rate trends (thousand) in Syria 1993 – 2004

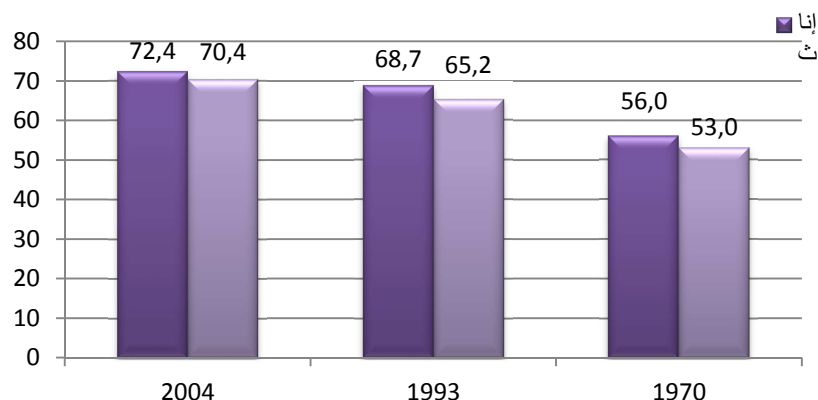


Reference: first national report 2008 (Syrian population status) – Syrian commission for family affairs 2001 - COS

### 1.5.3. Life expectancy at birth

The rapid decrease in death rates impacted positively inhabitants' life expectancy rate. Subsequently, life expectancy at birth for males increased from 53 year old in 1970 to 65.2 in 1993 then to 70.4 in 2004 while it increased for females from 56 year old to 68.7 to 72.4 year old respectively.

Figure (1-14) life expectancy at birth (1) per gender (per years) in Syria 1970 – 2004



Reference: population census in 1970 and 2004, mother & child health survey 1993 – COS  
(1) Life expectancy average at birth (per years) assuming the stability of death patterns at time of birth.

### 1.5.4. Internal migration

Migration is considered as the third most influential indicator in the determination of population size, its development and geographical dispersion. And it is defined as the movement of people permanently from one's place or locality to another place to achieve goals and aspirations unable to attain in the place of origin. Migration from rural areas to urban ones is the most common form and it is a result of superiority of living & work conditions at destination when compared with conditions in the place of origin.

Migration was active in Syria in sixties and seventies of the last century but it slowed down as a result of rural areas development plans and improvement trends in addition to the dispersion of development projects as well as distributing equal services amongst departments and regions. From migration matrix provided by 1994 and 2004 censuses we can conclude that the internal movement of inhabitants witnessed an increase from 749 (thousand) people until 1994 with a percentage of 5.4% of

total population count to 795 (thousand) until 2004 averaging 4.4% of total population count with an increase of 46 (thousand) people in the years mentioned.

Damascus rural department is one of the most attractive regions in the country where net migration reached 15.1% in 1994 and 16.3% in 2004 followed by Hassakeh, Dara'a and Raqqa by a considerable margin of 1.5% in 1994. Al Raqqa scored 1.9% in 2004 while other departments scored positive percentages headed by Al Quneitra. Rural Damascus Department formed the main point of attraction for many migrants due to its closeness to Damascus where rent and ownership rates are very high in addition to increasing population and tremendous pressure on city resources and services. Thus, many migrants including Damascus residents opted to move into its adjacent rural areas especially the surrounding belt.

Table (1-13) migration size as per department (thousand)  
1994-2004

Governorate	1994			2004		
	Coming to	Leaving from	Net migration	Coming to	Leaving from	Net migration
Damascus	157	218	-61	157	240	-83
Rural Damascus	286	37	249	393	25	368
Homs	45	47	-2	30	44	-14
Hama	19	56	-37	12	58	-46
Tartous	21	31	-10	27	28	-1
Lattakia	46	48	-2	33	45	-12
Idleb	16	59	-43	11	57	-46
Aleppo	58	75	-17	34	66	-32
Raqqa	31	28	3	29	14	15
DeirEzzor	6	24	-18	15	22	-7
Hassakeh	34	23	11	24	36	-12
Sweida	6	17	-11	10	17	-7
Dara'a	21	30	-9	17	29	-12
Quneitra	3	56	-53	3	36	-33

Reference: population census in 1994 and 2004 – COS

Table (1-14) migration rate as per department (%)

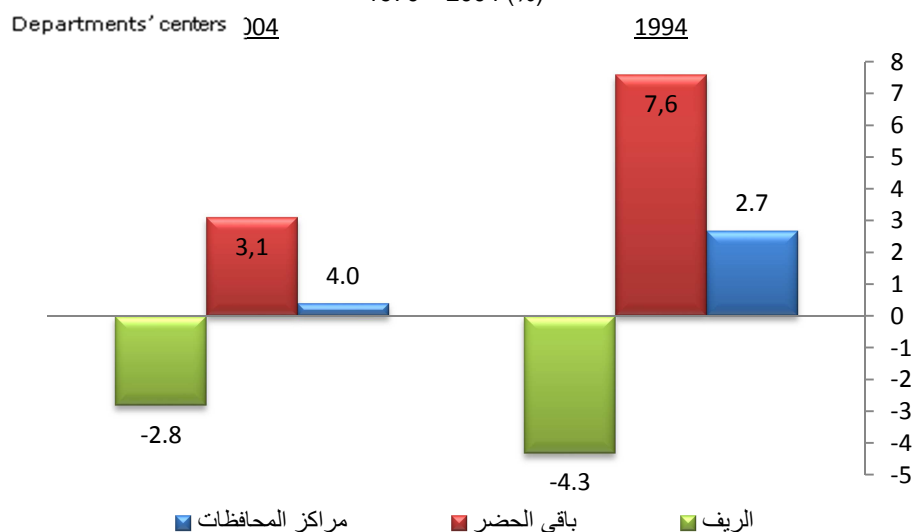
Governorate	1994			2004		
	Arrival %	Departure %	Net migration	Arrival %	Departure %	Net migration
Damascus	11.7	15.6	-3.9	10.9	15.8	-4.9
Rural Damascus	17.8	2.7	15.1	17.7	1.4	16.3
Homs	3.7	3.9	-0.2	2.0	2.9	-0.9
Hama	1.7	5.0	-3.3	0.8	4.0	-3.2
Tartous	3.7	5.2	-1.5	3.9	4.0	-0.1
Lattakia	6.3	6.5	-0.2	3.8	5.1	-1.3
Idleb	1.8	6.3	-4.5	0.9	4.4	-3.5
Aleppo	2.0	2.5	-0.5	0.9	1.6	-0.7
Raqqa	5.6	5.1	-0.5	3.7	1.8	1.9
DeirEzzor	0.8	3.4	-2.6	1.5	2.2	-0.7
Hassakeh	3.4	2.3	1.1	1.9	2.8	-0.9
Sweida	2.4	6.3	-3.9	3.1	5.5	-2.4
Dara'a	3.4	4.9	1.5	2.0	3.4	-1.4
Quneitra <sup>(1)</sup>	6.2	54.6	-48.4	4.9	35.7	-30.8

Reference: population census in 1994 and 2004 – COS

(1) High number of negative net migration is due to occupation in 1967

The following figure shows variations of net migration average based on administrative levels (department centres, rest of urban areas, rural). The rest of urban areas present the most attractive spot for migrants followed by department centres all to the expense of rural areas from 1994 to 2004. Alternatively, migration rates show significant decrease in the last year when compared with previous years.

Figure (1-15) net migration rate as per administrative levels (1) (department centres, rest of urban areas, rural) 1970 – 2004 (%)



Reference: population census in 1994 and 2004, mother & child health survey 1993 – COS  
 (1) The rest of urban areas are areas with a population more than 20000 inhabitants or more

## ➤ 2. The main economic and social transformations

### 2-1- Education

Education is considered to be one of the most basic dimensions of human development, and an indispensable tool for empowering people, expanding their choices in the various economic and social fields, and improve their lives.

#### 2-1-1-The Educational structure of the Inhabitants

During the past four decades; positive changes had occurred to the educational pyramid's structure of the inhabitants, personified by a significant decrease in the rate of illiteracy and the percentage of literate inhabitants aged 15 years old and over, and a gradual rise in the percentage of the educationally qualified due to the free and compulsory education in Syria, which is extended to the end of the primary stage (ninth grade) as per the law No. (32) Of the year 2002. The expansion of the law's application to cover all urban inhabitants and rural alike, helped to ensure enrollment opportunities are available to all.

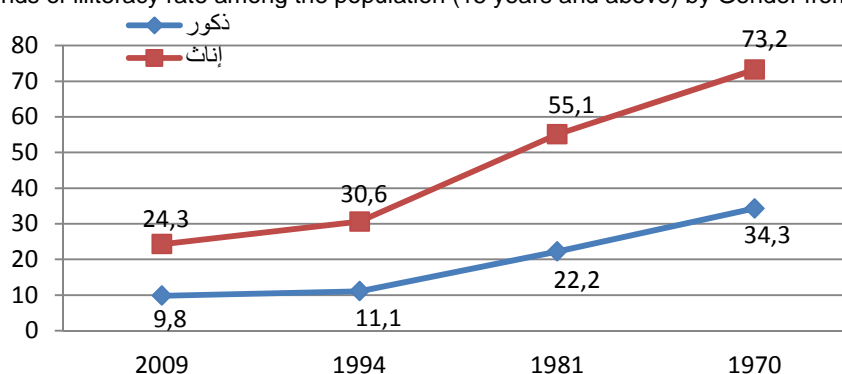
Recently, the gap have largely shrunk between males and females in education than it was in the past decades, as a result of the social heritage decline which was limited girls' education, especially in rural areas and widespread of the basic and secondary education schools all over the country. However illiteracy is still very high among females, although it decreased from (73.2%) in 1970 to (55.1%) in 1981 and then to (30.6%) in 2004 to (24.3%) in 2009. It is clear from the foregoing above that the educational system in Syria has made great achievements in the quantitative field but still suffers from some weakness in the efficiency and quality fields, which make the outputs of the educational process away far from the needs and requirements of the labour market which in turn led to increase the unemployment rate.

Table (2-1) the evolution of the educational structure of the population (15 years and above) by Gender 1970-2009

Educational status	1970		1981		1994		2009	
	Males	Females	Males	Females	Males	Females	Males	emales
Illiterate	34.3	73.2	22.2	55.1	11.1	30.6	9.8	24.3
Read & write	55.6	15.0	31.6	20.1	21.8	18.6	9.9	9.4
Elementary	18.3	7.8	26.4	15.0	37.4	29.6	36.7	28.6
Secondary	5.7	2.2	9.2	5.4	13.5	10.7	18.4	15.7
High school	4.0	1.1	6.5	2.7	7.6	5.6	14.1	12.9
College	0.7	0.4	1.6	1.1	4.2	3.1	5.2	4.8
University	1.4	0.3	2.5	0.6	4.4	1.8	5.9	4.3
Total	100		100		100		100	

Source: The results of the population censuses (1970-1994) and labor force surveys 2009 - Central Bureau of Statistics.

Figure (2-1) trends of illiteracy rate among the population (15 years and above) by Gender from 1970 to 2009 (%)



The educational composition of population considerably varied among the provinces, as a result of the disparity between the success degrees achieved by each of them in the field of education, and still this combination is noticeably weak in northern and eastern provinces which are Aleppo, Idleb, Raqqa, Deir Ezzor and Hassakah, especially among females, since the illiteracy percentage has reached to (49.6%) in Raqqa, (46.4%) in the Deir Ezzor, (44.3%) in Hassakah, (32.4%) in Aleppo, and (23.8%) in Idleb in 2009.

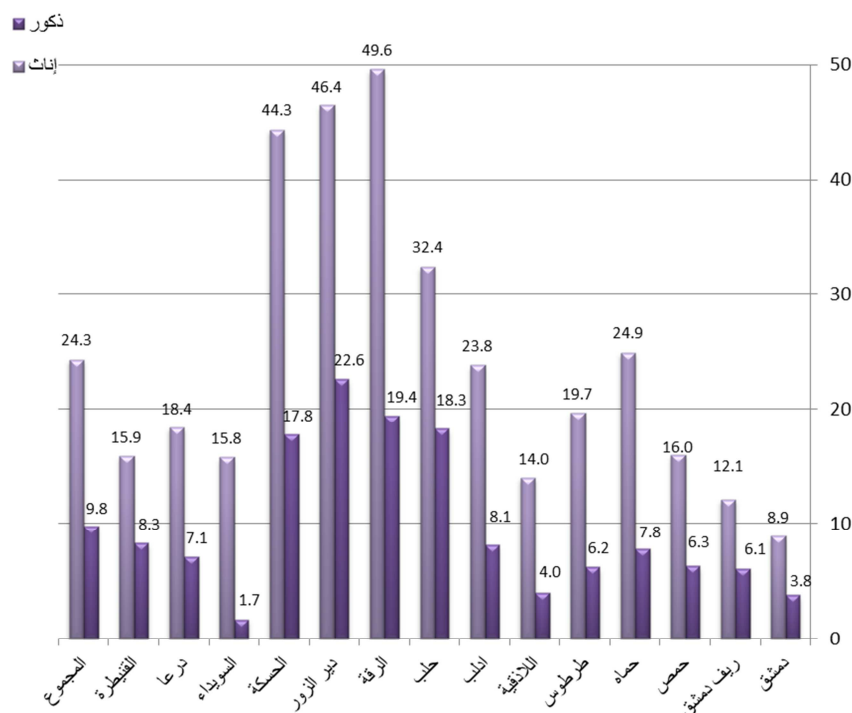
Table (2-2) the educational composition of the population (15 and over) by the provinces in 2009 (%)

Department	Illiterate	Read & write	Elementary	Secondary	High school	College	University	total
Damascus	6.3	5.0	31.5	20.3	20.8	5.5	10.6	100
Damascus Countryside	9.0	8.3	40.9	20.0	12.9	4.2	4.7	100
Homs	11.0	11.5	31.0	19.7	14.5	6.4	5.9	100
Hama	16.2	6.8	38.8	16.1	12.6	6.5	3.0	100
Tartous	12.9	5.4	26.4	20.7	16.8	10.1	7.8	100
Lattakia	8.9	4.4	27.5	22.3	21.7	7.2	8.0	100
Idleb	15.8	14.5	36.8	15.6	10.7	3.9	2.7	100
Aleppo	22.8	13.8	30.4	15.8	10.9	3.2	3.1	100
Riqqa	33.7	18.5	26.3	8.7	8.0	2.8	2.0	100
Der Ezzor	34.4	9.9	27.4	11.6	9.0	5.2	2.5	100
Hassakah	31.0	8.7	32.8	11.0	11.2	3.7	1.6	100
Sweida	8.9	7.1	31.8	17.8	19.7	9.6	5.1	100
Dara'a	12.6	6.3	43.2	17.8	11.9	4.8	3.4	100
Quneitra	12.0	2.3	46	23.7	9.9	4.4	1.7	100
	16.9	9.7	33.1	17.1	13.5	5.0	4.7	100

Source: Labour Force Survey Results 2009 - Central Bureau of Statistics



Figure (2-2) illiteracy rate by provinces and Gender, 2009 (%)



## 2-1-2- Educational services

### Spending on education:

The spending ratio on education to the total state budget is considered to be one of the important indicators in the study of the evolution of education inputs, this ratio have increased from (9.1%) in 1990 to (13.8%) in 2001 and then to (16.2%) in 2005 and to (18.9%) in 2009, which is consistent, in the last two years, with the UNESCO recommendation for education budget to be between (14-17%) of the state budget. The ratio of public outflow on education to the GDP (Gross domestic products), has increased from (2.1%) in 1990 to (4.9%) in 2005 and then to (5.1%) in 2009, and it is also consistent, for the last two years, with the recommendation of UNESCO for the education budget to be ranging between (4% to 5%) of the state's GDP.

The steady rise in the education budget is linked to the growing need to construct more new planned buildings or to expand the already existing ones and supplying them with equipment, tools, educational and administrative staff, to accommodate the large and growing number of the population approaching school age annually.

Table (2-3) the state budget, the education budget and the percentage of the education budget to the state budget

Years	General state budget	Educational budget			% Educational budget from state budget
		Elementary, secondary education	High education	Total	
1990	61875	3372	3288	5660	9.1
2001	322000	35489	8793	44282	13.8
2005	460000	58566	15925	74491	16.2
2009	685000	97992	31324	129316	18.9

Source: Annual Statistical Abstract 2010 - Central Bureau of Statistics  
 "1" except for the Ministry of Education's share of the Ministry of Local Administration.

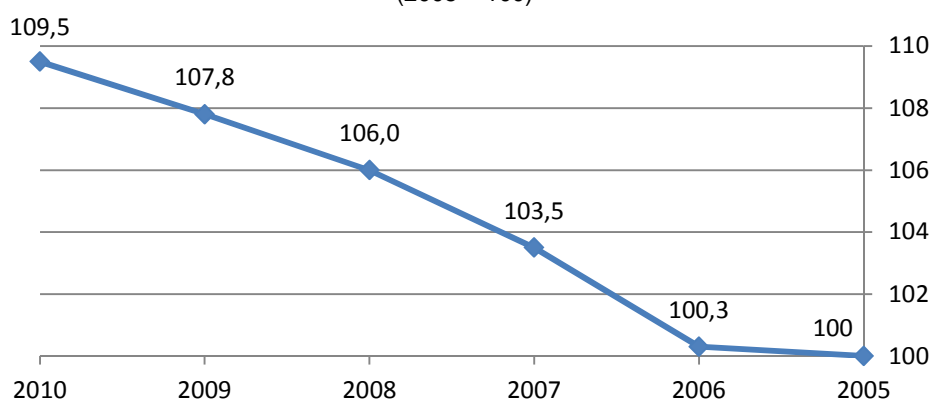
### Elementary Education:

Elementary education is an essential bond in the integration of the education and development processes. Many developed countries' experiences have shown that there is a strong positive correlation between the quality of preliminary education and high rates of economic productivity.

#### Number of schools:

The total number of basic education schools have increased from around (15.6) thousands school in 2005 to (17.1) thousand schools in 2010, including (97%) public schools, the rest belongs to the private sector and the refugee agency (UNRWA), and these schools are distributed all over the provinces, regions and administrative properties down to the smallest agglomeration regardless to its area size.

Figure (2-3) Record of the evolution of the number of elementary education schools 2005-2010  
(2005 = 100)



Source: Annual Statistical Abstract 2010-2011 - Central Bureau of Statistics

Table (2-4) distribution of elementary education schools by provinces 2005, 2010

Department	2005		2010	
	Number	%	Number	%
Damascus	580	3.7	609	3.6
Rural Damascus	1019	6.5	1157	6.8
Homs	1235	7.9	1330	7.8
Hama	1491	9.5	1600	9.3
Tartous	918	5.9	902	5.3
Lattakia	915	5.9	890	5.2
Idleb	1085	6.9	1217	7.1
Aleppo	3188	20.4	3384	19.8
Raqqa	1110	7.1	1338	7.8
Der Ezzor	799	5.1	1086	6.3
Hassakeh	2012	12.9	2126	12.4
Sweida	364	2.3	386	2.2
Dara'a	685	4.4	816	4.8
Quneitra	239	1.5	279	1.6
Total	15640	100	17120	100

Source: Annual Statistical Abstract of the 2006 -2011 - the Central Bureau of Statistics

#### Number of classrooms:

The number of classrooms in elementary education's schools have raised from about (124.2) thousands Division in 1995 to (130.3) thousands Division in 2000 and then to (149.7) thousands

Division in 2005, and to (172.7) thousands Division in 2010, which means an annual growth rate increased from (1%) between 1995-2000 (2.8%) between 2000-2005 and then to reach (2.9%) between 2005-2010, in order to accommodate the growing numbers of children who reach the age of this educational stage annually. On the other hand, the relative distribution of the classrooms by provinces has kept its general shape during the studied years, although there are some relatively limited differences between year and another. It should be noted the lack of published data for this distribution in recent years.

Table (2-5) the distribution of elementary education classrooms by provinces  
1995.2005

Department	1999		2005	
	Number	%	Number	%
Damascus	8090	6.3	8882	5.9
Rural Damascus	11233	8.7	14202	9.5
Homs	11116	8.6	12523	8.4
Hama	11701	9.1	13379	8.9
Tartous	6415	5.0	6358	4.2
Lattakia	7810	6.0	5086	3.4
Idleb	8862	6.8	11768	7.9
Aleppo	27212	21.0	29823	19.9
Raqqa	6765	5.2	9007	6.0
Der Ezzor	5622	4.3	9376	6.3
Hassakeh	13446	10.4	16173	10.8
Sweida	2665	2.1	2779	1.9
Dara'a	5858	4.5	7074	4.7
Quneitra	2613	2.0	3269	2.2
Total	129408	100	149699	100

Source: Annual Statistical Abstract 2000- 2006 - the Central Bureau of Statistics

Students number and the average share per division:

The number of basic education students has increased from about (3.3) million students in 1995 to (3.6) million students in 2000, and to (4.2) million students in 2005, then to (4.7) million students in 2010, in an annual growth rate increased from (1.4%) in 1995-2000 reaching (3.4%) in 2000-2005, then decreased to (2.1%) in 2005-2010. Where exceeded during first and second periods the level of the annual growth rate for the number of classrooms at this stage then became lower than it in the recent period, as result a raise occurred in the average of students' share per division from (26.8) students in 1995 to (27.3) students in 2000 and then to (28.1) students in 2005 and finally dropped to (27) students in 2010, which are consistent averages with the recommended educational internationally standards.

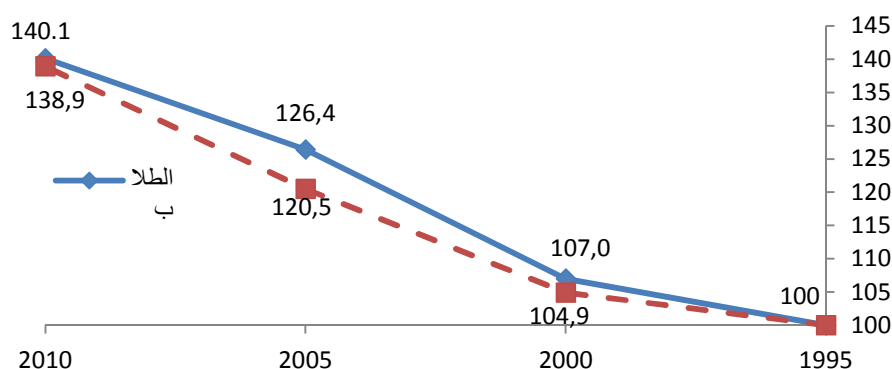
Table (2-6) the evolution of students and classrooms' number at the basic education stage and the students' average per Division 1995-2010

Years	Students (thousands)	Classroom (thousands)	Classroom share of students
1995	3327	124.2	26.8
2000	3558	130.3	27.3
2005	4207	149.7	28.1
2010	4662	172.7	27.0

Source: The annual Statistical Abstract for the years 2000, 2006, 2010 - Central Bureau of Statistics

The gradual decline of the cultural heritage and the positive shift in the society's attitude toward the females' education issue had led to an improvement in the ratio of females to the total basic education's students from (46.1%) in 1995 to (46.7%) in 2000, and to (47.5%) in 2005 and then to (48.1%) in 2010.

Figure (2-4) record of the evolution of the students and classroom's number at the basic education stage. 1995-2010 (1995 = 100)



Source: Previous data table.

On the other side, the relative distribution of students has varied between the provinces on one hand and between the year and another at the other hand, but the general trend for the shape of this distribution remained without a largely change during the studied years. The imbalances between the students of elementary education and the number of classrooms at the provincial level have led to wide disparities in the average share of students per division, where it ranged between (19.2) students in 1995 and (20) students in 1999 in Hassakah province, and (38.1) students in 1995, (35.6) students in 1999 in Damascus. The lower in the mentioned average in Hassakah province is returns to the scattered inhabitants' zones and its low population, while its rise in Damascus returns to the overpopulation in it compared with its limited area.

Table (2-7): distribution of the elementary education's students and the average share per classroom. By provinces 1999, 2005

Department	1999		Classroom share of students	2005		Classroom share of students
	Students			Students		
	Number (thousands)	%		Number (thousands)	%	
Damascus	307.9	8.8	38.1	316.4	7.5	35.6
Rural Damascus	378.7	10.9	33.7	460.5	10.9	32.4
Homs	316.0	9.1	28.4	355.2	8.4	28.4
Hama	291.7	8.4	24.9	343.1	8.2	25.6
Tartous	131.3	3.8	20.5	130.7	3.1	20.6
Lattakia	170.3	4.9	21.8	170.9	4.1	33.6
Idleb	243.1	7.0	27.4	319.1	7.6	27.1
Aleppo	752.1	21.5	27.6	945.8	22.5	31.7
Raqqa	140.5	4.0	20.8	192.7	4.6	21.4
Der Ezzor	173.8	5.0	30.9	274.3	6.5	29.3
Hassakeh	258.1	7.4	19.2	323.4	7.7	20.0
Sweida	63.9	1.8	24.0	61.1	1.5	22.0
Dara'a	180.4	5.2	30.8	214.8	5.1	30.4
Quneitra	78.5	2.2	30.0	99.0	2.3	30.3
Total	3486.3	100	26.9	4207.0	100	28.1

Source: annual Statistical Abstract of 2000 -2006, the Central Bureau of Statistics

#### Net enrolment rate:

Net enrolment rate is defined in education stage as a percentage of the number of students enrolled in elementary education between the ages (6-14 years old) of the total population in the same age group.

This rate has increased from (90.6%) in 2001 to (91.9%) in 2004, and was higher in males than its level in females, since it raised in males than (91.3%) in 2001 to (92.6%) in 2004, and in female from (89.8%) (91.1%) between the mentioned two years

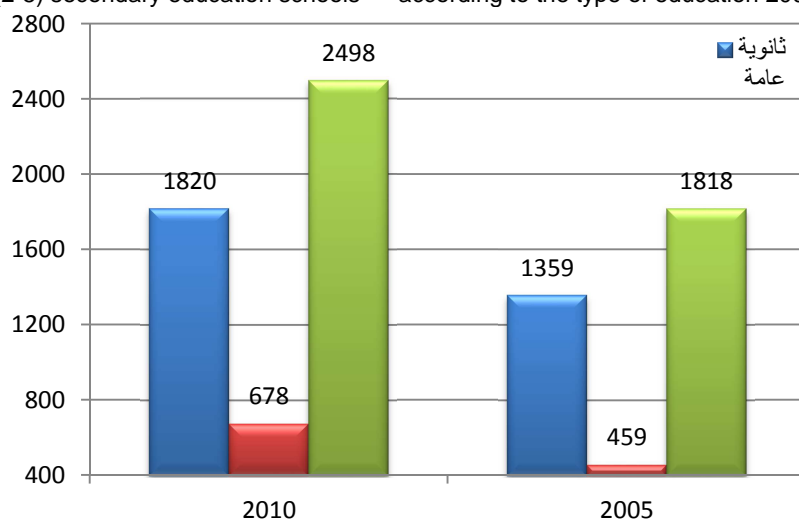
It is clear from that that although the education compulsory at this stage according to the law no. (32) 2002, there is (8.1%) from all children who are in elementary education's age 2004 were out of school, which leads to devote the phenomena of child labour and early marriage.

### Secondary education

Number of schools:

The number of secondary schools has increased from (1818) School in 2005, (75%) are General and the rest are vocational to (2498) School in 2010, including (73%) General and the rest are vocational, in an annual average growth (6.6%) between the two years, and (94.7%) of the general secondary education schools belong to the governmental sector in 2005 (93.8%) in 2010 and the rest belong to the private sector, while all secondary vocational schools belong to the governmental sector.

Figure (2-5) secondary education schools "1" according to the type of education 2005, 2010



Source: annual Statistical Abstract 2010 - 2011, the Central Bureau of Statistics  
"1" except for the legal education

Number of classrooms:

The number of classrooms in secondary general and vocational school has risen from about (7.3) thousand Divisions in 1995 to (9.1) thousand Divisions in 2000, then to (14.2) thousand Divisions in 2005, in an annual growth rate doubled between 1995 and 2005 and that from (4.5%) during the period 1995-2000 (9.2%) during the period 2000-2005. It very high increases in line with the state seeking to accommodate the large number of students who passes the basic education exams yearly.

For the classrooms ratios in the general secondary schools to the total classrooms in the secondary education; they ranged from (72.5%) in 1995 to (59.9%) in 2000 and then to (69.7%) in 2005 and the rest in secondary education vocational schools, that is due to the variation of the minimum acceptance limit of students who passed the exams of basic education stage in the first grade of general secondary education between year and another and between province and the other.

On the other hand, there have been some changes in the relative distribution of the classrooms by provinces between 1999 and 2005, which were required by the variation size of flows on the registration in the first grade of secondary education by the students who succeeded the basic education exams. It should be noted the lack of published data on such distribution also in recent

years. The ratio of classrooms in the general secondary schools have ranged to the total number of classrooms in the general and vocational secondary schools together between (50.3%) in Deir al-Zour and (67.2%) in Latakia in 1999 and between (60.1%) in Sweida and (75.3%) in Latakia in 2005.

Table (2-8) Distribution of classrooms in secondary education by provinces 1999-2005

Department	1999				2005			
	General	Vocational	Total		General	Vocational	Total	
			Count	%			Count	%
Damascus	670	403	1073	12.5	910	453	1363	9.6
Damascus Countryside	470	322	792	9.2	979	438	1417	10.0
Homs	599	356	955	11.1	1034	440	1474	10.4
Hama	495	371	866	10.1	977	418	1395	9.8
Tartous	494	328	822	9.6	838	346	1184	8.3
Lattakia	596	291	887	10.3	894	293	1187	8.4
Idleb	238	164	402	4.7	644	252	896	6.3
Aleppo	551	388	939	10.9	1300	476	1776	12.6
Raqqa	103	84	187	2.2	281	120	401	2.8
Der Ezzor	154	152	306	3.5	455	239	694	4.9
Hassakeh	200	193	393	4.6	528	271	799	5.6
Sweida	191	161	352	4.1	279	185	464	3.3
Dara'a	264	209	473	5.5	547	260	807	5.7
Quneitra	90	59	149	1.7	224	101	325	2.3
Total	5115	3481	8596	100	9890	4292	14182	100

Source: Annual Statistical Abstract of 2000 and 2006 - the Central Bureau of Statistics

Number of students and the average share of the Division of them:

The number of general and vocational secondary education together had increased from (233.5) thousand students in 1995 to (299) thousand students in 2000 and to (447.8) thousand in 2005 and then to (508.5) thousand students in 2010, in an annual growth rate increased from (5.1 %) during the period 1995-2000 to (8.4%) during the period 2000-2005 and then decreased to (3.2%) during the period 2005-2009, where these rates slightly decreased than the level of the annual growth rate for the classes number, and this has led to some limited changes in the average of the division share from students, with a (31.8) student in 1995 and (32.7) students in 2000 and then (31.6) students in 2005 and (29.5) in 2010.

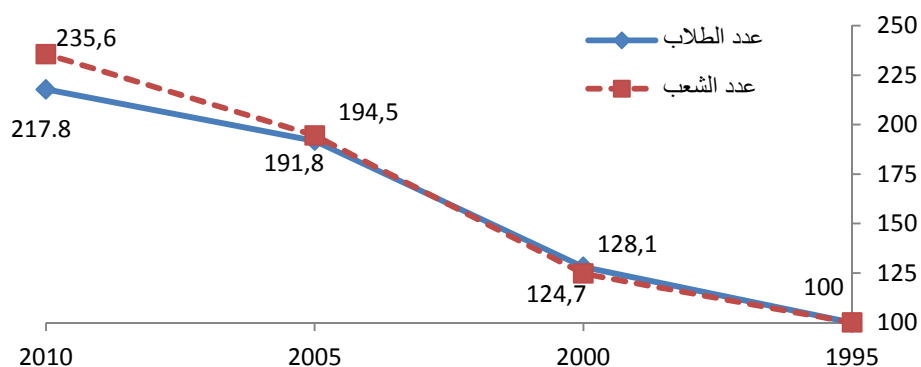
Table (2-9) the evolution of the students and classrooms number at the secondary education stage and the average of students per Division 1995-2010

Years	Students (thousands)	Classroom (thousands)	Classroom share of students
1995	233.5	7.3	31.8
2000	299.0	9.1	32.7
2005	447.8	14.2	31.6
2010	508.5	17.2	29.5

Source: Annual Statistical Abstract for the years 2000, 2006, 2011 - Central Bureau of Statistics

The proportion of females in the general and vocational secondary education of the total number of students at this stage increased from (41.9%) in 1995 to about (49.5%) during the period 2000-2010, which is almost half of the total number of students.

Figure (2-6) record of the evolution of the students' and classrooms' number in secondary education 1995-2010 (1995 = 100)



Source: Previous Data table

The proportion of students in secondary vocational education to the total students in this stage have decreased from (42.7%) in 1999 to (30.3%) in 2005 compared to a significant increase in the enrolled proportion in general secondary education. The proportion of secondary vocational education students ranged from (35.5%) in Latakia and (53.7%) in AlHasaka in 1999, and between (24.5%) in Aleppo and (38.3%) in Sweida in 2005.

On the other hand, the relative distribution map for the students of this stage varied by the provinces between 1999 and 2004, where Damascus was containing the largest number of students (15.1%) in 1999, then Aleppo (13.8%) in 2005. Finally, the average share of students per division had varied between the provinces, ranging between (28) students in each of Tartous and Latakia and (39.3) students in Damascus in 1999, and between approximately (25) students in Tartous and (37) students in Damascus in 2005.

Table (2-10) distribution of secondary education students by the provinces and the type of education and the average per Division including 1999, 2005

Department	1999					2005				
	Students (thousand)			% of voc. students	Class share of students	Students (thousand)			% of voc. students	Class share of students
	General	Voc.	Total			General	Voc.	Total		
Damascus	26.6	15.5	42.1	36.9	39.3	34.6	15.8	50.4	31.4	37.0
Damascus Countryside	13.9	10.4	24.3	47.2	30.7	29.4	12.5	41.9	29.8	29.6
Homs	19.1	12.6	31.7	39.8	33.3	32.5	15.2	47.7	31.9	32.4
Hama	14.1	12.5	26.6	46.9	30.7	27.6	12.3	39.9	30.7	28.6
Tartous	13.8	9.5	23.3	40.6	28.2	20.4	9.7	30.1	32.3	25.4
Lattakia	16.1	8.8	24.9	35.5	28.1	22.3	8.7	31.0	28.2	26.1
Idleb	7.1	5.2	12.3	41.9	30.5	19.7	8.0	27.7	28.9	30.9
Aleppo	17.6	13.3	30.9	43.1	32.9	46.7	15.2	61.9	24.5	34.8
Ragqa	3.3	3.5	6.8	51.7	36.5	9.7	3.3	13.0	25.6	32.6
Der Ezzor	4.8	4.9	9.7	50.3	31.8	14.7	8.4	32.1	36.3	33.3
Hassakeh	6.7	7.7	14.4	53.7	36.7	21.1	10.5	31.6	33.2	39.5
Sweida	5.7	5.2	10.9	47.4	31.1	8.6	5.3	13.9	38.3	30.0
Dara'a	8.7	8.3	17.0	49.0	36.0	18.1	7.8	25.9	30.0	32.1
Quneitra	2.6	1.8	4.4	40.4	29.2	6.7	3.0	9.7	30.8	30.1
Total	160.1	119.2	279.3	42.7	32.5	312.1	135.7	447.8	30.3	31.6

Source: Annual Statistical Abstract of the 2000 -2006 - the Central Bureau of Statistics

Net enrolment rate:

The net enrolment rate in secondary education means, the percentage of the enrolled students at this educational stage and aged between (15-17 years old) of the population in the same age group. The net enrolment rate in secondary education have risen, in both public and vocational parts from (32.8%) in 2001 to (34%) in 2005 and then dropped to (32%) in 2009, which is higher in males than in females in all studied years.

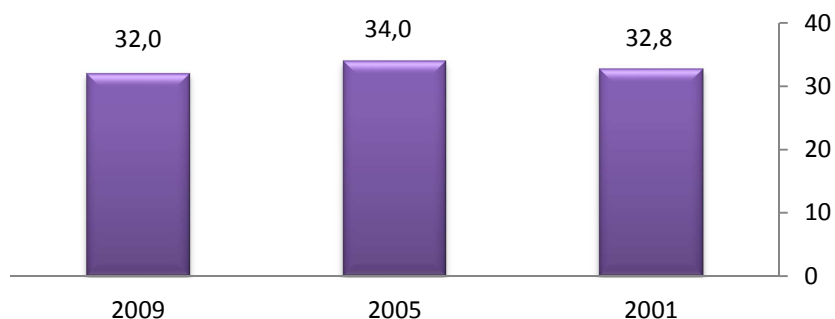
Table (2-11) the net enrolment rate in secondary education by gender 2001-2009 (%)

2001			2005			2009		
Males	Females	Total	Males	Females	Total	Males	Females	Total
34.1	31.4	32.8	35.0	33.0	34.0	33.0	31.0	32.0

Source: 1 - Family Health Survey 2001 - the Central Bureau of Statistics

2 - the second national report (status of population of Syria, 2010) - Syrian Commission for Family Affairs

Figure (2-7) the net enrolment rate in secondary education in Syria 2001-2009 (%)



Source: same as the previous table

### Higher Education

Number of intermediate institutes, universities and colleges:

Intermediate institutes' aim to graduate specialist and technical cadres', to help the cadres of universities' and higher studies' graduates in the various fields of science and knowledge. The number of intermediate institutes in Syria increased from (131) Institute in 1995 to (151) Institute in 2000, and to (189) Institute in 2005 and then to (199) of the Institute in 2010. For the public universities number, it had increased from (4) universities includes (56) College in 2000 to (5) universities includes (66) College in 2004, and (5) universities also includes (121) additional College to (15) private university contains (48) College in 2010.

Number of students:

The number of intermediate institutions' students had decreased from (58.6) thousand students in 2000 to (42.8) thousand students in 2005, then rose to (86.0) thousand students in 2010, in an average annual growth rate (3.9%) between 2000 and 2010. including (55%) males in both 2000 and 2010, and the rest were females. For the students number in the governmental universities, it increased from (155.1) thousand students in 2000 to (218.1) thousand students in 2004, and again to (338.7) thousand students in addition to (24.6) thousand students in private universities in 2010 at an annual growth rate of (8.3 %) between 2000 and 2010. On the other hand, the females percentage to universities' students had increased gradually from (43.5%) in 2000 to (47.3%) in 2004 and then to (51.8%) in 2010, while the rest were males.



## Net enrolment rate in the intermediate institutes and universities:

the indented is the percentage of the enrolled students in intermediate institutes and universities aged between (18-23 years old) of the total population in the same age group. The net enrollment has increased in the higher education from about (15.5%) in 1995 to (16.5%) in 2000 and then to (17.4%) in 2006, and this rate is considered to be low if compared to its fellow in the Middle Eastern countries where it's around (25%) and up to (40%) in developed countries.

Table (2-12) number of higher education students, the Net enrolment rate 2000-2010

Years	Students (thousand)			Net registration average %
	College	University	Total	
2000	58.6	155.1	213.7	16.5
2005	42.8	233.9	276.7	17.4
2010	86.0	363.3	449.3	-

Source: 1 - annual Statistical Abstract of the years 2001, 2006, 2011 - the Central Bureau of Statistics  
2 - the first national report 2008 (the status of Syria's population) - Syrian Commission for Family Affairs

## 2-2- The economically active population (labour force):

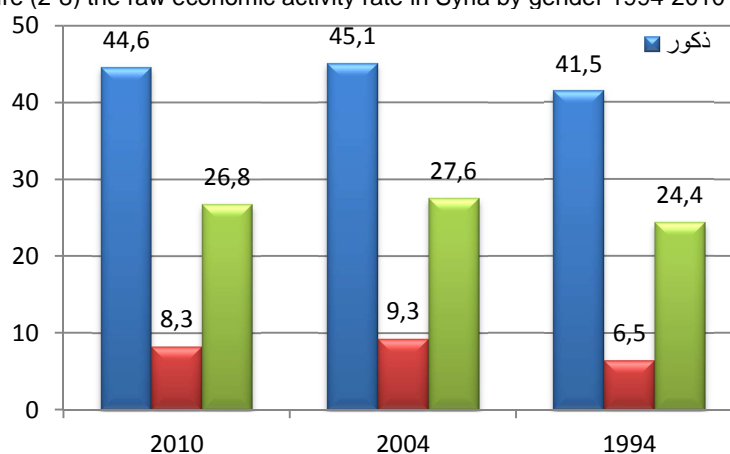
The mean of Labour force, or what is known as populated with economic activity labour supply, and includes all working age individuals (in Syria 15 years and over) who contribute effectively with their physical and mental efforts in the production of goods or services (EST), as well as able to perform this work, wish for and looking for it (unemployed). The labour force in Syria have grown of about (3.4) million in 1994 to (4.9) million in 2004 and then to (5.5) million in 2010, in an annual growth rate decreased sharply from (3.7%) during the period 1994-2004 to (1.9%) during the period 2004-2010, and that is mainly due to the growing number of people who continue their educational attainment in the recent period who are outside the labour force. The males consist most of the labour force size representing (85%) in 2010, and remain (15%) are females.

Table (2-13) the evolution of the labour force (15 years and over) by Gender 1994-2010 (by thousands)

Years	Males		Females		Total	
	Count	%	Count	%	Count	%
1994	2925.6	87.0	437.2	13.0	3362.8	100
2004	4134.8	83.6	811.1	16.4	4945.9	100
2010	4691.5	84.9	834.4	15.1	5525.9	100

Source: Census results of population for the years 1994 and 2004, the results of the labour force surveys 2010 - Central Bureau of Statistics.

Figure (2-8) the raw economic activity rate in Syria by gender 1994-2010 (%)



Source: This rate was calculated based on previous data table, and the results of the population census of 1994 and 2004, and annual Statistical Abstract for 2011 - the Central Bureau of Statistics

The revised rate of economic activity reflects the percentage of the economically active population to the total working age population, which is the human force (15 years and over), and this rate is an accurate and expressive measure about the contribution size to the raw economic activity.

The revised rate of economic activity in Syria rose from (38.2%) in 1994 to (45.6%) in 2004, then declined to (42.7%) in 2010, and that rate was much higher in males than in females.

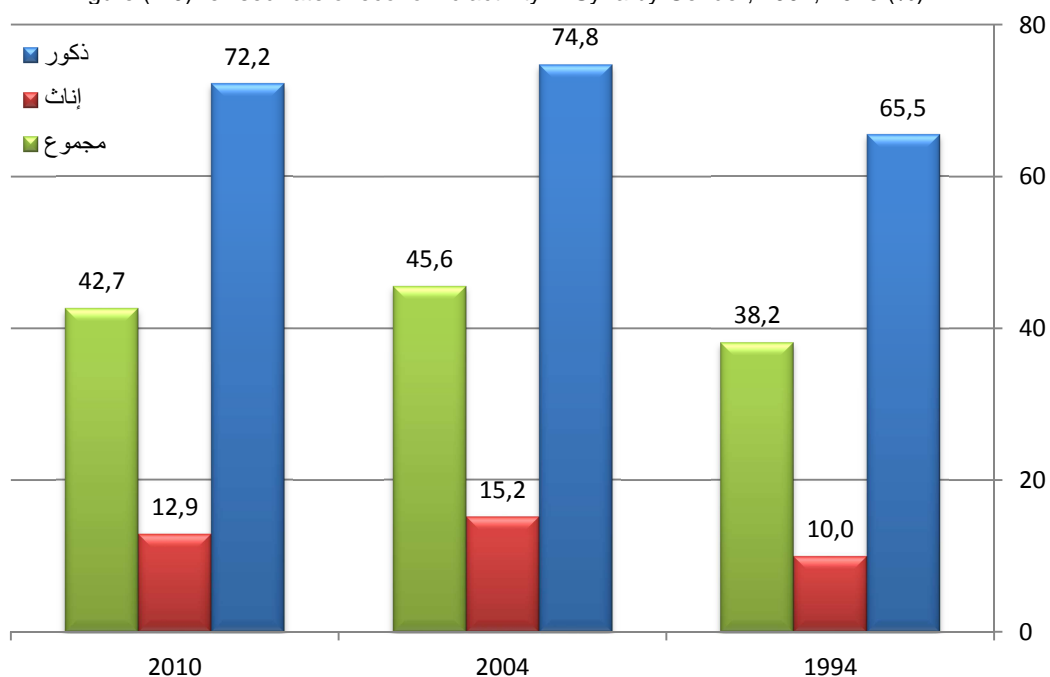
The economic activity rates by age take the shape of the bell, where gradually increases with age until it reached a certain age and then start to decline. These rates reached its peak in Syria in the age group from (35-39 years) in 2004 and in the age group from (40-44 years) in 2010, which about (58%). The following table shows the variation of the revised rate of the economic activity among the provinces.

Table (2-14) the revised rate of economic activity by provinces and Gender 1994, 2004 (%)

Department	1994			2004		
	Males	Females	Total	Males	Females	Total
Damascus	66.1	11.9	39.8	72.9	15.8	45.0
Rural Damascus	67.8	8.0	38.8	78.9	11.6	46.3
Homs	64.1	10.7	37.7	31.7	15.3	44.0
Hama	65.3	15.2	40.7	75.3	18.8	47.7
Tartous	64.9	15.3	40.4	70.8	28.5	50.0
Lattakia	62.3	19.5	41.3	72.5	29.2	51.1
Idleb	68.3	9.1	37.2	74.2	10.3	42.8
Aleppo	68.8	6.7	38.6	84.5	10.6	47.0
Raqqa	65.7	7.6	37.1	72.6	16.6	45.2
Der Ezzor	63.3	9.0	36.2	66.7	18.1	42.7
Hassakeh	65.4	6.3	36.1	68.1	14.6	41.6
Sweida	60.3	10.6	35.2	69.9	18.8	43.7
Dara'a	58.9	6.7	32.5	71.8	9.8	41.3
Quneitra	62.1	4.6	33.2	72.2	11.1	42.4
Total	65.5	10.0	38.2	74.8	15.2	45.6

Source: First National Report 2008 (Syria's population status) - Syrian Commission for Family Affairs

Figure (2-9) revised rate of economic activity in Syria by Gender, 1994, 2010 (%)



Source: previous Data table, and labour force surveys 2009 - Central Bureau of Statistics

The raw economic activity rate is defined as the economically active populations' percentage (employed and unemployed job) to the total population. In the context of this definition, the average of the raw economic activity increased from (24.4%) in 1994 to (27.6%) in 2004 and then declined slightly to (26.8%) in 2010, when males were rated more than females (by four times).

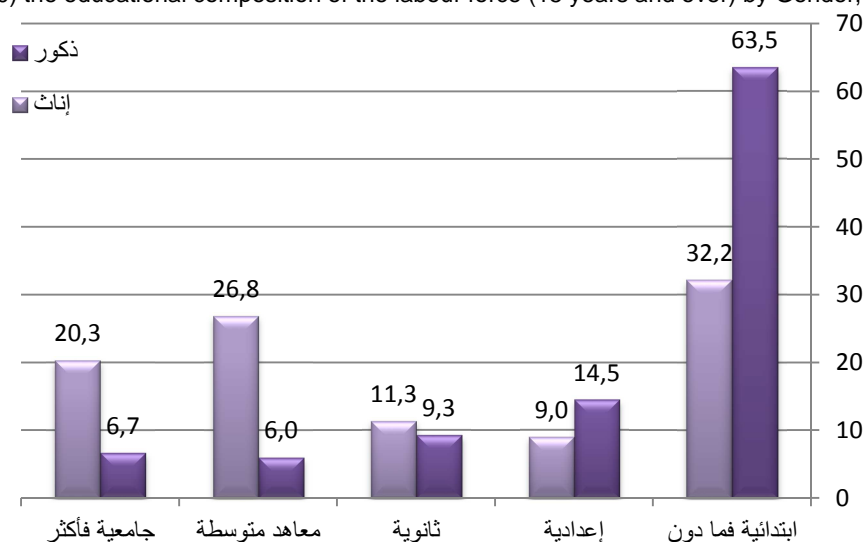
The labour force in Syria divided by its weak educational composition, where about three-fifths of its members are certified with primary education or below, and the rest is distributed to other educational levels at rates gradually declined with the increasing of the educational qualification. The mentioned composition varies between males and females, and this composition is much better in females compared to males, suggesting that education is one of the most important keys that lead to greater empowerment of women in the various economic and social fields.

Table (2-15) the educational composition of the labour force (15 years and over) by Gender, 2010 (%)

Educational status	Males	Females	Total
Elementary & below	63.5	32.2	59.5
Secondary	14.5	9.0	13.8
High school	9.3	11.7	9.6
College	6.0	26.8	8.7
University & above	6.7	20.3	8.4
Total	100	100	100

Source: annual Statistical Abstract of 2011 - Central Bureau of Statistics

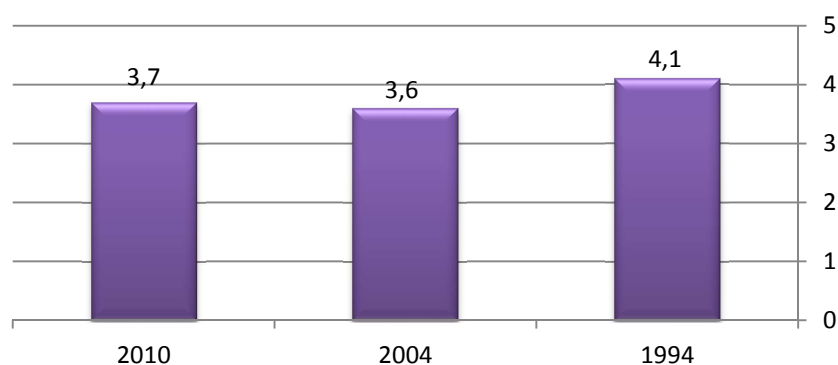
Figure (2-10) the educational composition of the labour force (15 years and over) by Gender, 2010 (%)



Finally, the economic dependency is known as the average number of individuals who are dependents by a one member of the labour force, which is the inverted rate of the raw economic activity, and refers to the burden level of members of the labour force (independents) to fend for themselves in addition to individuals outside the labour force, children and elderly (dependents). The increasing of this level led to devour the savings, and affect negatively on the investment, and exacerbate social problems and pressures because of the comprehensiveness of the unemployed.

The level of economic dependency ratio in Syria is considered to be high despite its decline from (4.1) persons in 1994 to (3.6) personnel in 2004 and its persistence almost in 2010, which increases in females by more than four times in males, as it varies between the provinces ranging between (2.8) personnel in Tartous and Lattakia and (4.3) personnel in Daraa in 2004.

Figure (2-11) economic dependency rate in Syria 1994-2010 (individuals)

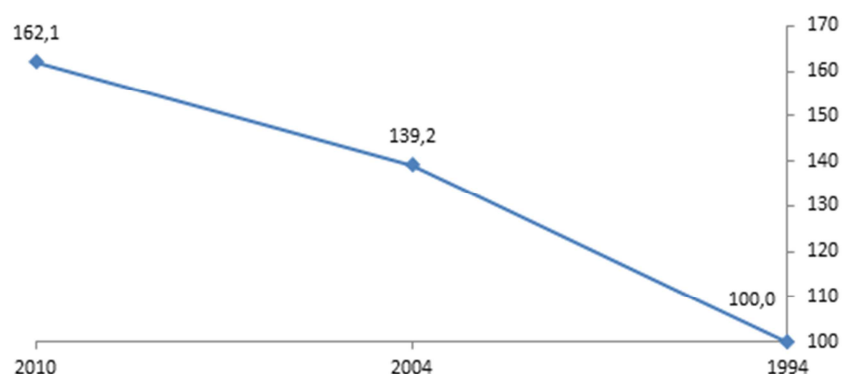


Source: population Census results for the years 1994 and 2004, labor force surveys - Central Bureau of Statistics

### 2-2-1- Employed

The number of employees increased from about (3.1) millions in 1994 to (4.3) million in 2004 and then to (5.0) millions in 2010, an annual growth rate decreased from (3.4%) during the period 1994-2004 (2.6%) during the period 1994-2010.

Figure (2-12) record of the evolution of employees 1994-2010 (1994 = 100)



Source: population Census results for the years 1994 and 2004, and labour force surveys for the year 2009 - the Central Bureau of Statistics

The most employees are males with a percentage of (87.1%) of the total number of workers in 2010, while the proportion of females did not exceeding (12.96%)

### Age structure of workers:

The percentage of workers reached its peak (15.8%) in the age group 25-29 years in 2004 and (14.5%) in the age group 30-34 years in 2010, after which it started to decline gradually with age progress, and this percentage was higher in females from it in males .Hereafter increasing portions of females start to withdraw gradually from the labour market under the pressure of house holding and raising children.

Table (2-16) workers' age structure (15 years old and over) by Gender 2004, 2010 (%)

Age groups	2004			2010		
	Males	Females	Total	Males	Females	Total
15-19	10.2	12.2	10.5	8.0	4.6	7.5
20-24	15.2	17.0	15.5	11.8	10.7	11.7
25-29	15.7	17.1	15.8	14.1	15.1	14.2
30-34	14.1	15.1	14.3	14.1	16.1	14.5
35-39	12.6	14.0	12.8	12.9	14.6	13.1
40-44	10.5	10.9	10.6	12.3	15.0	12.6
45-49	7.8	6.5	7.6	9.5	12.1	9.8
50-54	5.9	3.9	5.6	7.6	6.9	7.5
55-59	3.7	1.7	3.4	4.8	3.5	4.0
60-64	1.9	0.8	1.8	2.4	0.7	2.2
65+	2.4	0.8	1.1	2.5	0.7	2.3
Total	100	100	100	100	100	100

Source: Annual Statistical Abstract for 2005, 2011 - Central Bureau of Statistics.

Educational structure of workers:

The image of the educational structure of workers is almost identical with its alike of labour force, which previously referred to.

The structure of workers by economic activity divisions:

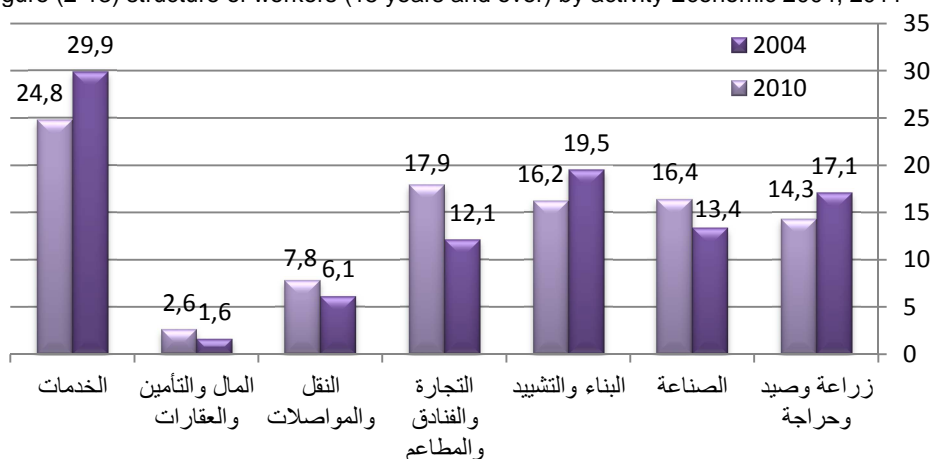
Important changes have taken place on the structure of the employed by economic activity between 2004 and 2010, necessitated by the process of economic and social development in Syria, and these changes represented by the decline in the proportion of workers in agriculture, construction and services, compared to its raise in the rest of the economic activities. This structure varies at the level of both males and females.

Table (2-17) structure of workers (15 years and over) by economic activity and gender 2004, 2010 (%)

Economic activity	2004			2010		
	Males	Females	Total	Males	Females	Total
Agriculture, hunting and forestry	15.6	25.5	17.1	13.2	22.2	14.3
Industry	14.4	7.7	13.4	17.6	8.7	16.4
Building & construction	22.1	4.4	19.5	18.5	0.5	16.2
Commerce, hotels & restaurants	13.7	3.2	12.1	19.5	6.4	17.9
Transportation and communication	6.9	1.0	6.1	8.7	1.7	7.8
Funds, insurance & real estate	1.9	1.9	1.9	2.6	2.9	2.6
Services	25.4	56.3	29.9	19.9	57.6	24.8
total	100	100	100	100	100	100

Source: Annual Statistical Abstract for 2005, 2011 - Central Bureau of Statistics

Figure (2-13) structure of workers (15 years and over) by activity Economic 2004, 2011



Source: same as the previous table

#### Structure employed by Employment Status:

Intended the process recipe Ownership situation at work, and data show a significant changes in the structure of the employed by working status, was down ratios employers and employees without pay for high ratios for the self-employed and paid during the period 2004-2010. This structure also varies between males and females.

Table (2-18) structure of workers (15 years and over) by Employment Status and Gender 2004, 2010 (%)

Work status	2004			2010		
	Males	Females	Total	Males	Females	Total
Business owner	7.5	2.3	6.7	4.7	1.0	4.2
Self employed	21.9	8.3	20.0	31.3	12.0	28.8
Paid worker	58.9	69.2	60.4	61.3	75.9	63.2
Unpaid worker	11.7	20.2	12.9	2.7	11.1	3.8
Total	100	100	100	100	100	100

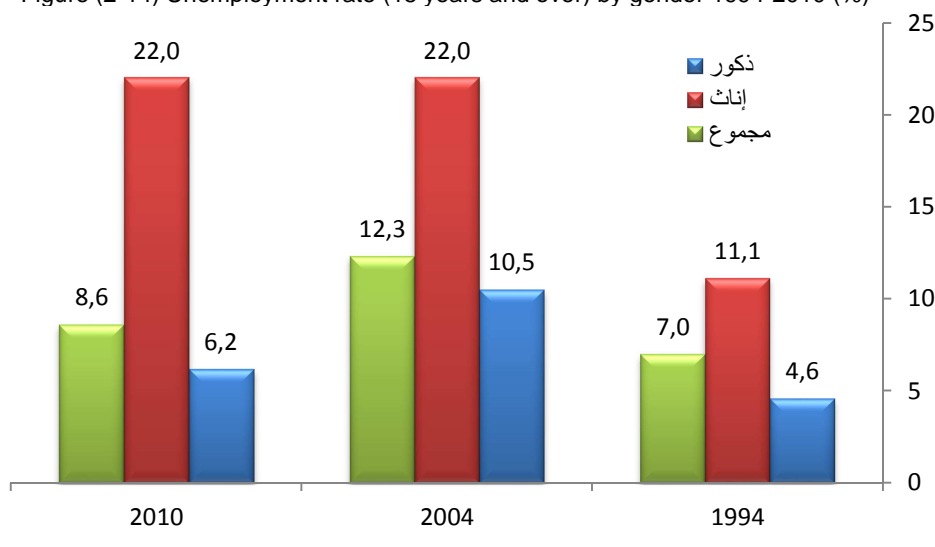
Source: Statistical Abstract of the 2005 Annual, 2011 - Central Bureau of Statistics

#### 2.2.2. Unemployment

Unemployment is one of the most fundamental problems afflicting most developing and developed countries, has adopted the Central Bureau of Statistics definition of unemployment recommended by the International Labour Organization, where is unemployed every individual who is in the working age but without a job is able to work and wants and is looking for, but not finds. The unemployment rate is thus on the percentage of the number of unemployed of the total labour force.

The unemployment rate rose in Syria (7%) in 1994 to (12.3%) in 2004, then decreased to (8.6%) in 2010 equivalent (476.3) thousand unemployed. The unemployment rate was much higher in females from its level in males, ranging between (6.4%) for males and (11.1%) for females in 1994, and between (10.5%) for males and (22.0%) for females in 2004, as well as between (6.2%) for males (22.0%) for females in 2010. The unemployment rate varies considerably between provinces, ranging between (4.5%) in the province of Aleppo and (13.8%) in Sweida in 1994 (4.0%) in the province of Damascus and (26.5%) in the province of Hasaka in 2004.

Figure (2-14) Unemployment rate (15 years and over) by gender 1994-2010 (%)



Source: First National Report 2008 (the case of Syria's population) - Syrian Commission for Family Affairs  
Annual Statistical Abstract of the year 2011 - the Central Bureau of Statistics

#### Age and sex structure of the unemployed:

Indicate labour force survey data for the year 2010 to (61.5%) of the total number of unemployed are male and the rest female, and that the largest percentage of the unemployed are concentrated in the younger age group 20-24 years in each of the years 2004 and 2010, and then gradually decreases with age. And slightly decreased the proportion of the unemployed who are under the age of 35 years to the total number of unemployed (88%) in 2004 to (86.5%) in 2010.

Table (2-19) age structure of the unemployed (15 years and over) by gender 2004-2010 (%)

Age groups	2004			2010		
	Males	Females	Total	Males	Females	Total
15-19	27.6	24.2	26.6	28.0	6.2	19.6
20-24	33.7	35.9	34.3	30.4	35.6	32.4
25-29	17.4	20.1	18.2	19.6	29.3	23.3
30-34	8.7	9.8	9.0	8.0	16.1	11.2
35-39	5.1	5.8	5.3	4.8	8.1	6.1
40-44	2.9	2.2	2.7	3.6	3.0	3.3
45-49	1.8	1.0	1.6	1.9	1.2	1.6
50-54	1.2	0.4	1.0	2.2	0.3	1.5
55-59	0.7	0.2	0.5	0.8	0.1	0.5
60-64	0.4	0.1	0.3	0.5	0.1	0.3
65+	0.5	0.2	0.4	0.2	-	0.2
Total	100	100	100	100	100	100

Source: Statistical Abstract for 2005 Annual, 2011 - Central Bureau of Statistics

#### The educational structure of the unemployed:

Show changes in the structure of unemployment in Syria by educational status noticeable tendency towards increasing the volume of unemployed among the members of the labour force with secondary education and higher education, as a result of weak demand in the labour market to qualified cadres of these educational levels on the one hand and the incompatibility of the quality of outputs of the educational process with requirements and the needs of this market. The proportion of the unemployed of a campaign document completion of primary education or less to the total number of unemployed (68.5%) in 2004 to (41.4%) in 2010, compared with a rise in the proportion of the unemployed from other educational levels, and this trend deeper units at females compared to males.

Table (2-20) the educational structure of the unemployed (15 + years) by sex  
2004, 2010 (%)

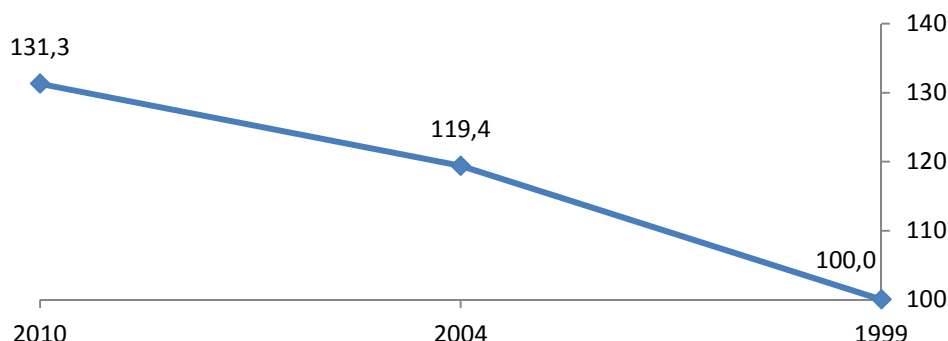
Educational status	2004			2010		
	Males	Females	Total	Males	Females	Total
Illiterate	9.9	8.7	9.5	5.3	1.8	4.0
Read & write	34.5	24.2	31.5	25.4	4.5	17.3
Elementary	29.6	22.3	27.5	26.9	9.6	20.1
Secondary	12.0	13.8	12.5	15.0	12.6	14.1
High school	9.1	17.3	11.4	13.2	31.8	20.4
College	3.1	9.3	4.9	7.4	25.2	14.3
University	1.9	4.4	2.6	6.8	14.5	9.8
Total	100	100	100	100	100	100

Source: Statistical Abstract of the 2005 Annual, 2011 - Central Bureau of Statistics

### 2.3. Palestinian refugees:

Increased numbers of Palestinian refugees in Syria steadily from (67.9) thousand refugees in 1999 to (439.1) thousand in 2004 and then to (483) thousand in 2010, an annual growth rate fell from its high and very deep (3.6%) during the period 1999 - 2004 to a moderate level (1.6%) during the period 2004-2010. The sex ratio (which expresses the number of males per 100 females) hits (104) in 1999 and (101) more general 2004 then (102.2) in 2010. The number of registered refugees in the provinces of Damascus and Damascus (68.7%) of the total registered Palestinian in Syria, and the rest is distributed to other provinces rates ranging between (0.1%) in the eastern provinces which tenderness and Deir ez-Zor and Hasaka and (8.8%) in the province of Quneitra in 2010. On the other hand, the crude birth rate fell between these refugees (23.3) per thousand in 1999 to (20.9) per thousand in 2010, while the crude death rate fell from (3.3) per thousand (2.9) roll during the same period. Thus decreasing the rate of natural increase (20) thousand (18) roll between the above two years.

Figure (2-21) record of the evolution of the Palestinian refugees in Syria 1999-2010 (1999 = 100)



Source: Statistical Abstract of the annual for the years 2000, 2005, 2011 - Central Bureau of Statistics

### 2.4. Economic level of the family

#### 2.4.1 - Wages

Changes have occurred in the image distribution relative to paid workers who are aged 15 years and above by segments monthly wage, was down the proportion of workers who earn less than (5) thousand for. Q of (40.4%) in 2004 to (9%) only in 2010 compared to high percentage of those who earn more than (9) thousand for. Q of (10.6%) to (60.1%) during the same period, so as to reduce the erosion of wages due to the high level of prices, which increased by (8.4%) on average annually between the above two years, according to data from the statistical Abstract of the Central Bureau of Statistics in 2011. This distribution varies between economic activity and another; also vary unit changes in the distribution of workers in these activities by wage categories between 2004 and 2010.



Table (2-21) proportional distribution of paid workers (15 + years) by economical activity and monthly pay rate (Syrian Pounds) 2004, 2010

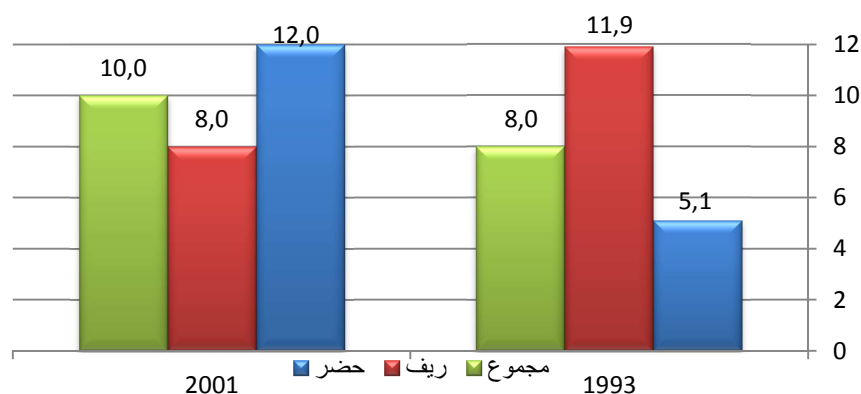
Economic activity	2004							2010						
	≤5000	5001-6000	6001-7000	7001-8000	8001-9000	≥9000	Total	≤5000	5001-6000	6001-7000	7001-8000	8001-9000	≥9000	Total
Agriculture	80.3	6.0	5.0	3.9	1.4	3.4	100	27.5	14.7	10.9	15.2	8.4	23.3	100
Industry	45.2	17.3	10.1	12.0	5.9	9.5	100	6.8	6.2	5.4	13.4	7.2	61.0	100
Building & construction	46.8	20.6	11.5	8.8	4.4	7.9	100	11.7	9.0	9.6	17.6	10.3	41.9	100
Commerce & restaurants	54.2	14.3	6.5	9.7	4.3	11.0	100	12.6	9.0	6.8	12.7	6.9	52.0	100
Transportation & storage	21.3	15.8	15.8	15.5	10.8	19.8	100	1.6	3.2	4.1	10.4	9.3	71.4	100
Funds, insurance & real estate	35.1	8.1	13.5	12.2	8.1	23.0	100	5.8	4.1	3.1	7.5	6.5	73.0	100
Services	27.7	15.4	14.5	17.4	13.0	12.0	100	6.0	2.2	3.3	6.7	7.1	74.7	100
Total	40.4	15.6	11.8	13.1	8.5	10.9	100	9.0	5.9	5.7	11.4	7.9	60.1	100

Source: Annual Statistical Abstract for 2005, 2011 - Central Bureau of Statistics

#### 2.4.2 - family ownership to a private car:

The family ownership for some durable goods, especially for a private car, is one of the indicators to measure the economic and social level of the family. The available data indicate that the percentage of families owning a private car increased from (8%) in 1993 into (10%) in 2001, and this percentage was higher in rural areas from its urban level in 1993 and the opposite in 2001.

Figure (2-22) the percentage of households that own a private car by urban and rural areas (%) 1993-2001



Source: Survey of Maternal and Child Health 1993, Family Health Survey 2001 - the Central Bureau of Statistics

#### 2-4-3- Monthly Average of household expenditure

The income statement, which is usually contained in the questionnaires of the living cost surveys; Suffers from a lack of accuracy and credibility, which made many countries adopt a statement of expenditure to measure the standard of living in the household sector. The results of the household's income and expenses surveys' in Syria indicate that the household average of monthly spending rose from (18372) S.P in 1996-1997 to (21008).S.P in 2003-2004 and then to (25918) S.P in 2006-2007, at an annual growth rate increased from (1.9%) between 1997 and 2004 to (7.3%) between 2004 and

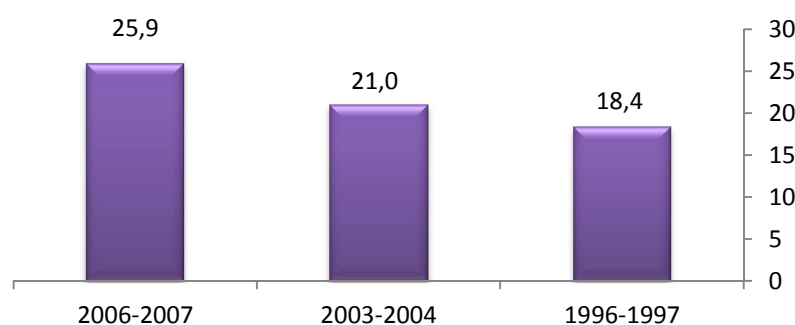
2007. these averages include spending on durable and non-durable goods and services, which is higher in urban than rural areas. On the other hand, the average of household expenditure varies between provinces and from year to year, reaching its highest level in Al Hasaka in 1997, in Damascus in 2004 and in Tartous in 2007, while the lowest level in Sweida in 1997 and 2004 and in Raqqa in 2007.

Table (2-22) the monthly average of household expenditure by the provinces and urban and rural areas

Department	1996-1997			2003-2004			2006-2007		
	Urban	Rural	Total	Urban	Rural	Total	Urban	Rural	Total
Damascus	19.1	-	19.1	28.5	-	28.5	28.2	-	28.2
Rural Damascus	18.4	19.9	19.1	20.0	18.4	19.2	24.8	24.3	24.7
Homs	18.0	14.4	17.4	22.2	17.3	20.1	21.8	31.6	26.2
Hama	17.1	16.5	17.0	20.1	21.6	21.0	31.2	26.4	28.3
Tartous	18.0	20.4	18.8	24.5	22.4	23.1	39.8	32.3	34.8
Lattakia	20.3	22.0	20.7	20.3	19.7	20.0	27.3	30.8	29.0
Idleb	18.0	18.4	18.1	22.9	18.7	19.9	27.4	18.3	20.8
Aleppo	16.9	13.4	16.2	20.6	12.2	17.8	26.5	17.3	23.5
Raqqa	17.5	15.3	16.8	20.2	19.4	19.7	18.5	18.7	18.6
Der Ezzor	21.9	20.5	21.9	31.7	18.2	22.9	29.3	20.4	24.4
Hassakeh	23.6	23.0	23.4	25.3	21.9	23.1	34.1	18.2	23.5
Sweida	16.2	14.5	15.6	20.6	14.7	16.7	35.9	28.0	29.8
Dara'a	21.4	19.2	20.7	23.2	23.2	23.2	28.5	36.9	32.8
Quneitra	-	18.2	18.2	-	19.0	19.0	-	32.1	32.1
Total	18.5	18.0	18.4	23.1	18.5	21.0	27.1	24.3	25.9

Source: Results of Family Income and Expenditure 1996-1997, 2003-2004, 2006-2007 - Central Bureau of Statistics

Figure (2-23) the monthly average of household expenditure by provinces 1997-2007 (thousands. Syrian Pounds)



Source: previous Data table

## 2-5 – Gross Domestic Production

There are many economic indicators covered by the national accounts, we'll be sufficed with the GDP index at the market price or what is known as the total added-value, which is equal to the goods' market value and the services produced in the accounting period minus the intermediate consumption, which includes the value of non-durable goods and services used in production.

### 2.5.1 - GDP (at current prices)

The volume of GDP at market price raised from (268.3) billion Syrian pounds in 1990 to (904.6) billion Syrian pounds in 2000 and then to (2791.8) billion Syrian pounds in 2010, in an average annual increase reached (63.6) billion Syrian pounds during the period 1990-2000 and then (188.7) billion Syrian pounds during the period 2000-2010. The average of individual's share of this GDP grew from

(22.1) thousand S.P in 1990 to (55.4) thousands S.P in 2000 and then to (135.4) thousand S.P in 2010, in an average annual growth rate of (9.6%) during the period 1990-2000 (9.3%) during the period 2000-2010. At the level of economic sectors, statistical data indicates a significant decline in the share of the agriculture sector for the benefit of most other sectors during the studied period.

Table (2-23) the evolution of the structure of GDP in Syria by sectors at current prices  
1990-2010 (%)

Sectors		1990	2000	2010
Agriculture		28	25	20
Industry & mining		20	30	28
Construction		4	3	4
General trade		23	15	21
Transportation		9	13	10
Money, insurance & Real estate		4	4	5
Personal & social services		2	2	2
Government services		10	8	10
Total	%	100	100	100
	Billion S.P.	268.3	904.6	2791.8

Source: the annual Statistical Abstract of 2011 - Central Bureau of Statistics

#### 2.5.2 - GDP (at constant prices of the year 2000)

The volume of GDP at the market prices (at constant 2000 prices) had increased from (510.6) billion Syrian Pounds 1990 to (904.6) billion Syrian Pounds in 2000 and then to 1469.7 billion Syrian Pounds in 2010, in an increase of an average annual rate of (39.4) billion Syrian Pounds during the period 1990-2000 and then to (56.5) billion Syrian Pounds during the period 2000-2010.

The average of the individual's share of GDP grew from (42.1) thousand Syrian Pounds in 1990 to (55.4) thousand Syrian Pounds in 2000 and then to (71.3) thousand Syrian Pounds in 2010, in an average annual growth rate reached to (2.8%) during the period 1990-2000 (2.6%) during the period 2000-2010. And the great disparity in the level of average per individual of the gross domestic product (GDP) at current prices and its alike in the constant 2000 prices indicate the continuous steady rises in the level of the prices of goods and services during the same studied periods.

Price stability has been reflected on the economic sectors' stakes of the total gross domestic product (GDP) where those shares declined in some sectors, especially agriculture, while rising in others. It should be noted the lack of data on national accounts indicators at the provincial level.

Table (2-24) evolution of the composition of GDP in Syria by sectors  
(At constant 2000 prices) 1990-2010 (%)

Sectors		1990	2000	2010
Agriculture		25	25	16
Industry & mining		26	30	23
Construction		3	3	4
General trade		20	15	20
Transportation		10	13	13
Money, insurance & Real estate		3	4	6
Personal & social services		2	2	4
Government services		11	8	14
Total	%	100	100	100
	Billion S.P.	510.6	904.6	1469.7

Source: the annual Statistical Abstract of 2011 - Central Bureau of Statistics

## 2-6 - Foreign immigration

Syria witnessed during the French Mandate permanent migrations for Syrians toward South America, Europe, Africa and Australia, while in the sixties of the last century there were relatively limited migrations for labour force towards the Gulf states concentrated among artisans and professionals, increased significantly in the seventies of the mentioned century after the boom in prices oil concentrated among technicians and specialists, then receded in the eighties and nineties as a result of the first and the second Gulf War and the resulted economic impact in the region.

all the attempts so far failed to provide reliable data about the volume of Syrian foreign migration and expatriates' properties and their distribution by their place of residence, so that the number of the population stayed which provide the data about the population inside those countries from Syrians and others at the time of listing, and the civil status records that provide data about the Syrians numbers inside and outside the country, the only sources for the development of external migration indicators.

This comparison between the two mentioned data sources helped to estimate the number of Syrian migrants abroad on each of these censuses' date. Where the number Syrians abroad increased from (376) thousand people in 1960 to (593) thousand people in 1970 and to about (1.6) million in 1981 and to (2.2) million in 1994, and then to (2.6) million in 2004 and is expected that their number has reached to (3.4) million in 2011. In an annual increase amounted to (22) thousand during the period 1960-1970 and (93) thousand during the period between 1970-1981 and (47) thousand during the period between 1981-1994 and (37) thousand during the period between 1994-2004 and finally (114) thousand during the period 2004-2011.

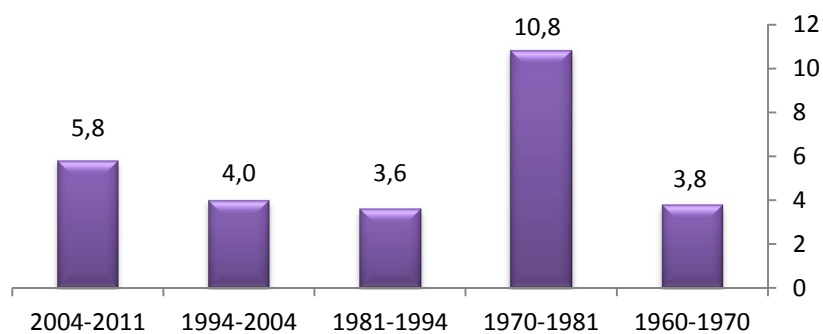
This made it possible through this data to estimate the rate of immigration in Syria, where foreign immigration amount reached (3.8) per thousand per year during the period 1960-1970, compared to (10.8) per thousand during the period 1970-1981 and (3.6) per thousand during the period 1981-1994 and (4) per Thousand during the period 1994-2004 and then (5.8) per thousand during the period 2004-2011.

Table (2-25) estimation of the size of the external migration in Syria 1960-2011 (in thousands)

1960	1970	1981	1994	2004	2011
376	593	1616	2227	2600	3400

Source: Results of population censuses and annual statistical groups - the Central Bureau of Statistics

Figure (2-24) estimate the rate of out-migration in Syria from 1960 to 2011 (in thousands)



Source: same as the previous table

## **First – Conclusion**

Syria had witnessed during the past five decades high demographic developments, which led to a huge increase in population and the size of the labour force, and important changes in their structural characteristics and geographical distribution.

One of the clearest features of this evolution was the gradual observed decline in the rate of population growth and its components, particularly the fertility and mortality, and the beginning of the demographic window's opening represented by a dramatic decrease in the proportion of children under 15 years old, compared with a rapid rise in the proportion of working-age population aged 15 years and over or what called the human power, and thus economically active individuals whom or what is called the labour force.

Also Syria witnessed during the same period tangible social and economic transformations , the most important was positive changes on the structure of educational pyramid of the population due to the quantified expansion of education, especially the primary and the secondary education in all communities, and that led to further women empower and their contribution to the economic and social life, nevertheless there is still a large gap between the outputs of the educational process and the needs of the labour market, with led to exacerbate the problem of unemployment.

On the other hand, the growing increases in the prices of goods and services affected the population's standard of living and led to the erosion of their incomes.

## Sources and references

- 1 - the results of the population censuses 1960, 1970, 1981, 1994, 2004 - Central Bureau of Statistics
- 2 - Annual Statistical Groups - Central Bureau of Statistics
- 3 - results of a survey of maternal and child health 1993 - Central Bureau of Statistics
- 4 - Family Health Survey 2001 - the Central Bureau of Statistics
- 5 - Family Health Survey Results 2009 - Central Bureau of Statistics
- 6 - the results of the fertility survey of Syrians 1978 - Central Bureau of Statistics
- 7 - the first national report 2008 (the case of Syria's population) - Syrian Commission for Family Affairs
- 8 - Labor Force Survey Results 2009 - Central Bureau of Statistics
- 9 - the results of household income and expenses' surveys for the years 1996/1997, 2003/2004, 2006/2007 - the Central Bureau of Statistics
- 10 - Second National Report 2010 (the case of Syria's population) - Syrian Commission for Family Affairs
- 11 - the population of the Arab world for the present and future (prepared by Abdel Rahim Omran, 1988) - United Nations Fund for Population

## Annex of the Syria Report

Table (1) population growth in Syria – million people per department

Departments	According to Civil status records		According to Populations number	
	Inhabitants volume 1994	Inhabitants volume 2004	Inhabitants volume 1994	Inhabitants volume 2004
Damascus	1.30	1.63	1.39	1.55
Aleppo	3.52	4.81	2.98	4.05
Damascus rural side	1.18	1.58	1.65	2.27
Homs	1.41	1.84	1.22	1.53
Hama	1.35	1.79	1.10	1.38
Lattakia	0.90	1.11	0.75	0.88
Edlib	1.21	1.68	0.91	1.26
Al Hasaka	0.98	1.32	1.02	1.28
Der Al Zur	0.95	1.32	0.71	1.00
Tartous	0.70	0.87	0.59	0.70
Al Raqqa	0.56	0.80	0.55	0.79
Daraa	0.65	0.91	0.61	0.84
Swaida	0.37	0.44	0.27	0.31
Qunaitera	0.32	0.41	0.05	0.07
The State	15.40	20.50	13.78	17.92

Resource: population census results, yearly census groups - CBS

Table (2) population growth evolution in Syria (thousand) growth rate per department 1994 &amp; 2004

Departments	According to Civil status records		According to Populations number	
	Populations' growth rate 1994-2000	Average annual growth 1994-2000 (thousands)	Populations' growth rate 1994-2000	Average annual growth 1994-2000 (thousands)
Damascus	2.24	32	1.09	16
Aleppo	3.14	128	3.11	106
Damascus rural side	2.95	40	3.26	62
Homs	2.71	43	2.31	31
Hama	2.86	44	2.35	28
Lattakia	2.11	21	1.66	13
Edlib	3.34	47	3.33	35
Al Hasaka	3.01	34	2.23	25
Der Al Zur	3.39	38	3.49	29
Tartous	2.12	16	1.79	11
Al Raqqa	3.60	24	3.65	24
Daraa	3.31	25	3.34	23
Swaida	1.85	7	1.57	4
Qunaitera	2.65	9	3.16	2
The State	2.90	510	2.66	410

Resource: indicators were calculated based on previous table.

Table (3) population dispersion in Syria and annual growth rate % 1994 &amp; 2004

Departments	Areas	1994		2004		Annual growth rate %
		People (thousand)	%	People (thousand)	%	
Damascus	Damascus	1394	10.11	1552	8.66	1.09
Aleppo	Mount Sama'an	1834	13.30	2491	13.90	3.11
	Al Bab	211	1.53	293	1.63	3.32
	Afreen	163	1.18	172	0.96	0.57
	Ezaz	187	1.36	252	1.40	3.02
	Manbej	267	1.94	408	2.28	4.29
	Ain Arab	161	1.17	193	1.07	1.79
	Sfeira	113	0.82	178	0.99	4.67
	Jarablos	45	0.32	59	0.33	2.79
Damascus Countryside	Damascus countryside centre	601	4.36	902	5.03	4.12
	Douma	325	2.35	434	2.42	2.94
	Qutaifeh	96	0.70	119	0.67	2.18
	Tal	96	0.70	116	0.65	1.93
	Yabrood	39	0.28	48	0.27	2.23
	Nabek	66	0.48	80	0.45	1.98
	Zabadani	82	0.60	105	0.59	2.52
	Qatana	160	1.16	207	1.16	2.65
Homs	Daraya	182	1.32	261	1.46	3.67
	Homs centre	814	5.90	1035	5.78	2.44
	Qusair	82	0.59	107	0.60	2.76
	Talkalakh	136	0.99	129	0.72	-0.50
	Rastan	93	0.68	128	0.71	3.21
	Palmyra	53	0.38	77	0.43	3.78
Hama	Mkharam	39	0.28	52	0.29	2.96
	Hama centre	499	3.62	645	3.60	2.61
	Suqaylabieh	193	1.40	238	1.33	2.16

	Salameyeh	144	1.05	186	1.04	2.59
	Misyaf	149	1.08	171	0.95	1.40
	Mhardeh	113	0.82	145	0.81	2.50
Lattakia	Lattakia centre	435	3.15	527	2.94	1.95
	Jableh	167	1.21	196	1.09	1.65
	Heffeh	75	0.55	81	0.45	0.76
	Qurdaha	69	0.50	75	0.42	0.85
Idleb	Idleb centre	283	2.05	385	2.15	3.14
	Ma'aret al Nouman	255	1.85	372	2.07	3.83
	Harem	124	0.90	175	0.98	3.52
	Jisr al Shoogoor	116	0.84	150	0.84	2.65
	Areeha	128	0.93	176	0.98	3.24
Hassakah	Hassakah centre	372	2.69	480	2.68	2.61
	Qamishli	353	2.56	426	2.37	1.91
	Malkieh	166	1.20	192	1.07	1.47
	Ras el ein	138	1.00	177	0.99	2.56
Der Ezzor	Der Ezzor centre	357	2.59	492	2.75	3.27
	Boukamal	190	1.37	265	1.48	3.41
	Mayadeen	165	1.19	247	1.38	4.13
Tartous	Tartous centre	230	1.67	284	1.58	2.13
	Banyas	143	1.03	174	0.97	2.04
	Safita	114	0.82	130	0.72	1.33
	Dreikhish	55	0.40	61	0.34	1.10
	Sheikh Bader	47	0.34	53	0.30	1.31
Raqqa	Raqqa centre	354	2.56	504	2.81	3.60
	Tal Abyad	95	0.69	130	0.72	3.14
	Al Thawra	105	0.76	160	0.89	4.30
Dara'a	Dara'a centre	311	2.25	429	2.39	3.26
	Sanamein	121	0.88	168	0.94	3.33
	Izra'a	175	1.27	247	1.38	3.52
Sweida	Sweida centre	152	1.10	181	1.01	1.80
	Salkhad	56	0.41	60	0.34	0.71
	Shahba	61	0.44	72	0.40	1.76
Quneitra	Quneitra centre	47	0.34	65	0.36	3.19
	Fik zoweya	2	0.01	2	0.01	2.48
	Total	13794	100.00	17921	100.00	2.66

Resource: population census results – CBS



Table (4) average population density per area people/km<sup>2</sup>  
1994 & 2004

Departments	Areas	General average population density	
		1994	2004
Damascus	Damascus	13279	14782
Aleppo	Mount Sama'an	648	880
	Al Bab	113	156
	Afreen	93	99
	Ezaz	158	212
	Manbej	56	85
	Ain Arab	57	67
	Sfeira	43	68
	Jarablos	76	100
Damascus Countryside	Damascus countryside centre	1117	1675
	Douma	24	32
	Qutaifeh	88	109
	Tal	246	297
	Yabrood	96	120
	Nabek	85	103
	Zabadani	169	216
	Qatana	229	297
	Daraya	2567	3685
Homs	Homs centre	102	130
	Qusair	135	178
	Talkalakh	290	276
	Rastan	324	445
	Palmyra	2	3
	Mkharam	13	17
Hama	Hama centre	244	315
	Suqaylabieh	217	268
	Salameyeh	29	38
	Misyaf	231	265
	Mhardeh	325	415
Lattakia	Lattakia centre	461	558
	Jableh	349	411
	Heffeh	141	151
	Qurdaha	204	222
Idleb	Idleb centre	177	241
	Ma'aret al Nouman	113	165
	Harem	145	205
	Jisr al Shoogoor	162	211
	Areeha	191	262
Hassakah	Hassakah centre	29	38
	Qamishli	86	104
	Malkieh	63	73
	Ras el ein	35	45
Der Ezzor	Der Ezzor centre	18	25
	Boukamal	23	32
	Mayadeen	31	46
Tartous	Tartous centre	407	503
	Banyas	242	295
	Safita	328	373
	Dreikhish	302	336
	Sheikh Bader	223	253
Raqqa	Raqqa centre	43	62

	Tal Abyad	18	24
	Al Thawra	17	26
Dara'a	Dara'a centre	202	279
	Sanamein	95	131
	Izra'a	191	269
Sweida	Sweida centre	62	74
	Salkhad	37	39
	Shahba	39	46
Quneitra	Quneitra centre	90	124
	Fik zoweya	9	12
Total		75	97

Resource: population census results – CBS

Table (5) average population density per Damascus departmental districts 2004 (people/km2)

Areas	Districts	General Average Population Density
Rural Damascus Centre	Kisweh	0.31
	Bebila	6.53
	Jaramana	15.88
	Mleha	1.10
	Kafar Batna	6.72
	Irbin	14.96
	Qudssaya	1.56
Douma	Douma Centre	1.26
	Harasta	5.01
	Sabe'e Byar	0.00005
	Dmair	0.01
	Nashabyeh	0.40
	Ghezlanieh	0.14
	Harran al Awamid	0.26
Qutayfeh	Qutqyfeh centre	0.24
	Jeirood	0.12
	Ma'aloula	0.08
	Rhaybeh	0.06
Al Tal	Tal centre	0.55
	Sednaya	0.20
	Rankous	0.08
Yabrood	Yabrood centre	0.18
	Essal al Ward	0.05
Nabek	Nabek centre	0.13
	Deir Atyeh	0.07
Zabadani	Zabadani centre	0.33
	Deemas	0.15
	Ein el Fijeh	0.28
	Madaya	0.21
	Serghaya	0.11
Qatana	Qatana centre	0.41
	Mazraet Beit Jin	0.14
	Sa'sa'a	0.20
Daraya	Daraya centre	3.55
	Sehnaya	1.48
	Hajar al Aswad	22.96

Resource: population census results – CBS

## Turkey

by Oguz Isik  
July 2013

### ➤ Data sources and population movements in Turkey

The collection and dissemination of statistical data in Turkey is under the responsibility of Turkish Statistical Institute (hereafter referred to as TurkStat). There are also other agencies, especially Ministries and Municipalities, gathering and publishing data in their respective areas of jurisdiction. TurkStat has carried out regular population censuses until 2000. Starting in 1927 with the first census, the second one was held in 1930. Thereafter population censuses were held in 5-year intervals. Censuses held by TurkStat until the year 2000 was carried out under a curfew in the strict sense of the word, meaning that the population was forced to stay indoors and census officials visited each and every household during the 10 to 12 hour curfew period. Several questions were asked including age, sex, education, employment, migration, quality of housing and females were also asked to answer several questions concerning fertility. Though criticised quite correctly on grounds of forcing people to stay indoors during the time of count, pre-2000 censuses gave a complete picture of the country as the data were gathered through face-to-face interviews with every citizen. The data gathered were then processed and published by the TurkStat mostly on a *de facto* basis, with some census results having been published on *de jure* basis.

There are two main factors that seem to have had impaired the reliability of pre-2000 censuses. In the first place, the data were classified according to the declaration made by the respondent. A person, for instance, regarding himself/herself as self-employed was classified accordingly. Considering the fact that Turkish agriculture was, and is still, dominated by petty producers owning small plots of land, the census results tended to exaggerate the role of agriculture as rural respondents, both males and females, having a small piece of land were classified as working in the agricultural sector. This is one of the reasons, for instance, why female labour force participation rate is among the highest in Turkey (although overall female labour force participation rate is very low). The second criticism for pre-2000 censuses concerned the allegations that not every individual was counted. Although such critics were partially true, pre-2000 censuses were the main sources of data for geographers and social scientists from various backgrounds. Furthermore, TurkStat published census results at various geographical levels and even provided 5% or 10% micro-data sets for researchers for 1990 and 2000 censuses.

Before going into the details of post-2000 censuses we need to add a few words about the administrative divisions in Turkey. Turkey inherited from the Ottoman Empire a complex system of administrative division. Although radically renewed since the foundation of the Republic in 1923, the main divisions have been largely borrowed from the Imperial period. There are at the highest level provinces which act in most cases as extension of central government. Each province has a governor equipped with some major powers especially concerning security issues. Below the province level there are what be called districts (*ilçe* in Turkish). Each district has a sub-governor whose powers are far more limited than those of governors. And below the districts there are villages headed by *muhtars* with some minor roles in administrative division.

Although this triple division seems clear, there are various problems associated with the distribution of functions and roles among these units. First of all, there are municipalities operating literally between the boundaries of these divisions as they do not overlap necessarily with any of the divisions above. Although the *Municipalities Act* of 2005 provides that municipalities should be established only in settlements whose population is larger than 5.000, municipalities in settlements with less than 5.000 people make up nearly 70% of the total number of municipalities (see table-1 below). The rule of 5000+ citizens will apply to new municipalities to be established after the publishing of the Law. To make the things more complex, there are metropolitan municipalities, the top-tier local government administrative body for cities of 750.000+ population (similar to the now dissolved Greater London Council in the British system), district municipalities under metropolitan municipalities (similar to London's boroughs). With the addition of district centres and awkwardly undefined *belde* municipalities, this delineates the entire administrative system in Turkey.

Table-1: The number of municipalities by population size, 2010

Population size	Total	Metropolitan municipalities	Province centres	Metropolitan districts	District centres	Belde*
	2950	16	65	143	749	1977
Less than 2.000	926	-	-	-	52	874
2.000-5.000	1133	-	-	-	218	915
5.000-10.000	327	-	-	5	177	145
10.000-25.000	227	-	2	11	175	39
25.000-50.000	89	-	6	19	61	3
50.000-100.000	96	-	23	17	55	1
100.000-250.000	67	-	24	32	11	-
250.000-500.000	54	1	10	43	-	-
500.000-1.000.000	23	7	-	16	-	-
More than 1 million	8	8	-	-	-	-

Source: Ministry of Interior ([www.icisleri.gov.tr](http://www.icisleri.gov.tr))

Note: "Belde" is an administrative division that does not have a clear definition in legal documents. It usually refers to villages (in the administrative meaning of the word) with a municipal organisation.

It must be noted that the number and boundaries of provinces and especially of districts have undergone radical changes since the late 1980s (see Table-2 below). The number of districts increased from 636 in 1960 to 918 in 2000 and to 957 in 2011. These changes do not seem to follow a clear pattern since in most cases villages affiliated to several provinces are merged into a new district. It is therefore impossible to track the changes in province and district boundaries. Furthermore, TurkStat has not published any data in a backward manner in order to allow comparisons with the previous borders. It is therefore impossible to prepare time-series data sets in Turkey that would allow researchers to make comparisons among spatial units on a temporal basis. This can be done only with the help of some radical and highly dubious assumptions.

Table-2: The number of provinces and districts by census years

	Number of	
	Provinces	Districts
1960	67	636
1965	67	637
1970	67	638
1975	67	638
1980	67	640
1985	67	646
1990	73	894
1995	79	918
2000	81	923
2010	81	957

Source: Ministry of Interior ([www.icisleri.gov.tr](http://www.icisleri.gov.tr))

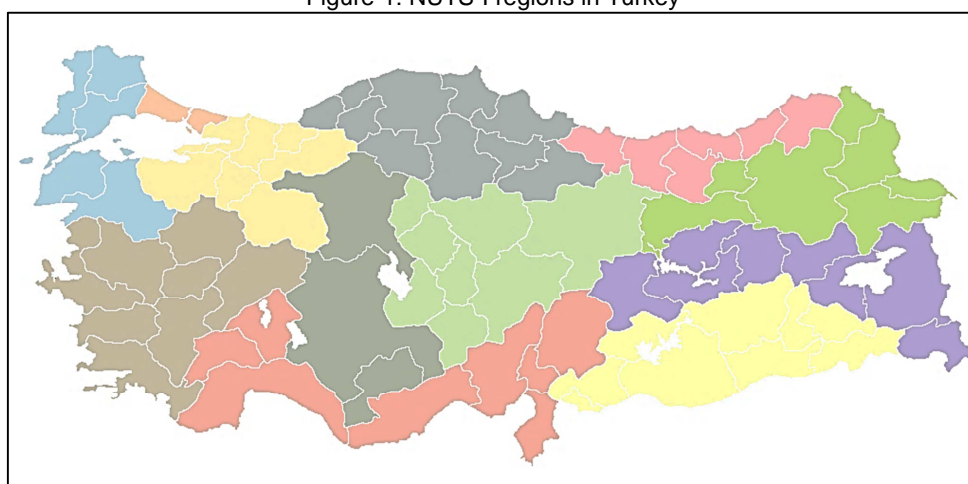
The definition of urban and rural follows these ambiguous administrative boundaries. Although in the 1970s and 1980s TurkStat tried to define both urban and rural in terms of population sizes, this system was abandoned in the 1990s in favour of delineation in terms of administrative divisions. While in the earlier periods urban referred to settlements with a population larger than 10.000 (and in some instances 20.000), now the population living in province centres and district centres are classified as

urban population and the rest (namely those living in what is designated as villages, even if their settlement has a municipal organisation) classified as rural population.

In the first decade of the 2000s, TurkStat underwent a radical restructuring in line with European Union harmonisation process and changed its system of data collection and publication. Part of the EU harmonisation process concerned the way in which censuses were carried out. It was no longer the case that population counts would be made by forcing people to stay indoors. Instead of a curfew-type census where officials interviewed every single citizen, an Address Based Population Registration System (ABPRS) was launched in 2006. The relevant Law charge TurkStat for establishing the Address Based Population Registration System and Ministry of Interior, General Directorate of Population and Citizenship Affairs for updating and maintaining the system. The purposes of establishing the ABPRS are to establish National Address Database (NAD) that covers information on usual place of residence of all people living within the boundaries of the country, to obtain the address information of Turkish citizens and foreigners living in Turkey, to match the address information and the registers of the central population registration System database by using the Turkish Republic identification numbers for Turkish citizens, to match the address information and passport numbers of foreigners and to keep this information on a separate database. Studies on ABPRS were completed on 31 December 2007 and the first results obtained from the new system were announced on 21 January 2008.

One of the biggest advantages of using ABPRS is that the system can be connected to other official records which have Turkish Identification Number. TurkStat already established National Education System and the study on matching with records of Social Security Institution is still underway. Conversely, the use of administrative data sources involves definite disadvantages that need to be taken into consideration. One such drawback is that register-based descriptions have to rely exclusively on the information contents that can be formed on the basis of the registers available. This imposes some restrictions with respect to the variables that are available for analysis and may also some deficits both internal and international comparability. While in the previous censuses it was possible to gather data on demographic characteristics, employment conditions and even on the quality of housing, the scope of information gathered through the ABPRS system is considerably small, covering some limited information about the age, sex and education status of the citizens. The data concerning labour force statistics, demography and other areas are now collected through field surveys with limited geographical resolution.

Figure-1: NUTS-I regions in Turkey



Source: [http://tr.wikipedia.org/wiki/Turkiye'nin\\_IBBBS'si](http://tr.wikipedia.org/wiki/Turkiye'nin_IBBBS'si)

Note: The coloured areas in the map refer to NUTS-I regions while the white lines show the boundaries of provinces, namely NUTS-III regions.

Since the early 2000s TurkStat has started gathering and publishing data on various new areas extending from poverty and detailed budget and consumption surveys to income distribution and

labour force statistics. Although the scope of the services and the data offered by the TurkStat has been widened considerably, with a concomitant increase in reliability, the geographical base of its statistics has been narrowed to a considerable extent. One reason for this shrinkage in geographical scope lies in the fact that Turkey adopted in the year 2001 the NUTS system again as part of its EU harmonisation process. Studies were made by the TurkStat and the State Planning Organisation in order to determine the boundaries of NUTS-I and NUTS-II regions. It was accepted that the NUTS system should be in conformity with the existing administrative divisions, namely 81 provinces of the country. The result was a new system of territorial division with 12 NUTS-I and 26 NUTS-II regions. Below these two levels are 81 provinces which constitute the NUTS-III regions (See Figure-1 below). One note of caution should be added here: The NUTS system was imposed with statistical purposes only and has nothing to do with the already “bizarre” system of administrative geographical divisions of the country, except for the fact that they are based upon the existing provincial boundaries.

In line with the recently established NUTS system of territorial divisions, TurkStat has started gathering and publishing its data at NUTS-I and NUTS-II levels. TurkStat gathers and publishes various data of enlarged scope. The important point here is the fact that most of the data are now collected through surveys. These surveys enable researchers in most cases to make very limited geographical choices. One can make in most of the new datasets a distinction only between urban and rural (as defined above) and NUTS-I regions, and in some other cases between NUTS-II regions. To give an example, TurkStat started collecting and publishing after the year 2002 detailed poverty statistics with the help of comprehensive budget and consumption surveys. It is now possible for example to calculate individual poverty figures in terms of either expenditures or income in EU equivalent terms, something that was literally unthinkable in the 1990s. But the geographical scope of such survey is extremely limited; it is possible to make interferences only on the basis of urban-rural distinction and in some limited cases on the basis of NUTS-I regions. To repeat the point made clear just above: The scope, extent and the quality of the data offered by TurkStat has considerably increased in the last decade but the geographical scope has been surely decreased. It is almost impossible to find almost any time-series data, even the simple population figures, on the basis of geographical units.

## 1. Population of Turkey – Basic Trends

Sometime between the years 2000 and 2010, the population of Turkey reached 70 million. At the end of 2010, total population is estimated to be around 74 million (Table-3). This means that the population has grown more than 2,5 folds in the fifty year period from 1960 to 2010. This process has been an uneven one in terms of population growth rates, with population growth rate climbing to 2,5% in the 1970s then slightly falling but gaining apace again in the mid-1980s. It is however striking to see that the growth rate of population has been on a continuous decline since its peak in 1985. The annual rate of growth declined from 2,5% in the 1970s to 1,8% in 2000, the first growth rate recorded in Turkey below 2%. This is remarkable on many accounts as it is for the first time since 1945 that the annual rate of population growth fell below 2%. The rate of population growth continued to slow down even further in the first decade of the 21<sup>st</sup> century and dropped to %0,84 in 2010, which was unimaginable for many a few decades ago.

In the studies and forecasts made in the 1970s and 1980s, it was estimated that the population growth of Turkey would somewhat slowdown as the country proceeds to the last decade of the century.<sup>132</sup> But the pace of this slowdown exceeded even the expectations of optimistic scenarios. According to estimates the slowdown in population growth will continue apace in the years to come and that the population of Turkey will reach some 95 million and stabilise around the mid-21<sup>st</sup> century.

---

<sup>132</sup> Frederic Shorter, a well-known demographer of US origin, has largely contributed to the population forecasts made in the 1980s. See the following source for the revision in the 1990s of Shorter's original calculations. TurkStat (1995). *The population of Turkey, 1923–1994: Demographic structure and development*. State Institute of Statistics, Publication No, 1839, Ankara.

Table-3: Turkey, Major population trends: 1960-2010

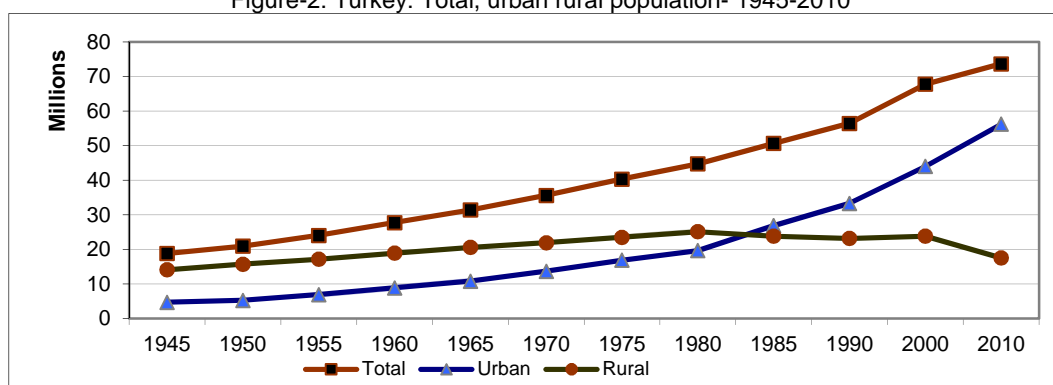
	Population			Average annual growth rate for (%)		
	Total	Urban	Rural	Total	Urban	Rural
1960	27.754.820	8.859.731	18.895.089			
1965	31.391.421	10.805.817	20.585.604	2,46	3,97	1,71
1970	35.612.776	13.691.101	21.921.675	2,52	4,73	1,26
1975	40.347.719	16.869.069	23.478.650	2,50	4,17	1,37
1980	44.736.957	19.645.007	25.091.950	2,07	3,05	1,33
1985	50.664.458	26.865.757	23.798.701	2,49	6,26	-1,06
1990	56.473.035	33.326.351	23.146.684	2,17	4,31	-0,56
2000	67.803.927	44.006.184	23.797.743	1,83	2,78	0,28
2010	73.722.988	56.222.356	17.500.632	0,84	2,45	-3,07

Source: TurkStat, Population Statistics, various years.

Please note the urban-rural definition does not refer to a specific population threshold but is only in terms of administrative divisions. Province and district centres are designated as "urban" while all other settlements are regarded as "rural".

Figure-2 below summarises the whole story in terms of the growth of urban and rural populations. It can be seen from the Figure that the rural and urban population became even in the mid-1980s and since then the percentage of urban population has been higher. For the sake of clearing the meanings attributed to the terms "urban" and "rural" by TurkStat, it must be mentioned once again that this division has nothing to do with the actual characteristics or population sizes of the settlements but is only an administrative division with province and district centres designated as "urban" while all other settlements are classified as "rural". It can be seen from the Figure below and the Table above that despite a serious decline, the annual growth rate of urban population has never been below 2% since the 1960s. It is also clear from these figures that the "frenzy" period urbanisation, the years when the urban population grew at a rate of 4% and even 6% a year, is now over. Today more than three fourths (76,3%) of total population live in what is designated as urban areas. It is highly likely that the tendency of the population to conglomerate in urban areas is likely to continue in the years ahead, but in a steadily slowing rate.

Figure-2: Turkey: Total, urban rural population- 1945-2010



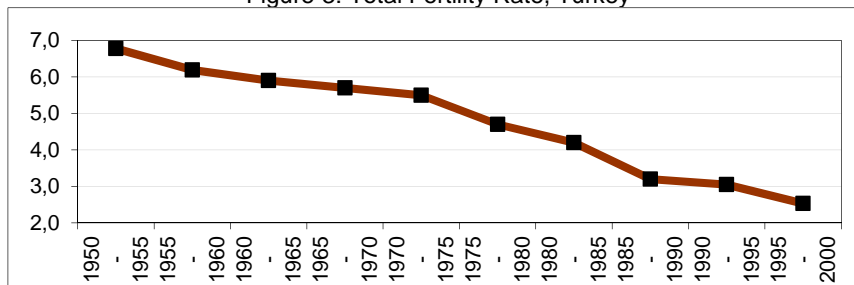
Source: TurkStat, Population Statistics, various years.

It must be noted that behind this slowdown in population growth there is surely what can be called "a silent transition", a steady fall in fertility rates all over the country.<sup>133</sup> The decline in fertility is very striking: Starting from a rate of 6.7 in the early 1950s, total fertility rate (TFR) fell down to 2.2 according to the results of the 2003 Turkey Demography and Health Survey (Figure-3 below). Although the

<sup>133</sup> For fertility decline and regional variations in this process see Işık, O. and Pınarcıoğlu, M. 2006, "Geographies of a silent transition: A geographically weighted regression approach to regional fertility differences in Turkey", *European Journal of Population*, 22(4), 399-421.

population continues to grow at a rate which is still high compared to many European countries thanks to the well-known population momentum impact, fertility has fallen below replacement level for most part of the country, except for southern and eastern parts. In a vast geography extending from West Asia to North Africa (excepting Israel), Turkey has thus become the first country to reach such a low level of fertility.<sup>134</sup>

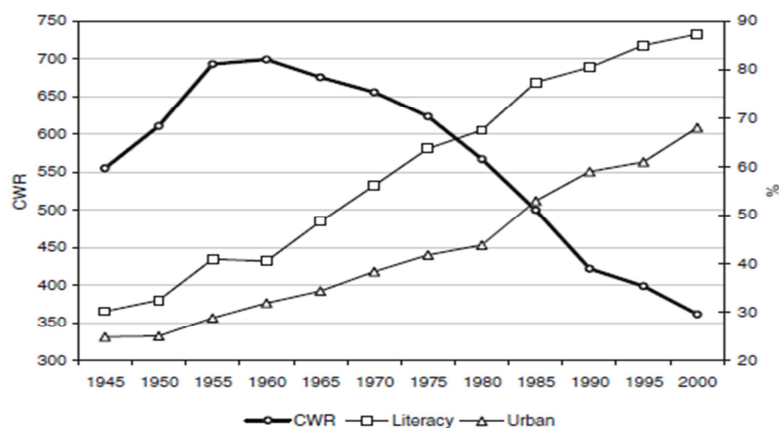
Figure-3: Total Fertility Rate, Turkey



Source: Turkey Demography and Health Survey, Hacettepe University, various years.

If we use Child-Woman Ratio (CWR) as a measure of fertility, the scale of the transformation that Turkey has gone through in terms of fertility decline may become more visible. CWR is defined as the number of children under age 5 per 1000 women of reproductive age (ages 15–49) in a population in a given year. It may be regarded as an indicator of *recent* fertility *net* of child mortality. A crude and indirect measure of fertility easily obtainable from census data, CWR is frequently used in fertility studies in the absence of such specific measures as total or age-specific fertility rate. Measured through CWR, there has been a steady decline in fertility in Turkey since the early 1960s (Figure 4). The figure reveals a pattern of fertility rising from 555 to 700 between 1945 and 1960, and falling continually thereafter and finally reaching 362 in 2000. The figure also shows that this fall in fertility has been accompanied by a secular rise in adult literacy rate (from 30.2% in 1945 to 88% in 2000) and urban population (from 25% to 68% in the same period). As Turkey has become more urbanised and better educated, the fertility indicators have registered a sharp decline.

Figure-4: Child–woman ratio (CWR), literacy and urban population by years



Source: TurkStat, Statistical Yearbooks, various years

It should be stressed, however, that this fall has been severely uneven in space. Figure 5 below shows the district-wide distribution of CWR for the 2000. As is the case in almost all economic and social variables, the demographic transition process that Turkey is obviously about to complete is characterised by wide regional inequalities and a distinct geographical pattern: western regions representing patterns of social development similar to developed countries, and those in the east and southeast resembling a “third-world” pattern, while central regions represent an in-between case.

<sup>134</sup> Angin, Z., & Shorter, F. C. (1998). Negotiating reproduction, gender and love during the fertility decline in Turkey. *Social Science and Medicine*, 47(5), 555–564.



About 56 out of 923 districts, almost all in the east and southeast, have CWRs higher than the national average of 40 years ago. The result is clear: The tendency for the fertility level to decline is surely a general one, but the speed at which this fall takes place is uneven in space (for further info about regional disparities in Turkey see the forthcoming sections of this report).

Figure-5: Child Woman Ratio by districts, 2000

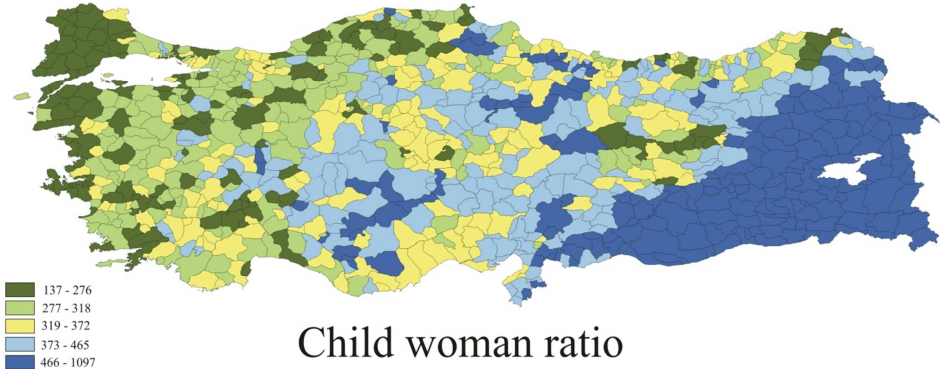
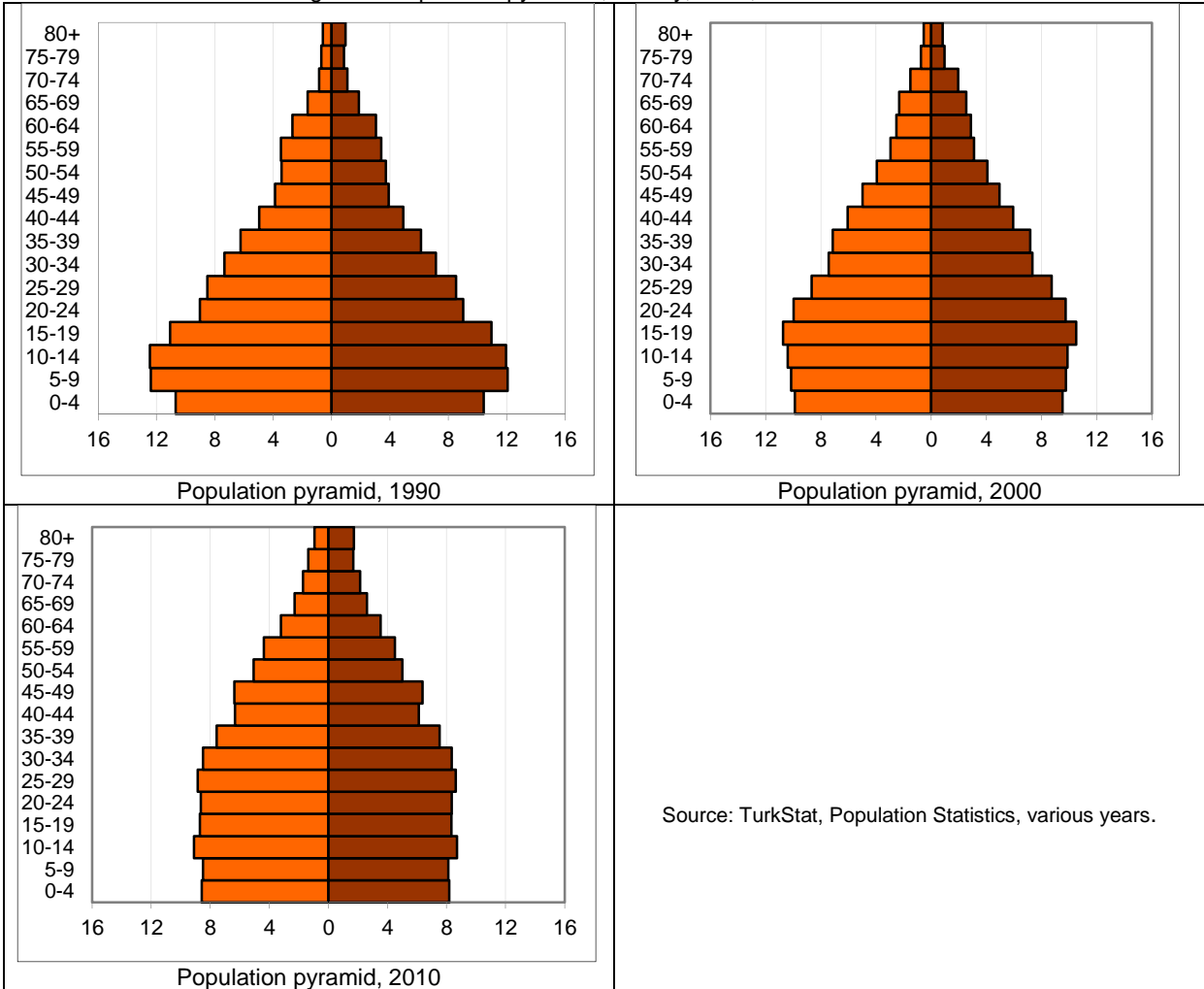


Figure-6: Population pyramids, Turkey, 1990, 2000 and 2010



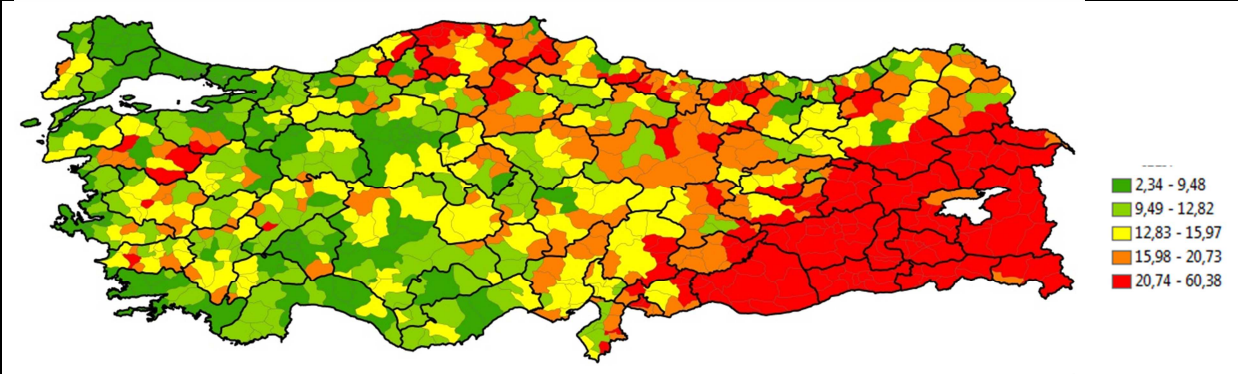
The picture of Turkey at the end of the first decade of the 21<sup>st</sup> century is that of a country that has completed much of its demographic transition process. Despite some striking regional differences, overall population growth rate is on the irreversible decline. For most part of the country, fertility level has fallen below the replacement level. It is only the eastern and south-eastern parts of the country that seems to be growing, a fact which also explains part of the migratory movements in Turkey, a topic to be dealt with in the following section. The rate of urbanisation too has lost much of the momentum it had in the 1970s and 1980s and seems to have reached more reasonable levels. Now that the rate of population growth and urbanisation has decline, Turkey is now in a better position to solve the problems it inherited from the so-called frenzy period of urbanisation, insufficient urban infrastructure, poor housing, schooling etc. The fact that Turkey is about to complete its demographic transition period is nowhere better explained than the population pyramids given in Figure-6 below.

The decline in fertility rates manifests itself clearly in the falling share of young aged population, the shrinking lower part of the pyramid. The most notable growth is in the share of population aged 30 and higher, the expanding middle and upper part of the pyramid.<sup>135</sup> In terms of its population dynamics and structure Turkey is now closer to what may be termed “the developed country pattern”, characterised by slow growth rates and ageing population, rather than the “underdeveloped country pattern”, characterised by high rate of growth and preponderance of young aged population.

2. Population movements in Turkey since mid-1980s

Turkey is a land of vast regional inequalities. As the map below shows there are three regions that may be easily identified: The affluent west where education level is high, fertility is low, household size small and even getting smaller; the poor east and southeast representing just the opposite characteristics and the mid-Anatolia representing an in-between case. In other words, in terms of key demographic and social variables Turkey is characterised by wide regional inequalities and a distinct geographical pattern: affluent western regions and east and southeast region reminiscent of “third-world” countries, while central regions represent an in-between case. The position of East and Southeast Anatolian settlements is striking. These are the most backward areas of Turkey by any standards- not only in terms of literacy but also in terms of fertility, household size, employment characteristics and so on. In Figure-7 below one of such wide inequalities is given, namely the rate of illiteracy by districts. Such a concentration of poverty in a single region has certainly had serious impacts not only on political equations but also on population movements in the country since the mid-1980s.

Figure-7: The rate of illiteracy by districts, 2000 (%)

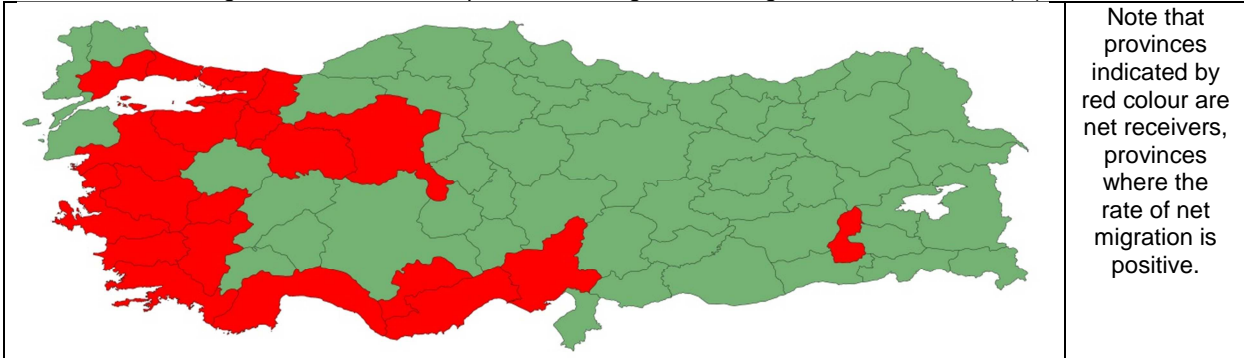


Source: TurkStat, 2000 census results  
 Note that the census results in the map above are given at the district level. The bold lines in the map represent province boundaries.

<sup>135</sup> For a detailed analysis of Turkey demographic transition process see TUSIAD. (1999). *Turkey's window of opportunity—Demographic transition and its consequences*. Istanbul: Turkish Industrialists' and Businessmen's Association, Publication no: 99-3-254.

One should be aware of the fact that all the inequalities considered herein do have a very strong ethnic dimension and that the matter can hardly be tackled without explicit reference to the part played by ethnicity. More clearly, the eastern and south-eastern provinces that represent a demographic pattern and level of social and economic development reminiscent of third-world countries are largely inhabited by Kurdish speaking groups. The traditional backwardness of the region multiplied with the on-going conflicts between the Kurdish separatists and the armed forces since the mid-1980s have led to massive out-migration from the region. Figure-8 below shows the rate of net migration by provinces between the 1985-90 period. The Figure makes it clear that the massive out-migration from the south-eastern region is not something new, but a phenomenon that has been going on since the early 1980s.

Figure-8: Provinces with positive and negative net migration rates, 1985-90 (%)



Source: TurkStat migration statistics

The massive influx of people from the Eastern regions to western regions seems to have been continued and even intensified in the decade of the 1990s and the 2000s (Figure-9 and Figure-10).

Figure-9: Rate of net migration by provinces, 1995-2000 (%)

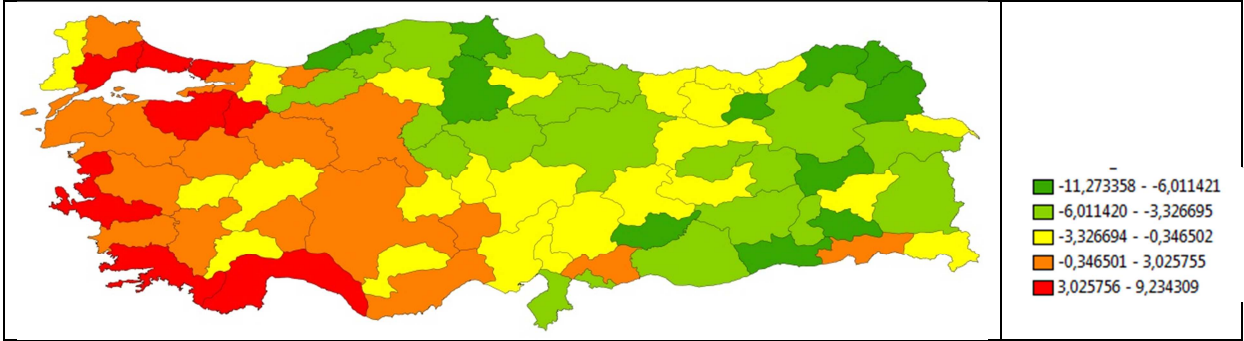
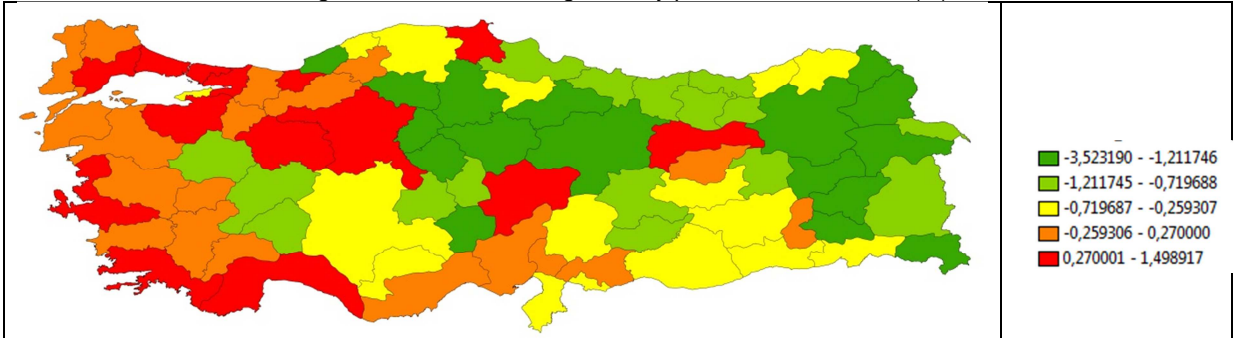


Figure-10: Rate of net migration by provinces, 2009-2010 (%)



There are even major notable differences between Western cities towards which the migration seems to have been oriented. In the first place, Istanbul with a population of not less than 12 million has acted as a magnet for migrants. It must also be noted that the changing position of Istanbul in the global networks and the rise of the city especially after the fall of the so-called *Iron Curtain* in the late-1980s and early-1990s has strengthened the role of the city as major global city. Istanbul is probably on the few growth poles in Turkey in the 2000s and it is highly likely it will continue to play the same role and therefore attract population in the foreseeable future. We should also note that the transformation that Istanbul has undergone in the last few decades has influenced not only the city itself but also some of the neighbouring provinces. It is known and well documented that the decentralisation of industry from Istanbul that started in the 1980s has gathered apace in the 1990s and 2000s. The cities that are neighbours to Istanbul have therefore registered striking growth rates thanks to the industrial establishments fleeing from Istanbul. With the addition of provinces like Kocaeli (province to the east of Istanbul), Tekirdağ (west of Istanbul) and Bursa (an industrial city over 1 million on the south of Istanbul), the whole area can be regarded as the Istanbul city-region. This whole region itself is the major development pole in Turkey.

Another region that seems to attract population is the south-western cities on the Aegean and Mediterranean coast. These cities, especially Muğla and Antalya, have registered striking growth rates in the last few decades thanks to the massive tourism investments. These two provinces and a large number of spots within these two provinces have literally become the capital of global tourism and attracted not only a large number of tourists from every corner of the world but also massive migration of largely unskilled workers from the South East working in the tourism and related service sectors. There are also some cities in the Central Anatolia that attract population. Ankara the capital and Eskişehir to the west of Ankara attract few migrants from the East and Southeast regions but mostly from neighbouring rural provinces.

### 3. Major cities

Table-4 below gives the 1990, 2000 and 2010 populations of the 10 largest provinces in Turkey. Please note before proceeding any further that these are population figures for the entire province, which includes all the population even the rural areas within the boundaries of the province. It is impossible once again to give exact population figures for cities, because the city boundaries have continuously changed and it is impossible to keep the trace of all these changes. It should however be emphasised that a great majority of the provincial population lives in the province centre and therefore the results are indicative of the general population trends for each city as well.

With a population of more than 13 million, İstanbul is by far the largest city in Turkey. Not only is it the home for rapidly growing global business in the country, but also it is a major attraction point for both global capital and migrating masses in the country. Regarded by many as a *global city in the making*<sup>136</sup>, it has been among the fastest growing towns in Turkey for many decades. As part of the general trend within the country, the growth of Istanbul has somewhat lost momentum in recent years. Despite this trend, Istanbul is and will in the near future remain to be a major centre of attraction for global capital and migratory flows.

Ankara, the capital, has surely lost its rapid growth potential in the 1970s, largely because of the undisputed role of Istanbul within the country. Today it is the home to government offices, rapidly expanding IT software companies and high-tech firms, universities and nation-wide health institutions. As it did in the past it continues to attract population mostly from nearby and neighbouring provinces. The third biggest town Izmir is on the Aegean Sea coast and has been the major port city for centuries. In the face of growing role of Istanbul within the global flows and national economy, Izmir has also lost part of its glamour. The city has attracted some significant Kurdish population from the South-east and most of these migrants continue to live in and around the transition zones close to the historic centre of the city.

Bursa is the fourth largest city and one of the major industrial centres of Turkey. It has been home to many large industrial complexes since the 1960s and in recent years attracted many of the industrial

---

<sup>136</sup> Keyder, Ç. (1994), Globalisation of a Third-world Metropolis: Istanbul in the 1980s. *Review* 7, pp. 151–174.

establishments decentralising from Istanbul. In addition to traditional textile-related businesses and major car factories like Renault and Fiat, the city has also attracted some global companies in recent years.

Table-4: Top 10 provinces

	Population			Growth rates between	
	1990	2000	2010	1990-2000	2010-2000
Istanbul	7.309.190	10.018.735	13.255.685	3,15	2,80
Ankara	3.236.626	4.007.860	4.771.716	2,14	1,74
İzmir	2.694.770	3.370.866	3.948.848	2,24	1,58
Bursa	1.603.137	2.125.140	2.605.495	2,82	2,04
Adana	1.934.907	1.849.478	2.085.225	-0,45	1,20
Konya	1.750.303	2.192.166	2.013.845	2,25	-0,85
Antalya	1.132.211	1.719.751	1.978.333	4,18	1,40
Gaziantep	1.140.594	1.285.249	1.700.763	1,19	2,80
Şanlıurfa	1.001.455	1.443.422	1.663.371	3,66	1,42
İçel	1.266.995	1.651.400	1.647.899	2,65	-0,02

Source: TurkStat, population Statistics various years.

Adana was, not long ago, the fourth largest city and a major town for rapidly expanding rural businesses in the 1950s and 1960s. Since then however it has lost most of its dynamism with slackening economic indicators and even minus population growth rates. Thanks to its proximity to Kurdish region today it is one of the major poles of attraction for Kurdish migrations.

## ➤ Social and economic trends in Turkey

### 1. Data Sources

The collection and dissemination of statistical data in Turkey is under the responsibility of Turkish Statistical Institute (hereafter referred to as TurkStat). There are also other agencies, especially Ministries and Municipalities, gathering and publishing data in their respective areas of jurisdiction. TurkStat has carried out regular population censuses until 2000. Starting in 1927 with the first census, the second one was held in 1930. Thereafter population censuses were held in 5-year intervals. Censuses held by TurkStat until the year 2000 was carried out under a curfew in the strict sense of the word, meaning that the population was forced to stay indoors and census officials visited each and every household during the 10 to 12 hour curfew period. Several questions were asked including age, sex, education, employment, migration, quality of housing and females were also asked to answer several questions concerning fertility. Though criticised quite correctly on grounds of forcing people to stay indoors during the time of count, pre-2000 censuses gave a complete picture of the country as the data were gathered through face-to-face interviews with every citizen. The data gathered were then processed and published by the TurkStat mostly on a *de facto* basis, with some census results having been published on *de jure* basis.

There are two main factors that seem to have had impaired the reliability of pre-2000 censuses. In the first place, the data were classified according to the declaration made by the respondent. A person, for instance, regarding himself/herself as self-employed was classified accordingly. Considering the fact that Turkish agriculture was, and is still, dominated by petty producers owning small plots of land, the census results tended to exaggerate the role of agriculture as rural respondents, both males and females, having a small piece of land were classified as working in the agricultural sector. This is one of the reasons, for instance, why female labour force participation rate is among the highest in Turkey (although overall female labour force participation rate is very low). The second criticism for pre-2000

censuses concerned the allegations that not every individual was counted. Although such critics were partially true, pre-2000 censuses were the main sources of data for geographers and social scientists from various backgrounds. Furthermore, TurkStat published census results at various geographical levels and even provided 5% or 10% micro-data sets for researchers for 1990 and 2000 censuses. In the first decade of the 2000s, TurkStat underwent a radical restructuring in line with European Union harmonisation process and changed its system of data collection and publication. Part of the EU harmonisation process concerned the way in which censuses were carried out. It was no longer the case that population counts would be made by forcing people to stay indoors. Instead of a curfew-type census where officials interviewed every single citizen, an Address Based Population Registration System (ABPRS) was launched in 2006. The relevant Law charge TurkStat for establishing the Address Based Population Registration System and Ministry of Interior, General Directorate of Population and Citizenship Affairs for updating and maintaining the system. The purposes of establishing the ABPRS are to establish National Address Database (NAD) that covers information on usual place of residence of all people living within the boundaries of the country, to obtain the address information of Turkish citizens and foreigners living in Turkey, to match the address information and the registers of the central population registration System database by using the Turkish Republic identification numbers for Turkish citizens, to match the address information and passport numbers of foreigners and to keep this information on a separate database. Studies on ABPRS were completed on 31 December 2007 and the first results obtained from the new system were announced on 21 January 2008.

One of the biggest advantages of using ABPRS is that the system can be connected to other official records which have Turkish Identification Number. TurkStat already established National Education System and the study on matching with records of Social Security Institution is still underway. Conversely, the use of administrative data sources involves definite disadvantages that need to be taken into consideration. One such drawback is that register-based descriptions have to rely exclusively on the information contents that can be formed on the basis of the registers available. This imposes some restrictions with respect to the variables that are available for analysis and may also some deficits both internal and international comparability. While in the previous censuses it was possible to gather data on demographic characteristics, employment conditions and even on the quality of housing, the scope of information gathered through the ABPRS system is considerably small, covering some limited information about the age, sex and education status of the citizens. The data concerning labour force statistics, demography and other areas are now collected through field surveys with limited geographical resolution.

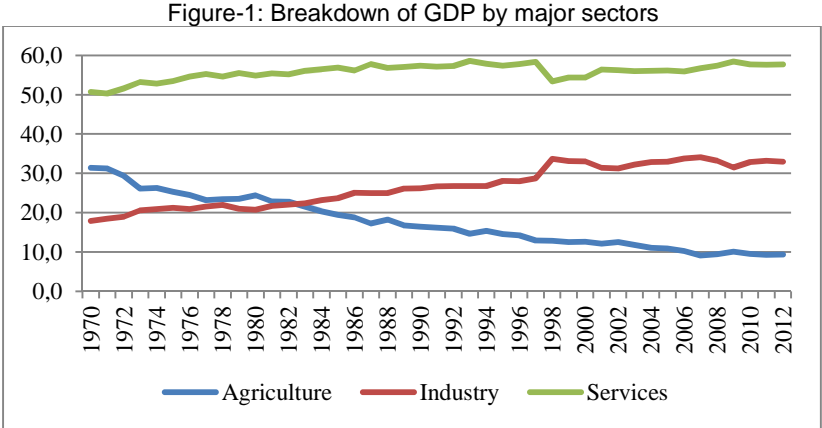
Since the early 2000s TurkStat has started gathering and publishing data on various new areas extending from poverty and detailed budget and consumption surveys to income distribution and labour force statistics. Although the scope of the services and the data offered by the TurkStat has been widened considerably, with a concomitant increase in reliability, the geographical base of its statistics has been narrowed to a considerable extent. One reason for this shrinkage in geographical scope lies in the fact that Turkey adopted in the year 2001 the NUTS system again as part of its EU harmonisation process. Studies were made by the TurkStat and the State Planning Organisation in order to determine the boundaries of NUTS-I and NUTS-II regions. It was accepted that the NUTS system should be in conformity with the existing administrative divisions, namely 81 provinces of the country. The result was a new system of territorial division with 12 NUTS-I and 26 NUTS-II regions. Below these two levels are 81 provinces which constitute the NUTS-III regions. One note of caution should be added here: The NUTS system was imposed with statistical purposes only and has nothing to do with the already "bizarre" system of administrative geographical divisions of the country, except for the fact that they are based upon the existing provincial boundaries.

## 2. Income

From the mid-1950s to the late 1970s Turkey pursued policies of import substitution, depending on the growth of protected industries relying on ever-expanding domestic market whose sustainability was secured through a series of welfare state policies. This growth model came to an abrupt end in the late 1970s following the so-called global oil crisis of the early 1970s and deepening social tensions within the country. Starting from 1980 Turkey adopted a radical restructuring programme that aimed at transforming the economy from an inward-oriented one to an export-oriented one. The measures

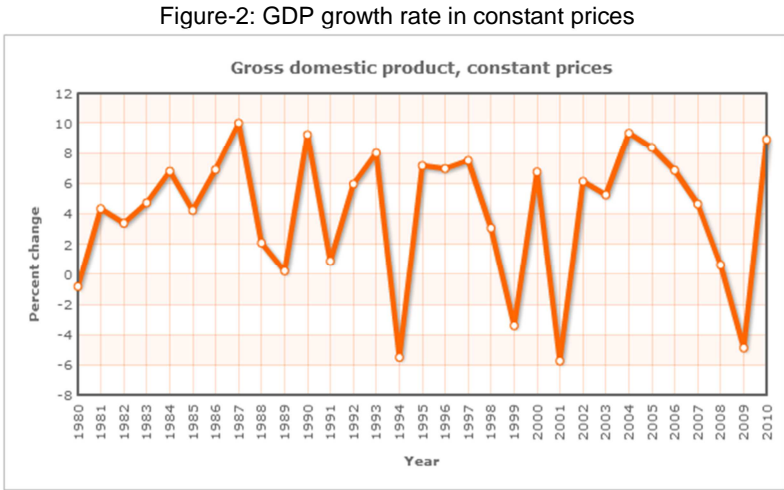
contained in the programme were designed to allocate resources from import substituting industries to those serving export markets. Since Turkish economy has undergone radical changes and been transformed from an agriculture-based economy to one based on manufacturing and rapidly growing service sector.

As seen in Figure-1 below, the share of agriculture in GDP has dropped radically from its 1970 level of 30% to nearly 9% at the end of the first decade of the 21<sup>st</sup> millennium. This fall in agriculture seems to have been compensated by concomitant rise in industry (including in the Figure below construction activities which account for 5 to 7 per cent of GDP) and a minor rise in services.



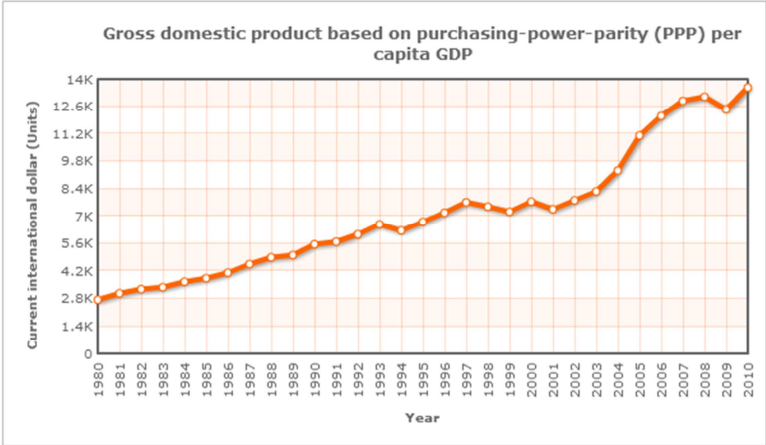
The share of agriculture in total GDP was around 30 % in the 1970s and nowadays it has fallen below 10%, a historic threshold for Turkish society. As will be noted in the employment section of this report, despite this sharp fall in agriculture’s share in GDP, the fall in its share in total employment has been slower, a clear example of lower productivity in agricultural activities.

This transformation has become more evident since the 1990s with the impact of globalization dynamics and Turkish economy has increasingly and rapidly turned into an economy open to global dynamics, global money flows. Starting from the early years of the first decade of the 2000s Turkish economy has been dominated by what may be called neo-liberal policies of the current government under the rule of the Justice and Development Party (JDP): The JDP has pursued an aggressive economic policy of encouraging foreign investment at whatever cost and striking rates of growth have been achieved especially in tourism, real estate and banking sectors. The growth rate of real GDP (GDP in constant prices) is given in Figure-2 below.



Despite a considerable volatility in the 1990s, Turkish economy has managed to grow at remarkable rates in the first decade of the 2000s, with the exception of 2009 when the economy registered a downfall under the impact of global financial crisis that hit the US and European markets. In terms of the growth achieved in the ten-year period between 2000 and 2010 Turkey is one of the fastest growing economies in the world, ranking among the first three with China and India.

Figure-3: GDP per capita on purchasing power parity



[http://www.indexmundi.com/turkey/gdp\\_per\\_capita\\_\(ppp\).html](http://www.indexmundi.com/turkey/gdp_per_capita_(ppp).html)

As a result of this relatively stable growth and partly thanks to the falling rate of population growth, GDP per capita has grown very rapidly and climbed from some 3000 \$ to 13000 in 2010. Today Turkey is no longer classified as a developing economy as it used to be in the 1980s, but classified by the World Bank as a middle income country.

As for the income distribution within the country, there is evidence to argue that income disparity as measured by the Gini coefficient worsened in the 1990s and started to recover in the 2000's. With a Gini coefficient of 0.38 Turkey may be regarded as a country with fairly unequal distribution of income.

Table-1: Gini coefficient by years

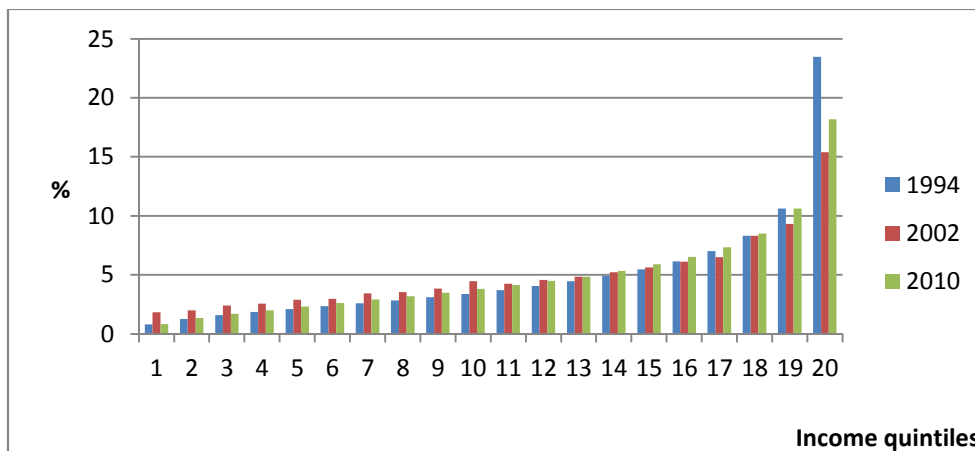
	1994	2002	2010
Total	0.4334	0.4385	0.3847
Rural	0.3983	0.4083	0.3945
Urban	0.4376	0.4409	0.3617

Source: TurkSat Household Budget Survey

Though giving a good idea about the overall distribution of income, the Gini coefficient does not give an idea about how the income is shared between different groups. Figure-4 below show the share in total national income of 5% equal population groups ranked in order. As can be seen from the Figure easily lower income groups were the beneficiaries of economic policies pursued in the 1990s. This situation seems to have been reversed under the neo-liberal policies of the JDP government with high-income groups increasing their shares considerably. This figure may also be interpreted as the rise of a new middle class group in the 2000s at the expense of lower strata of the population.



Figure-4: Distribution of income by 5% quintiles

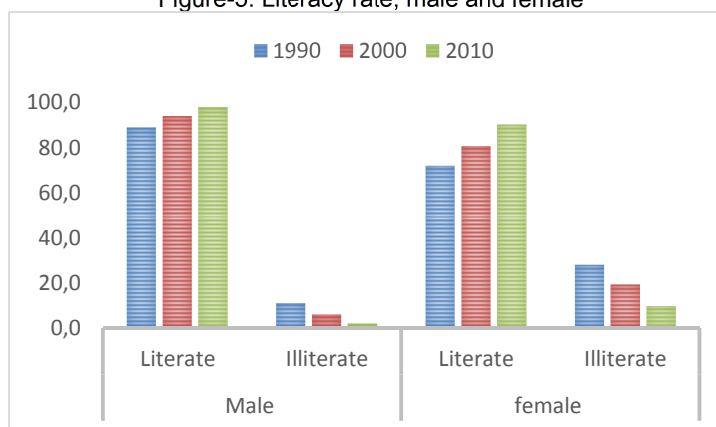


Source: TurkSat Household Budget Survey

## 2. Education

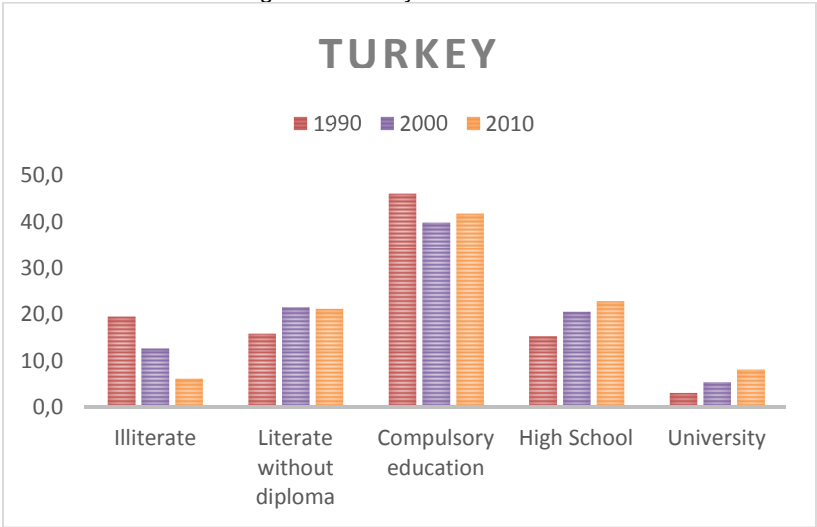
Starting from the 1980s Turkey has become better educated. Not only has the share of literacy risen but also the percentage of college graduates has grown considerably thanks to the advances in education system. The rate of literacy has consequently risen from 80% in 1990 to 94% in 2010. It is important to note that the rate of literacy among males is considerably higher compared to females. Although such a difference between male and female rates of literacy may be regarded normal to a certain extent, the difference in Turkey is beyond what may be regarded normal. The rate of literacy among males in 1990 is 88.8% as opposed to 72% among women. It is however an encouraging development to see that since 1990 this imbalance has changed in favour of women. In the 20-year period between 1990 and 2010, the literacy rate has grown by 9% among males, while the rate of increase in female literacy rate in the same period is much higher, i.e. 18%. Put more clearly, the rate male literacy increased from 88.8% to 97.8% from 1990 to 2010, while the female rate of literacy grew from 72% to 90.1% in the same period. This means that the difference between male and female rates of literacy has decreased considerably in the two decades after 1990, from 14.8% to 7.7%. This fact denotes the increasing mobilisation of women in social sphere although this increase has not been accompanied, as we shall discuss later, by a concomitant increase in female participation in labour force.

Figure-5: Literacy rate, male and female



In a similar fashion parallel to the increase in literacy levels in the two decades following 1990, the education level of the population has changed considerably as seen in Figure-6 below. The first column shows the percentage of illiterate population by years. As mentioned above, the percentage of illiterates in total population has dropped from 19.5% to 12.7% and 6% in 1990, 2000 and 2010 respectively. The second column shows those who can read and write but have not received formal education. The share of this portion of population has grown from 15.9% to 21.2% from 1990 to 2000. The third column shows the percentage of those who have received the minimum compulsory education. It must be noted here that the duration of compulsory education was extended from 5 years to 8 years in 1997. Those who have received minimum compulsory education make up nearly 40% of all population. On the other hand those who have received 11 years of formal education (i.e. those with high school diploma) constitute a growing share of population, with a percentage of 23% in 2010. The most dramatic increase by proportion is in the share of university graduates whose share increased from 3% in 1990 to 5% in 2000 and 8% in 2010.

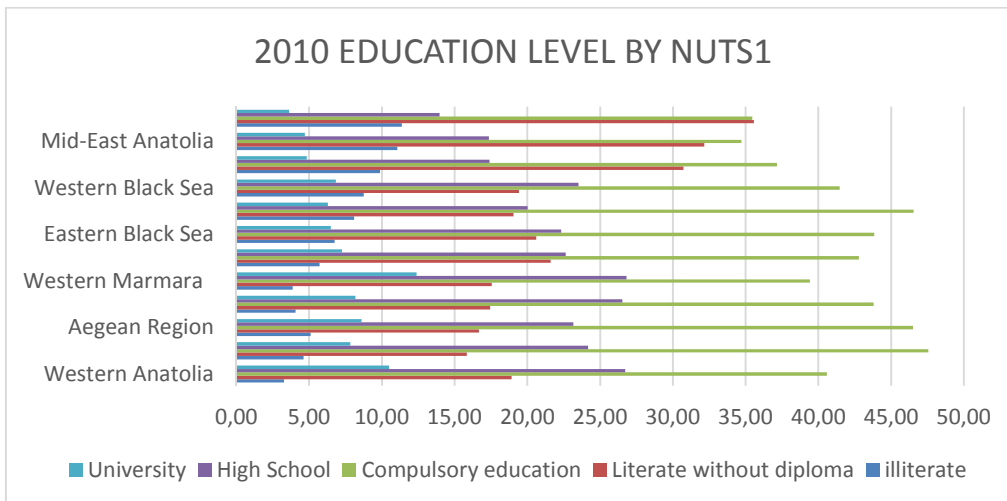
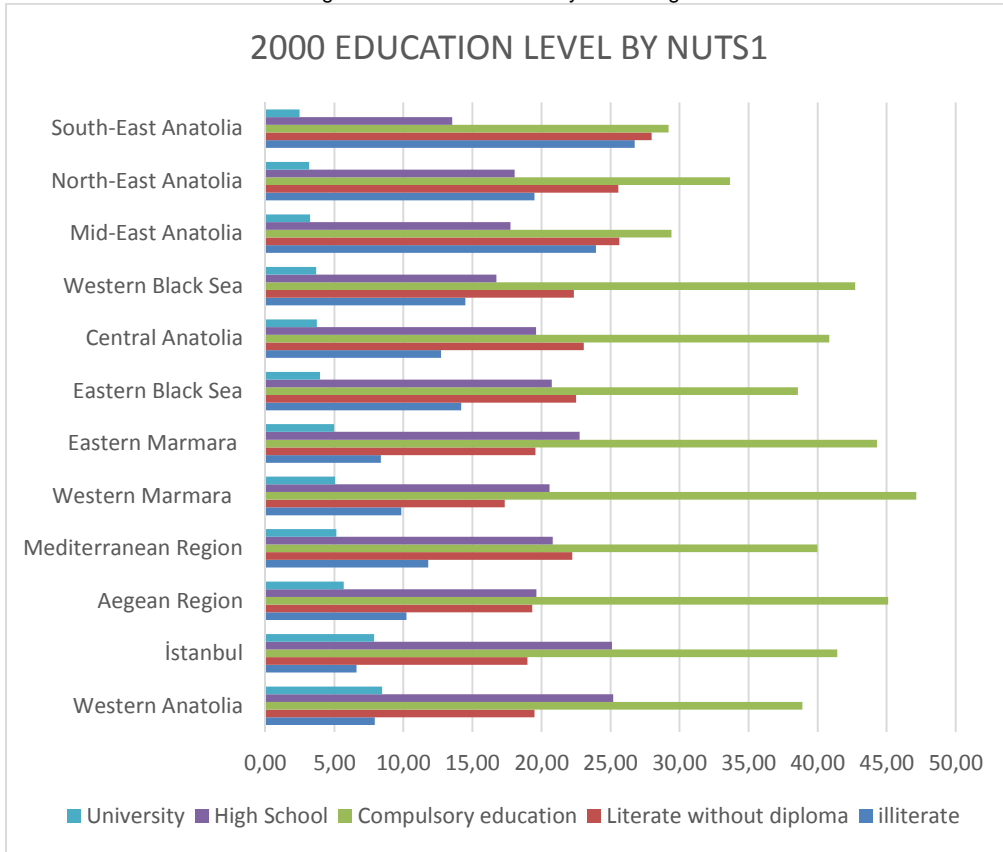
Figure-6: Turkey education level



There are however very significant differences between regions in terms of education levels, as is the case in many other social indicators. Figure-3 and Figure-4 below show education levels by NUTS-1 regions in the years 2000 and 2010. As can be seen from the figures below, there are significant differences between regions in terms of socio-economic development indicators, a fact that has bewildered Turkey for many years. The western parts of Turkey, especially Istanbul and Eastern Marmara Regions are far better educated than the rest of the country. To give an example the percentage of university graduates in Istanbul is three times higher and the percentage of illiterates is three times lower than the respective ratios in South-East Anatolia. It must be stressed here that these differences are valid not only in the case of education but also in many other indicators related to socio-economic development level. Especially there are many striking differences between the western and eastern parts of Turkey in terms of demographic indicators, a fact that was stressed in the preceding pages of this report.

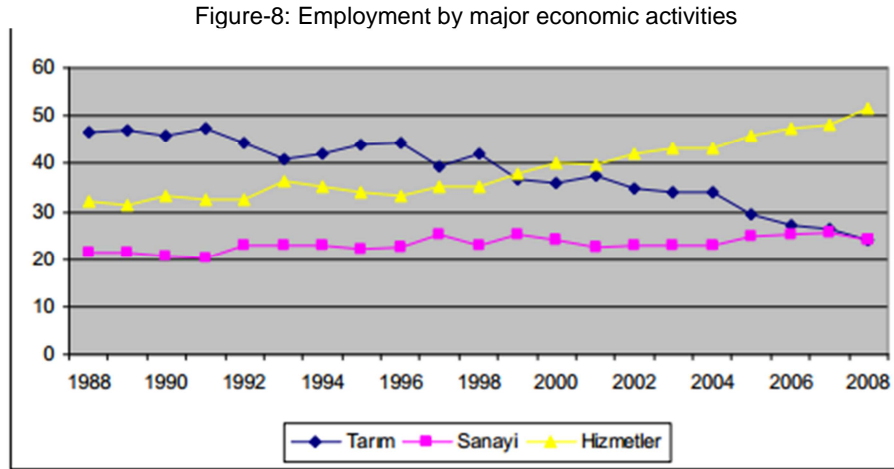
In this picture of regional inequalities the western regions represent patterns of development similar to many developed countries. The regions in the eastern parts of Turkey, on the other hand, look more like what may be termed third world countries while the provinces in the centre represent an in-between case.

Figure-7: Education levels by NUTS regions



### 3. Employment

Employment by major economic activities is given in Figure-8.



Source: Görmüş, A. (2009) "1990'dan günümüze Türkiye'de istihdamın değişim trendi ve ulusal istihdam stratejisi ihtiyacı", Kamu-İş, 10/4, 105-133.

The most striking change in this period is the sharp fall in the share of agriculture in total employment, from some 45% in 1988 to almost 20% in 2008. Compared to its share in GDP, this share is almost twice as high. This refers to low level of productivity in agriculture in general. The most remarkable growth is in the services sector especially after the late 1990s. The share of industry in employment has been more or less stagnant in the two decades analysed in the Figure above.

The labour force participation rate in Turkey is traditionally low. Compared to nearly 70% of labour force participation rate in EU and OECD countries, Turkish rate is around 50%. Interestingly this rate is on the decrease. The main reason for this is the decline in agriculture's share. In Turkey, female participation in workforce has been exceptionally low and increased very slowly. Out of a total of some 26 million working people in 2000, over one-third (36.3%) are women. This figure is misleading since Turkish data count unpaid family workers as employed. Three quarters of "working" women are in agriculture and 90% of them are unpaid family workers. Owing to the predominance of small land ownership, Turkish agriculture still depends to a large extent on family economy and unpaid women labour. Therefore, the figure of 36.3% is an indication of an economy in which work and domestic spheres are not clearly separated, and thus of the patriarchal relations women live in, not an indication of increasing emancipation or empowerment on the part of women. On the other hand, female participation in non-agricultural sectors has been extremely low. In the year 2000, out of a total of 13.4 million people working in non-agricultural sectors, only 11.7% are women; varying between a minimum of .7 and a maximum of 33.4%. With a rapid increase in working age population coinciding with a structural transformation away from labour-intensive agriculture toward industry and services, women have found it increasingly difficult to find a place for themselves in the urban labour markets essentially because of low level of educational attainment. The growing gender gap in employment in almost all sectors does testify to the withdrawal of women from the labour force with increasing urbanisation.

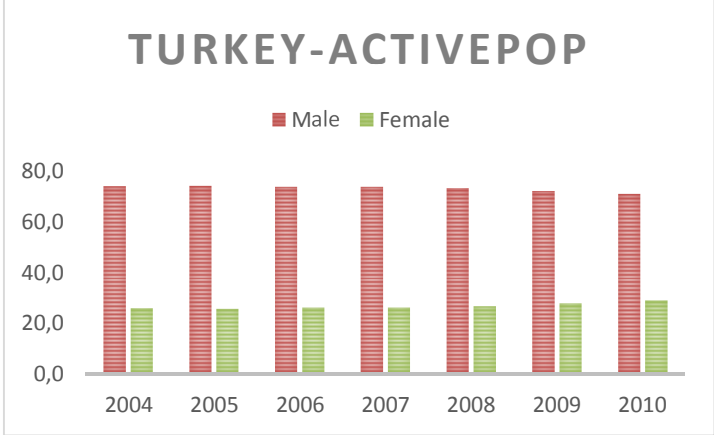
Table-2: Labour force participation rate

	Labour force participation rate					
	1994	2003	2004	2005	2006	2007
Turkey	57.5	51.1	51.5	51.3	51.3	51
EU-15	67.5	70	70.7	71.3	71.9	72
OECD	69.5	69.8	70.1	70.3	70.6	70.7

Source: Görmüş, A. (2009) "1990'dan günümüze Türkiye'de istihdamın değişim trendi ve ulusal istihdam stratejisi ihtiyacı", Kamu-İş, 10/4, 105-133.

Of the economically active population only one thirds is woman as shown below. There is only a slight increase in woman participation for the reasons explained above. This gender gap and the low female participation is one of the most important bottlenecks that may endanger Turkish economy's growth in the near future.

Figure-9: Male and female components of economically active population



Source: www.tuik.gov.tr

#### 4. Minorities

The issue of minorities has always been a controversial issue in Turkey since the foundation of the Republic in 1923. The Treaty of Lausanne dated 1923 recognising Turkish sovereignty within its new borders provided, inter alia, for the protection of non-Muslim minorities, namely Greek Orthodox Christians, Jews and Armenians, without making any reference at all to Muslim minorities, particularly to Kurds. Although there are no exact figures as to the share of non-Muslim minorities at the time or before the foundation of the Republic, some estimate that nearly 20% per cent of pre-Republican Turkey consisted of Christian minorities ([http://en.wikipedia.org/wiki/Minorities\\_in\\_Turkey](http://en.wikipedia.org/wiki/Minorities_in_Turkey), and Keyder 1987). It is known that during the harsh years of the collapse of the Ottoman Empire and War of Independence leading to the new Republic, most of these Christian minorities had to leave the country. The Treaty of Lausanne also provided for the exchange of population between Turkey and Greece. An indication of the flight of non-Muslim minorities is the dramatic fall in their share from some 20% in 1914 to 2.5% in 1927. Since then the share of non-Muslim minorities has continued to fall. They now constitute an insignificant share of total population.

The most reliable source of data for minorities in Turkey is population censuses. The population census contained a question on religion until 1965. Unfortunately no data has been gathered since then about religion. Similarly, population censuses contained detailed questions about mother tongue and second best tongue until 1980. Although census contained some questions about language, data after 1970 were never published. Therefore, what we know about religion and mother tongue of Turkish citizens through censuses dates back to 1965. Since then data about religion and language were gathered through some local surveys. The most important of such surveys is the Turkey Demography and Health Survey (TDHS) conducted by the Hacettepe University in five year intervals. These surveys are nationally representative and include questions about the mother tongue of the respondent and his/her parents' mother tongue.

The biggest non-Christian minority in Turkey is the Kurds. The share of Kurdish speaking is 9.1%, 8.8% and 7.5% in 1935, 1950 and 1965 censuses respectively. Using the results of 1990 TDHS, Mutlu (1996) estimated that the total number of Kurdish speaking minority was around 7 million corresponding to 12.6 per cent of population. It is known that a great majority of Kurdish population lives in Eastern and South-Eastern parts of Turkey. Two thirds of total Kurdish population are estimated to be living in Ağrı, Bingöl, Bitlis, Adıyaman, Diyarbakır, Elazığ, Hakkâri, Mardin, Muş, Siirt, Şanlıurfa and Van provinces, all in the Eastern and South-Eastern of the country. It is also known that

due to increasing geographical mobility especially after the 1960s, the share of Kurdish population in Western provinces has also risen (Mutlu, 1996).

Another study trying to find out the share of Kurdish minority is the one conducted by Romano and Sirkeci (1999). Using the results of 1993 TDHS, they conclude that the Kurds make up 15% of total population, some 8.9 million. They estimate that 70% of the Kurds live in what is designated as the Kurdish region of the country, the provinces mentioned above. They also stress that the Kurds have a different demographic regime compared to the Turkish speaking majority. The Kurds are far worse educated, live in larger households and have higher levels of fertility compared to Turks (see also Işık and Pınarcıoğlu, 2006 with similar results and an analysis as to the socio-economic causes of fertility differentials within Turkey). In a similar fashion Yavuz (2006) found out that the fertility rate of Kurdish speaking women is twice higher than the Turkish speaking women, a fact which may help explain the rise in the share of Kurdish minority since the 1960s. In a study about the intermarriage between Kurds and Turks Gündüz-Hoşgör and Smits (2002) found out that the interethnic marriages are on the rise between these groups.

#### References:

Ahmet Icduygu, David Romano & Ibrahim Sirkeci (1999): The ethnic question in an environment of insecurity: the Kurds in Turkey, *Ethnic and Racial Studies*, 22:6, 991-1010

Gündüz-Hoşgör, A ve Smits, J (2002), Intermarriage between Turks and Kurds in contemporary Turkey Inter-ethnic Relations in an Urbanizing Environment, *European Sociological Review*, Vol. 18 No. 4, 417-432

Mutlu, S. (1996), Ethnic Kurds in Turkey: A Demographic Study, *International Journal of Middle East Studies*, Vol. 28, No. 4 (Nov., 1996), pp. 517-541

Yavuz, S., (2006), Completing the fertility transition: Third birth developments by language groups in Turkey, *Demographic Research*, Volume 15, Article 15, pages 435-460

## 9. List of sources

In **bold**, sources of data used for ITAN Final Report maps.

In regular, other sources of data uploaded in the ESPON database.

### Northern Neighbourhood

- . **Arctic climate impact assessment (ACIA)**

#### Faroe Islands

- . **Hagstova Føroya**
- . Prime Minister's office

#### Greenland

- . **Statistics Greenland**

### Eastern Neighbourhood

#### Belarus

- . Government of Belarus
- . **National statistical committee of the republic of Belarus**

#### Georgia

- . **National statistics office of Georgia**

#### Moldova

- . **IPC Sheriff**
- . **National Bureau of statistics of the republic of Moldova**
- . **National statistical service of the Ministry of economy of the TMR**

#### Russia

- . *Демоскоп Weekly*
- . **Russian Federation federal state statistics service**

#### Ukraine

- . Mr Vladimir Kolosov
- . **State statistics service of Ukraine**

### South-Eastern Neighbourhood

- . **DemoBalk**
- . Mr Goran Penev
- . **Statistical office of the federal republic of Yugoslavia**

#### Albania

- . **Bank of Albania**
- . *Institut national d'études démographiques (INED)*
- . **Institut of statistics (INStat)**

#### Bosnia and Herzegovina

- . **Agency for statistics of Bosnia and Herzegovina**
- . **Central bank of Bosnia and Herzegovina**
- . **Institute for statistics of Bosnia and Herzegovina**
- . Institute of statistics of republic of Srpska

Croatia

- . **Croatian bureau of statistics (DZS)**
- . **Croatian national bank**

The Former Yugoslav republic of Macedonia

- . **National bank of the republic of Macedonia**
- . **Statistical office of the republic of Macedonia (SSO)**

Kosovo under UN resolution 1244/99

- . **Central bank of the republic of Kosovo**
- . **Kosovo agency of statistics (ASK)**

Montenegro

- . **Central bank of Montenegro**
- . European Union
- . **Statistical office of Montenegro (MonStat)**

Serbia

- . **National bank of Serbia**
- . **Statistical office of the republic of Serbia**

Mediterranean Neighbourhood

- . **Anima-MIPO (Mediterranean investment and partnership observatory)**
- . **Marianne Milano, "Current state of Mediterranean water resources and future trends under climatic and anthropogenic changes", PhD Thesis, University Montpellier Sciences et Techniques, 2012**
- . **Ministère de la Défense (MINDEF, France)**
- . **Observatoire méditerranéen de l'énergie (OME)**
- . **Plan Bleu**

Algeria

- . *Centre de recherche en économie appliquée pour le développement (CREAD)*
- . GeoHive
- . **National office of statistics (ONS)**

Egypt

- . **Central agency for public and statistics (CAPMAS)**
- . Central bank of Egypt

Israel

- . **Central bureau of statistics (CBS)**

Jordan

- . **Department of statistics (DOS)**
- . Ministry of labor

Lebanon

- . **Central administration of statistics (CAS)**
- . **Ministry of social affairs (MOSA)**
- . Ministry of public health
- . Presidency of the council of Ministers
- . **United Nations Fund for population activities (UNFPA)**
- . United Nations international children's emergency fund

Libya

- . **Bureau of statistics and census**
- . **Ministry of planning**



## Morocco

- . **Haut-commissariat au plan (HCP)**

## Occupied Palestinian territories

- . Ministry of health
- . **Palestinian central bureau of statistics (PCBS)**
- . Palestinian remembered

## Syria

- . **Central bureau of statistics (CBS)**
- . Mr Mamdouh Al Mobayed
- . Syrian commission for family affairs (SCFA)

## Tunisia

- . **Ministry of education**
- . **National institute of statistics**
- . *Société tunisienne de l'électricité et du gaz (STEG)*
- . Tunisian national social security fund (CNSS)

## Turkey

- . **Turkish statistical institute**

## Other sources

- . **AeroGRID**
- . **AEX**
- . **Carbon dioxide information analysis center (CDIAC, USA)**
- . **Central European free trade agreement (CEFTA)**
- . **Central intelligence agency (CIA, USA)**
- . **Centre d'études prospectives et d'informations internationales (CEPII) – Chelem database**
- . **Centre de recherche Europes-Eurasie (CREE)**
- . **Centre national de la recherche scientifique (CNRS, France)**
- . **City population**
- . **Conservation of clean air and water in Europe (ConCAWE)**
- . **Cross-border cooperation (CBC)**
- . **DigitalGlobe**
- . **EnviroGRIDS project (FP7)**
- . **ESPON database**
- . **Esri**
- . **EuroBroadMap project (PCRD)**
- . **European environment agency (EEA)**
- . **European network of transmission system operators for electricity (ENTSO-E)**
- . **Europe in the World project (ESPON)**
- . **Eurostat**
- . **Factiva**
- . **Food and agriculture organisation (FAO) of the United Nations – Aquastat**
- . **Gas infrastructure Europe (GIE)**
- . **GeoEye**
- . **Getmapping**
- . **Groupement d'intérêt scientifique Collège international des sciences du territoire (GIS CIST)**
- . **GIS user community**
- . **Global administrative areas – GADM database**
- . **Google Earth**
- . **Institut national des langues et civilisations orientales (INALCO, France)**
- . **Institut de gestion de l'environnement et d'aménagement du territoire (IGEAT)**
- . **Institut national de l'information géographique et forestière (IGN, France)**
- . **Instrument for pre-accession assistance (IPA)**
- . **International energy agency (IEA)**
- . **International monetary fund (IMF)**
- . **I-Cubed**

- . **Lloyd's list**
- . **M4D project (ESPON)**
- . **Mr César Ducruet**
- . **Mr David Teurtrie**
- . **Mr Pierre Beckouche**
- . Mr Thomas Brinkhoff
- . ***Multicriteria S.L. (MCRIT)***
- . **National aeronautics and space administration (NASA, USA) – Surface meteorology and solar energy (SSE)**
- . **National geospatial-intelligence agency (NGA) – World port index (WPI)**
- . **National institute of statistics (INS, Romania)**
- . **National statistical institute (NSI, Bulgaria)**
- . **Nordregio**
- . **Oak ridge national laboratory (ORNL, USA)**
- . **Official airline guide (OAG)**
- . **P. Beckouche & Y. Richard, Atlas de la grande Europe, Autrement, 2013**
- . **Swisstopo**
- . **UMR Environnement Ville Société (EVS)**
- . **UMR Géographie-cités**
- . **UMS RIATE**
- . **United Nations Conference on trade and development (UNCTAD)**
- . **United Nations Development programme (UNDP)**
- . **United Nations Educational, scientific and cultural organisation (UNESCO)**
- . **United Nations Environment programme (UNEP)**
- . **United Nations Statistics division (UNSD)**
- . **United States census bureau**
- . **United States department of agriculture (USDA)**
- . **United States geological survey (USGS)**
- . **University of Maryland**
- . **Wikipedia**
- . **World bank**
- . **World Gazetteer**
- . **World health organisation (WHO)**

## 10. References

- Ababsa , M., 2013, "Jordan Report", ESPON-ITAN project, Amman
- Ababsa, M., (ed.), 2013, *Atlas of Jordan. History, Territories and Society*, Presses de l'Ifpo, Beirut, 485 p., <http://books.openedition.org/ifpo/4560>
- Abdallah, Ch., 2011, "Le Proche-Orient appartient-il encore à l'espace méditerranéen?", in P.Beckouche, ed., "Régulations régionales de la mondialisation : quelles recommandations pour la Méditerranée?", Ipemed, coll. Construire la Méditerranée, 102-110.
- Abis, S. & Blanc, P., 2010, "Repenser la sécurité alimentaire mondiale", *Questions Internationales*, n°43, La Documentation française, Paris
- ADB, 2011, "Institutions for Regional Integration – Towards an Asian Economic Community", Asian Development Bank, Hong Kong
- AfDB, 2009, "ADB Group Regional Integration Strategy, 2009-2012", Banque africaine de développement, Tunis,
- African Economic Outlook, 2012, *Perspectives Économiques en Afrique: Maroc 2012*. BAfD, OCDE, PNUD, CEA. Available at [www.africaneconomicoutlook.org](http://www.africaneconomicoutlook.org)
- Agorastakis M. & Sidiropoulos G., 2007, Population Change due to Geographic Mobility in Albania, 1989–2001, and the Repercussions of Internal Migration for the Enlargement of Tirana., *Population, Space and Place*,13, pp. 471-481.
- Agorastakis M., 2013, Reconstruction of the population map of western Balkans: Crises and population mobility during 1991-2001. The case of Albania., PhD Thesis. Laboratory of Demographic & Social Analysis, Department of Planning and Regional Development, School of Engineering, University of Thessaly (forthcoming).
- Aita, S., 2011, *Les travailleurs arabes hors-la-loi: emploi et droit du travail dans les pays arabes de la Méditerranée : vision des enjeux et implications du partenariat européen : Algérie, Egypte, Jordanie, Liban, Maroc, Palestine, Syrie, Tunisie*, Editions L'Harmattan, 2011 - 276 pages
- Ando, M., 2006, "Fragmentation and vertical intra-industry trade in East Asia", *North American Journal of Economics and Finance* 17 (2006) 257–281
- Aras, B., and P. Akpinar, 2011, The relations between Turkey and the Caucases in the 2000s in Perceptions. *Journal of International Affairs*,16, 1, 53–68 pp.
- Arctic Climate Issues, 2011, *Changes in Snow, Water, Ice and Permafrost* , AMAP <http://innovation.ca/sites/default/files/Rome2013/files/SWIPA%20Overview%20Report%202011.pdf>, Accessed 2013.11.29
- ARIJ and the Ministry of National Economy, 2011, "The Economic Costs of the Israeli Occupation for the occupied Palestinian Territory", Applied Research Institute – Jerusalem, Available: <http://www.arij.org/programs/116-new/488-economic-cost-of-occupation.html>
- ARIJ, 2004, POICA website : <http://www.poica.org/glossary/glossary.php>, Applied Research Institute – Jerusalem
- ARIJ, 2007, "Policy Tools Towards Sustainable Land Use and Urban Environmental Management at Municipal Level under a Transitional Political Context-Urban Area of Bethlehem, Palestine", Applied Research Institute – Jerusalem, Bethlehem
- ARIJ, 2011, Geo-informatics Department Database, Applied Research Institute – Jerusalem, Bethlehem
- Atfeh, N., 2013, "Syria Report", ESPON-ITAN project, Damas
- Azuelos M., Cosio-Zavala M-E. & Lacroix J-M., ed., 2004, "Intégration dans les Amériques, dix ans d'Alena", Presses Sorbonne Nouvelle, Paris, 341p.
- Baghough, Z., 2012, *The Debt Burden*. Available at <http://moroccoboard.com/index.php/viewpoint/124-zouhair-baghough-/5325-morocco-the-debt-burden>
- Balanche F., 2012, "Atlas du Proche-Orient arabe", Paris: RFI/Presses de l'Université Paris-Sorbonne, 132 p.
- Balassa B., 1961, "The theory of economic integration", R.D. Irwin, Homewood, IL.
- Baldwin, R.,1997, "The Causes of Regionalism". *The World Economy*, vol 20-7: pp.865-888
- Baldwin, R.E., 2006, "Multilateralising Regionalism: Spaghetti Bowls as Building Blocks on the Path to Global Free Trade", *The World Economy*, 29(11): 1451-518

- Barents Observer, 2013, [http://barentsobserver.com/en/business/2013/11/visa-free-travel-20-countries-norway-not-included-04-11?utm\\_medium=twitter&utm\\_source=twitterfeed](http://barentsobserver.com/en/business/2013/11/visa-free-travel-20-countries-norway-not-included-04-11?utm_medium=twitter&utm_source=twitterfeed)
- Barents Review, 2012, *Barents Borders Delimitation and internationalisation*, ed. Staalesen, A., The Norwegian Barents Secretariat, Kirkenes 2012 Available at: [http://www.barents.no/getfile.php/1904592.900.bpwbxfwqtx/Barents\\_Review\\_2012.pdf](http://www.barents.no/getfile.php/1904592.900.bpwbxfwqtx/Barents_Review_2012.pdf), Accessed 4 November 2013
- BDF, 2013 <http://www.bdforum.org/baltic-sea-region/>
- Beckouche P. & Richard Y., 2008, Atlas d'une nouvelle Europe. L'UE et ses voisins : vers une région mondiale ?, Paris, Autrement.
- Beckouche, P., 2011a, "Gouvernance et territoires dans les pays arabes méditerranéens", Maghreb-Machrek, n° 208, Summer 2011, Paris
- Beckouche, P., 2011b, "Bilan d'Euromed: un état des lieux du financement par l'UE du développement en Méditerranée". Ipemed, *Palimpsestes*, 3-2011.
- Beckouche, P., Le Bras, H., 2011, "Méditerranée: Passer des migrations aux mobilités", collection "Construire la Méditerranée, Ipemed, Paris
- Beeson M. & Li F., 2012, "Charmed or Alarmed? Reading China's regional relations", *Journal of Contemporary China*, Volume 21, Issue 73, Special Issue: The Rise of China and the Regional Responses in the Asia-Pacific, pages 35-51
- Belarus, 2013, Facts about Natural Resources in Belarus website. [http://www.belarus.net/Belarus/Nat\\_Resources/](http://www.belarus.net/Belarus/Nat_Resources/) Accessed on 16/12/2013
- Belokurova, E. and Nozhenko, M. (2013) Regional community building and cross-border interaction. *The EU-Russia Borderland*. New contexts for regional co-operation.
- Ben Abdallah, M., Allal, S., Kappauf, J., Preure, M., coord. Mozas, M., 2013, "Towards a Euro-Mediterranean Energy Community. Moving from import-export to a new regional energy model", collection "Building the Mediterranean", Ipemed, Paris
- Ben Cheikh, N., 2013, "Tunisia Report", ESPON-ITAN project, Tunis
- Bhagwati, J., 1995, "US Trade Policy: The Infatuation with Free Trade Areas" in Claude Barfield (ed.), *The Dangerous Obsession with Free Trade Areas*, AEI - American Enterprise Institute for Public Policy Research, Washington
- Black Sea SCENE, 2013, Major problem areas. Available at: [http://www.blackseascene.net/content/content.asp?menu=0040034\\_000000](http://www.blackseascene.net/content/content.asp?menu=0040034_000000)
- Blaga, R. A., 2012, Les dynamiques de coopération dans la région de la Mer Noire dans un contexte de mondialisation, Master's thesis, Ecole Normale Supérieure de Lyon, 135 p.
- Blayo C., Bergouignan Ch. , Llopart M., Okobo N., Stiegler N., 2000, "Demographic, social, economic situation and reproductive health in Kosovo following the 1999 conflict, Results of a household survey November 1999 – February 2000", UNFPA, SOK, IOM. <http://www.unfpa.org/wp-content/uploads/2012/06/DHS2000.pdf>
- Böhme, K. ,2013, ADDED VALUE OF MACRO REGIONAL STRATEGIES: A GOVERNANCE PERSPECTIVE. Spatial Foresight Brief 2013:3. [http://www.spatialforesight.eu/tl\\_files/files/editors/dokumente/Brief-2013-3-130710.pdf](http://www.spatialforesight.eu/tl_files/files/editors/dokumente/Brief-2013-3-130710.pdf)
- Bonifazi C., Conti C., and Mamolo M., 2006, "Balkan International Migration in the 1990s", Demobalk papers, vol. 8.
- Botrić V., 2010, "Foreign Direct Investments in the Western Balkans: Privatisation, Institutional Change, and Banking Sector Dominance", *Economic Annals*, LV(187)
- Boulineau E. et Suci M., 2008, « Décentralisation et régionalisation en Bulgarie et en Roumanie. Les ambiguïtés de l'eupéanisation », in *L'espace géographique*, 2008/4 - Tome 37, pp. 349-363.
- BSR, 2012, Interim report on the research THE BALTIC SEA REGION IN THE FOCUS OF DEVELOPMENT STRATEGIES OF THE EUROPEAN UNION AND THE RUSSIAN FEDERATION: <http://www.bsr2012.eu/wp-content/uploads/Russia-EU-BSR-Development-Strategies.pdf>
- BSR, 2012b, Comparative table of the Strategy of social and economic development of the North-West Federal District and the European Union Strategy for the Baltic Sea region; <http://www.bsr2012.eu/wp-content/uploads/Russia-NW-EUSBSR-Comparative-table.pdf>
- BSR, 2013, <http://eu.baltic.net/index.php?id=7086>

- BUP, 2002, The Baltic Sea Region. Cultures, Politics, Societies, Editor Witold Maciejewski
- BUP, 2013, Baltic University Programme, <http://www.balticuniv.uu.se/index.php/4a-urbanisation>
- BUUF, 2007, Baltic University Urban Forum, Urban Management Guidebook VIII. Urban-rural cooperation.
- Buza, M. and V. Urucu., 1999, "Black Sea Traffic and European Integration", *Promet*, 11, 2-3
- Cataruzza, A. et Sintès P., 2012, Atlas géopolitique des Balkans, Un autre visage de l'Europe, Paris, Autrement.
- CBSS, 2012, The Russian Presidency of The council of The Baltic sea states: [http://www.cbss-russia.ru/sbgm\\_eng.pdf](http://www.cbss-russia.ru/sbgm_eng.pdf)
- CBSS, 2012b, Declaration on Energy Security in the Baltic Sea Region adopted by the 17th Extraordinary CBSS Ministerial Session, Schloss Ploen, [http://www.auswaertiges-amt.de/cae/servlet/contentblob/608164/publicationFile/164296/120205\\_ostseerat\\_erk%C3%A4rung\\_energiesicherheit.pdf](http://www.auswaertiges-amt.de/cae/servlet/contentblob/608164/publicationFile/164296/120205_ostseerat_erk%C3%A4rung_energiesicherheit.pdf)
- CBSS, 2013, <http://www.cbss.org/seba/>
- Cheriet, F., Mohaved, N., and Rastoin, J-L., 2010, "La situation céréalière en Méditerranée, enjeux stratégiques et éléments de prospective", programme Partenariats stratégiques pour la sécurité alimentaire en Méditerranée – PSAM, Ipemed, Paris
- Chevalier C., 2005, *Governance of the Mediterranean Sea. Outlook for the Legal Regime*. The World Conservation Union.
- Ciheim, 2008, "The Future of Agriculture and Food in Mediterranean Countries" *Mediterra Report*, Presses de Sciences Po, Paris
- CMI, World Bank, Islamic Development Bank, (2012), "From Political to Economic Awakening in the Arab World: The Path of Economic Integration", World Bank publications, 340 p.
- COE (Council of Europe), 2006, Local and Regional Democracy in Albania, Congress of Local and Regional Authorities, Strasbourg, 20<sup>th</sup> November 2006.
- Cohen, Y., 2013, "Israel Report", ESPON-ITAN project, New York
- COM, 2009, 248 final. Concerning the European Union Strategy for the Baltic Sea Region. Available at: [http://ec.europa.eu/regional\\_policy/sources/docoffic/official/communic/baltic/com\\_baltic\\_en.pdf](http://ec.europa.eu/regional_policy/sources/docoffic/official/communic/baltic/com_baltic_en.pdf)
- COM, 2013, 468 final. Concerning the added value of macro-regional strategies. Available at: [http://ec.europa.eu/regional\\_policy/sources/docoffic/official/communic/baltic/com\\_added\\_value\\_macro\\_region\\_strategy\\_en.pdf](http://ec.europa.eu/regional_policy/sources/docoffic/official/communic/baltic/com_added_value_macro_region_strategy_en.pdf)
- Comair, F., Donzier, J-F., Hervé Lainé, Mino, E., 2010, "A Mediterranean Water Agency to move from strategy to action", Ipemed, "Reports and syntheses", Paris
- Commander, S., Isachenkova, N., Rodionova, Y., 2013, "A model of the informal economy with an application to Ukraine", *Revue internationale du Travail*, Volume 152, Issue 3-4, pages 483–507
- Courbage Y., 2003, "Census, Elections and Population : the case of Macedonia", *Population*, 58(4), pp. 429-450.
- Courrier des Balkans, « Serbie : une jeunesse pauvre et déprimée, qui ne rêve que d'émigration ». <http://balkans.courriers.info/article18536.html>
- Darques R. & Deslondes O., 2008, « Avant-propos », in *Bulgarie-Roumanie. Les nouveaux horizons de l'Union européenne, Méditerranée*, vol. 110, Université de Provence.
- De Lombaerde P., Pietrangeli G., Weeratunge C., 2008, "Systems of Indicators for Monitoring Regional Integration Processes: Where Do We Stand?", *The Integrated Assessment Journal, Bridging Sciences & Policy*, Vol.8, Iss. 2, pp. 39–67
- De Lombaerde P., Soderbaum, F., 2014, *Regionalism*, 1520 pages, Sage publications Ltd
- Deblock Ch. & Regnault H., dir., 2006, *Nord-Sud : la reconnexion périphérique*, Editions Athéna, Montréal
- Deblock Ch., 2010, "L'Aléna, tremplin ou trappe?", Note de recherche Continentalisation 10-02, ISSN 1714-7638, Centre d'études sur l'intégration et la mondialisation, Institut d'études internationales de Montréal, Université du Québec, Montreal
- Deichmann, U. & Indermit Gill, I., 2008, "The Economic Geography of Regional Integration", *Finance & Development*, dec. 2008, IMF, Washington

Delegation of the European Union in Albania, 2011, « EU assistance of €6 million has enabled the construction of 10 border crossing points and the refurbishment of 17 border police stations in Albania - Press release ». [http://eeas.europa.eu/delegations/albania/press\\_corner/all\\_news/news/2011/20110722\\_en.htm](http://eeas.europa.eu/delegations/albania/press_corner/all_news/news/2011/20110722_en.htm)

Delegation of the European Union to Montenegro, « New border crossing facilities constructed on border with Serbia ». <http://www.delme.ec.europa.eu/code/navigate.php?id=1660>

Delegation of the European Union to Montenegro, 2009, « New border crossing between Albania and Montenegro opened ». <http://www.delme.ec.europa.eu/code/navigate.php?id=169>

Delegation of the European Union to the Republic of Serbia, 2011, "Freedom of movement as agreed in the EU facilitated dialogue to start", <http://www.europa.rs/en/mediji/najnovije-vesti/1342/Freedom+of+movement+as+agreed+in+the+EU+facilitated+dialogue+to+start.html>

Delpuech Th. et Vassileva M., 2010, « Des transferts aux apprentissages : réflexions à partir des nouveaux modes de gestion du développement économique local en Bulgarie », in *Critique Internationale*, n°48/3, Presses de science po, pp. 25-52.

DEMOTIX, 2013, "New border crossing opens between Kosovo and Albania". <http://www.demotix.com/news/2039213/new-border-crossing-opens-between-kosovo-and-albania>

Descamps, M., 2013, Les jumelages des villes de la Mer Noire, un moteur d'intégration régionale ?, Master's thesis, Ecole Normale Supérieure of Lyon, 109 p.

DG SANCO, 2013, « Establishments List per Section ». [https://webgate.ec.europa.eu/sanco/traces/output/non\\_eu\\_listsPerActivity\\_en.htm#](https://webgate.ec.europa.eu/sanco/traces/output/non_eu_listsPerActivity_en.htm#)

Dieter H., dir., 2006, "Report on East Asian Integration", Studies & Research n°47, Notre Europe, report for the Japanese trade ministry, Paris

Djurovic K., « Region tackles unofficial border crossing points ». [http://setimes.com/cocoon/setimes/xhtml/en\\_GB/features/setimes/features/2013/05/14/feature-04](http://setimes.com/cocoon/setimes/xhtml/en_GB/features/setimes/features/2013/05/14/feature-04)

Dragović Z., 2013, « BiH spremna za inspektore FVO-a? », *Nezavisne novine*. <http://www.nezavisne.com/posao/analize/BiH-spremna-za-inspektore-FVO-a-216901.html>

Dreyer, I., 2012, Trade Policy in the EU's Neighbourhood. Ways Forward for the Deep and Comprehensive Free Trade Agreements. [http://www.notre-europe.eu/media/i.dreyer\\_tradepolicyineuneighbourhood\\_ne\\_may2012.pdf?pdf=ok](http://www.notre-europe.eu/media/i.dreyer_tradepolicyineuneighbourhood_ne_may2012.pdf?pdf=ok)

Dupuch S., Jennequin H., Mouhoud El M., 2004, "EU enlargement: what does it change for the European economic geography?", *Revue de l'OFCE* 5/2004 (no 91 bis), p. 241-274, [www.cairn.info/revue-de-l-ofce-2004-5-page-241.htm](http://www.cairn.info/revue-de-l-ofce-2004-5-page-241.htm)

EAS, 2013, European Union External Action: <http://eeas.europa.eu/russia/>

Ebinger, C. and Zambetakis, E., 2009, The geopolitics of Arctic melt, *International Affairs* 85: 6, pp. 1215–1232

EC (European Commission), 2008, Communication COM/2008/0763 from the Commission to the European Parliament and the Council, The European Union and the Arctic Region. Available at: <http://eur-lex.europa.eu/LexUriServ/LexUriServ.do?uri=COM:2008:0763:FIN:EN:PDF>, Accessed 9 November 2013

EC, 2013, European Commission- Our Neighbourhood and Russia. [http://ec.europa.eu/europeaid/where/neighbourhood/index\\_en.htm](http://ec.europa.eu/europeaid/where/neighbourhood/index_en.htm)

EEA 2010, European Environment Agency, Report N°1:2010, *Environmental trends and perspectives in the Western Balkans: future production and consumption patterns*.

EEAS, 2011, EU-Russia Common Spaces Progress Report 2010. Available at: [http://eeas.europa.eu/russia/docs/commonspace\\_prog\\_report\\_2010\\_en.pdf](http://eeas.europa.eu/russia/docs/commonspace_prog_report_2010_en.pdf)

EEAS, 2013, European Union External Action- Northern Dimension. Accessed 28/11/2013: [http://eeas.europa.eu/north\\_dim/index\\_en.htm](http://eeas.europa.eu/north_dim/index_en.htm)

El Laithy, H., Abu-Ismaïl, K. and Hamdan, K., 2008, "Poverty, Growth and Income Distribution in Lebanon", Country Study n°13, UNDP - International Poverty Centre, January 2008, pages 1-21

ENPI, 2007, European Neighbourhood and Partnership Instrument. Eastern Regional Programme Strategy Paper 2007-2013. Available at: [http://ec.europa.eu/world/enp/pdf/country/enpi\\_eastern\\_rsp\\_en.pdf](http://ec.europa.eu/world/enp/pdf/country/enpi_eastern_rsp_en.pdf)

ENVSEC, 2006a Identification and review of key environment and security problems in the Republic of Moldova. Background paper for UNEP. Available at: [http://www.envsec.org/publications/Identification%20and%20description%20of%20key%20environmental%20and%20safety%20problems%20in%20the%20Republic%20of%20Moldova\\_Eng.pdf](http://www.envsec.org/publications/Identification%20and%20description%20of%20key%20environmental%20and%20safety%20problems%20in%20the%20Republic%20of%20Moldova_Eng.pdf)

ENVSEC, 2006b, Ukraine country chapter for ENVSEC. Background paper for UNEP. Available at: [http://www.envsec.org/publications/Ukraine%20country%20chapter%20for%20ENVSEC\\_April%202006.pdf](http://www.envsec.org/publications/Ukraine%20country%20chapter%20for%20ENVSEC_April%202006.pdf)

ENVSEC, 2007, Environment and Security: Transforming risks into cooperation - The case of Eastern Europe. UNEP, UNDP. Available at: [http://www.envsec.org/publications/ENVSEC.%20Transforming%20risks%20into%20cooperation.%20The%20case%20of%20Eastern%20Europe\\_English.pdf](http://www.envsec.org/publications/ENVSEC.%20Transforming%20risks%20into%20cooperation.%20The%20case%20of%20Eastern%20Europe_English.pdf)

ENVSEC, 2010, <http://envsec.grid.unep.ch/easteur/index.php>

ENVSEC, 2011, Climate Change in Eastern Europe. Available at: [http://www.envsec.org/publications/climate\\_change\\_in\\_ee\\_english.pdf](http://www.envsec.org/publications/climate_change_in_ee_english.pdf)

Eskelinen, H., 2013, Geopolitics and the market. Borderland economies in the making. The EU-Russia Borderland. New contexts for regional co-operation.

Eskelinen, H., Liikanen, I. and Scott, J.W., 2013, The EU-Russia Borderland. Next contexts for regional co-operation. BASEES/Routledge Series on Russian and East European Studies.

ESPON DATABASE 2013, 2011, Technical Report: Analysis of the Availability and the Quality of Data on Western Balkans and Turkey.

ESPON, 2013, ESaTDOR: European Seas and Territorial Development, Opportunities and Risks. Governance Case studies: Baltic Sea. Available at: [http://www.espon.eu/export/sites/default/Documents/Projects/AppliedResearch/ESaTDOR/FR\\_160413/20130417\\_annexes/ESaTDOR\\_FR\\_Annex\\_10\\_Baltic\\_CS.pdf](http://www.espon.eu/export/sites/default/Documents/Projects/AppliedResearch/ESaTDOR/FR_160413/20130417_annexes/ESaTDOR_FR_Annex_10_Baltic_CS.pdf)

Esquenazi, J-P., 2002, *L'écriture de l'actualité*, Ed. PUG, Grenoble, 183 p.

EU Parliament, 2012, "Parliament backs rules allowing suspension of visa-free travel only as a last resort". <http://www.europarl.europa.eu/news/en/news-room/content/20130910IPR19556/html/EP-backs-rules-allowing-suspension-of-visa-free-travel-only-as-a-last-resort>

EuroMed Transport Project, 2005, *Blue paper. Towards an Integrated Euro-Mediterranean Transport System*.

European Commission 2009, "Evaluation du règlement du conseil n° 2698/2000 (Meda II) et de sa mise en œuvre", Aide à la Décision Economique, et Development Researchers' Network, Rapport final d'évaluation pour la commission Européenne, Brussels

European Commission 2011, "Joint communication to the European Council, the European Parliament, the Council, The European Economic and Social Committee and the Committee of the Regions: A Partnership for Democracy and Shared Prosperity with the Southern Mediterranean", High Representative of the Union for Foreign Affairs and Security Policy, March 8th 2011, COM(2011) 200 final, Brussels

European Commission, 2003, "Wider Europe - Neighbourhood: A New Framework for Relations with our eastern and southern Neighbours", Communication from the Commission, COM(2003) 104, Brussels, URL: [http://ec.europa.eu/world/enp/pdf/com03\\_104\\_en.pdf](http://ec.europa.eu/world/enp/pdf/com03_104_en.pdf)

European Commission, 2010b, "An Integrated Industrial Policy for the Globalisation Era. Putting Competitiveness and Sustainability at Centre Stage", Communication of the EC, COM(2010) 614 , Brussels

European Commission, 2011, "A New Response to a Changing Neighbourhood. A review of European Neighbourhood Policy", Joint Communication by the High Representative of The Union For Foreign Affairs And Security Policy and the European Commission, Brussels, 25 May 2011, URL: [http://ec.europa.eu/world/enp/pdf/com\\_11\\_303\\_en.pdf](http://ec.europa.eu/world/enp/pdf/com_11_303_en.pdf)

European Commission, 2013, « EUROPA - COMMUNIQUES DE PRESSE - Communiqué de presse - Speech: Croatia - Bosnia and Herzegovina: Agreements on border management signed ». [http://europa.eu/rapid/press-release\\_SPEECH-13-557\\_en.htm?locale=FR](http://europa.eu/rapid/press-release_SPEECH-13-557_en.htm?locale=FR)

European Commission, 2013, Elements for a Common Strategic Framework 2014 to 2020 - the European Regional Development Fund, the European Social Fund, the Cohesion Fund, the European Agricultural Fund for Rural Development and the European Maritime and Fisheries Fund, Brussels, 14.3.2012, SWD(2012) 61, final

European Commissions, 2010a, "Europe 2020, a strategy for smart, sustainable and inclusive growth", Communication of the EC, Brussels, 3.3.2010, COM(2010) 2020 final

European Union, 2011a, "The Territorial State and Perspectives of the European Union, Background document for the Territorial Agenda of the European Union 2020", presented at the Informal meeting of Ministers responsible for Spatial Planning and Territorial Development, on 19th May 2011 Gödöllő, Hungary

European Union, 2011b, "Territorial Agenda of the EU 2020, towards an Inclusive, Smart and Sustainable Europe of Diverse Regions".

European Union 2013, Joint Communication to the European Parliament, the Council, the European Economic and social committee and the Committee of the Regions, "European Neighbourhood Policy: Working towards a Stronger Partnership", High Representative of the Union for Foreign Affairs and Security Policy, 20.3.2013, JOIN(2013) 4 final, Brussels

Euroreg, 2012, "TERCO - European Territorial Co-operation as a Factor of Growth, Jobs and Quality of Life", ESPON project, Applied Research 2013/1/9

EUROSTAT, 2011, CIS-EU - trade in goods: [http://epp.eurostat.ec.europa.eu/statistics\\_explained/index.php/CIS-EU\\_-\\_trade\\_in\\_goods](http://epp.eurostat.ec.europa.eu/statistics_explained/index.php/CIS-EU_-_trade_in_goods)

EUROSTAT, 2013, Key Figures on the Enlargement Countries. Eurostat pocketbook.

EUSBSR Action Plan, 2013, <http://www.balticsea-region-strategy.eu/pages/what-is-the-eusbsr>

EUSBSR, 2009, <http://eur-lex.europa.eu/LexUriServ/LexUriServ.do?uri=COM:2009:0248:FIN:EN:PDF>

EWR, 2012, Estonian World Review Online <http://www.eesti.ca/estonia-split-opinions-about-nord-stream/article37750>

Faludi A., 2008, "European Spatial Research and Planning", Lincoln Institute of Land Policy, Cambridge MA, 304 p.

Faour, G., 2013, "Lebanon Report", ESPON-ITAN project, Beirut

Flockhart, T., 2010, 'Europeanisation or EU-isation?' The Transfer of European Norms Across Time and Space', *Journal of Common Market Studies*, 48/4, pp. 787-810.

Frisch, M., 2013, Crossing the borders of Finnish and Northwest Russian labour markets. The EU-Russia Borderland. New contexts for regional co-operation.

FRONTEX, 2013a, Annual Risk Analysis 2013, Warsaw.

FRONTEX, 2013b, Western Balkans - Annual Risk Analysis 2013, Warsaw.

Galal A. and Reiffers J-L., ed., 2010, "Crise et voies de sortie de crise dans les pays méditerranéens", Rapport de synthèse du Femise pour la Femip, BEI, Luxembourg.

Galal, A. and Reiffers, J-L., 2009, "Les pays partenaires méditerranéens face à la crise", Femise, Rapport sur le partenariat euroméditerranéen, Marseilles

Garant, 2008, Legislation Online <http://base.garant.ru/193447/>

Gardin J., Givre O., Javourez G. & Sintès P., to be published, « Le développement comme ressource : jeux d'échelle et enjeux multiples de l'eupéanisation du local entre Grèce et République de Macédoine », ouvrage final du programme Balkabas.

Gaubert N., Richard Y., 2010, "European Cohesion Policy and Territorial Cooperation with Neighbouring Countries: Towards Deeper Coordination?". *European Journal for Spatial Development*, Nordregio and OTB Research Institute, URL: <http://www.nordregio.se/Global/EJSD/Refereed%20articles/refereed41.pdf>

Gesano G.Heins F, Regional, 2009, *Challenges in the perspective of 2020. Regional disparities and future challenges*.

Giguère1051, S., 2007, Baltic Partnerships. INTEGRATION, GROWTH AND LOCAL GOVERNANCE IN THE BALTIC SEA REGION. OECD, 2007

Giraud, T. and Severo, M., 2011, "La blogosphère tunisienne", *L'Espace géographique*, 2011/2, p. 190.

Golaz, V., Nowik, L., Sajoux, M., 2012, « L'Afrique, un continent jeune face au défi du vieillissement », *Population & Sociétés* n°491, Ined, Paris

Gossiaux, J-F., 2002, Pouvoirs ethniques dans les Balkans, Paris, PUF.

Government of the Republic of Serbia (The), 2011, The Republic of Serbia Migration Profile for 2010, Belgrade.

Grasland C. (coord), 2012, Synthesis, WP6, Eurobroadmap, URL: <http://www.eurobroadmap.eu/>

Grasland C. and Didelon C., coord., 2007, "Europe in the World", ESPON project 3.4.1, Luxembourg, URL: [http://www.espon.eu/main/Menu\\_Projects/Menu\\_ESPON2006Projects/Menu\\_CoordinatingCrossThematicProjects/europeintheworld.html](http://www.espon.eu/main/Menu_Projects/Menu_ESPON2006Projects/Menu_CoordinatingCrossThematicProjects/europeintheworld.html)

Grasland, C. and Van Hamme, G., 2010, 'La relocalisation des activités industrielles: une approche centre-périphérie des dynamiques mondiale et européenne', *L'Espace géographique* 39 (1) : 1-19. URL: [www.cairn.info/revue-espace-geographique-2010-1-page-1.htm](http://www.cairn.info/revue-espace-geographique-2010-1-page-1.htm).



- Grasland, C., Giraud, T., and Severo, M., 2012, "Un capteur géomédiatique d'événements internationaux" in Beckouche P., Grasland C., Guerin-Pace F., Moisseron J.Y., 2012, *Fonder les Sciences du Territoires*, Karthala, Paris
- Green S.F., 2012, « A sense of border », in Wilson T. M. et Donnan H. (dir.), *A Companion to Border Studies*, Wiley-Blackwell.
- Groza O. et Rey V., 2008, « Bulgarie et Roumanie, une affaire d'européanisation », in *L'espace géographique*, 2008/4 - Tome 37, pp. 289-296.
- Guéneq M., 2010, La Russie et les « sécessionnismes » géorgiens, *Hérodote*, 3, 138, 27-57 pp.
- Hallegatte, S., Somot, S. and Nassopoulos, H., 2009, "Région méditerranéenne & changement climatique une nécessaire anticipation", coll. *Construire la Méditerranéen*, Ipemed, Paris
- Hammouda, N-E., 2013, "Algeria Report, Demographic part 1", ESPON-ITAN project,
- Hasić N., 2013, « Zbog afere mljeko usvojen set mjera: Ministri štite zdravlje građana », *Nezavisne novine*.  
<http://www.nezavisne.com/novosti/bih/Zbog-afere-mljeko-usvojen-set-mjera-Ministri-stite-zdravlje-gradjana-182050.html>
- Hatem F., dir., 2006, "Les investissements étrangers en transports dans la région Meda", *Anima*, notes et études n°18, 140 p., <http://www.animaweb.org/Documents/Transport.pdf>, Marseilles
- Henry, L.A. and Douhovnikoff, V., 2008, *Environmental Issues in Russia*. *Annu. Rev. Environ. Resource*. Available at: <http://www.bowdoin.info/faculty/vvdouhovn/pdf/douhovnikoff-environmental-issues-in-russia.pdf>
- Hettne B., Soderbaum, F., 2004, "Regional cooperation. A tool for addressing regional and global challenges", *International Task Force on Global Public Goods*, chap.5, pp 179-244, URL: <http://www.cris.unu.edu/uploads/media/GlobalTaskForce.pdf>
- Hilal, J. and Zboun, I., 2013, "OPT Report", ESPON-ITAN project, ARIJ, Bethlehem
- Hirata H., Kose M.A. and Otrók C., (2013), "Regionalisation vs. Globalisation", *IMF Working Paper*, Research Department, also available at SSRN <http://dx.doi.org/10.2139/ssrn.2197892>, FRB of St. Louis Working Paper No. 2013-002A
- Hoekman B., Eby Konan D., 2001, "Deep Integration, Non-discrimination and Euro-Mediterranean Free Trade", *ZEI Studies in European Economics and Law*, Volume 4-2001, pp 171-194
- Hong, N., 2012, The energy factor in the Arctic dispute: a pathway to conflict or cooperation?, *Journal of World Energy Law and Business*, 2012, Vol. 5, No. 1
- Huvy B., 2006, "How many have left? Displacement of citizens from former Yugoslavia". In Parant A., (ed.) *Migrations, crises et conflits récents dans les Balkans / Migration, crises and recent conflicts in the Balkans*. DEMOBALK / LDSA, University of Thessaly, Volos, 2006, pp. 29-48
- IEA (International Energy Agency), 2008, *Energy in the Western Balkans. The Path to Reform and Reconstruction*. Paris.
- IEMed, 1995, *Towards a New Scenario of Partnership in the Euro-Mediterranean Area*.
- IEMed, 1999, *El Espacio Mediternáneo Latino*.
- IEMed, 2010, *Med 2010. Anuari IEMed de la Mediterrània*.
- ILO, 2011, *A comparative Overview of Informal Employment in Albania, Bosnia and Herzegovina, Moldova and Montenegro*. ILO Country Office for Central and Eastern Europe.
- Inra-Cirad, 2009, *Agrimonde. "Agricultures et alimentations du monde en 2050: Scénarios et défis pour un développement durable"*, Inra, Paris, 202 p.
- INSTAT, 2004, *Migration in Albania*. Tirana.
- INTERACT, 2007, [http://www.interact-eu.net./etc/etc\\_2007\\_13/4/2](http://www.interact-eu.net./etc/etc_2007_13/4/2)
- International Commission on the Balkans, 2005, *The Balkans in Europe's Future*, Robert Bosch Stiftung, King Baudouin Foundation, German Marshall Fund of the United States, Charles Stewart Mott Foundation.
- International Organisation for Migration, 2007a, *Bosnia and Herzegovina : Migration Profile 2007*, Geneva.  
[http://publications.iom.int/bookstore/index.php?main\\_page=product\\_info&cPath=41\\_42&products\\_id=617&language=fr](http://publications.iom.int/bookstore/index.php?main_page=product_info&cPath=41_42&products_id=617&language=fr)
- International Organisation for Migration, 2007b, *The Former Yugoslav Republic of Macedonia : Migration Profile 2007*, Geneva.  
[http://publications.iom.int/bookstore/index.php?main\\_page=product\\_info&cPath=41\\_42&products\\_id=618](http://publications.iom.int/bookstore/index.php?main_page=product_info&cPath=41_42&products_id=618)

- International Organisation for Migration, 2007c, The Republic of Croatia: Migration Profile 2007, Geneva. [http://publications.iom.int/bookstore/index.php?main\\_page=product\\_info&cPath=41\\_42&products\\_id=618](http://publications.iom.int/bookstore/index.php?main_page=product_info&cPath=41_42&products_id=618)
- International Organisation for Migration, 2007d, The Republic of Serbia including the province of Kosovo: Migration Profile 2007, Geneva. [http://publications.iom.int/bookstore/index.php?main\\_page=product\\_info&cPath=41\\_42&products\\_id=618](http://publications.iom.int/bookstore/index.php?main_page=product_info&cPath=41_42&products_id=618)
- INTERREG, internet website of the Interreg program in Greece, consulted on the 16/12/2013 <http://www.interreg.gr/en/european-territorial-cooperation.html>
- IPA Cross border Program between Greece and Albania – Official website, consulted on the 16/12/2013 <http://www.greece-albania.eu/programme/basic-information-on-the-programme.html>
- IPA Cross-border Program between Greece and FYROM, consulted on the 16/12/2013 <http://www.ipa-cbc-programme.eu/programme>
- IPCC, 2013, Summary for Policymakers. In: Climate Change 2013: The Physical Science Basis. Contribution of Working Group I to the Fifth Assessment Report of the Intergovernmental Panel on Climate Change [Stocker, T.F., D. Qin, G.-K. Plattner, M. Tignor, S. K. Allen, J. Boschung, A. Nauels, Y. Xia, V. Bex and P.M. Midgley (eds.)]. Cambridge University Press, Cambridge, United Kingdom and New York, NY, USA.
- Isik, O., 2013, "Turkey Report", ESPON-ITAN project, Istanbul
- IW LEARN, 2009, "Lake Prespa Transboundary Diagnostic Analysis" <http://iwlearn.net/news/iwlearn-news/lake-prespa-transboundary-diagnostic-analysis>
- IW:LEARN, 2009, "Lake Prespa Transboundary Diagnostic Analysis" <http://iwlearn.net/news/iwlearn-news/lake-prespa-transboundary-diagnostic-analysis>
- Karbus, S., 2012, "Les ressources de gaz naturel en Méditerranée orientale : défis et opportunités", MED 2012, Imed, Barcelone
- Kawai M. & Wignaraja, G., 2009, "Global and Regional Economic Integration: a View from Asia", Interamerican development bank, Institute for the Integration of Latin America and the Caribbean, n°29, vol.13-2009, Buenos Aires, URL: [http://www.iadb.org/intal/icom/29/eng/pdf/i\\_INTAL\\_I&T\\_29\\_2009\\_Kawai\\_Wignaraja.pdf](http://www.iadb.org/intal/icom/29/eng/pdf/i_INTAL_I&T_29_2009_Kawai_Wignaraja.pdf)
- Kawai, M., 2005, "East Asian economic regionalism: progress and challenges", Journal of Asian Economics, Volume 16, Issue 1, February 2005, Pages 29–55
- Kim, B-Y., 2010, "Informal Economy Activities and Entrepreneurship in Russia", Proceedings of the German Development Economics Conference, Hannover 2010, no. 55
- Kocsis K. (ed.), 2007, South Eastern Europe in Maps. Hungarian Academy of Sciences, Budapest.
- Koistinen, P. and Krutova, O., 2013, Crossing the borders of Finnish and Northwest Russian labour markets. The EU-Russia Borderland. New contexts for regional co-operation
- Koivurova, T. et al., 2011, The Present and future competence of the European Union in the Arctic, *Polar record*, V 48 (4), 361-371
- Koivurova, T., 2010, Limits and possibilities of the Arctic Council in a rapidly changing scene of Arctic governance, *Polar Record* 46 (237): 146–156 (2010).
- Kolarctic, 2013, Kolarctic ENPI CBC website. Accessed 28/11/2013: <http://www.kolarcticenpi.info/en>
- Kommersant, 2013, [http://www.kommersant.com/tree.asp?rubric=5&node=398&doc\\_id=-54](http://www.kommersant.com/tree.asp?rubric=5&node=398&doc_id=-54) Accessed on 16/12/2013
- Koopmans, R., Vliegthart, R., 2011, "Media Attention as the Outcome of a Diffusion Process. A Theoretical Framework and Cross-national Evidence on Earthquake Coverage", *European Sociological Review*, Vol. 27, no. 5, S. 636-653.
- Kotzamanis B., 2001, "Razvitak stanovništva i demografske perspektive jugoistočne Evrope". Stanovništvo, Beograd, 39(1-4), pp. 7-44. <http://scindeks-clanci.ceon.rs/data/pdf/0038-982X/2001/0038-982X0101007K.pdf>
- Kristal, T., 2013, "Slicing the Pie: State Policy, Class Organisation, Class Integration, and Labor's Share of Israeli National Income", *Social Problems*, Vol. 60, Issue 1, pp. 100–127
- Krstić, G., Sanfey, P., 2010, "Earnings inequality and the informal economy: evidence from Serbia", Working Paper 114, EBRD.
- Kukes Regional Council, 2013, "Strategic Project, Construction of Shishtavec – Dragash Road", Kukes Regional Council. <http://www.kgk.gov.al/en/news/strategic-project-construction-of-shishtavec-dragash-road>

- Kuznetsov, 2012, Transborder corporate integration in the Baltic Sea Region. Institute of World Economy and International Relations (IMEMO) [http://mpr.ub.uni-muenchen.de/43736/1/MPRA\\_paper\\_43736.pdf](http://mpr.ub.uni-muenchen.de/43736/1/MPRA_paper_43736.pdf)
- Kvasha E.A. and Harjkova T.L. Life expectancy of the adult population in the regions of Russia during the last decade. Ожидаемая продолжительность жизни взрослого населения в регионах России в последнее десятилетие <http://publications.hse.ru/articles/68853238>
- Lagutov, V., 2011, Environmental Security in Watersheds: The Sea of Azov. NATO Science for Peace and Security Series – C: Environmental Security. Available at: [http://books.google.se/books?id=xQCUGWs-8HEC&dq=the+sea+of+Azov+environmental+threats&hl=sv&source=gbs\\_navlinks\\_s](http://books.google.se/books?id=xQCUGWs-8HEC&dq=the+sea+of+Azov+environmental+threats&hl=sv&source=gbs_navlinks_s)
- Lannon E. & Martín I., 2009, « Enquête adressée aux experts et aux acteurs du Partenariat euro-méditerranéen. Rapport sur les progrès du Partenariat euro-méditerranéen », lemed, report for the European Commission, Barcelona.
- Lejeau N., 2005, « Le nettoyage ethnique en ex-Yougoslavie : le cas de la Krajina de Knin », Revue Géographique de l'Est, 45(1), p. 45-53.
- Lerch M., Subashi B., Nesturi, M., Galanxi E. & Wanner P., 2010, "Regional demographic dynamics in Albania". In: Socio-demographic statistics in Albania: selected topics and future developments, pp. 29-58, Swiss Cooperation Office Albania, Tirana.
- Lerch, M. and P. Wanner. 2008, Demographic data in Albania - Results of an assessment. Geneva: Laboratory of Demography - University of Geneva.
- Lithuanian Tribune, 2012, The next stage of Russia's Resurgence: The Baltic States <http://www.lithuaniantribune.com/10549/the-next-stage-of-russias-resurgence-the-baltic-states-201210549/>
- Liveland Project, 2013, Draft Final Report. ESPON Programme
- Maksudov, 2005, Chechen population: what does census say? Население Чечни: права ли перепись? <http://polit.ru/article/2005/09/07/demoscope211/>
- Mashayekhi, M., Ito, T., ed., 2005, "Multilateralism and Regionalism. The New Interface", report of the 11ThUnctad conference", June 2004, Sao Paulo, Geneva; URL: [http://unctad.org/en/docs/ditctncd20047\\_en.pdf](http://unctad.org/en/docs/ditctncd20047_en.pdf)
- Matthews A., 2003, "Regional Integration and Food Security in Developing Countries", report for the Policy Assistance Division, Rome: Food and Agriculture Organisation of the UN, URL: <http://www.fao.org/docrep/004/y4793e/y4793e00.htm>
- McCombs, M. and Shaw, D.L., 1993, "The evolution of agenda-setting research: Twenty-five years in the marketplace of ideas", *Journal of Communication*, 43(2), 58-67
- McCombs, M., 2002, "Agenda-Setting Role of the Mass Media in the Shaping of Public Opinion", presented communication, Mass Media Economics 2002, London
- Mega Trends, Nordic Council of Ministers, 2011, TemaNord 2011:527. Available at: [http://www.nordregio.se/Publications/Publications-2011/Megatrends/Accessed 6 November 2013](http://www.nordregio.se/Publications/Publications-2011/Megatrends/Accessed%206%20November%202013)
- Megatrends, 2011, Nordic Council of Ministers, Copenhagen 2011
- Metaprom, 2009, Murmansk oblast - industries and enterprises in Murmansk oblast. Мурманская область - промышленность и предприятия Мурманской области: [http://www.metaprom.ru/regions/murmanskaya\\_obl.html](http://www.metaprom.ru/regions/murmanskaya_obl.html)
- MFA Kaliningrad, 2013, The Representation of the Ministry of Foreign Affairs of the Russian Federation in Kaliningrad [http://www.kaliningrad.mid.ru/eng/acc\\_002.html](http://www.kaliningrad.mid.ru/eng/acc_002.html)
- Ministère de l'Energie, des Mines, de l'Eau et de l'Environnement, 2009, *Projet Marocain de l'Energie Solaire*.
- Ministère de l'Energie, des Mines, de l'Eau et de l'Environnement, 2009, *Le Projet Marocain intègre de l'énergie éolienne*
- Ministère de l'équipement et du transport, 2012, *Le secteur aéroportuaire en chiffres*
- Ministère de l'équipement et du transport, 2012, *Les ports du Maroc en chiffres 2000 – 2010*
- Ministry of Ecology and Natural Resources of Azerbaijan Republic (2012). Environmental problems of the Caspian Sea. Available at: <http://www.eco.gov.az/en/x-ep.php>
- Ministry of Local Self-Government (FYROM), Ministry of European Integration (Albania), 2007, IPA CBC Cross Border Republic of Macedonia-Republic of Albania. [http://www.sep.gov.mk/data/file/Pred%20Pristapna%20podrska/IPA/Komponenta%20\(angliska%20verzija%20-%20AL\).pdf](http://www.sep.gov.mk/data/file/Pred%20Pristapna%20podrska/IPA/Komponenta%20(angliska%20verzija%20-%20AL).pdf)

- Moisseron, J-Y. and Hafid, H., 2013, "Moroccan Report", ESPON-ITAN project, Paris
- Monova M., 2001, « De l'historicité à l'ethnicité : les Egéens ou ces autres Macédoniens », in *Balkanologie*, 5, pp. 179-197.
- Montabone, B., 2011, *L'Union Européenne et la Turquie. Les enjeux d'un développement régional*, Presses Universitaires de Rennes, Rennes, 235 p.
- Moriconi-Ebrard (François), 1993, *L'urbanisation du monde depuis 1950*, Anthropos, collection Villes, Paris, 372p
- Mundell R., 1961, "A Theory of Optimum Currency Area", *American Economic Review*, vol. 51, N°4 (September 1961), pp.657-665
- NCC, 2013, The North Calotte Council website. Accessed 28/11/201: [www.nordkalottradet.nu](http://www.nordkalottradet.nu)
- Nies, S., 2010, "L'énergie, l'UE et la Russie", *Hérodote*, 3, 138, 79-93 pp.
- NORA, 2013, Nordic Atlantic Cooperation website. Accessed 28/11/2013: <http://www.nora.no/en/frontpageuk/>
- Nordregio, 2012, ET2050. Baltic Sea Region & Nordic and Northern Peripheries Region Report. Dubois, A., Roto, J., Tepecik Diş, A.
- Northern Periphery, 2013a, The Northern Periphery Programme 2007-2013 website. Accessed 28/11/2013: <http://www.northernperiphery.eu>
- Northern Periphery, 2013b, Northern Periphery & Arctic 2014-2020 Operational Programme DRAFT Contents Chapters for Public Consultation. Accessed 28/11/2013: [http://www.northernperiphery.eu/files/archive/Downloads//Programming\\_process\\_2014-2020/Public\\_Consultation\\_DRAFT\\_OP/Draft\\_OP\\_document\\_-\\_chapters\\_1-4.pdf](http://www.northernperiphery.eu/files/archive/Downloads//Programming_process_2014-2020/Public_Consultation_DRAFT_OP/Draft_OP_document_-_chapters_1-4.pdf)
- NSIDC, 2013, National Snow and Ice Data Center, [http://nsidc.org/cryosphere/arctic-meteorology/climate\\_vs\\_weather.html](http://nsidc.org/cryosphere/arctic-meteorology/climate_vs_weather.html)
- NWAPA, 2013, Северо-Западный федеральный округ: особенности и направления регионального развития: [http://nwapa.spb.ru/sajt\\_ibo/vistavki/sevzap.html](http://nwapa.spb.ru/sajt_ibo/vistavki/sevzap.html)
- Observatorio del Estrecho de Gibraltar, 2012, *Base de datos socioeconómicos y flujos de tráfico Europa – África. Informe Estadístico 2012*. Sociedad Española de estudios para la comunicación fija a través del Estrecho de Gibraltar (SECEGSA)
- OECD, 2007, *Baltic Partnerships. Integration, growth and local governance in the Baltic Sea Region*
- OECD, 2008, "Territorial Reviews: Istanbul"
- OME, 2011, *Mediterranean Energy Perspectives*, Observatoire Méditerranéen de l'Energie, Paris
- Osservatorio sui Balcani, 2003, « Bosnie : les jeunes tentés par l'exil ». <http://balkans.courriers.info/article2539.html>
- Ouadah-Bedidi, Z., 2013, "Algeria Report", ESPON-ITAN project, Paris
- Ozaslan, M., Dincer, B., Ozgur, H., 2006, "Regional Disparities and Territorial Indicators in Turkey: Socio-Economic Development Index (SEDI)"; European Regional Science Association, ERSA conference papers 01/2006
- Özbay, F., 2011, "The relations between Turkey and Russia in the 2000s". *Perceptions. Journal of International Affairs*, 16, 3, 69–92 pp.
- Paas, T. and Tafenu, E., 2004, *Modelling the economies of the Baltic Sea Region*. The University of Tartu.
- Pagès-EI Karoui, D., 2012, "Mapping the Arab Uprisings: Places, Spatial Dynamics and Scales", Paper presented at BRISMES (British Society for Middle Eastern Studies), LSE, March 28 2012, London
- Pagès-EI Karoui, D., 2013, "Egypt Report", ESPON-ITAN project, Paris
- PAM, 2014, Report on the "Activities of the PAM Panel on Trade and Investments in the Mediterranean 2013", Rapporteur Hon. Nevena Stojanovic, Parliamentary Assembly of the Mediterranean
- Parant A., Penev G., Remikovic R., 2008, "Les Monténégrins au Monténégro : majoritaires hier, minoritaires demain?". *Démographie et Cultures - XVe Colloque de l'Aidelf*, Québec, 25-29. août 2008, pp. 373-388 <http://www.erudit.org/livre/aidelf/2008/001512co.pdf>
- Pelagonia Region – Official website, consulted on the 16/12/2013 <http://www.pelagonijaregion.mk/portal/index.php?jazik=2>

- Penev G., 2009, Demografski trendovi u Crnoj Gori od sredine 20. vijeka i perspektive do 2050. godine. Zavod za statistiku Crne Gore – Monstat, Podgorica.  
<http://www.monstat.org/userfiles/file/publikacije/DEMOGRAFSKI%20TRENDOVI%20I%20PROJEKCIJE%20U%20CRNOJ%20GORI.zip>
- Penev, G. , 2011, Migracije, krize i ratni sukobi na Balkanu s kraja 20. veka, Društvo demografa Srbije-Demobalk.
- Penev, G. ed., 2006, Stanovništvo i domaćinstva Srbije prema popisu 2002. godine. Republički zavod za statistiku Srbije - Institut društvenih nauka / Centar za demografska istraživanja - Društvo demografa Srbije, Beograd. <http://pod2.stat.gov.rs/ObjavljenePublikacije/G2006/pdf/G20066005.pdf>
- Penev, G., 2010, "Novije promene u populacionoj dinamici Srbije i balkanskih zemalja". Demografija, Beograd, 2010(7), pp. 45-78. [http://www.gef.bg.ac.rs/img/upload/files/5\\_Penev.pdf](http://www.gef.bg.ac.rs/img/upload/files/5_Penev.pdf)
- Penev, G., 2012, "Etnička struktura stanovništva balkanskih država krajem 20. i početkom 21. veka". Teme, Niš - Univerzitet u Nišu., XXXVI(4), p. 1535-1557, <http://teme.junis.ni.ac.rs/teme4-2012/teme%204-2012-04.pdf>
- Plan Bleu (2010). *Maritime Transport of Goods in the Mediterranean*. Plan Bleu, Valbonne, 2010 (Blue Plan Papers 7).
- Plan Bleu, 2009, *Energy production and energy consumption in Morocco*
- Plan Bleu, 2010, *Infrastructures and sustainable energy development in the Mediterranean: 2025 outlook*. Plan Bleu, Valbonne, 2010 (Blue Plan Papers 6).
- Poon, J.P.H., 1997, 'The cosmopolitanisation of Trade regions: Global trends and implications, 1965-1990', *Economic Geography* 73 (4): 390-404.
- Poon, J.P.H., Thomson, E.R. and Kelly, P.F., 2000, 'Myth of the Triad? The Geography and Trade and Investments Blocs', *Transactions of the Institute of the British Geographers, New Series* (4): 427-444. URL : [http://www.eurobroadmap.eu/Flows\\_and\\_Networks](http://www.eurobroadmap.eu/Flows_and_Networks)
- Pushka, A. & Pushka N., 2008, Analysis of the Vital Statistics for the Newest Period of Time. Statistical Office of Kosovo (SOK). [http://esk.rks-gov.net/ENG/pop/publications/doc\\_download/707-analysis-of-the-vital-statistics-for-the-newest-period-of-time](http://esk.rks-gov.net/ENG/pop/publications/doc_download/707-analysis-of-the-vital-statistics-for-the-newest-period-of-time)
- Radvanyi J., 2010, Caucase : la marche turbulente de la Fédération de Russie, *Hérodote*, 3, 138, 8-26 pp.
- Rasmussen, R.O., Hovelsrud, G., Gearheard, S. , 2013, AHDR-II draft Community Viability and Adaptation
- Reda, M., 2013, "Egypt Report, technical part", ESPON-ITAN project, Cairo
- Republic of Macedonia - State statistical Office, 2013, Statistical Yearbook, [http://www.stat.gov.mk/PrikaziPublikacija\\_1\\_en.aspx?rbr=410](http://www.stat.gov.mk/PrikaziPublikacija_1_en.aspx?rbr=410)
- Richard Y., Zanin C., 2009, « L'Europe dans la régionalisation de l'espace mondial », *Géocarrefour*, Vol. 84/3, [En ligne], mis en ligne le 06 janvier 2010. URL: <http://geocarrefour.revues.org/index7383.html>
- Richard Y., 2012, "Political cooperation of the EU. A geographical assessment", in Van Hamme et al., *Territorial Impact of Globalisation for Europe and its Regions*, Draft Final Report, 2012, ESPON, [http://www.espon.eu/main/Menu\\_Projects/Menu\\_AppliedResearch/tiger.html](http://www.espon.eu/main/Menu_Projects/Menu_AppliedResearch/tiger.html)
- Rogoža, J., Wierzbowska-Miazga, A. and Wiśniewska, I., 2012, A captive island – Kaliningrad between Moscow and the EU. *OSW Studies* (Centre for Eastern Studies).
- Ross, C. and Campbell, A., 2008, *Federalism and Local Politics in Russia*. BASEES/ Routledge Series on Russian and East European Studies.
- Roux M. , 1992, *Les Albanais en Yougoslavie: minorité nationale, territoire et développement*, Paris, éditions de la Maison des Sciences de l'Homme.
- Royaume du Maroc, 2008, *Les transports au Maroc et l'intégration physique régionale*
- Ruiz Estrada, M-A., 2012, "The Application of the Multi-Level Investment Flows Monitoring Model (MIF Model) on china and Asean", University Library of Munich, MPRA Paper number 40653, URL: <http://mpra.ub.uni-muenchen.de/40653/>
- Rupnik J. (ed), 2011, *The Western Balkans and the EU: the Hour of Europe*, Chaillot Paper, June 2011.
- Saint-Petersburg, 2013, <http://www.saint-petersburg.com/russian-visa/frequently-asked-questions.asp>
- Sardon J-P., 2004, "Démographie de pays dans la tourmente : les Balkans depuis 1990". *Espace, populations, sociétés*, Lille, 2004(3), p. 499-517. <http://eps.revues.org/pdf/345>

- Sazonova, I. E., 2006, Differentiation of life expectancy in Russian Regions. Pskov regional Journal. ДИФФЕРЕНЦИАЦИЯ СРЕДНЕЙ ПРОДОЛЖИТЕЛЬНОСТИ ЖИЗНИ В РЕГИОНАХ РОССИИ. Псковский регионологический журнал : <http://cyberleninka.ru/article/n/differentsiatsiya-sredney-prodolzhitelnosti-zhizni-v-regionah-rossii>
- Schmitt, P. & Dubois, A., 2008, Exploring the Baltic Sea Region –On territorial capital and spatial integration., Nordregion 2008.
- Schuler, M., Jarne, A., Shameti, E. and L. Seferkolli, 2010, “Typology of Communes and Definition of Agglomerations in Albania”. In: Socio-demographic statistics in Albania: selected topics and future developments, pp. 129-159, Swiss Cooperation Office Albania, Tirana.
- Sebentsov A.B. and Zotova M.B., 2013, Себенцов А.Б; Зотова М.В “Российский эксклав на Балтике: потенциал ЭГП и возможности его реализации
- SECEGSA, SNED, 2008, *Rapport de situation socioéconomique, tendances et scénarios. Bases de données, analyse et définition de scénarios*
- SIGMA, 2013, SIGMA Assessment Kosovo. [http://www.sigmaweb.org/publications/KosovoAssessment\\_2013.pdf](http://www.sigmaweb.org/publications/KosovoAssessment_2013.pdf)
- Sintès P., 2010, La raison du mouvement. Territoires et réseaux de migrants albanais en Grèce, Paris, Editions Karthala, Maison méditerranéenne des sciences de l’homme, Ecole française d’Athènes.
- Socpol, 2013a, Independent Institute for Social Policy. Social Atlas of Russian Regions: <http://www.socpol.ru/atlas/portraits/arkh.shtml>
- Socpol, 2013b, Independent Institute for Social Policy. Social Atlas of Russian Regions: <http://www.socpol.ru/atlas/portraits/arkh.shtml>
- Sompairac, L., 2014, “Urbaniser les territoires à forte instabilité géopolitique - Le cas de Rawabi, première ville nouvelle palestinienne”, master of geography thesis, University Paris 1
- Sophia Antipolis, 2004, *Climate Change and Energy in the Mediterranean*. Plan Bleu
- State of the Region Report, 2012, Baltic Development Forum: [http://www.bdforum.org/cmsystem/wp-content/uploads/BDF\\_SoRR\\_2012\\_10.pdf](http://www.bdforum.org/cmsystem/wp-content/uploads/BDF_SoRR_2012_10.pdf),
- Sutyryn, S., 2012, The impact of Russia’s WTO and the Eurasian Economic Union membership on the Baltic Sea. Available at: [regionhttp://www.utu.fi/en/units/tse/units/PEI/events/Documents/Sutyryn%20lopullinen%20julkaistava.pdf](http://www.utu.fi/en/units/tse/units/PEI/events/Documents/Sutyryn%20lopullinen%20julkaistava.pdf)
- Taillard Ch., ed., 2004, "Intégrations régionales en Asie orientale", Paris : Les Indes Savantes, URL : <http://perspectiveschinoises.revues.org/920>
- Tangier Med Port Authority, 2010, *Rapport Annuel 2010*.
- Tannock Ch. & Obiols R., 2007, « Report on Strengthening the European Neighbourhood Policy », A6-9999/2007, Commission des Affaires étrangères, Parlement européen, Bruxelles
- Tatarstan, 2013, General information <http://tatarstan.ru/eng/about/economy.htm> Accessed on 16/12/2013
- Tay, S.C., 2010, *Asia Alone: The Dangerous Post-Crisis Divide from America*, John Wiley & Sons
- Teurtrie D., 2008, La stratégie de la Russie dans l'exportation de ses hydrocarbures : contrôle et diversification, Flux, 1, 71, 24-36 pp.
- Teurtrie, D., 2012, Union Européenne ou Russie : le dilemme ukrainien, Outre-Terre, 2, 347–353 pp.
- Thibault, H-L., El Andaloussi, H., 2011, L’efficacité énergétique dans le bâtiment en Méditerranée, Futuribles n°376
- Timofeyev, Y., 2013, “The Effects of the Informal Sector on Income of the Poor in Russia”, Volume 111, Issue 3, pp 855-866, Soc Indic Res (Social Indicators Research 2013) 111:855–866, Springer. Available at SSRN: <http://ssrn.com/abstract=2062759>
- Tornedalsrådet, 2013, Torne Valley Council website. Accessed: 28/11/2013 <http://www.tornedalen.org/>
- Tourret J; Wallaret V, 2008, *Méditerranée 2030. 4 scénarios pour les territoires méditerranés*. Institut de la Méditerranée.
- Tourret JC; Wallaert V, 2010, *MedGovernance Project. 3 Scenarios for a Mediterranean Macro-Regional Approach*. Institut de la Méditerranée.
- Trajkovski M., 2013, « Macedonia and Albania to open new border crossing ». [http://setimes.com/cocoon/setimes/xhtml/en\\_GB/features/setimes/features/2013/02/18/feature-01](http://setimes.com/cocoon/setimes/xhtml/en_GB/features/setimes/features/2013/02/18/feature-01)

Ukraine, 2013, Natural resources of Ukraine EEA 2010, European Environment Agency, Report N°1:2010, *Environmental trends and perspectives in the Western Balkans: future production and consumption patterns*. <http://ukrainetrek.com/about-ukraine-nature/ukraine-natural-resources> Accessed on 16/12/2013

UNDP, 2010, Report on Foreign Direct Investment in Albania.

UNECA, 2012, "Assessing Regional Integration in Africa V - Towards an African Continental Free Trade Area", UN Economic Commission for Africa, African Union, African Development Bank, Addis Abeba, URL: <http://new.uneca.org/aria/aria5.aspx>

UNEP, 2006, Global International Waters Assessment. Regional assessment 17 Baltic Sea [http://www.unep.org/dewa/giwa/areas/reports/r17/giwa\\_regional\\_assessment\\_17.pdf](http://www.unep.org/dewa/giwa/areas/reports/r17/giwa_regional_assessment_17.pdf)

UNEP, 2013, New Awareness of and Opportunities for Unep to address Climate Change in the Arctic. A Background paper for the Arctic Side Event at the Governing Council/Global Environmental Ministerial Forum, What Future for the Arctic? Naobi, Kenya, 18 February 2013

UNEP, 2013, Protecting Arctic Biodiversity, Limitations and Strengths of Environmental Agreements, GRID Arendal-A Centre Collaborating with Unep, p.21, available at: [http://www.grida.no/\\_cms/OpenFile.aspx?s=1&id=1442](http://www.grida.no/_cms/OpenFile.aspx?s=1&id=1442), Accessed 29.11.2013

UNHCR, 2007, « Bosnia and Herzegovina », Statistical Yearbook 2005, Geneva <http://www.unhcr.org/464478a72.html>

United Nations Environment Programme, 2006, *The Blue Plan's sustainable development outlook for the Mediterranean*. Plan Bleu

United Nations Environment Programme, 2008, *The Blue Plan's sustainable development outlook for the Mediterranean*. Plan Bleu

United Nations, 2004, "Republic of Lebanon, Public Administration Country Profile", Division for Public Administration and Development Management (DPADM) , Department of Economic and Social Affairs (DESA)

UNITED NATIONS, 2008, Demographic Yearbook 2005, New York.

United Nations, 2010, *World Population Prospect, the 2011 Revision*. United Nations

United Nations, 2012, *World Population Prospect, the 2012 Revision*. United Nations

US Geological Survey, 2008, "Assessment of undiscovered oil and gas in the Arctic", US Geological Survey Fact Sheet 2008

Van Boeschoten R. et alii, 2008, Μνημες και ληθη του ελληνικου εμφυλιου πολεμου (Monuments et tombes de la guerre civile grecque), Thessalonique, Epikentros.

Van Hamme G. et al., 2012, "Territorial Impact of Globalisation for Europe and its Regions", TIGER Final Report, ESPON, url: [http://www.espon.eu/main/Menu\\_Projects/Menu\\_AppliedResearch/tiger.html](http://www.espon.eu/main/Menu_Projects/Menu_AppliedResearch/tiger.html)

Van Hamme G., Grasland C. (coord.), 2012, Divisions of the world according to flows and networks, March 2012. URL: [http://www.eurobroadmap.eu/Flows\\_and\\_Networks](http://www.eurobroadmap.eu/Flows_and_Networks)

Van Hamme G., Pion G., 2012, 'The relevance of the world-system approach in the era of globalisation of economic flows and networks', *Geografiska Annaler: Series B, Human Geography*, 94 (1): 65-81.

VASAB, 2009, Long-Term Perspective for the Territorial Development of the Baltic Sea Region. Towards better territorial integration of the Baltic Sea Region and its integration with other areas of Europe. Available at: [http://www.mrr.gov.pl/rozwoj\\_regionalny/Polityka\\_przestrzenna/VASAB/Documents/VASAB\\_070709.pdf](http://www.mrr.gov.pl/rozwoj_regionalny/Polityka_przestrzenna/VASAB/Documents/VASAB_070709.pdf)

Veltz, P., 2005, *Mondialisation, villes et territoires*, Ed. PUF, Paris, 288 p

Verdeil, E., 2011, "Révolution et décentralisation en Tunisie : les chantiers des géographes tunisiens", <http://rumor.hypotheses.org/1921>

Visit Russia, 2013, Russian National Tourist Office <http://www.visitrussia.org.uk/visaform/getting-a-russian-visa/>

Voronez Media, 2009, [http://www.voronezh-media.ru/news\\_out.php?id=42571](http://www.voronezh-media.ru/news_out.php?id=42571)

Vučetić D., 2007, "The most Important Changes in Serbian System of Territorial Decentralisation", *Facta Universitatis: Law and politics*, 5(1), p. 39-46.

Wanner, P., Lerch, M. & E. Galanxhi, 2010, "Albanian Demographic Information System: A description." In: Socio-demographic statistics in Albania: selected topics and future developments, pp. 15-27, Swiss Cooperation Office Albania, Tirana.

Wikimedia, 2009, Topographic Map of Ohrid and Prespa Lakes, consulted on the 16/12/2013 [http://commons.wikimedia.org/wiki/File:Ohrid\\_and\\_Prespa\\_lakes\\_topographic\\_map.svg](http://commons.wikimedia.org/wiki/File:Ohrid_and_Prespa_lakes_topographic_map.svg)

- World Bank, 2006, *Is there a New Vision for Maghreb Economic Integration?*
- World Bank, 2009, World Development report 2009, Spatial disparities and Development Policy.
- WORLD BANK, 2012, Montenegro: Preparing for Prosperity, Report No. 73826-ME.
- WORLD BANK, INSTAT, UNDP, 2009, Albania: Trends in poverty 2002-2005-2008.  
[http://www.instat.gov.al/media/37906/living\\_standard\\_measurement\\_survey\\_2008.pdf](http://www.instat.gov.al/media/37906/living_standard_measurement_survey_2008.pdf)
- Yiftachel, O., 2009, "Ghetto Citizenship: Palestinian Arabs in Israel" in Rouhana, N. and Sabagh, A. eds *Israel and the Palestinians – Key Terms*, Mada Center for Applied Research, Haifa
- Zimin, D., 2013, Russia's oil and gas export infrastructure. New routes, new actors. The EU-Russia Borderland, New contexts for regional co-operation
- Zvidriņš, P., 2011, Demographic development in the Baltic Sea Region. Latvian Academy of Sciences, Available at: [http://www.lza.lv/LZA\\_VestisA/66\\_5-6/5\\_Peteris%20Zvidrins.pdf](http://www.lza.lv/LZA_VestisA/66_5-6/5_Peteris%20Zvidrins.pdf)
- Zwierzchowski J. & Tabeau E., 2010, "Census-based multiple system estimation as an unbiased method of estimation of casualties' undercount". Conference Paper for the European Population Conference, 1-4 September 2010, Vienna. <http://epc2010.princeton.edu/papers/100880>

## Websites

- Arctic Council: <http://www.arctic-council.org/index.php/en/>
- Arctic Monitoring and Assessment Programme (AMAP): <http://www.amap.no/>
- Barent Euro-Arctic Council (BAEC): <http://www.beac.st/in-English/Barents-Euro-Arctic-Council>
- Barents Sea: <http://www.barentsinfo.org/Content-by-Category/Environment--Nature/Barents-Sea>  
<http://browse.oecdbookshop.org/oecd/pdfs/product/8407011e.pdf>  
[http://commons.wikimedia.org/wiki/File:Ohrid\\_and\\_Prespa\\_lakes\\_topographic\\_map.svg](http://commons.wikimedia.org/wiki/File:Ohrid_and_Prespa_lakes_topographic_map.svg)
- <http://iwlearn.net/news/iwlearn-news/lake-prespa-transboundary-diagnostic-analysis>  
<http://www.e-f-a.org/whatsefa.php>  
[http://www.espon.eu/main/Menu\\_Projects/Menu\\_AppliedResearch/terco.htm](http://www.espon.eu/main/Menu_Projects/Menu_AppliedResearch/terco.htm)  
<http://www.greece-albania.eu/programme/basic-information-on-the-programme.html>  
<http://www.interreg.gr/en/european-territorial-cooperation.html>  
<http://www.ipa-cbc-programme.eu/programme>  
<http://www.pelagonijaregion.mk/portal/index.php?jazik=2>  
<http://www.predaplus.eu/>  
[http://www.predaplus.eu/images/stories/dokumenti/Regional\\_Development\\_in\\_Western\\_Balkan.pdf](http://www.predaplus.eu/images/stories/dokumenti/Regional_Development_in_Western_Balkan.pdf)  
<http://www.sep.gov.mk/data/file/Pred%20Pristapna%20podrska/IPA/Komponenta%202/angliska%20verzija%20-%20AL.pdf>
- Protection of the Arctic Marine Environment (PAME): <http://www.pame.is/>
- Sustainable Development Working Group (SDWG): <http://www.sdwg.org/>
- The Arctic Contaminants Action Program (ACAP): <http://www.arctic-council.org/index.php/en/acap-home/283-about-acap>
- The Conservation of Arctic Flora and Fauna (CAFF): <http://www.caff.is/>
- The Emergency Prevention, Preparedness and Response Working Group (EPPR): <http://www.arctic-council.org/eppr/>
- The Nordic Atlantic Cooperation (NORA): <http://www.norden.org/en/nordic-council-of-ministers/council-of-ministers/nordic-council-of-ministers-for-business-energy-regional-policy-mr-ner/institutions-co-operative-bodies-border-regions-and-working-groups/co-operating-body/the-nordic-atlantic-cooperation-nora>



## Databases

Office des changes, Royaume du Maroc	<a href="http://www.oc.gov.ma">http://www.oc.gov.ma</a>
Royaume du Maroc	<a href="http://www.hcp.ma/">http://www.hcp.ma/</a>
Maroc 2030	<a href="http://194.204.215.40/maroc2030/Default.aspx?tabid=36">http://194.204.215.40/maroc2030/Default.aspx?tabid=36</a>
Instituto Nacional de Estadística	<a href="http://www.ine.es">www.ine.es</a>
Ministerio de Fomento, Gobierno de España	<a href="http://www.fomento.gob.es">http://www.fomento.gob.es</a>
African Economic Outlook	<a href="http://www.africaneconomicoutlook.org">http://www.africaneconomicoutlook.org</a>
World Bank	<a href="http://data.worldbank.org/">http://data.worldbank.org/</a>
International Monetary Found	<a href="http://www.imf.org">http://www.imf.org</a>
United Nations, Population Division	<a href="http://www.un.org/esa/population/">http://www.un.org/esa/population/</a>
Union pour la Méditerranée	<a href="http://www.ufmsecretariat.org/en">http://www.ufmsecretariat.org/en</a>
Commission Interméditerranéene	<a href="http://www.medregions.com/">http://www.medregions.com/</a>
Ministère de l'Équipement et du Transport	<a href="http://www.mtpnet.gov.ma">http://www.mtpnet.gov.ma</a>
COMEXT	<a href="http://epp.eurostat.ec.europa.eu/portal/page/portal/external_trade/data/database">http://epp.eurostat.ec.europa.eu/portal/page/portal/external_trade/data/database</a>
TourEspaña	<a href="http://www.tourspain.es/">http://www.tourspain.es/</a>
AENA Statistics	<a href="http://www.aena-aeropuertos.es/csee/Satellite?pagename=Estadisticas/Home">http://www.aena-aeropuertos.es/csee/Satellite?pagename=Estadisticas/Home</a>
Cross-Border cooperation in the Mediterranean	<a href="http://www.enpicbmed.eu/">http://www.enpicbmed.eu/</a>
Euro-Mediterranean free trade area (EMFTA)	<a href="http://www.sia-trade.org/emfta">http://www.sia-trade.org/emfta</a>
Euro-Mediterranean Information System on know-how in the Water sector (EMWIS)	<a href="http://www.semide.net/">http://www.semide.net/</a>
EuroMed Transport Project	<a href="http://www.euromedtransport.org/En/home_4_46">http://www.euromedtransport.org/En/home_4_46</a>
European Institute of the Mediterranean (IEMed)	<a href="http://www.iemed.org/">http://www.iemed.org/</a>
EUROSTAT	<a href="http://epp.eurostat.ec.europa.eu/portal/page/portal/statistics/themes">http://epp.eurostat.ec.europa.eu/portal/page/portal/statistics/themes</a>
Horizon 2020	<a href="http://www.h2020.net/">http://www.h2020.net/</a>
Institut de Prospective Économique du Monde Méditerranée	<a href="http://www.ipemed.coop/">http://www.ipemed.coop/</a>
Integrated Coastal Zone Management (ICZM) Protocol to the Barcelona Convention	<a href="http://ec.europa.eu/environment/iczm/barcelona.htm">http://ec.europa.eu/environment/iczm/barcelona.htm</a>
Marseille Centre of Mediterranean Integration	<a href="http://www.cmimarseille.org/Resources.php">http://www.cmimarseille.org/Resources.php</a>
OECD	<a href="http://www.oecd.org">http://www.oecd.org</a>
Plan Bleu	<a href="http://www.planbleu.org/">http://www.planbleu.org/</a>
Programme Med	<a href="http://www.programmemed.eu/index.php?id=5175&amp;L=1">http://www.programmemed.eu/index.php?id=5175&amp;L=1</a>
SESRIC	<a href="http://www.sesric.org/">http://www.sesric.org/</a>
United Nations Environment Programme. Mediterranean Action Plan for the Barcelona Convention	<a href="http://www.unepmap.org/">http://www.unepmap.org/</a>
UNCTAD	<a href="http://unctadstat.unctad.org/ReportFolders/reportFolders.aspx">http://unctadstat.unctad.org/ReportFolders/reportFolders.aspx</a>

## 11. Dissemination: List of the publications of the ITAN TPG members

### Publications

Beckouche P., 2013, « Atlas des integrations regionales. Euro-Méditerranée, Asie orientale, Amérique du Nord », IPEMED, Paris, France

url : <http://www.ipemed.coop/fr/publications-r17/etudes-analyses-c108/atlas-des-integrations-regionales-euro-mediterranee-asie-orientale-amerique-du-nord-a2139.html>

Beckouche P., Besnard P., Pécout H. and UMS RIATE, 2014, Web file “L’Europe en cartes” for the European elections 2014, Nouvel Observateur, Paris, France – Online 22/05/2014

- . Energy: can European countries do without an European policy?
- . Is there an European social model?
- . To move from “migrations” to “mobilities”
- . How to avoid the world marginalisation?
- Online file: <http://www.gis-cist.fr/les-enjeux-de-lelection-europeenne-cartes-sur-table/>

Beckouche P., Richard Y. and Schultz M. (postface), 2013, *Atlas de la grande Europe*, Autrement, Paris, France

Moisseron J-Y. and Pécout H., 2013, Web file “Avoir 20 ans en Tunisie”, *Libération*, Paris, France – Online 15/06/2013

Moisseron J-Y., 2014, Report on “L’accès et le maintien des femmes à l’emploi de qualité au Maroc, en Tunisie et en Turquie”, Agence française de développement, Paris, France

Moisseron J-Y., *coming*, Project TAWALA (Territorial analysis of women access to labour), Centre national de la recherche scientifique et technique – Morocco, Faculté des lettres et des sciences sociales de l’université de Marrakech, Morocco

### Events

Beckouche P., 08/06/2012, Round table “*Trajectoires institutionnelles des transformations du monde arabe : temps longs et contraintes territoriales*”, ASECTU (Tunisian economists association) Forum “Croissance, emploi et répartition dans un contexte de mondialisation”, Hammamet, Tunisia

Beckouche P., 15/11/2012, Presentation in International Conference “*Toward a trans-Mediterranean entrepreneurship?*”, Programme MeRsi-AUF-IRMC, Aix-en-Provence, France

Laporte A., 06/09/2013, “*Borders in embassy networks: how diplomacy contribute to a new regionalization of Europe*”, 4th EUGEO Congress, Rome, Italy

- Programme: <http://www.eugeo2013.com/key-dates>

Berlina Anna, Besnard P. and Van Well L., 12/12/2013, Presentation of ITAN results for the Eastern Neighbourhood and the Baltic Sea case study in Session “*Territorial cooperation projects relevant for achieving the Long-Term Perspective goals*”, VASAB Stakeholder meeting “*Creating synergies for a well-integrated and coherent Baltic Sea Region*” - **ITAN Dissemination Event**, Helsinki, Finland

- Programme: <http://www.vasab.org/index.php/events/past-events/item/162-vasab-stakeholder-meeting-helsinki>

- Presentation: <http://www.vasab.org/index.php/events/past-events/item/162-vasab-stakeholder-meeting-helsinki>
- Audience: Aalto University, Baltic Landscape project, Baltic Sea Research and Development Programme, Baltic Sea States Subregional Co-operation, City of Helsinki, Conference of peripheral maritime regions Baltic Sea Commission, Council of the Baltic Sea States, Finnish Transport Safety Agency, Geomedia LLC, International Centre for Social and Economic Research, Ministry for Foreign Affairs of Finland, Ministry of Employment and the Economy of Finland, Ministry of Environment of Finland, Northern dimension partnership on transport and logistics, s.Pro Sustainable-Projects GmbH, TransBaltic, Union of the Baltic Cities Commission on Environment, VASAB

Grunfelder J., 10/04/2014, Presentation of ITAN results in “*EU neighboring regions and territorial development (ITAN)*”, ENECON – ESPON Evidence in a North European context, Vilnius, Lithuania  
 Boulineau E. and Laporte A., 30/06/2014, “*Entre mer Noire et Union européenne, le développement régional en Bulgarie : effets de voisinage, de cohésion ou de compétitivité?*”, The Regions and the EU Cohesion Policy Congress, Rennes, France

- Programme : <http://www.notre-europe.eu/media/programme-colloque-cohesion.pdf?pdf=ok>
- Audience : DG Regio, Bretagne Region, Rennes Metropolitan area, French Senate

Beckouche P., 22/10/2014, Conference and round table about the thematic of the cooperation between Europe and its Neighbourhoods, ESPON on the Road (ECP France) and DIMED, Paris, France

- audience: AVITEM, CIHEAM, Dimed, ESPON TIGER, MPC South, OME, Plan Bleu

ITAN TPG members, 12/11/2014, “*What territorial cooperation between Europe and its Neighbourhoods?*” - **ITAN Dissemination Event**, Brussels, Belgium

- programme: <http://www.gis-cist.fr/events/what-territorial-cooperation-between-europe-and-its-neighbourhoods/>
- audience: Committee of the Regions, DG Energy, DG Enlargement, DG Regio, EIB, ESPON CU, European External Action service, European Parliament, European Union Military, Eurostat, Permanent Representations, Russian Academy of sciences, territorial associations, think tanks
- report: <http://www.gis-cist.fr/itan-dissemination-events-what-next/>

ITAN TPG members, 27/11/2014, “*Further steps for territorial cooperation in the wider region Europe + Neighbourhoods*” - **ITAN Dissemination Event**, Barcelona, Spain

- programme: [http://www.gis-cist.fr/events/further\\_steps\\_for\\_territorial\\_cooperation\\_in\\_the\\_wider\\_region\\_europe-neighbourhoods/](http://www.gis-cist.fr/events/further_steps_for_territorial_cooperation_in_the_wider_region_europe-neighbourhoods/)
- audience: Anima, Cetmo, CGLU, Cidob, DemoBalk, ESPON CU, EU's institutions, Euro-Mediterranean Parliamentary Assembly, Euro-Mediterranean Regional and Local Assembly (Arlem), Eurostat, Haut-Commissariat au Plan (Morocco), IEMED, ITAN external experts, Migration Policy Center, OME, Plan Bleu, Tunisie Statistiques, Russian Academy of sciences, UfM, universities (UAB, UB)
- report: <http://www.gis-cist.fr/itan-dissemination-events-what-next/>

## 12. Dissemination: A territorial analysis of Ukraine

ESPON – “ITAN”. A territorial analysis of Ukraine  
Pierre BECKOUCHE\*, Pierre BESNARD\*, Vladimir KOLOSSOV\*\*, Hugues PECOUT\*  
\*GIS CIST ([www.gis-cist.fr](http://www.gis-cist.fr))

\*\* Institute of Geography, Russian Academy of Sciences  
Draft July 9th 2014

Available on line: <http://www.gis-cist.fr/portfolio/une-analyse-territoriale-de-lukraine-a-territorial-analysis-of-ukraine/>

The recent développement in Ukraine shows how important it is to consider the evolution of territorial patterns in political decision making, in particular regarding the EU neighbourhood. This document describes the main features of recent territorial development in Ukraine at the regional (oblast) scale. Though it does not allow to follow detailed changes, such analysis shows the major trends of the country's dynamics – for example, a sharp increase of the economic role of the capital city (the city of Kyiv – Kiev – makes up a separate territorial unit) typical for most post-socialist States. Ironically, the ongoing crisis in Ukraine, which raises the issue of the national cohesion, takes place after a period of strong reinforcement of the capital city. The growing gap in wealth between the capital and other regions and the hypertrophy of its functions is one of the factors undermining the modern Ukraine national building. This document considers its socio-economic development in the macro-regional context, in the Black Sea basin and as an interface between Russia and West Europe. Then it shows the place of Eastern Ukraine in the national territorial structure as a pre-requisit of the current deep crisis.

Most of the maps derive from the ESPON “ITAN” project (Integrated Territorial Analysis of the Neighbourhoods ) coordinated by the CIST. ESPON provides European stakeholders with results stemming from researches on territorial issues. The ITAN project included the creation of a database on the EU neighbouring countries at the regional level and a comparative analysis of their evolution.

The analysis partly derives from debates that took place during the CIST international conference held in Paris on March 27- 28th 2014 .

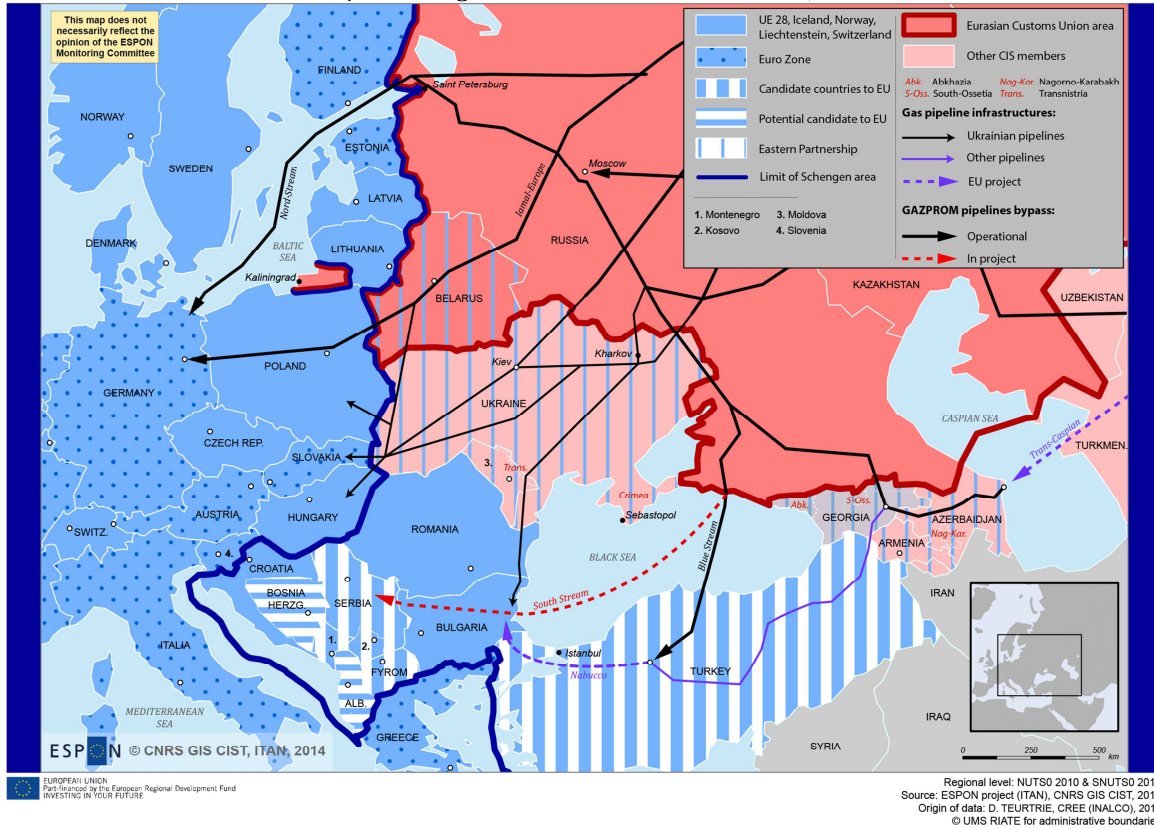
### 1. Ukraine in its macro-regional context: a fragile interface between Europe and Russie

Ukraine plays a key role in the delivery of Russian energy resources to Europe: 60% of the Russian gas consumed in Europe is transiting through Ukraine. In the last decade, Russia has developed alternative routs: the North Stream (under the Baltic Sea directly to Germany, Map 1) and the Blue Stream. The project of the South Stream under the Black Sea is worked out.

Both the EU and Russia tried to convince the former Ukrainian leadership in the advantages of economic integration with them. The EU suggested to sign the ENP Association agreement while Russia insisted that Ukraine joins the Eurasian Custom Union under Moscow's leadership. Each side argued that the maintenance of close economic relations was incompatible with the integration with the other partner and thus considered it as a zero-sum game which triggered the current crisis in November 2013, when Russia requested Ukraine to make it join the Eurasian Custom Union before signing the ENP Association agreement during the Oriental Partnership Summit.

The EU and Russia are the main partners of Ukraine in foreign trade and the most important sources of foreign direct investments. They also are the main destination of Ukrainian emigration. The EU provides to Ukraine the largest part of foreign aid. The territorial distribution of flight connections reflects the situation. In relation to population, Russia as a trade partner is much more important for Ukraine than the EU member states. The legacy of the common Soviet past is clearly manifested in its distribution of export: Russia is a much more important foreign consumer of Ukrainian goods (agricultural and mineral raw materials, aerospace and military industry...) than the EU. The latter's share in Ukrainian trade has been rising in the 1990s but is declining since the 2000s.

Map 1 – The geo-economic context of Ukraine, 2013



Map 2 - The geography of relations of Ukraine, around 2010

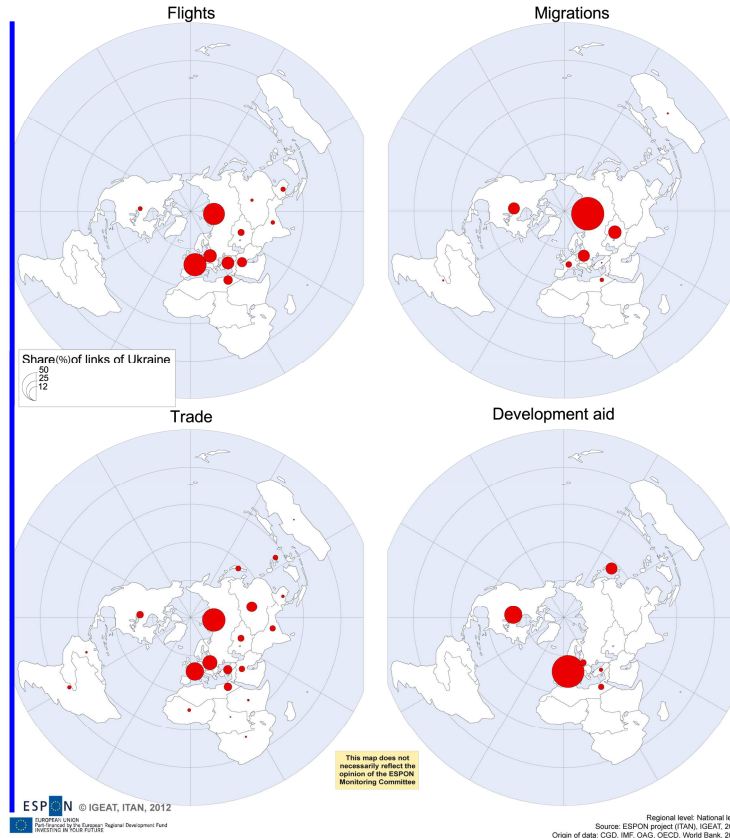
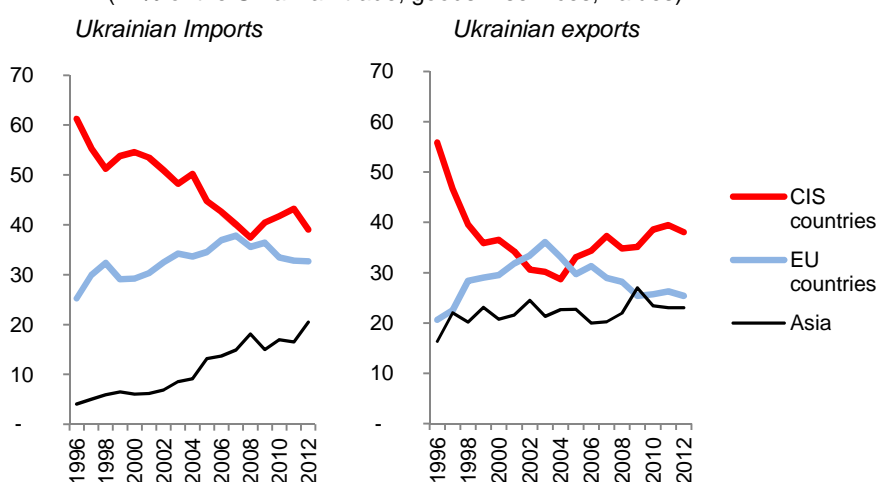


Figure 1. The external trade of Ukraine: the declining role of Europe (in % of the Ukrainian trade, goods + services, values)

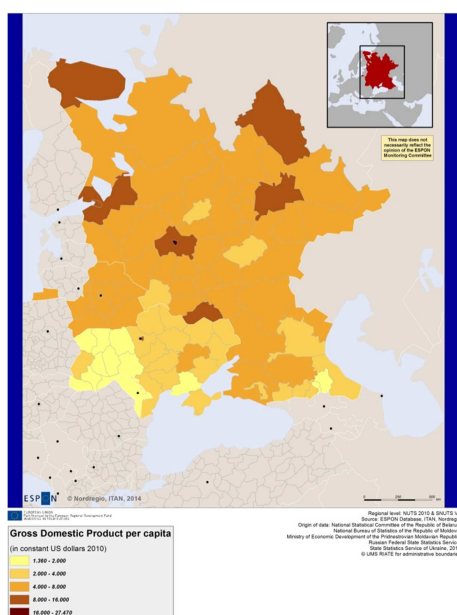


Source: Ukrstat

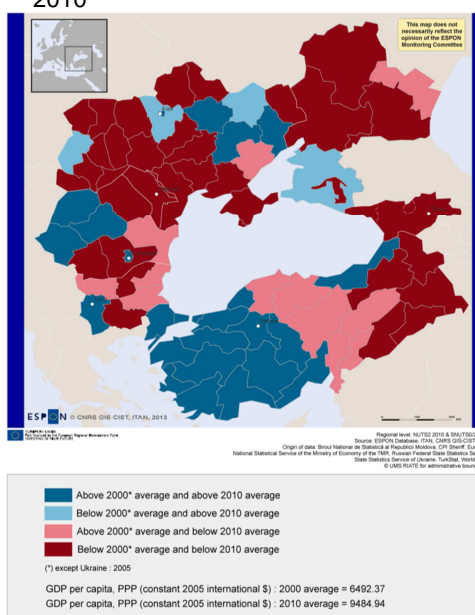
Map 3 shows the GDP per capita in the EU Eastern Neighbourhood by regions. In the last decade, the economy of Ukraine has shown successive indicators of weakness. The gap between Russia's economic growth and that of Ukraine has been rising, because the Ukrainian productive system has not been modernising quickly enough and needed massive investments. Since 2005 Ukrainian trade deficit is deepening and since 2006 the Ukrainian public debt has been rapidly increasing. As a result, Ukraine's path is less and less alike that of an emerging economy. It looks as the poorest area of Europe's Eastern neighbourhood, along with Georgia and its breakaway parts – Abkhazia and South Ossetia. The Western part of Ukraine shows a particularly low level of development. The contrast is obvious vis-à-vis Russia, and even vis-à-vis Belarus which has been doing quite better than Ukraine since the 2000s.

As compared with its neighbours in the Black Sea basin, the economic dynamic of Ukraine during the 2000s was particularly bad (Map 4). Still, the situation in its East, the most industrialized and urbanized region, was more favourable, partly because of a rapid depopulation (GDP per inhabitant rises when population declines). This development was in striking contrast with the progress of most regions of Turkey and of the neighbouring Russian Krasnodar krai.

Map 3. GDP per capita, 2010



Map 4. GDP (PPP) per cap. Black Sea area, 2000-2010



## 2. Ukraine's national territory: nation building and cohesion undermining

Another striking feature of Ukraine during the last decade is the rising regional issue. Ukraine exists in its present boundaries basically only since World War Two. Before it, West Ukraine, which has historically long been under Polish influence, has never been a part of a single State with other regions. Crimea was included in the Ukraine's territory even later (1954). Besides, unlike the core Ukrainian areas, south-eastern and southern regions have been populated by Ukrainian and Russian settlers (particularly the cities) relatively recently – since the late 17th century but especially in the period of industrialisation since the late 19th century. So, regional cultural, economic and political disparities became one of the major problems for the Ukrainian independent State. Moreover, during the last decade territorial disparities were deepening.

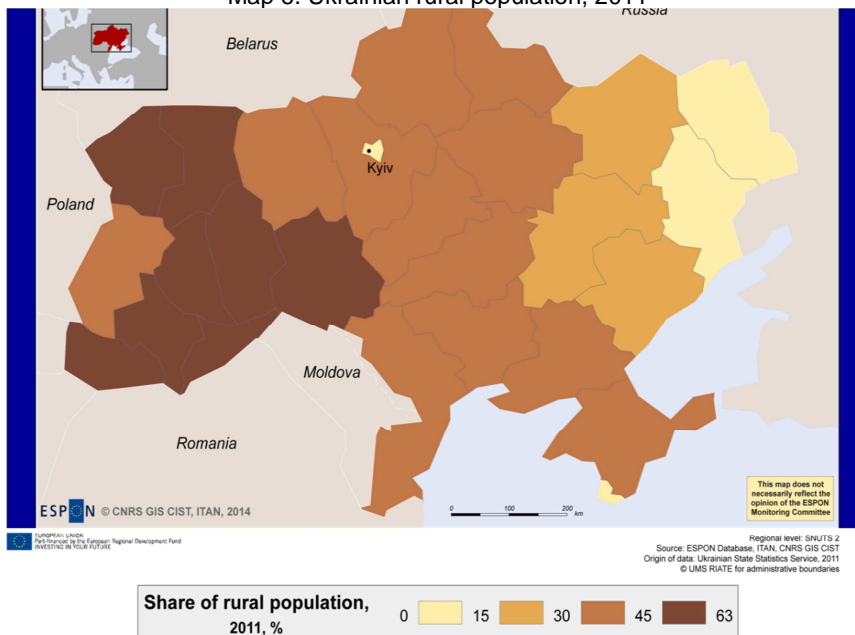
- The West still remains much less urbanised; its agriculture keeps an important share in GDP. The region suffers from under-equipment and is lagging behind the national income average.
- The East possesses a strong industrial basis and concentrates largest cities; it is richer than the national average.
- The centre of the country has an intermediate position, except of the city of Kyiv (Kiev) and its oblast which are the most dynamic territories, with a lot of civil servants and a set of business services.

Intra-regional disparities are often more pronounced than the gap between regions. Like in other post-Soviet States, the most favourable is the situation in the largest cities disposing of a diversified economy and skilled labour. Industrial cities specialised in export branches of economy and oblasts' administrative centres are also doing relatively well, while peripheral agricultural areas and small towns beyond urban regions, especially mono-industrial towns depending on one or two big plants in decline, suffer from drastic depopulation and poverty.

Map 5. Ukrainian cities over 200 000 inhabitants



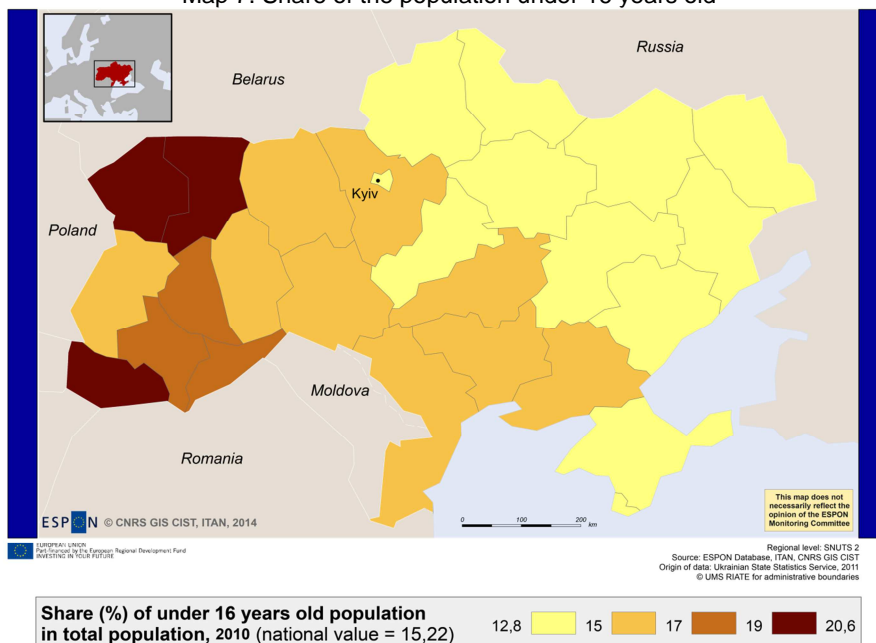
Map 6. Ukrainian rural population, 2011



All in all, the demographic dynamic is quite unfavourable. Ukraine's population has been steadily declining; nowadays it makes up 46 million people, instead of 53 million in 1993. The population came back to its mid-1960s level. The reasons of this decline are both natural decrease, and emigration almost equally distributed between EU countries and Russia. During the 2000s, no single region in the country experienced a demographic growth, except the city of Kyiv (Map 8).

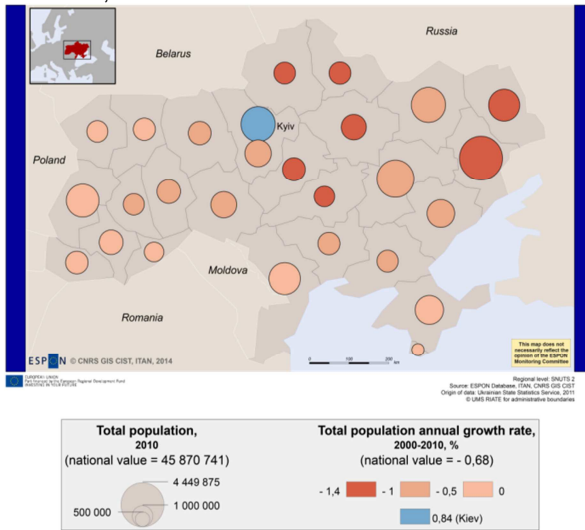
Depopulation is particularly strong in the East (regions of Donetsk, Louhansk) and also in the oblasts of Chernihiv, Sumy, Poltava and Kirovohrad. This process is closely related with the aging of population. In the East and Crimea the share of children under 16 dropped under 13% (Map 7). Most oblasts have a negative migratory balance. Few exceptions include first of all Kyiv and its outskirts, and to a much lesser extent Odesa, Kharkiv and Crimea with its sea resorts, its deep-water ports namely Sebastopol which as a naval base has always had a specific status.

Map 7. Share of the population under 16 years old

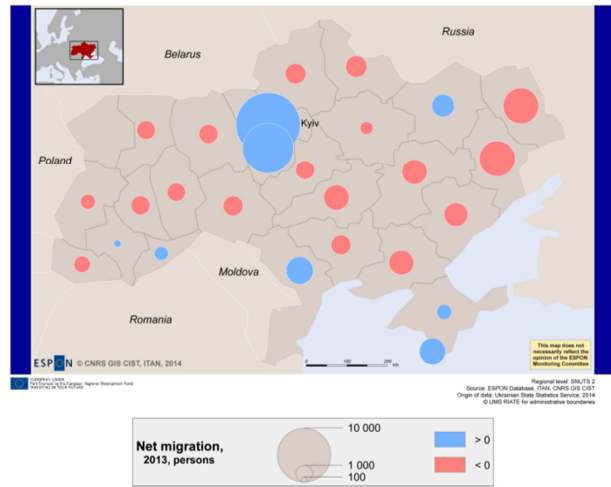




Map 8. Ukrainian regions' demographic evolution, 2000-2010



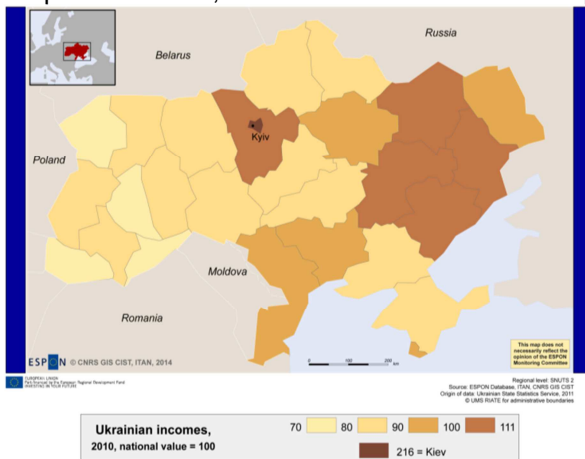
Map 9. Ukrainian domestic migrations, 2013



### 3. Declining regional disparities, rising concerns

The income's regional disparities are very high: in 2010 the City of Kyiv is more than twice as rich as the national average (Map 10). The East runs the second. The lowest incomes are in the West, that is to say in the territories neighbouring with the EU's countries. Since the collapse of the Soviet Union, in the Eastern industrial regions wages have been severely declining as compared with the national average. On the contrary, during the nation-state building era, the relative average amount increased in the West and especially in Kyiv (Map 11). Figure 2 shows the impressive rise of the average wage in the capital city compared to the national average, a typical phenomenon in any nation building process and in particular in post-Soviet countries.

Map 10. Incomes, 2010



Map 11. Wages regional disparities, 1995-2010

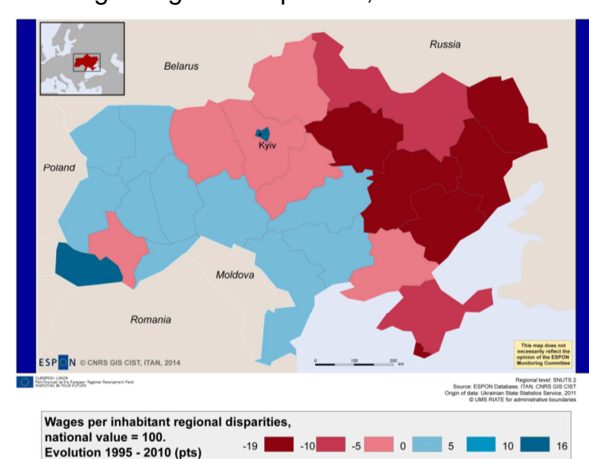
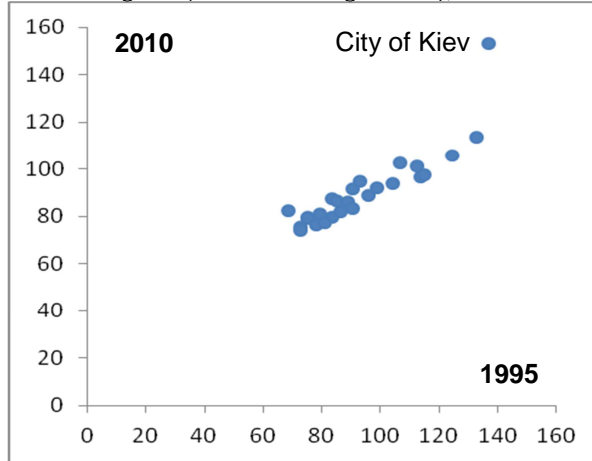


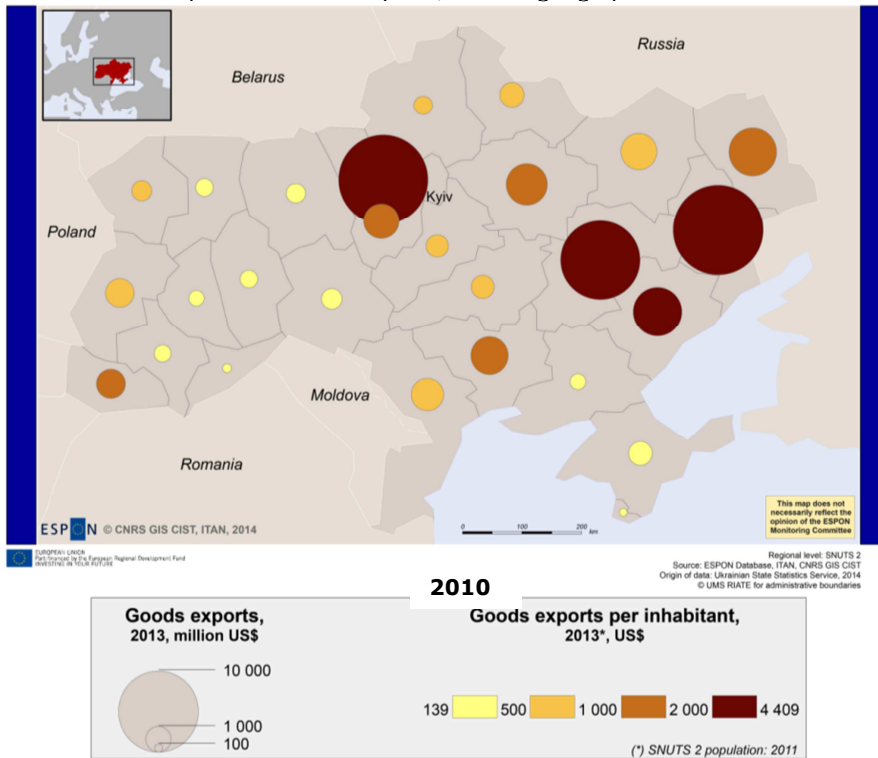
Figure 2. Salaries in the Ukrainian regions (national average = 100), 1995-2010: the boom of the City of Kyiv



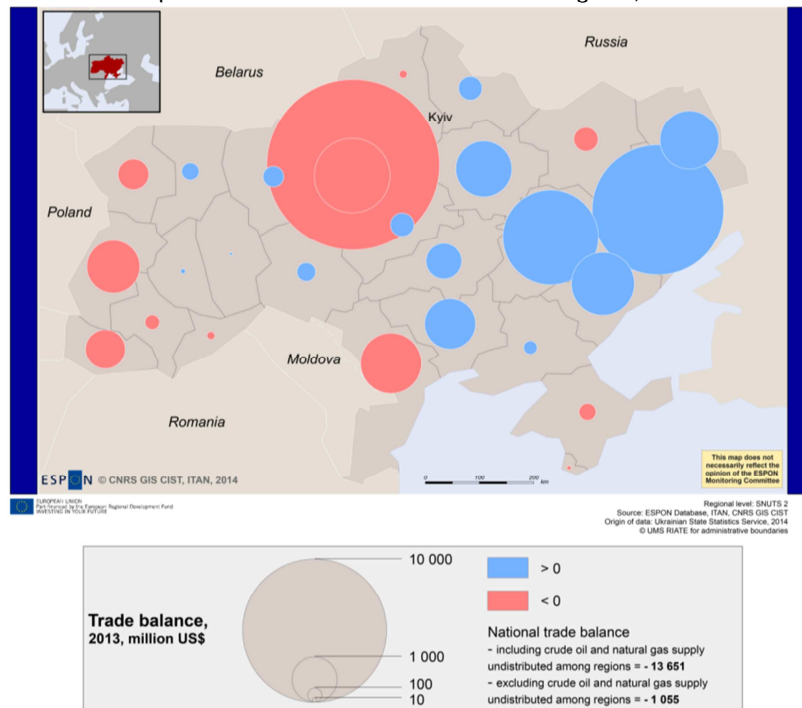
Source : Ukrainian State Statistics Service (Ukrstat), Espo - ITAN

At the same time, the East remains the main source of Ukrainian exports: exports' per capita value is particularly high in the regions of Donetsk and Dnipropetrovsk, which provide more than a third of the country's exported goods, mainly iron ore, rolled steel, basic chemicals and fertilizers. The City of Kyiv is also an important exporter because it hosts the headquarters of many important companies whose production units are located in other regions (regionalised data on foreign trade are always questionable). But the import of Kyiv is even larger, thus its trade balance is highly negative (Map 13). Therefore, Ukraine earns most of its revenues from foreign trade thanks to the industrial export from its Eastern part. CIS countries, especially Russia, are the main trade partners, particularly considering that national statistics does not distribute by regions 8% of foreign trade, which mostly consist in "undocumented" natural gas coming from Russia. Ukraine and Russia have for centuries belonged to the same single economic space, and economic links inherited from the Soviet time are still strong, especially in the East.

Map 12. Ukrainian exports, 2013: a geographical divide



Map 13. Trade balance of the Ukrainian regions, 2013



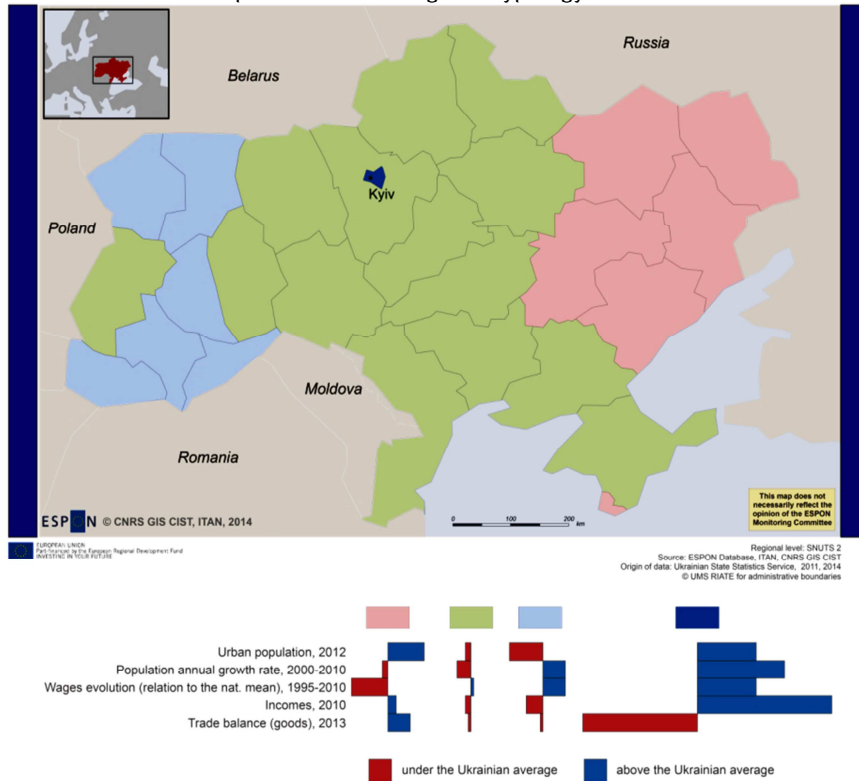
#### 4. Conclusion: a jaws effect in the East

Map 14 proposes a synthetic typology:

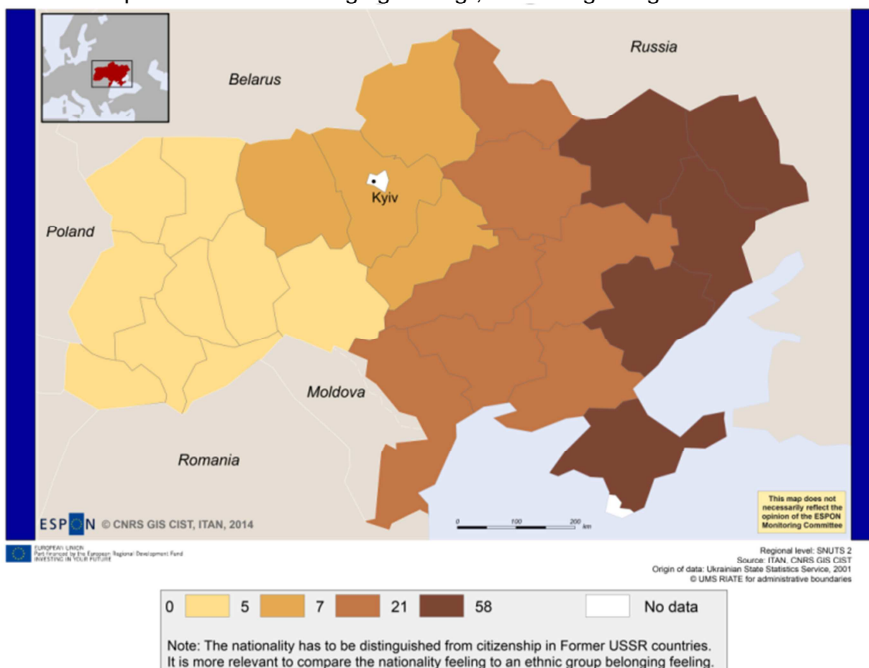
- The City of Kyiv benefited of the developments in the post-Soviet period thanks to relatively high incomes, the rapid growth of wages and consumption manifested in the highly negative balance of foreign trade. It explains a significant increase of the capital's population – a striking contrast vis-à-vis the rest of the country – thanks to migrations from all other regions, in other words a typical nation-building pattern.
- The position of the West in the national economic space slightly improved but only in relative terms. It remains less urbanised and poorer as compared with the country as the whole, though the demographic situation is still better, and the wages have been rising.
- The central part of the country is close to the national average by all indicators.
- As for the East, since the end of the Soviet era, it highly contributed to the modern national-building era: it remains the main source of export incomes of the country; it gathers the most important taxpayers since per capita incomes and salaries are significantly higher than the national average (even if informal economy is smaller than in the rest of the country where revenues are ten somehow under-estimated); it sends its youth to the capital region and suffers from depopulation and has a negative net balance of migrations. All of this happens in a context of ageing population, sluggish economic growth and declining wages are vis-à-vis the rest of the country. The East keeps strong economic relations with Russia, particularly in the sectors of engineering and manufacturing which depend on the export to Russia: Eastern regions have a positive trade balance with Russia, and many important plants belong to Russian companies. Such situation, in combination with a high ratio of “ethnic” Russians (Map 15) and of the families with the mixed Russian-Ukrainian background, with the absolute domination of Russian in everyday people to people communications (at the beginning of the

2000s 30% of the Ukrainians claimed Russian as their mother tongue), provoked the dissatisfaction of many citizens with the arrival to power in February 2014 of politicians from the West calling for a break with Russia. The linked action of the Russian authorities sealed the deepening of the Ukrainian nation-building crisis.

Map 14. Ukrainian regional typology ca 2012



Map 15. Russian “belonging feeling”, at the beginning of the 2000s



(source: survey elaborated by the State Statistics Service of Ukraine)

[www.espon.eu](http://www.espon.eu)

The ESPON 2013 Programme is part-financed by the European Regional Development Fund, the EU Member States and the Partner States Iceland, Liechtenstein, Norway and Switzerland. It shall support policy development in relation to the aim of territorial cohesion and a harmonious development of the European territory.

ISBN 978-2-919777-61-7