COUNTRY REPORT: AZERBAIJAN

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Hamza Khalilov, Namig Shalbuzov, Ramil Huseyn

Research Institute of Agricultural Economics, Azerbaijan

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Acronyms

AZPROMO	Azerbaijan Export & Investment Promotion Foundation
EU	European Union
FAO	Food and Agriculture Organization of the United Nations
FDMS	Farm Data and Monitoring System
GDP	Gross Domestic Product
IEOA	Institute of Economics and Organization of Agriculture
LRWM	Land Reclamation and Water Management ("Azmelsutasarrufat") OJSC
MoA	Ministry of Agriculture
MoEI	Ministry of Economy and Industry
MoF	Ministry of Finance
MoT	Ministry of Taxes
MoH	Ministry of Health
MoENR	Ministry of Ecology and Natural Resources
NFES	The National Fund for Entrepreneurship Support
NGO	Non-Governmental Organization
SCSMP	State Committee on Standardization, Metrology and Patents
SSC	State Statistical Committee of the Republic of Azerbaijan
SPCS	State Phytosanitary Control Service
SME	Small and Medium Enterprises
WTO	World Trade Organization

1. MACROECONOMIC ENVIRONMENT AND POLICIES

1.1 Background data

Azerbaijan is a nation situated in the Caucasus (Kavkaz) region on the coast of the Caspian Sea in Central Asia. The Republic of Azerbaijan is located at the crossroads of Europe and Asia. In the north, Azerbaijan borders with the Russian Federation, in the south - with Islamic Republic of Iran and Republic of Turkey, in the west - with Republic of Armenia and Republic of Georgia. Total area of Azerbaijan is 86.6 thousand km2. Length of the territory from north to south is 400 km, from west to east - 500 km. Baku is the capital city of the Republic. As of 2013, total number of population is 9.47 million people.

Source: http://azertag.az/store/Article/caucasus_region_1994.jpg

Azerbaijan is located on the south-eastern part of the Caucasus. Territory of the country covers parts of the Greater and Lesser Caucasus, Talish Mountains and the Kura-Araz lowland located between them. Average altitude is 384 m with drop of altitudes from 4,466 m (Bazar-Duzu pick) to minus 26 m in the Caspian coastal area. Plains and lowlands occupy 57%, of which 18% are below the level of the world ocean, low and middle mountains occupy 39.5%, and highlands (over 2,500 m) occupy 3.5% of the country's territory. Territory of the country is seismically active and mud flows are quite frequent there.

Climatic conditions of the country are specified by its location at the boundary of temperate and sub-tropical belts. Depending on the altitude and remoteness form the Caspian Sea, several climatic types are identified: arid subtropical, humid subtropical, temperate and cold. Arid subtropical climate is characteristic of the Kura-Araz lowland and Apsheron peninsula, humid subtropical climate is characteristic of foothills of the Talish mountain and Lenkoran lowland. Temperate climate, which dominates on the slopes of the Greater and Lesser Caucasus, covered with forests, is divided to arid, temperate warm arid, temperate warm humid and temperate cold. Cold climate dominates in the high ridges and peaks of the Greater and Lesser Caucasus. Average annual air temperature varies between 14°C in the low lying areas and 0°C and below in the highlands.

Table 1.1 Main country view 2013

Azerbaijan – Year 2013	
Population (31st December) (000 inhabitants)	9477,1
Area (sq. km)	86600
Real GDP growth rate (% change on previous year)	105.8
Unemployment rate (%)	5.0
Agricultural Utilized Area (ha)	4768300
Agriculture, hunting and fishing (% of total GVA)	5.3

Sources: Azerbaijan in figures, Baku, 2014, p. 10, 12, 28, 61.

Average annual temperature in July in low lying areas is 25-27°C, in highlands it does not exceed 5°C; in January, it is 3-6°C and -3 - -5°C respectively. Absolute maximum reaches 43°C, absolute minimum is -30°C. Atmospheric precipitation is distributed unevenly. During the year, precipitation amount on the Apsheron coast is less than 200 mm. In foothills and middle mountainous belt, precipitation is 300-900 mm, with 1,000-1,300 mm on the southern slope of the Greater Caucasus and 1,200-1,400 mm in the Lenkoran-Astara zone.

Distribution of solar radiation over the country's territory is uneven and its magnitude varies between 130-160 kcal/cm2 per year. Number of hours of sun shining during a year is 1,900-2,800 hours. Annual average wind speed in the coastal areas is 5.4-5.8 m/sec, and in other regions it is 2.4-3.1 m/sec. Number of days with wind speed more than 8 m/sec on the Apsheron peninsula is 226, and 20-70 days in other regions of the country.

Water resources of Azerbaijan constitute 29.2 km3 per year, of which only 7.5 km3 are formed on the territory of the country, with the other 21.7 km3 being formed beyond its boundaries. All rivers belong to the Caspian Sea basin and constitute three groups: rivers of the Kura basin, rivers of the Araz basin, and rivers directly running into the Caspian Sea. Water provision of the territory is low and makes up 84 thousand m3 /km2. There are 450 small and middle lakes with total area of 394 km2, and water stock of 0.89 km3 on the territory of the country. A total of 38 water reservoirs with total area of 650 km2 and water reserve of 19.6 km3 have been constructed in Azerbaijan.

The Caspian sea is the greatest in the world enclosed water basin with the area of 400 thousand km2, and water volume of 80 thousand km3. Length of the Azerbaijan shoreline is 825 km. Coastal area is densely populated and intensively developed. About 40% of the population and major industrial potential of the country are concentrated here. Coastal area and sea bed are rich in oil and gas. The water basin has unique biological resources, including 90 % of the world sturgeon stock.

Top soil and vegetation of Azerbaijan is peculiar due to its variety. Main soil and vegetation belts are: desert and semi-desert belt of the lowland (salinized gray soils with mugwort and saltwort vegetation), semi-desert belt of foothills (gray-brown solonetz-like soils with mugwort – bush vegetation), mountainous forest belt (chestnut-brown and yellow soils with deciduous forests), high mountain subalpine-alpine and high mountain nival.

Major sectors of economy of Azerbaijan are: fuel energy, machinery construction and metal processing, chemical and petrochemical, light and food industries, as well as agriculture. Peak of development of the economy of Republic falls on the period between 1985 and 1990 when, out of the total output, 85% of industrial and 30% of agricultural products were exported from the country.

After the collapse of the USSR, disruption of traditional economic links has very negatively reflected on the social and economic situation of the country. This process has further aggravated by the unstable public and political situation and occupation of 20% of country's territory, which provided up to 15% of GDP, great amount of refugees and IDPs (more than 1 million people) from the occupied territory of Karabakh and Armenia, as well as transport blockade and some other factors. All these have caused a deep economic crisis, as a result of which GDP and other social and economic indicators have drastically decreased.

As a result of achieving of political stability in the country only since 1995 wide-scale economic reforms became possible. From the mid 1996, the process of privatization started and today, more than 80% of the GDP is formed in the private sector of the economy. At the same time, the Government of Azerbaijan has built a firm fundament for the inflow of foreign investment in the national economy for the nearest decades and fundamental reforms on restructuring of the state owned enterprises and strengthening of the economic laws.

1.2 Macroeconomic developments

After the independence from the former Soviet Union in 1991, Azerbaijan suffered industrial unrest and economic stagnation. However, thanks to the government's aggressive implementation of policies to attract foreign investment mainly into the energy sector and financial support from the international financial institutions, Azerbaijan made a remarkable economic growth, with its GDP climbing up to 26.4% in 2005. The economy of Azerbaijan has increased dynamically during last ten years. Deepening economic reforms, large oil and gas projects made it possible to increase the economy rapidly.[1]

Table 1.2 Main macroeconomic indicators in Azerbaijan Republic 2004–2013

	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013
Population (1000 persons)	8 349,1	8 447,4	8 553,1	8 666,1	8779,9	8 897,0	8 997,6	9 111,1	9235,1	9 356,5
Real GDP growth rate (% change on previous year)	10,2	26,4	34,5	25,0	10,8	9,3	5,0	0,1	2,2	5,8
GDP at current prices (mill. manat)	8 530,2	12522,5	18746,2	28360,6	40137	35602	42465	52082	54744	57708
GDP per capita at current prices (manat)	1023.0	1494.3	2208.2	3296.6	4603.7	4033.2	4753.0	5650.8	5966.1	6207.3
GDP per capita at purchasing power (PPP; USD)	5 558,0	7 177,0	9 841,0	12491,0	13813	14917	10058,9	15754	16166	17139
GVA at current prices (mill. AZN)	7 914,5	11576,0	17721,8	26490,3	37449	32794	39588,5	49026	51411	54088
GDP deflator (%)	106.4	116.1	107.1	114.4	127.8	78.8	111.3	117.8	101.5	99.6
Inflation (annual average, % change on previous year)	106.9	109.6	108.3	116.7	120.8	101.5	105.7	107.9	101.1	102.4
Total employment (1000 persons)	4016.9	4062.3	4110.8	4162.2	4215.5	4271.7	4329.1	4375.2	4445.3	4521.2
Unemployment rate (%)	8,3	7,3	6,6	6,3	5,9	5,7	5,6	5,4	5,2	5,0
Current account balance (% of GDP)	-21,6	1,3	21,3	31,5	35,4	24,1	28,4	26,0	21,4	16,7
General government balance (% of GDP)	0.1	-0.7	0.4	-0.3	-0.0	-0.5	-0.9	0.6	-0.2	0.5
General government gross debt (% of GDP)	na	na	na	na	4,6	6,3	6,6	na	6,4	na
Exchange rate, annual average (manat/EUR)	1.33	1.09	1.14	1.23	1.13	1.15	1.06	1.02	1.03	1.08
Exchange rate, annual average (manat/USD)	0.98	0.92	0.87	0.84	0.8	0.8	0.8	0.79	0.78	0.78
Total government budget (expenditures) (mill. manat)	1502.1	2140.7	3789.7	6059.5	10680.0	10567.9	11766.0	15394.7	17105.6	19143.5

Sources: State Statistical Committee of the Republic of Azerbaijan. 2005 Statistical yearbook of Azerbbaijan, Baku, 2005; 2014 Statistical yearbook of Azerbbaijan, Baku, 2014; www.stat.gov.az; World Bank; 2014 World Development Indicators, table 4.12.

During the indicated period the volume of GDP per capita increased for more than 6 times. Azerbaijan entered the group of higer middle income countries according to international classifications.[2]

Following factors played a special role in economic growth:

- expanding oil and gas production and infrastructure due to a large-scale energy projects;
- increased allocations for state investments, especially large scale infrastructure projects due to use of oil incomes;
- the measures taken to improve the welfare of population (due to the expansion of the state's financial capacity) stimulates economic growth.

Economic growth was followed by increase in number of working places. During this period the number of employees increased too. Under the conditions of dynamic increase of the population, in 2013 the level of unemployment decrased to 5% compared to 7.3% in 2003.

During this period the amount of state budget rapidly increased. At the same time the balance was kept in the budget. The level of budget surplus or deficit to GDP has not exceeded 1%.

Generally we can outline the following strengthes of economy of Azerbaijan Republic:

- sustainable surplus in the balance of payments and existence of good conditions for macroeconomic stability;
- sustainability of economy against adverse external impacts due to creation of large scale strategic state reserves;
- Considerable potential for growth of economy due to existance of highly educated and relatively cheap labor.

At the same time we can outline the following weaknesses of the country economy:

- as the main source in formation of state budget is oil sector, there’s risc of volatility of incomes;
- oil sector is the main sector in economy and lack of diversification of processing sector;
- economic growth considerably depends on state investments;
- Comparatively low level of foreign investments into non-oil sector of the economy.

To solve the main problems of economy it is necessary to implement the economic diversification, modernization of economy and especially agrarian sector, also continue the economic reforms in order to set favorable business environment for investors[1] (See: S.V. Salahov 2013)

Development prospects of economy are closely connected to goals defined in Development Concept “Azerbaijan 2020: look to future” accepted by Azerbaijan Government. These directions include acceleration of the diversification of the economy, keep the rapid development temps of non-oil sector and enlarge the export opportunities of this sector in future. (“Azerbaijan 2020: 5).

1.3 Macro-economic and other general policies

Economic growth of Azerbaijan Republic in last 10 years has been accompanied by growth of its competitiveness. According to The World Economic Forum's "Global Competitiveness Report (2013-2014)" Azerbaijan was ranked 39th among 148 world economies.

At present, reforms are continued in order to develop the non-oil sector of economy, also, relevant measures are taken for implementation of active industrial policy.

In long term perspective, the policy of easing the tax burden is implemented in Azerbaijan. For this purpose, it is intended to apply proportional tax system instead of progressive tax system for income tax of enterprises and organizations. It is provided to decrease the income tax from 35% to 20%, VAT from 28% to 18%, some taxes are cancelled. (AZPROMO).

According to WB's "Doing Business 2014" report Azerbaijan took the 70th place among 189 countries for favorable business environment. At present, business environment in Azerbaijan is favorable for beginning the business, registration of property, investment protection and so on.

Successful reforms are implemented in the country to ease doing business. According to the Order of President of Azerbaijan Republic from 1st January 2008 new, single registration system, "one window" is applied. After application of "one window" system, the prosedures needed to begin the business decreased from 15 to 1 and the time spent from 30 days to 3 days. (AZPROMO).

Azerbaijan made starting a business easier by introducing free online registration services and eliminating preregistration formalities. The E-registration systems for individuals and for legal entities began to be applied from 2011 and 2012, respectively. With the application of E-registration system 3 necessary procedures are cancelled and the registration process is much easier now. According to the results of 2013 share of E-registration system in total registration was 45.2% (Ministry of Taxes of AR).

Protection of investors' rights and interests, inviolability of property, creation of equal conditions for local and foreign entrepreneurs is guaranteed by the Laws of the Republic of Azerbaijan on "Investment activity", "Protection of Foreign Investments" and other legal and normative documents. In Azerbaijan there are many organisations serving to the development of business: Chamber of Commerce and Industry, the Fund for Export and Investment Promotion - AzPROMO, the National Confederation of the Owners (Employers) and different consulting organisations. These organisations help to owners to establish business relations, organise business tours, implement exportation of their products, also different tranings, consulting services are implemented by ebove mentioned organisations. At present the government works on improvement the competition environment and lagislation in this direction. The newly developed "Competition Code" is being discussed in the parliament.

Mental (intellectual) property rights protection legislative framework was developed in accordance with the international standards, the relevant bodies have been established.

In line with the success there atill are unsolved problems in creation of favorable environment for efficient business in Azebaijan. Development of economy, especially implementation of industrialization requires implementation of more effective implementation of activities to improve the business environment (Khaliov H.A., Yusifov E.M. 2014) .

At the current stage improvement of business environment in Azerbaijan is mainly connected to implementation of measures connected to Dealing with Construction permits, getting electricity, trading across borders and so on. And the country rating on these points is low according Doing Business reports. To improve the situation in above mentioned directions necessary reforms are to be implemented. According to the Decree of the President of the Republic of Azerbaijan on additional measures related to the development of entrepreneurship dated 03 March 2014 the goverment has to prepare offers in the following directions and present to the President of AR:

- construction permits reduction of the existing procedures and deadlines;
- establishment of electronic adoption of documents for connection to the power supply, procedure, time and cost reduction;
- reduction of required documents, time and costs during import-export operations.

The above mentioned decree will help to improve the business environment, including procedures, time and cost reduction in the state registration of rights to immovable property, improve the functioning of the institutions which affect the lending process, improving corporate management and the protection of investors' interests.

Table 1.3 FDI flows in Azerbaijan Republic 2004–2013

	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013
FDI (mill. $):*										
Inward	4697.5	4475.4	4469.0	4526.0	3982.4	2899.0	3351.0	4465.1	5291.3	6278.2
Of which:	4593.3	4244.9	4100.5	4086.1	3339.8	2146.3	2573.4	3465.6	4290.1	5170.5
Oil sector	104.2	230.5	368.5	439.9	642.6	752.7	777.6	999.5	1001.2	1107.7
Other sectors	2356.8	4017.3	5775.5	9628.2	4527.4	2808.6	3018.2	3531.3	4479.0	4838.9
Outward	...	1220.8	705.5	520.0	555.6	326.1	235.7	554.0	1194.2	1477.9
Of which:										
Direct investments to foreign economy	...	2796.5	5070.0	9108.2	3971.8	2426.7	2782.5	2977.3	3284.8	3361.0
Repatriation of attracted investments										
FDI in agricultural sector (mill. manat)**	12.2	16.2	10.9	28.0	13.7	9.7	1.0	0.5	5.7	12.3
FDI in food-processing sector (mill. manat)**	59.2	8.9	14.8	0.7	1.0	2.1	1.1	-	-	-

*Azerbaijan Central Bank

** Foreign investments directed to fixed capital by sector economy

Sources:
http://www.nba.az/lpages/statistics/external-sector-statistics
http://www.stat.gov.az/menu/6/statistical_yearbooks/ State Statistical Committee of Azerbaijan
Construction in Azerbaijan, Statistical yearbook (publication), pp. 208-222.

Every year inward of considerable amounts of Foreign Direct Investments (FDI) to Azerbaijanian economy and outward of investments is implemented. As we see from the data of Table3, during 2004-2013 FDI flow by inward was 2.9-6.3 billion $US, by outward it was 2.1-5.2 billion $US. In line with that, due to dynamic and continous growth of national economy share of FDI in GDP is getting lower. As, is this indicator in 2004 by inward amounted 54.1% and by outward 27.2%, in 2013 it amounted relatively 8.5% and 6.8%.

The biggest share in FDI comes to oil sector. In 2013 82.4% of FDI belonged to this sector. Although the share of other sectors is too low, the tendency is positive. The amount of FDI in non-oil sector in the years 2004-2013 consistently increased and the total increase amounted 10,6 times.

Dynamic growth was observed in direct investments to foreign economy from Azerbaijan. In the years 2012-2013 this figure passed 1 billion $U**.S**. and its amount outstripped the amount of FDI in non-oil sector of the country.

The level of foreign investments in agrarian sector of Azerbaijan is not high. Also, towards the end of the period under review, a sharp decrease in this direction has been observed. Only in 2012 there was a small growth. Share of agrarian sector in foreign investments to economy is small.

The situation in food production sector is similar to agrarian sector. But decreas in this sector was much more sharper and in the years 2011-2012 there were no foreign investments in this sector.

1.4 Institutional environment of the agro-food sector

Credit availability: according to the information of the Central Bank of Azerbaijan towards the end of 2013 total volume of credits to agricultural production and processing amounted 733.3 million manats. Share of these fields in total credits was 4.8%. This figure is 7.5 times higher compared to 2005.[4]

At present agricultural producers and food producers get discounted credits through the following channels:

- Credits by Azerbaijan National Fund for Enterpreneurship Support (ANFES). The aim of establishment of ANFES is to take part in development of enterpreneurship and increase of business activity of the population, implement the financial support to them. The fund delivers discount credits to business men. In 2013 2/3 of credits belonged to production and processing of agricultural products.
- State Agency on Agricultural Credits (SAAC). This agency was established to support enterpreneurship in agrarian sector. The agency provides discount credits to business entities having activities in production, processing, irrigation and other fields of agrarian sector. To provide agricultural producers' demand on credits SAAC was transfered 8 million manats from State Budget for 2013, 5 million manats for 2014.
- SAAC also participate in international projects signed with International organisations and Financial institutions. Beginning from 2007 SAAC takes part in joint projects with IFAD and with authorized credit institutions related to development of rural areas.(North-East Development Project, North-West Development Project). SAAC also works jointly with Islamic Development Bank from 2013. In the framework of the project of "Complexs Development of Rural Areas" SAAC provides credits with 2 years of advantage.

As the result of realisation of projects financed by ANFES more than 12 thousand new jobs are created. In 2013 57 production, processing and infrastructure enterprises are established. 68,8% of the credits come to agrarian sector[1].

Non-bank credit institutions also take part in creditising of agriculture. In 2013 there were 111 credit unions, 35 non-bank credit institutions. By the end of 2013 the actives of non-bank credit institutions reached 542.1 million manats. Share of this figure in total bank actives of the country was 2.7%.

Non-Bank Credit Organization CJSC Agrocredit with 100% of the state-owned share capital has bigger potential and realises Crediting Program of Rural Areas. In 2013 in the framework of this program 1207 legal and individual entities, 826 groups of debtors and totally 2033 business activites were given credits on total amount of 8.42 million manats[5].

Availibility of market information: During the period of transformation in the framework of implemented projects, information and consuslting services were established in agrarian sector.

Thus, according to the WB second Agricultural Development and Credit Project an information and consuslting center in Baku and regional consulting centers in regions were established. With the WB and State support, in the framework of « Second Agricultural development and crediting project », Market Information Commercial Center (MICC) is established by State Agency on Agricultural CreditsThe main goal is to provide the producers, processors and other agrarian organizations with marketing services.[6]

In line with this, the positive impact of information agencies on development of agricultural production is not high. The amount of provided services doesn't meet the demand in most of cases. At the same time, the quality of services is not high. (Arif Aliyev 2013)

Property over the agricultural lands: as the results of agrarian reforms part of agricultural lands was given to private sector. According to the tasks set by the "Land Reform" Law of the Republic of Azerbaijan 19.6% (1.7 million hectars) of the total lands of the republic were privatized, 56.9% stayed state-owned, 23.5% was given to the municipal property (http://www.dtxk.gov.az/main/index_e.html).

[1] http://www.marja.az/busines/sector/industry/itemlist/tag/%C5%9Eirzad%20Abdullayev.html

In accordance with the law, there are no restrictions on the purchase and sale of land. At the same time, according to the Land Code of the Republic of Azerbaijan lands, including agricultural lands could not be transferred to foreign legal and individual entities.

According to the Land Code of the Republic of Azerbaijan unused state lands are under the control of local executive power officces, municipal lands are under control of municipalities. The lands can be rented by local and foreign legal and individual entitis, as well as persons. (Land Code of the Republic of Azerbaijan, article. 51, 56).

Price adjustment is not carried out during the purchase and sale of privately owned agricultural lands. The prices are formd in accordance with the market demand and supply.

According to the results of "Doing Busness" 2014 Report, the procedures of purchase and sale of privately owned agricultural lands takes 11 days and 0.5% of the total value of the land sold or rented[2].

Availibility of infrastructure services:

Education and scientific researches: agricultural specialists on the university level are trained in Azerbaijan State Agrarian University, Baku State University and Nakhchivan State University. In line with these there are also agrarian-oriented colleges and vocational schools (high schools). National Agricultural Research System includes totally 20 institutes: 13 research institutes Under the Ministry of Agriculture, 3 under the National Academy of Sciences, 2 under the Amelioration and Water Management OJSC and 2 under the Ministry of Ecology and Natural Resources.[7] Share of agricultural researches and education in state budget expenditures amounted 0.05% in 2013.[8]

Veterinary and phytosanitary services:

- Phytosanitary Control Service under the Ministry of Agriculture is established. Laboratory of Expertise of the Plant Quarantine, National Control Laboratory of Toxicology, National Plant Protection Centre, 16 district and regional plant quarantine offices, 5 regional biological laboratories, 57 regional plant protection centers go into the structure of this service.
- Under the Ministry of Agriculture of the State Veterinary Service (SVS) was established. SVS covers the whole country.

Notes

1. In 2004-2013-the physical volume of GDP grew by more than 2.9 times. Calculated based on the SSC data. Source: http://www.stat.gov.az/source/system_nat_accounts/. Due to stabilization of oil and gas production in the 2011-2012, slowdown in the pace of growth in real GDP has been observed. In addition, the non-oil sector of the economy is growing dynamically. real growth of GDP in non-oil sector was 9.4% in 2011, 9.6% in 2012, 9.9% in 2013. Central Bank of Azerbaijan : http://www.nba.az/lpages/statistics/key-macroeconomic-indicators/
2. In accordance with the Central Bank's official exchange rate GDP per capita in 2013 was U.S. $ 7912.5. This is within the return interval accepted by the World Bank for upper middle-income countries.
3. According to the legislation, industrial park operators and residents are exempted from payment of relevant taxes for a period of 7 years.- See: Tax Code of the Republic of Azerbaijan.
4. Share of credits directed to agriculture and processing of agricultural products in total credits of economy were lower for 2.8 points in 2005, 0.5 points in 2013 compared to the share of agriculture in GDP.
5. Sometimes farmers take money from non-officcial sources (relatives, friends etc.) in order to enlarge the business activities. But due to lack of information in this direction it is difficult to make a comment about the role of these financial sources.
6. Azerbaijan Marketing Society established a new service about the prices of goods in markets. Definite database has been created on the bases of data from 9 regions. Every person with a cell phone has an access to this Database. They can get information, as well as put new information about his/her products. Only one mobile operator users have access to this service but in future the rest of mobile operators will provide the same service. (Azerbaijan Marketing Society...)
7. Ministry of Agriculture, Agrarian Scientific Center's information
8. Calculated according to the data of State Budget for 2013 www.budget.az

[2] http://www.doingbusiness.org/data/exploreeconomies/azerbaijan/#registering-property

2. SITUATION AND DEVELOPMENT OF THE AGRICULTURAL SECTOR

2.1 Role of agricultural sector in the economy

Azerbaijan, with a population of 9.4 million in 2013, out of which about half live in rural areas, is the most densely populated among the Southern Caucasian republics. Some 80% of the population is concentrated in valleys and low lands, where industrial centers are located, farming is more productive and irrigation is more developed. About 20% of the population lives in hilly and mountainous areas. The climate and weather conditions in Azerbaijan allow for 2 to 3 growing cycles per year.

As of 2013, the agricultural sector accounts for 5.3 percent of GDP and the agriculture, forestry and fisheries sectors take up 6.7 percent of the nation's fixed assets. Among the total population of 9.3565 million, the rural population accounts for 46.9 percent (4.39 million). And among the total population of 4.52 million engaged in the enterprise sector, those engaged in the agriculture, forestry, and fisheries sectors are 1.68 million, taking up 37.1 percent in the total employment. Agricultural exports are 910 million dollars as of 2013, accounting for 53.5 percent in the total amount of non-oil exports. This shows the agricultural sector plays a significant role in the national economy of Azerbaijan (see Table 2.1).

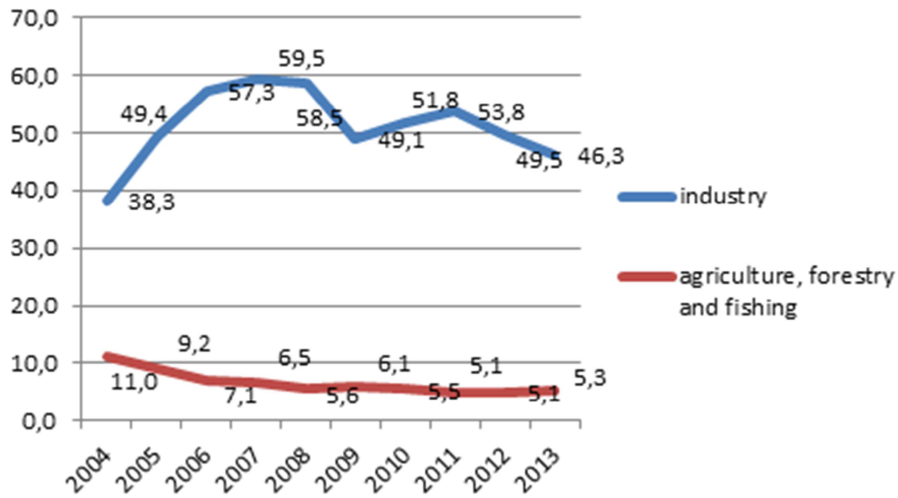
Table 2.1 Role of agricultural sector in the economy in Azerbaijan

Indicators	2011	2012	2013
GDP - billion AZN	52.1	54.7	57.7
Total value-added, generated in agriculture, forestry and fishing:			
- billion AZN	2.6	2.8	3.1
- Share of agricultural sector in the GDP, %	5.1	5.1	5.3
Total employment (1000 persons)	4375.2	4445.3	4521.2
Employment in the agriculturural sector (1000 persons)			
- thousand persons	1657.4	1673.8	1677.4
-share in employment, %	37.9	37.7	37.1
Total exports - billion US dollars	26.6	23.9	24.0
Non oil exports - billion US dollars	1.5	1.6	1.7
Export on agriculture and agricultural products processing secotr:			
- billion US Dollars			
- Share of agricultural sector in the non oil sector, %	0.74	0.86	0.91
	49.3	53.8	53.5

Source: The State Statistical Committee of the Republic of Azerbaijan (2014)

Government is now giving priority to non-oil sectors, including agriculture, to diversify economy and provide food security. Being the third biggest sphere in Azerbaijani economy after oil and construction agriculture possesses the biggest share in employment (in 2013, 37.1% of total employed population was working in agriculture, and only 1% in oil sector).

Figure 2.1 Share of agricultural sector in the GDP



Source: The State Statistical Committee of the Republic of Azerbaijan (2014)

In the result of agrarian reforms, 2239 collective farms, state farms and other agricultural enterprises were closed down and liquidated and instead of them different economies of organizational-legal forms. As a result of reforms conducted in this area:

- Agrarian reforms were conducted;
- Starting 1999, the producers of agricultural products were exempted from all taxes, except the land tax;
- In the districts that were abolished as a result of agrarian reforms, as well as in the occupied districts, the debts of the economic subjects were forgiven and other favours were made;
- 50 percent of farmers' costs for fuel, lubricants and fertilizers are paid by the state, state subsidies are granted for grain cultivation, "Agrolizing" Open Joint Stock Company was established to improve the machinery provision, machinery and fertilizers are provided to the producers via leasing on favourable terms;
- The share of private sector in agricultural production has increased to make up 99.7%.

The farm privatization reform in the mid-1990s led to the redistribution of land to some 850,000 small private farms of 2.6 ha on average. And it should be noted that more than 93% of agricultural production is produced on these small farms.

2.2. Land use

Azerbaijan is one of those countries, with less utilized agricultural area. The total land fund of the Azerbaijan Republic makes up 8641.5 thousand hectares and 4769.8 thousand hectares of it or 55% is fit for agriculture. 1435.2 Thousand hectares is irrigated land (See table 2.2).

The sowing area makes up 1884.3 thousand hectares of the area that is fit for agriculture in the land balance. 230.3 thousand hectares of the land that is fit for agriculture are long-term plantings, 2614,2 thousand hectares are pastures and hayfields. Courtyards make up 258.1 thousand hectares (227.6 thousand hectares of which is fit for agriculture) and forests make up 1040.2 thousand hectares in the country. Annual decreas in the total land resource, also agricultural lands, as well as sowings per capita is observed in Azerbaijan. Thus, the total land area per capita decreased from 2.26 hectares in 1960 to 0.97 hectares in 2013. Also, during these years the arable lands per capita decreased from 1.09 hectares to 0.5 hectares and cultivated lands from 0,38 hectares to 0,20 hectares (see Table 2.3).

Table 2.2 Agricultural land use in 1990–2013, ha

Years	Territory, 1000 km^2	Utilised agricultural area, 1000 ha	Arable land, 1000 ha	Permanent crops, 1000 ha	Hayfields and pastures, 1000 ha	Wood, 1000 ha
1990	86,6	4382,9	1589,0	347,4	2365,7	1038,8
1995	86,6	4489,1	1628,4	309,5	2453,3	1038,3
2000	86,6	4740,4	1766,8	236,8	2678,0	1037,4
2004	86,6	4754,9	1790,8	222,8	2691,4	1037,8
2005	86,6	4758,6	1797,6	221,5	2693,9	1037,8
2006	86,6	4756,0	1795,5	221,1	2693,6	1037,8
2007	86,6	4756,5	1808,4	224,7	2677,8	1038,8
2008	86,6	4756,7	1818,4	227,5	2669,0	1038,8
2009	86,6	4757,2	1832,5	227,0	2656,2	1039,9
2010	86,6	4766,8	1842,7	227,4	2655,3	1040,7
2011	86,6	4768,7	1843,8	227,2	2655,8	1040,8
2012	86,6	4768,3	1855,0	230,9	2640,6	1040,8
2013	86,6	4769,8	1884,3	230,3	2614,2	1040,2

Sources: www.stat.gov.az/source/agriculture/indexen.php

Table 2.3 Irrigated lands, end of the year in 1990–2013, ha

(1000 ha)

Years	Total area	of which		
		utilised agricultural area	of which	
			arable land	permanent crops
1990	1422,8	1418,5	1095,0	234,1
1995	1453,7	1449,5	1122,2	221,9
2000	1426,0	1423,0	1176,5	173,6
2004	1431,2	1428,1	1198,0	158,4
2005	1432,8	1429,7	1203,4	156,6
2006	1432,1	1429,1	1201,7	157,4
2007	1432,6	1429,6	1198,2	159,8
2008	1432,5	1429,5	1200,8	161,2
2009	1423,9	1420,7	1200,0	157,4
2010	1424,6	1421,4	1200,1	157,7
2011	1424,4	1421,0	1201,7	156,2
2012	1427,7	1424,3	1202,1	159,4
2013	1435,2	1431,8	1209,1	158,8

Sources: www.stat.gov.az/source/agriculture/indexen.php

Per capita sowing areas decrease year after year as the reason of allocation of lands for non-agricultural economic objects and private buildings and land erosion, increase of the level of underground waters because of rise of the Caspian Sea level, insufficient melioration activities, violation of farming technology, etc. Approximately 47% of irrigated arable lands have become salty in difference degrees. Therefore, it is necessary to conduct land-reclamation activities in 657.0 thousand hectares of the irrigated plots of land (see Table 2.3).

Irrigation is very important in cultivating crops in Azerbaijan. Irrigation area as of 2013 is 1.435 million hectares, with 1.209 million hectares for crop cultivation, and 159,000 hectares for permanent crop cultivation. The country's water resources are limited. Only 10 billion m^3 or 30% of the surface water resources are developed in its own territory, the rest 70% is formed in the territory of neighbour countries. 7-9 billion m^3 of water is used annually in the country and 67% of this is used for agricultural needs.

However, the limitation of water reserves in the country makes necessary the efficient and saving use of existing water resources and improvement of technical condition of irrigation systems, introduction of advanced water saving irrigation techniques and technologies.

As a result of the changes of planted area structure in ten years of independence the specific weight of crops and leguminous in 1990 was 39.9%, in 1995 was 50.5%, in 2000 – 62.2%, in 2002 - 67.2%, in 2005 – 60.4%, in 2009 -61.4% and in 2011 was 60.2%.

Table 2.4 Sown area of agricultural crops (All cateqories of farms 1000ha)

Years	Total	including			
		cereals and dried pulses	industrial crops	potates, vegetables, watermelons and melons	fodder crops
1985	1371,3	494,0	318,3	70,2	488,8
1990	1462,5	583,4	282,1	74,7	522,3
1995	1207,9	609,4	227,0	49,4	322,1
2000	1041,5	648,2	118,2	136,1	139,0
2005	1327,9	802,3	132,0	179,7	213,9
2006	1326,3	784,7	126,2	175,9	239,5
2007	1323,9	739,6	96,1	184,7	303,5
2008	1499,9	897,0	70,3	184,0	348,6
2009	1705,4	1125,5	40,9	177,6	361,4
2010	1583,9	968,0	52,6	178,8	384,5
2011	1608,2	967,3	66,9	179,7	394,3
2012	1647,1	1031,4	48,5	174,5	392,7
2013	1684,2	1074,1	42,2	171,5	396,4

Sources: www.stat.gov.az/source/agriculture/indexen.php

In meeting demand for food products, vegetable oils are most dependent on imports. Meanwhile, there is big potential to increase this production, especially olive production. It is possible to increase production through intensification of farm activity in the field of production of potato, vegetable, sugar beet and other agricultural products.

2.3 Farm structures (including land properties)

As a result of agrarian reforms, 2239 collective farms, state farms and other agricultural enterprises were closed down and liquidated and instead of them different economies of organizational-legal forms. The farm privatization reform in the mid-1990s led to the redistribution of land to some 843,200 small private farms of 2. ha on average, a large share of which (96%) have between 1 and 5 hectares. Agriculture is 99.9 percent private, out of which 66.8 percent of specialized agricultural producers consist of family-villager, 32.8 percent housekeeping and only 0.2 percent farming. And it should be noted that more than 90% of agricultural production is produced on these small farms.

The total number of agricultural producers in Azerbaijan amounts 1287385 units. They can be devided into 2 groups according to their status: legal entities and individuals. According to their share in production agricultural producers are devided into 3 groups:

1) public and private agricultural enterprises: 0.16% of all agricultural producers and 12.3% of agricultural lands belong to this group of farms. Land area of each farm amounts 132 ha. These farms have the status of a legal entity and they are market oriented producers;
2) family peasant farms and households: these farms' share in total number of farms amounts 93.73%, 86.94% of agricultural lands belongs to these group of farms and land area of each farm is 1.6 ha. All of them are individuals and are devided into 2 subgroups: family peasant farms – are market oriented producers and households – mainly produce for home consumption. Individuals sometimes sell small amounts of agricultural products in the markets;
3) dacha farms: small individuals and mainly produce for home consumption.

More comprehensive information about the status of different farm groups is given in the table below.

Table 2.5 Structure of agricultural producers and their status

	Number of farms, unit	Share of group in total number of farms, %	Agricultural land, ha	Agricultural land per farm, ha	The status and role of the group
I. Public and private agricultural enterprises and organizations, total	2027	0,16	267069	131,8	Legal entity, market oriented producer
a) Public agricultural enterprises and organizations	270	0,02	119248	441,7	-"-
b) Private agricultural enterprises and organizations	1757	0,14	147821	84,1	-"-
Collective farms	804	0,06	63474	78,9	-"-
open and closed joint-stock companies	69	0,01	5169	74,9	-"-
economic communities with additional and limited liabilities	264	0,02	25099	95,1	-"-
production cooperatives	179	0,01	5967	33,3	-"-
other farms	441	0,03	48112	109,1	-"-
II. family peasant farms and households, total	1206710	93,73	1881159	1,6	
family peasant farms	810136	62,93	1632002	2,0	Individual, market oriented production
Households	396574	30,80	249157	0,6	Individual, homeconsumption
III. dacha farms	78648	6,11	15571	0,2	Individual, homeconsumption
Total agricultural producers	1287385	100	2163799	1,7	
Including private farms	1287115	99,98	2044551	1,6	

Sources: www.stat.gov.az/source/agriculture/indexen.php

The main products of agricultural producers in Azerbaijan are the next: grains (wheat, barley, corn), legumes (peas, beans, etc.), vegetables (open and closed areas), melons, fruits and berries (seedy, citrus, sbtropik, nuts, etc. fruits), grapes, tea leaves, tobacco, sugar beet, cattle, sheep and goats, poultry, their products (milk, eggs, wool). These products are produced and sold in consumer market. Depending on the natural climatic conditions of the regions, crop and horticulture products are mainly produced by 2 methods: irrigation and rainfed.

90-99% of agricultural products is produced by family peasant farms and households.

As the results of agrarian reforms of mid 90s the biggest part of agricultural lands and animals were privatised. At present the main part of agricultural products is produced by private owners, family peasant farms and households. In 2013 share of these farms in total production amounted 93.1%. In plant-growing products this figure was 95.4%, in livestock 90.7% (see Table 2.6).

Table 2.6 **Structure of agricultural products by categories of holdings, in the actual prices per cent to the total**

Years	Total	including		Total	including	
		plant-growing products	livestock products		plant-growing products	livestock products
	Agricultural enterprises and other organizations			Private owners, family peasant farms and households		
2004	4,0	1,5	7,2	96,0	98,5	92,8
2010	5,0	3,0	7,1	95,0	97,0	92,9
2011	5,2	3,5	7,0	94,8	96,5	93,0
2012	6,6	4,0	9,3	93,4	96,0	90,7
2013	6,9	4,6	9,3	93,1	95,4	90,7

Sources: www.stat.gov.az/source/agriculture/indexen.php

14.4% (the biggest share) of of utilised agricultural area belong to farms of 1-<2 hectar. The second biggest size class according to utilized agricultural area is the farms of 2-<3 hectar with 12.6%. The third biggest share comes to size class of 5-<10 hectars with 10.8%. The size class of 3-<4 has a big share too. As, 9.2% of utilized lands belong to this group. As we can see, 47% of the utilized agricultural lands belong to the farms between 1-<10 hectars. But share of this group in number of farms is lower (38.8%). The same situation goes for arable lands (see Table 2.7).

2.4 Production and output (including major sectors and yields)

2.4.1 Crop production and yields

After gaining independence production of cotton, grapes, tobacco and tea has decreased. Paralelly, changes are observed in the structure of the gross output of agriculture. The share of plant growing products has decreased, while share of livestock products has increased. If, in 1990 share of plant products was 63.7%, in 2013 this figure decreased to 50.1. For livestock products these figures respectively were as 36.3% and 49.9% (see Figure 2.2).

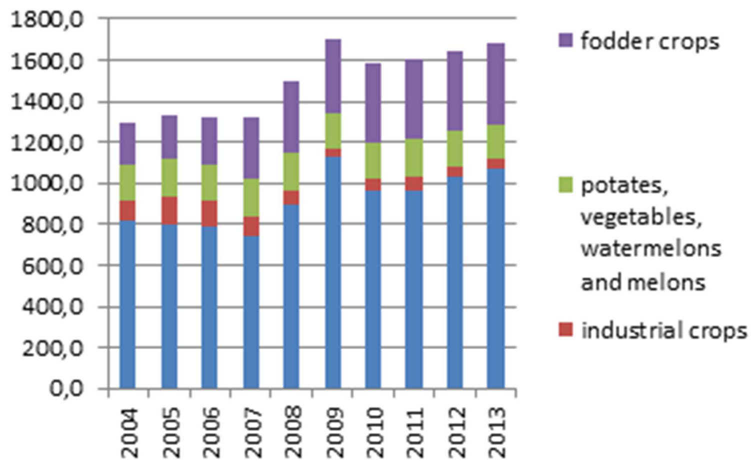
During the last ten years the total sown area of agricultural crops has considerably increased (30.2%). And this increasement is mainly based on the increasement of the cereals and dried pulses and fodder crops. Indeed, the sown area of industrials decreased for 2.3 times, and potates, vegetables, watermelons and melons for 1.6%.

Table 2.7. Agricultural holdings by size classes of utilised agricultural area (ha)

	according to utilizied land		according to arable land	
	number	area	number	Area
Without land area	41988	x	328771	x
With land area	1166749	2148228	879966	1352349
-<0.1	279430	10676	184704	6301
0.1-<0.2	79864	10674	56132	7544
0.2-<0.5	151097	50561	130061	42597
0.5-<1	187880	135632	147321	104779
1-<2	217978	310170	175843	242638
2-<3	111391	270414	87890	208943
3-<4	57412	196719	42506	143450
4-<5	29706	131410	20265	88465
5-<10	35581	232040	23768	152951
10-<20	8771	113434	6264	79590
20-<50	4558	137419	3594	106513
50-<100	1697	108530	1091	68394
100-<200	806	101992	378	46879
200-<500	432	127282	129	34935
500-<1000	99	65879	16	10101
1000-<2500	47	145396	4	8239
2500<	-	-	-	-

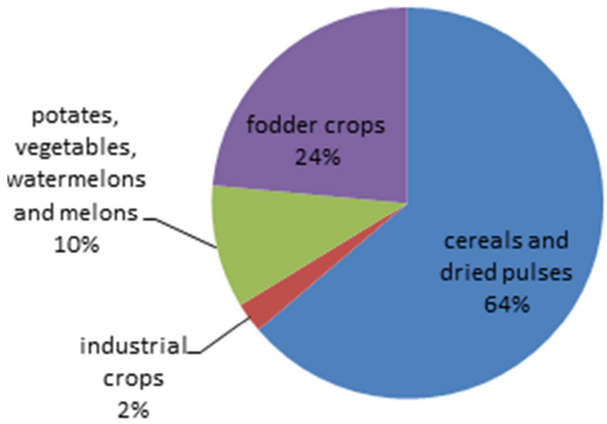
Sources: State Statistical Committee of the Republic of Azerbaijan

Figure 2.2. Sown area of agricultural crops



Sources: State Statistical Committee of the Republic of Azerbaijan

Figure 2.3. The production structure of agriculture according to sown area -2013



Sources: State Statistical Committee of the Republic of Azerbaijan

64 % of total sown area is used for production of cereals and dried pulses. This can be considered as the result of subsidy system implemented in Azerbaijan since 2007 in order to strengthen the food security level of the country. According to this system, farmers get 80 manats direct subsidies per hectar for wheat production. As we can see, share of industrielas is only 2%.

As a result of agrarian reforms, the production of agricultural products has dynamically developed in recent years, production of food stuff per capita significantly increased. The conducted reforms have caused changes in the structure of the production of plant-growing products as in many areas. This has influence the country's planting structure in the first place and gave opportunities for its formation in accordance with the requirements of domestic and foreign markets. Annual dynamic development has been ensured in the production of plant-growing products starting 1999. Wheat production was increased from 1098.3 thousand tons in 1999 to 2955,3 thousand tons in 2013, potato from 394.1 thousand tons to 992,8 thousand tons, vegetables from 670.8 thousand tons to 1236,3 thousand tons, water-melon from 206.3 thousand tons to 429,8 thousand tons, fruits and berries from 436.5 thousand tons to 853,8thousand tons.

Table 2.8 Crop production in Azerbaijan

Years	Cereals and dried pulses	Cotton	Tobacco	Potatoes	Vegetables	Watermelons and melons	Fruits and berries
2000	1540,2	91,5	17,3	469,0	780,8	261,0	477,0
2001	2016,1	83,6	12,7	605,8	916,4	290,9	497,5
2002	2195,9	80,4	3,3	694,9	974,6	330,3	516,8
2003	2057,8	99,6	4,7	769,0	1046,3	356,7	572,1
2004	2158,2	135,7	6,5	930,4	1076,2	355,3	424,6
2005	2126,7	196,6	7,1	1083,1	1127,3	363,8	625,7
2006	2078,9	130,1	4,8	999,3	1186,4	362,1	662,4
2007	2004,4	100,1	2,9	1037,3	1227,3	417,6	677,8
2008	2498,3	55,4	2,5	1077,1	1228,3	407,7	712,8
2009	2988,3	31,9	2,6	983,0	1178,6	410,8	718,2
2010	2000,5	38,2	3,2	953,7	1189,5	433,6	729,5
2011	2458,4	66,4	3,6	938,5	1214,8	478,0	765,8
2012	2802,2	57,0	4,3	968,5	1216,2	428,0	810,0
2013	2955,3	45,2	3,5	992,8	1236,3	429,8	853,8

Sources: www.stat.gov.az/source/agriculture/indexen.php

However, current production indicators of such plant-growing products including grain are considerably lower than potential resources. Average productivity for grain-crops and leguminous plants, which are main food product makes up 27.1 s/ha in Azerbaijan. There is an opportunity to significantly increase food production in our country through applying modern technologies without enlarging sowing areas.

Cereals

Azerbaijan is the country which has the most ancient cropping culture. Wheat production is an important part of Azerbaijan's agricultural sector and economy. Because, the bread and bakery products as a part of food consumption model have a relatively high role in Azerbaijan as compared with other world countries this means that in terms of food security self-sufficiency by wheat products is a decisive factor since imports are vulnerable to external relations with supply countries.

Grain is the main constituent part of the raw materials of the foodstuff and processing industry fields and therefore plays an important role not only in formation of field products but also in development of overall country economies. Average grain production in Azerbaijan was 571.6 thousand tons in 1961-1965, 1149/5 thousand tons in 1976-1980, 1146.8 thousand tons in1996-2000, 2392.6 thousand tons in 2006-2009. But during the last 10 years the growth of wheat doesn't meet needs of the growing population of republic.

Table 2.9 Wheat production in the Azerbaijan Republic (end of year)

Name of indicators	Unit	1995	2000	2005	2009	2010	2011	2012	2013
Planted area	Thousand hec	609,4	648,2	802,3	1125,4	968,0	967,3	1031,4	1074,1
Production	Thousand tones	921,4	1540,2	2126,7	2988,3	2000,5	2458,4	2802,2	2955,3
Productivity	Center	15,1	23,8	26,5	26,6	20,7	25,4	27,2	27,5

Source: The State Statistical Committee of the Republic of Azerbaijan

Looking at the yield of major agricultural products, per hectare yield of grain and pulses has been on the rise from 2.42 tons in 1990 to 2.38 tons in 2000 to 2.75 tons in 2013. For the yield of wheat, it was 2.37 tons in 2000, 1.99 tons in 2010 due to the adverse weather, and 2.75 tons in 2013, which is just above the yearly average. It is shown from the table that the wheat production has increased in 2010 compared to 1990. However, the increase of production volume has achieved mainly via the increase of cultivated areas. Most farms in the developed countries harvest 40-60 centners per hectare. But the productivity in Azerbaijan doesn't achieve the world middle level of 30 centners per hectare. This shows the potential for growth in wheat production that is possible by the intensive factors.

Azerbaijan is a land-poor country in the world and the extensive way of increase of wheat production is limited. The main goals of the State Program are to increase the planted area of the crops to 900 thousand hectares, the productivity to 32 centners per hectare and total production to 2,8 million tons. The Government of Azerbaijan began to apply subsidies in order to achieve self-sufficiency in grain production. In 2012 60.2% of arable lands used for grain grown. However we can increase productivity of grain and produce the requrired grain on less land and use this land for other purposes.

Increasing the productivity will allow to use the land under grain production for other purposes.

Table 2.10 Grains: cultivated area, ha

	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013
Total on Republic	2158189	2126666	2078919	2004362	2498306	2988305	2000523	2458436	2802249	2955311
Absheron ER	3619	3726	3792	3106	3281	3707	2809	2932	3658	3750
Ganja-Gazakh ER	270147	271276	253313	252270	275888	347171	237707	278470	297482	322418
Sheki-Zagatala ER	276796	271162	237653	253181	420197	449441	318287	463367	515599	479393
Lenkaran ER	187419	186171	184777	167985	191768	184015	121822	165566	174280	185501
Guba-Khachmaz ER	190258	190450	183394	148376	152295	196173	165836	210318	224003	257950
Aran ER	827956	812070	823755	800420	926428	1160901	696206	836046	945148	1052732
Yukhari Garabagh ER	93225	91379	97326	95250	195352	278816	183156	191914	260062	260017
Kelbajar-Lachin ER	2779	4150	4668	6577	10417	11251	6491	4038	6536	6892
Daghlig Shirvan ER	213126	192716	196071	195589	232534	253206	163167	195422	263790	273307
Nakhchivan ER	92864	103567	94170	81611	90146	103625	105045	110363	111691	113351

Source: The State Statistical Committee of the Republic of Azerbaijan

The last 10 years area of arable lands of grains increased for 300 thousand hectars and reached 1074.1 thousand hectars in 2013. Arable land of wheat increased for 99.4 thousand hectars, productivity increased for 1.4 centner/ha, and production increased for 351.5 thousand tons during the last 10 years and in 2013 these figures amounted 689.1 thousand hectars, 27.5 centner/ha and 1898.1 thousand tons relatively. In barley production similar situation is observed. Thus, the arable land increased for 189.6 thousand hectars, production increased for 487.9 thousand hectars and the productiviti increased for 1.1 centner/ha. In 2013 these figures amounted 329.4 thousand hectars, 822.2 thousand tons and 25 centner/ha relatively. As we can see in both cases, there's progress in all 3 directions, but the level of productivity is still low.

In 2013 the area of arable land under maize for grain was 38.6 thousand hectars, production 208.2 thousand tons, productivity was 53.9 centner/ha. These figures are higer for 6.4 thousand hectars, 65.1 thousand tons and 9.6 centner/ha relatively comared to 2004.

Rice production decreased in 2013 compared to 2003. Thus, if in 2003 total production of rice was 15.7 thousand tons, in 2013 this figure fell to 4.95 thousand tons. The productivity fell down to 23.3 centner/ha from previous 47.2. Additionally, sowing area of rice fell down too. In 2013 sown area of rice was 2.1 thousand hectars and this figure is 1.2 thousand hectars less compared to 2003.

Oilseeds

Oilseeds is grown in Azerbaijan and this sector is regulated by relevant legislative. In 2013 oilseeds production increased for 1%, and sown area increased by 31.6%.

Fruits and vegetables

The climatic conditions of Azerbaijan makes it possible to grow different types of fruits and vegetables.

State support to agricultural producers resulted with progress in fruit and vegetable production. Thus, during last 10 years fruit production increased for 1.5 times and amounted 853.8 thousand tons in 2013. Total area of orchards has also increased for 1.5 times and amounted 134.2 thousand hectars in 2013. The productivity has increased from 70 centner/ha to 74.3 centner/ha. Share of apples (246.6 thousand tons), pomegranates (149.8 thousand tons) and persimmons (143.1 thousand tons) in total fruit production is 64%.

Table 2.11 Fruits and berries: cultivated area, gross harvest and yield

Years	Cultivated area	of which at fruitbearing age	Gross harvest	Yield from 1 ha
	1000 ha		1000 tons	100 kg
2004	89,7	82,5	424,6	51,4
2005	93,0	84,3	625,7	73,9
2006	110,7	86,6	662,4	76,2
2007	114,0	93,7	677,8	71,9
2008	119,9	96,2	712,8	73,4
2009	125,0	99,0	718,2	71,9
2010	127,7	102,5	729,5	70,6
2011	130,5	106,0	765,8	71,7
2012	133,5	108,8	810,0	73,8
2013	134,2	113,9	853,8	74,3

Sources: State Statistical Committee of the Republic of Azerbaijan

In 2013 vegetable production increased for 19% compared to 2003 and amounted 1236,3 thousand tons. At the same time, sawn area of vegetables increased for 7% and amounted 77.6 thousand hectars, the productivity increased for 14 centner/ha and amounted 154.0 centner/ha. 80 % of total vegetables comes to cabbage, tomato and onions.

Other crops

In terms of changes in agricultural output in Azerbaijan from 1995 to 2013, most commodities including cereals, vegetables, fruit, and potatoes, with the exception of cotton and other industrial crops, have recorded high rates of annual growth. The annual growth rate of the output of potato is 10.9%, which is the highest rate, followed by fruit (7.2%), vegetables (6.1%), and cereals (5.3%). However, the output of industrial crops has declined by 1.2 percent every year due to the rapid drop in the output of cotton. From industrials cotton, sugar beet, tobacco is produced and this sector is regulated by the relevant legislation. Sugar Factory established inImihsly region in 2006 can process more than 600 thousand tons of sugar beet annually. Cotton production decreased for 54% in 2013 compared to 2003, and sown area decreased for 65%. In tobacco production similar situation was observed. As, production decreased for 25.5% and sown area for 43% respectively.

Azerbaijan Republic had been the second tea producing country among the CIS countries (after Georgia). In 1975 the total area of tea plantations was 7,900 ha, of which 4,900 ha had been productive. The harvest of green tea leaves was 13,100 tons. This resulted in 3,270 tons of tea produced. After the end of the Soviet Union and after Azerbaijan became independent the production decreased to 5.500 and 6.500 t green leaves. After the breakup of the collective farms and the tea factories in 1994/95 the tea sector collapsed totally. The tea plantations had been split to small plots and distributed to former members of the collective farms. At the end of the 90-ties only ca. 1,200 tons green tea leaves, respectively 300 tons black tea had been produced. During the following years the decline of the tea production continued and is only 900 ha to date, of which ca 570 ha is productive.

Also 500 different grape varieties are known in Azerbaijan. In 1985 Azerbaijan had 267,800 ha of vineyards and marketed the vast majority of its wine in the former Soviet Union; in fact 30% of the wine consumed in the former Soviet Union came from Azerbaijan. Due to Michail Gorbatschow's anti-alcohol campaign, starting in May 1985, the wine sector declined and the area under grapes has been reduced; regardless from the political Soviet order, the area dropped further significantly during independence; from eventually 170,000 ha at independence in 1991 to 9,600 ha in 2005; so almost all vineyards in Azerbaijan have been destroyed; at least 180,000 ha have been destroyed and around 45,000 ha have been lost in the Karabach conflict. Concerning the processing sector, the wineries, it has to be highlighted that 192 wineries have been closed as a consequence of reducing the grape production.
In Azerbaijan grape plantations have been replaced mainly by cash crops such as potatoes and vegetables. The 2013 data show 16,400 ha of cultivated area with an overall harvest of 154,100 tons and a gross harvest of 9,190 kg per ha. For comparison it should be stated that the fruit growing area in Azerbaijan covers 134,200 ha.

2.4.2 Livestock production

The analyses show that, during the last 10 years significant growth was achieved in both the number of animals and production of livestock products.

Table 2.12 Livestock number 2004-2013 Number of animals (1000)

	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013
Cattle (total)	2241,8	2315,8	2380	2445	2511,8	2569,6	2610,8	2646,7	2681,9	2712,7
of which cows	1934,4	2007,2	2077,1	2145,9	2212,8	2280,7	2327,8	2369,3	2412,3	2446,8
of which dairy cows	930,9	969,1	1006,3	1041	1074,1	1104,9	1129,7	1145,9	1159,7	1179
of which buffalo	307,4	308,6	302,9	299,1	299	288,9	283	277,4	269,6	265,9
of which dairy buffalo	144,8	147,9	145	142,6	142,7	137,2	133,8	131,5	128,4	126,6
Pigs (total)	20,4	22,9	22,9	21,3	18,7	10,3	5,3	6,3	6,1	6,5
Sheep	6676	6887,4	7105,3	7290,6	7523	7685,3	7802,3	7871,2	7931,9	8019,8
Goats	604,1	601,4	593,4	577,8	586,7	590,9	607,6	620,6	627,4	645,4
Horses	68,8	71	69,4	69,9	71,9	73,5	74,1	76,5	77,2	77,2
Poultry	17545	18253,3	19036	18760,6	20754	22352,9	22041,6	22432,3	23162	24581,4
Other animals										
Rabbits	1,4	1,4	1,4	1,4	1,4	1,4	1,4	1,4	1,4	1,4
Donkeys	42,2	44,5	45,4	46,3	47,2	46,4	46	46,1	45,9	44,3
Mules	0,1	0,1	0,1	0,1	0,1	0,1	0,1	0,1	0,1	0,1
Camels	0,2	0,2	0,2	0,2	0,2	0,2	0,2	0,2	0,3	0,3
Bee-hives	84	95,7	105	115,6	126,4	142,5	164	193,2	212,6	225,3

Sources: State Statistical Committee of the Republic of Azerbaijan

Table 2.13 Livestock production 2004-2013 (1000t)

	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013
Meat	196,8	205	212,7	225,5	232,3	237,1	253,8	263,7	285,6	297,9
Beef / veal	94,6	98	100,4	100,9	101,8	102,5	114,2	117	119,6	123
Pork	2,2	2	1,9	1,4	1,2	0,8	0,8	0,7	0,7	0,7
Sheep and goat meat	55,7	57,4	60,7	61,3	64,1	66,8	74,3	74,4	76	76,7
Poultry	44,3	47,6	49,7	61,9	65,2	67	64,5	71,6	89,3	97,5
Milk	1213,7	1251,9	1299,5	1341,3	1381,6	1433,1	1536,2	1622,3	1719,6	1820,5
Cow and buffalo	1 188,60	1 226,10	1 273,00	1 314,10	1 354,80	1 406,10	1 507,40	1 566,8	1 683,40	1780,1
Sheep and goat	25,1	25,8	26,5	27,2	26,8	27	28,8	55,5	36,2	40,4
Eggs	829,4	874,6	760,9	953,6	1101,2	1209,4	1178,6	1011	1226,7	1401,5
Honey-ton	0,6	0,6	1,1	1,2	1,4	1,3	1,9	2,3	2,4	
Wool	12,3	13,1	13,6	14,2	14,8	15,3	15,6	16,2	16,5	16,8
Sheep	12,3	13,1	13,6	14,2	14,8	15,3	15,6	16,2	16,5	16,8

Sources: http://www.stat.gov.az/source/agriculture/

In 2013, there were 2712.7 thousand heads of horned cattle and this figure is 21.01% higher compared to 2004. The similar situation is observed for other animals. Number of sheep increased for 20.1%, number of goats for 6.8%, poultry for 40.1%. Pedigree cattle-breeding. The fact that 1381 kg of milk was produced from each cow and buffalo in 2013 shows that, the pedigree cattle-breeding work among long-horn animals is not conducted up to required level, measures against barrenness is weakly performed, feeding lags behind zoo technical requirements.

Currently, more than 80 very large private pedigree farms have been launched in the country, In the meantime, 11 regional, 60 city and district artificial fermentation, 900 rural and town artificial fermentation stations were established.

Pork

Due to low demand inside the country, pork production is low. As we can see from the table, in 2004 2.2 tons of pork was produced in the country but in 2012 this figure fell down to 0.7 tons. It means in 2012 pork was produced 3 times less compared to 2004.

Poultry

During last years poultry is developed quite rapidly and poultry importation fell down due to this development. So that, in 2012 poultry meat production increased for 1.8 times compared to 2007, and the share of import fell to 11.4 per cent from 28.

At present the demand for poultry meat is mainly provided by local production. Poultry meat is produced in family farms, small scale commercial farms and big poultry farms.

Beef and Veal

In recent years, a number of steps have been taken towards the development of intensive livestock. At present 88.9% of demand for meat and meat products is provided by local production. Artificial insemination of livestock animals is enhanced, in order to improve the breed composition of cattle, more productive animals are brought into the country and later sold to farmers under suitable leasing terms.

There are different meat processing enterparises with modern technologies and the production fits of high standards.

Milk production

At present 25.9% of the milk consumed is imported. The main reason for low production is low productive of the animals. Some steps are being taken in the direction of improving the structure of animals and bring better cattle breeds. But there is still lack for big milk producing factories and feeding the anaimals by means of local production.

Due to lack of milk processing factories in regions and poor development of processing sectore consumers can’t fully benefit from market infrastructure.

Sheep and goats

Sheep breeding is developed in Azerbaijan and especially after independance this sectore became one of the most developed. The number of sheep amounted more than 8 millions in 2013. But in the number of goats there is no significant change. There were 645.5 thhousand goats in the country in 2013.

2.4.3 Organic production

Azerbaijan has got big potential for production of organic tomato, pomegranates, hazelnuts. Especially in mountainous villages production of organic hazelnuts can be established very easily.

During last 6 years several laws and regulative documents have been adopted and this fact caused the improvement in this sector.

On 13 June 2008 the law on organic farming” was adopted. The law stipulates that organic agriculture products shall be marked indicating the words “ECO-transition” and “ECO” words by a respective certification body, and products produced until the completion of transition period in organic farming subjects shall be posted with “ECO-transition” mark.

On 8 January 2009 The Cabiinet of Ministers of AR approved the next rules and regulations:

" The rules for crop production, using organic and traditional farming methods", "The rules of organic farming and food production, as well as the list of natural and non-natural remedies alowed to be used in organic farming", "The form and procedure of document (certificate) given to organic farming entities", "The rules of environmental monitoring, and certification in organic farming and the functions of accredited bodies", "The rules for certification of organic farming and food products and the exemplary form of certificate", "Rules of the turnover of organic farming and food production", "Regulations on the labeling of organic farming and food products", " Storage and transportation rules of organic agriculture and food products".

On 30 August 2010 The Cabinet of Ministers of AR adopted “"Rules for the implementation of scientific support in organic farming”.

Current situation

According to the Decree of the President of Azerbaijan the monitoring in organic farms is to be implemented by Ministry of Ecology and Natural Resources, and certification is to be implemented by State Committee on Standardization, Metrology and Patents.

The standards for organic farming and food products are defined jointly by the Ministry of Agriculture, Ministry of Economy and Industry, the Ministry of Health, Ministry of Ecology and Natural Resources and the State Committee on Standardization, Metrology and Patent.

Ministry of Agriculture, Ministry of Economy and Industry, the Ministry of Health, Ministry of Ecology and Natural Resources provide consumers with complete and reliable information about organic farming and food production standards, conducts educational work in this direction.

The State Committee on Standardization, Metrology and Patent publishes the list of organic farms.

As we see, there’s no single control.

Problems

There are problems with the application of the rules or norms of organic farming. Ministry of Agriculture stays away from these processes. It means the monitoring in organic farms is implemented by The Ministry of Ecology and Natural Resources, and certification is to implemented by State Committee on Standardization, Metrology and Patents.

There is no information about organic farms or organic products yet. State Statistical Commeetee intends to collect the data in 2015. State Committee on Standardization, Metrology and Patents doesn’t pulish the list of these kind of farms.

Getting the certificate of Organic Producer is a difficult process for farmers. There’s no real work in this direction.

The ways of solvation of the problem

For the development of organic farming there’s need for “one-window permission system”. Because, at present in the regions of the country, local officces of the Ministry of Agriculture are established. We think these officces have to be permittied to accept applications from the farmers for organic farming. The farmer has to apply to one Organisation, get the permission or certificate and began the production process according to the rules. We think if this process will be set more simplified and the role of the Ministry of Agriculture will be increased we can get prorgress in this direction.

We think Azerbaijan can be comperative in Europe markets by exporting organic tomato, pomegranates, hazelnuts. In azerbaijan NGOs are more active in this regard. It can be connected to some grant projetcs etc. Especially, Ganja Agribusiness Association GABA is very active in this sector.

GABA, located in Ganja c. supports organic farms. Since 2000, more than 2000 farmers have been trained by GABA and these farms have moved from conventional farming to organic farming and almost 400 farms have advanced to the stage of applying for organic certification of their products. The last few years were very productive for GABA’s organic initiative. Thus, GABA implemented projects in organic agriculture and established the first Organic Certification Body in the country - “AZEKOSERT”, and “Ecological monitoring of soil and environment” laboratory.

Azerbaijan State Agrarian University is also active in this field. The university established a separate department of Organic Agriculture.

In 2014 the Ministry of Agriculture of AR signed a grant agreement with FAO to support organic agriculture in Azerbaijan.

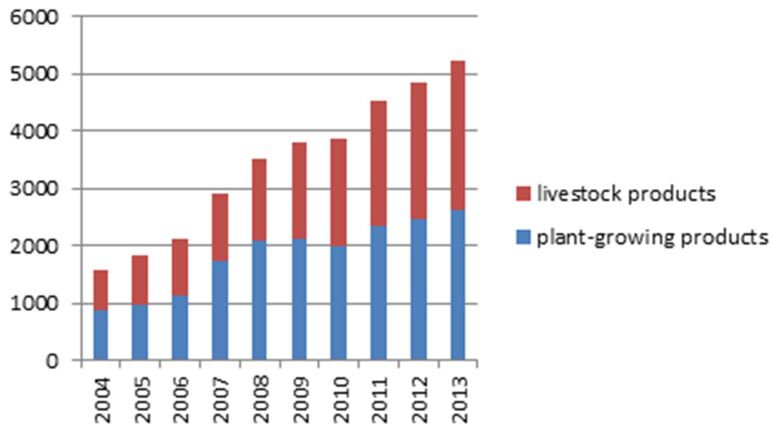
According to statistics provided by the Food and Agriculture Organization (FAO) of the United Nations, currently 332 farmers are engaged in organic farming in Azerbaijan. Two-hundred hectares are used for leguminous plants, 206 hectares for vegetables, as well as 755 hectares for orchards.

In 2014, Azerbaijani Agriculture Ministry and FAO signed an agreement for financial support. Azerbaijan has great potential in production of organic tomatoes, pomegranates, and hazelnuts. In particular, organic hazelnut is easily produced in the mountain villages.

2.5 Prices, costs and income

Beginning from 2004 **Gross output of agriculture** has been increasing constantly. We can see this from the following table.

Figure 2.4 Gross output of agriculture, by actually prices (million AZN)



Sources: http://www.stat.gov.az/source/agriculture/

As we can see during the last years share of livestock production in total agricultural production has increased. In 2013 share of livestock amounted 49.86% in total production.

2.5.1 Prices

Researches show that, during the period of observation the prices of agricultural products has been increased. Even if decrease was observed in 2009 on some of products, increase continued during the next years.

Table 2.14 Selling price of per centner agriculture harvest by private owner farms (AZN)

The name of the indicators	2000	2005	2008	2009	2010	2011	2012	2013
Grain crops	10,59	21,47	24,13	16,55	22,80	23,80	21,20	21,70
Row cotton	18,97	29,66	33,21	27,28	38,50	40,70	41,00	41,00
Sugar beet	-	-	4,45	4,49	4,20	4,70	4,80	4,90
Tobacco	31,32	49,30	60,00	54,83	78,70	79,20	74,40	89,60
Green tea leaf	-	-	50,00	90,00	112,50	200,00	100,00	100,00
Potato	15,42	18,29	39,25	40,36	50,80	51,00	49,90	41,00
Vegetable (open land)	5,71	12,96	17,77	19,96	28,40	28,50	26,50	24,10
Market - garden crops	5,78	8,19	14,62	16,56	19,80	20,10	16,80	13,60
Fruit and berry	10,02	36,05	45,41	33,17	45,30	50,60	42,80	44,10
Grape	17,00	26,01	31,68	31,42	39,20	44,00	34,10	34,90
Cattle and poultry, total	97,02	163,54	239,89	254,84	272,50	301,20	323,40	329,60
including:								
Cattle	84,56	159,99	235,27	252,21	266,20	296,10	320,00	322,60
sheep and goat	97,13	163,49	244,58	257,68	279,00	307,40	330,20	339,40
pig	104,00	196,83	281,67	-	200,00	303,60	-	-
Bird	102,39	135,67	220,30	234,31	251,90	277,90	269,80	273,00
Animal breeding harvests								
Milk	19,72	22,24	38,67	40,30	45,40	45,80	45,50	48,90
Wool	26,44	58,21	134,01	154,94	186,00	186,90	167,50	157,10
Egg (thsd number)	57,55	68,85	134,25	135,68	150,00	150,60	138,20	131,30

Sources: http://www.stat.gov.az/source/agriculture/

2.5.2 Costs

According to statistical data, cost price of the agriculture harvests increased too (see Table 2.15).

Table 2.15 Cost price of the agriculture harvests of private owner farms per centner (AZN)

The name of the indicators	2000	2005	2008	2009	2010	2011	2012	2013
Grain crops	5,80	6,52	11,19	10,31	17,46	17,37	14,60	16,44
Row cotton	16,56	13,28	24,03	38,30	23,53	24,92	24,97	24,18
Sugar beet (for treatment)	-	-	3,25	3,32	1,56	1,85	2,77	3,37
Tobacco	11,88	21,38	55,00	61,50	44,94	33,33	50,70	70,23
Green tea leaf	-	-	20,00	43,00	128,13	100,00	50,00	100,00
Potato	9,40	9,04	18,06	17,43	15,13	22,68	26,73	25,31
Vegetable (open land)	2,17	3,49	6,02	7,63	9,69	11,30	12,48	10,12
Market - garden crops	2,50	2,84	7,58	7,50	9,33	7,28	10,02	8,12
Fruit and berry	4,68	11,38	14,94	15,55	15,63	17,22	18,00	16,30
Grape	4,85	12,73	18,24	21,47	22,24	25,19	20,15	22,39
Weight growth								
Cattle	74,52	99,41	157,82	177,40	186,52	199,57	209,72	211,69
sheep and goat	73,32	67,50	151,05	167,90	186,73	211,46	209,50	211,84
pig	82,83	90,26	327,45	272,00	-	-	-	-
Bird	71,86	100,08	171,58	179,23	214,09	245,23	260,11	225,52
Animal breeding harvests								
Milk	10,18	11,94	22,67	22,34	25,25	27,70	27,50	27,45
Wool	18,40	32,28	65,80	83,34	117,10	127,60	130,18	116,32
Egg (thsd number)	16,06	37,92	61,76	71,18	65,42	66,56	84,46	78,43

Sources: http://www.stat.gov.az/source/agriculture/

Table 2.16 Labour expenditure for per centner harvest of private owner farms (person - hour)

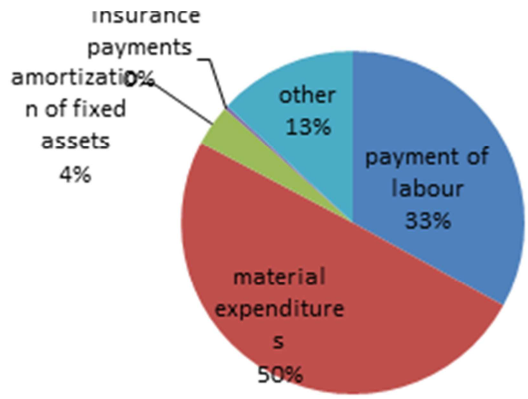
The name of the indicators	2005	2008	2009	2010	2011	2012	2013
Grain crops	10,6	12,3	11,0	10,6	11,0	10,9	11,0
Row cotton	53,2	62,2	61,3	59,2	61,8	61,9	59,7
Sugar beet (for treatment)	-	12,2	11,5	11,9	12,0	12,0	12,0
Tobacco	439,8	400,0	400,8	382,0	383,3	391,6	389,3
Green tea leaf	-	266,7	250,0	250,0	300,0	200,0	300,0
Potato	26,7	26,2	25,5	24,7	26,2	26,0	25,0
Vegetable (open land)	21,6	22,3	22,9	22,8	23,0	23,0	23,1
Market - garden crops	10,8	12,1	11,6	12,0	11,9	12,1	12,0
Fruit and berry	21,9	24,2	23,9	23,3	23,0	23,0	23,5
Grape	45,9	44,6	44,0	44,1	44,0	44,0	44,0
Weight growth							
Cattle	265,0	267,6	261,3	257,5	260,4	260,2	262,3
sheep and goat	242,3	231,3	231,1	223,3	229,8	230,5	230,3
pig	200,6	272,7	276,5	-	-	-	-
Bird	144,6	128,1	131,3	132,2	133,8	130,3	129,7
Animal breeding harvests							
Milk	48,4	48,7	47,4	47,4	47,8	48,2	48,0
Wool	356,6	393,3	393,4	380,5	399,4	392,6	394,1
Egg (thsd number)	59,3	61,7	62,2	61,6	63,2	61,7	65,0

Sources: stat.gov.az

Level of labour expenditure was different for different products. For example if labour expenditure increased in grains, it decreased in tobacco.

Share of labor amounted 33% of total costs in 2013. Share of payment of labour is especially high in vegetable (mainly tomato and cucumber) and fruit production. In harvesting period, higher working farmers (mainly females) work on daily payment terms.

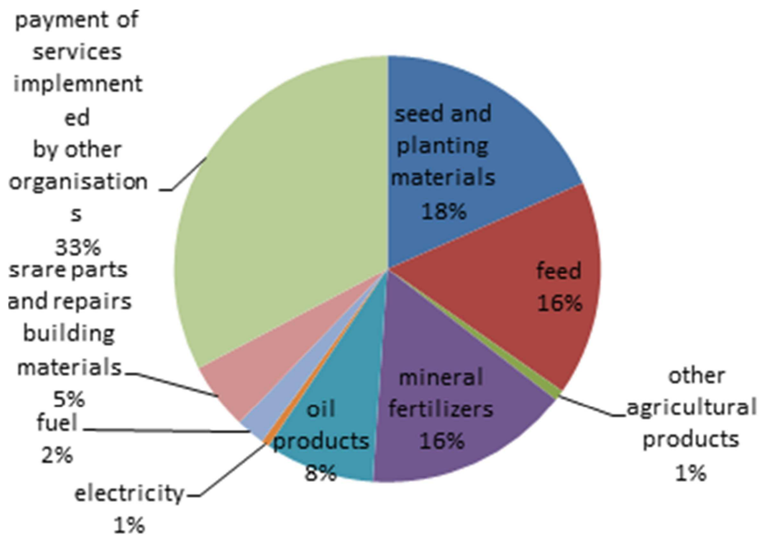
Figure 2.5 Structure of expenditures on agricultural production



Sources: stat.gov.az

Generally, the biggest share in production costs comes to material expenditures with 50% in Azerbaijan in 2013. From this point of view, the structure of material expenditures is very important. During the last years payments for services hold the main part of the structure of material expenditures. In 2013 share of payments of services implemented by other organizations amounted 33% of total material expenditures. This is mainly connected with lack of agricultural techniques and machinaries. Also, the small scale of farms plays its own role in this process. Due to small scale, the farmers usually are not willing to buy these machinaries.

Figure 2.6 Structure of material expenditures on agricultural production, %



Sources: www. stat.gov.az

2.5.3 Farm income

The number of unprofitable farms decreased during the last years. The farmers are able to establish profitable production in both, plant growing and livestock products.

Table 2.17 Level of profitability or damage of private owner farms from the selling of harvest (%)

The name of the indicators	2005	2008	2009	2010	2011	2012	2013
Grain crops	54,8	51,5	37,0	20,1	25,9	36,1	24,7
Row cotton	96,5	33,5	-29,3	60,5	50,6	53,3	62,7
Sugar beet(for treatment)	-	8,7	28,7	129,9	153,1	74,1	45,0
Tobacco	1.1 times	3,4	-39,2	48,9	48,4	28,2	19,1
Green tea leaf	-	63,0	8,0	1,9	100,0	-	-
Potato	103,8	16,1	73,2	79,6	68,5	45,7	46,2
Vegetable (open land)	1.1 times	42,9	53,3	110,6	84,0	53,1	73,9
Market - garden crops	112,3	56,7	74,3	78,5	71,5	37,5	42,5
Fruit and berry	96,5	63,2	95,5	146,4	107,9	75,7	94,9
Grape	1.6 dəfə	47,4	36,3	29,3	47,0	26,8	18,9
Plant growing	86,6	43,7	36,6	31,7	38,7	42,8	34,7
Cattle and poultry, total	48,1	40,0	35,3	39,2	39,5	38,1	41,8
including:							
Cattle	50,4	35,2	41,6	39,0	37,5	34,3	37,5
sheep and goat	44,4	44,2	29,9	39,2	41,2	42,8	45,9
pig	67,0	2,1	-	50,0	54,5	-	-
Bird	23,0	43,0	54,5	47,2	52,7	34,9	45,7
Milk and dairy products	62,5	46,4	49,1	62,0	56,4	47,7	55,9
Wool	33,9	51,3	36,4	56,4	41,1	42,6	34
Egg (thsd number)	73,3	90,0	62,5	126,8	90,6	69,3	76,9
Animal-breeding	54,4	45,5	36,5	48,8	45,4	41,6	45,3
Harvest sale	71,9	45,8	36,5	36,9	40,5	42,3	37,6
By the balance of agriculture	71,9	53,8	33,7	54,5	53,8	54,8	49,7

Source: http://www.stat.gov.az/source/agriculture/indexen.php

3. SITUATION AND DEVELOPMENT OF UPSTREAM AND DOWNSTREAM SECTORS

3.1 Input production and use

3.1.1 Input production

Provision of agricultural producers with modern equipment is one of the main conditions for increasing food production. Unfitness of equipment creates obstacles for conducting agro-technical measures in optimal period, impedes timely and without loss harvesting, creates serious obstacles for production processes.

Works conducted with old equipment are of bad quality and allows considerable losses. Thus, the necessity for creating service enterprises arises.

"Agroleasing" Open Stock Company was established with the Order 468, dated October 23, 2004, of the President of the Azerbaijan Republic "On additional measures in the field of extending leasing in agrarian sector", in order to accelerate the implementation of service works intended in the agrarian sector, facilitating entrepreneurs' work, providing them with necessary equipments timely and with compromised terms.

For the implementation of its tasks, "Agroleasing" was given 370.63 million manats from State budget and other sources during 2005-2012, **including:**

- 25,0 milion manats in 2005
- 41,0 milion manats in 2006
- 37,5 milion manats in 2007
- 72,5 milion manats in 2008
- 48,2 milion manats in 2009
- 44,6 milion manats in 2010
- 46,8 milion manats in 2011
- 55,0 milion manats in 2012

And during this period, 1033 units of different models of grain reaper harvesters, 4252 unitss of tractors, 164 units of excavators, 8950 units of agricultural equipments to the tractor (plows, cultivators, grass and straw pressers, harrows, seeders, sprayers, tractor trailers and so on.) have been bought. In addition 9 sets of dairy equipments, 23 sets of freezer compartments, 8 sets of equipments for fodder production plant, spare parts for agricultural machinery, machine tools were bought.

In line with above mentioned, 254.8 thousand tons of fertilisers – including - 198.6 thousand tons nitrogen, 54.2 thousand tons superphosphate, 2.04 thousand tons nitroammophos and 294.3 thousand liters of pesticides have been bought.

Also, wheat seeds and pedigree cattles have been brought and distributed among farmers.

Credit availability

According to the information of the Central Bank of Azerbaiojan twards the end of 2013 total volume of credits to agricultural production and processing amounted 733.3 million manats. Share of these fields in total credits was 4.8%. This figure is 7.5 times higher compared to 2005.

At present agricultural producers and food producers get discounted credits mainly through the following channels:

- Credits by Azerbaijan National Fund for Enterpreneurship Support (ANFES).
- State Agency on Agricultural Credits (SAAC).

The biggest provider of discounted credits to agricultural sector is Azerbaijan National Fund for Enterpreneurship Support (ANFES). The aim of establishment of ANFES is to take part in development of enterpreneurship and increase of business activity of the population, implement the financial support to them. The fund delivers discount credits to business men. In 2013 2/3 of credits belonged to production and processing of agricultural products.

Table 3.1 Use of funds of Azerbaijan Republic National Fund for Enterpreneurship Support (thousand manats)

Fields of economy	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013
Production and processing of various industrial goods	6044,3	12855,7	42758,8	42209,5	37912	38731	23450	27648	69256,5	85325
Processing of agricultural products	2747,9	7053,4	12576,5	13940,6	8442,5	19643,5	10350	16853	27860	149511
Agricultural production	7579	12987,8	23484	24130,4	28759,7	22573,3	55651,9	70358,5	99968,5	32679
Tourism raising	1323,8	1967	7110	8402	11279	850	2815			
Development of service (infrastructure)	681,9	1422,2	3240,3	1862,5	1213	47761,5	22733,1	23140,5	20915	7485
Development of mass media	118		973	115	200					
Total:	**18494,9**	**36286,1**	**90142,6**	**90660**	**87806,2**	**129559**	**115000**	**138000**	**218000**	**275000**

Source: http://anfes.gov.az/en/show.page.php?guid=4e13c77b-280b-11e0-8e86-0022190362dd

As the result of realisation of projects financed by ANFES more than 12 thousand new jobs are created. In 2013 57 production, processing and infrastructure enterprises are established. 31,5% of the total credits come to agricultural production, 22,4% come to processing of agricultural products. Non-bank credit institutions also take part in creditising of agriculture. In 2013 there were 111 credit unions, 35 non-bank credit institutions. By the end of 2013 the actives of non-bank credit institutions amounted 542,1 million manats. Share of this figure in total bank actives of the country was 2.7%.

Non-Bank Credit Organization CJSC Agrocredit with 100% of the state-owned share capital has bigger potential and realises Crediting Program of Rural Areas. In 2013 in the framework of this program 1207 legal and individual entities, 826 groups of debtors and totally 2033 business activites were given credits on total amount of 8.42 million manats.

In addition to above mentioned, the total volume of tax incentives to agricultural producers amounts 1,4 billion manats. No input industries, which could produce chemicals, machineries and other agricultural equipments, are active in the country.

3.1.2 Input use

The current status of the main agricultural equipment as of 2013 is as follows: tractors (23,468 units), ploughs (5,289 units), cultivators (732 units), seeding machine (2,132 units), mower (1,438 units), and grass pressing machine (1,707 units). For combines, there are 2,143 units of cereal harvesters, 7 units of maize harvesters, and 640 units of fodder harvesters (see Table 1-10).

Table 3.2 Number of tractors and combines, end of the year, 1000 units

Years	Tractors *		Grain combines
	number	total power of engines, thsd. horse power	
1999	29,5	2180	3,6
2005	14,9	1016	1,3*
	0,9**	61**	0,1**
2007	21,1	1439	2,1
2008	21,6	1473	2,2
2009	21,5	1478	2,2
2010	21,3	1453	1,9
2011	21,4	1464	1,8
2012	21,1	1434	1,7
2013	23,5	1630	2,1

* Excluding tractors with irrigation and other machines. There were 284 such tractors in 2005
** Besides "Agroservice" enterprises
Note: From 2007 data on the base of Head State Technical Supervision Inspectorate of the Ministry of Agriculture, including "Agroservice" and "Agrolizinq" enterprises

Table 3.3 Provision of agriculture with equipment

	2005	2007	2008	2009	2010	2011	2012	2013
Tractors per 1000 ha arable land, units	11,9	15,9	14,4	12,6	13,4	13,3	12,8	13,9
Arable land per 1 tractors, ha	84	63	69	79	75	75	78	72
Combines (machinery) per 1000 hectare of sown area of appropriate crops, units								
Cereals harvester	1,8	3,0	2,6	2,0	2,1	1,9	1,7	2,1
Grain maize harv	1,6	0,4	0,4	0,2	0,2	0,1	0,1	0,2
Potatoes harvester	0,2	0,2	0,1	0,3	0,3	0,3	0,3	0,6
Beet harvester	5,2	3,5	1,9	1,2	1,1	1,2	2,5	1,8
Cotton harvester	0,2	...	...	...	...	0,9	1,4	2,2
Sown area of appropriate crops per combine (machine), ha								
Cereals harvester	544	338	389	503	487	526	578	483
Grain maize harv	622	2450	2396	4504	5978	8409	11884	5521
Potatoes harvester	6427	4963	10173	3396	3290	3104	3667	1814
Beet harvester	197	279	535	852	944	811	402	547
Cotton harvester	5122	...	...	...	...	1127	713	451
Per 100 tractors, units								
Plougs	20	15	15	15	16	16	16	23
Cultivators	7	5	5	5	4	4	4	3
Seeding machines	9	9	9	9	9	9	9	9
Mowers	7	3	3	4	4	4	4	6

Sources: http://www.stat.gov.az/source/agriculture/

Number of tractors and grain combines has been increased during last years. But still, tere is lack of agricultural techniques in the field. Especially, during the harvesting season, farmers suffer from the lack of agricultural techniques. Also, small scale (2.5 ha average) of majority of the farms doesn't allow them hire machinery on time. As, all of relations are based on economic interest, the owners of machinery prefer first the bigger farms.

Per hectare fertilizer input is around 16 kilograms. Though there is a gap among items, inputs of fertilizer do not show a big difference since 2010, and inputs of chemical fertilizer is generally low.

For the supply of inorganic fertilizer, imports take large portion of the total fertilizer supplied. The total imports for inorganic fertilizer were 40,000 tons in 2000, but they were increased by 2.4 times to 98,000 tons in 2013. Import demand for inorganic fertilizer is expected to increase as the Azerbaijani agriculture sector is set to grow in the coming years.

Table 3.4 Application of mineral fertilizers by kinds of agricultural crops, on the basis of 100 % active substance

Years	Total 1000 t	per hectare of cultivated, kg	of which								Share of fertilised area, %
			cereals*	cotton	tobacco	potatoes	vegetables, watermelons and melons	fodder crops	fruit trees	vineyards	
1999	1,3	5	5	11	4	0,0	1	-	-	-	13
2007**	22,8	16	22	42	3	3	7	4	8	20	…
2009	22,8	12	14	27	4	12	12	3	7	2	31
2010	31,7	18	20	25	76	16	37	4	20	15	34
2011	20,4	12	15	30	34	10	19	2	9	6	54
2012	28,1	16	20	31	65	28	20	5	11	6	61
2013	29,3	16	20	30	66	28	24	4	12	7	68

* without maize

** since 2007 including private owners, family peasant farms and households

Sources: http://www.stat.gov.az/source/agriculture/

When average of 740 thousand tons of mineral fertilizer (in physical weight) was used annually until 1990, in 2001 this figure was only 40 thousand tons or 5.5 percent of the requirement.

Starting from 2005, “Agroleasing” JSC and private entities imported more than 200 thousand tons of mineral fertilizers, 294.3 tons of pesticides for plant protection and provided to the agricultural producers on favourable terms. In any case, the shortage fertilizers and plant protection resources significantly damage the plant-growing field.

A series of activities must be implemented for meeting the field’s needs for fertilizer and plant protection resources in order to increase the production of plant-growing products.

For these purposes, it is necessary to build a plant in the country that produces nitrogen fertilizers, establish wholesale and retail networks of fertilizers and plant protection means in the regions, strengthen the material-technical base and activities of agrochemical, plant protection and quarantine, seed-growing services.

3.2 Food industry

The organization of the processing and sale of produced goods is an important issue. In recent year, major creative works were implemented in wine-making, tea-growing, fruit and vegetables, canning industries, scores of new small and large enterprises were restored and launched in these industries. However, main characteristics, infrastructure of the market fit new economic relations for the purchasing-sale of products.

As there is no procurement-sale markets, the procurement, preservation and selling of fruits and vegetables in the field is not organized in the necessary level. According to calculations, 10-15% of the produced fruits and vegetables are lost each year because of the weakness of the market, processing, selling infrastructure.

Sorting, packaging, storing, advertising, reputation issues must be solved in order increase exports of agricultural products and sell competitive products in foreign markets and activities must be conducted that stimulate exports. The lack of enterprises for processing some agricultural products in the country and others' lagging behind modern requirements negatively influence the delay in growth level of agricultural production, loss of some part of products, full provision of producers with variety of local products, as well.

Table 3.5 Indexes of production (by kinds of economic activity)

Indicators / Years	2004	2005	2006	2007	2008	2009	2010	2011	2012
Manufactur of food products (percent)	100.1	102.7	102.3	104.0	101.6	102.6	102.3	103.8	100.1
Manufacture of beverage (percent)	130.4	129.6	125.0	124.2	94.9	87.5	110.8	100.0	130.4
Manufacture of tobacco products (percent)	61.8	137.9	91.9	75.9	77.1	88.4	95.4	92.8	8

Sources: stat.gov.az

Table 3.6 Average payroll of employees

Indicators / Years	2004	2005	2006	2007	2008	2009	2010	2011	2012
Manufacture of food products thsd. Person	11.5	13.0	13.8	15.8	17.0	17.4	15.1	14.6	17.0
Manufacture of beverage thsd. Person	4.1	4.3	4.8	5.0	5.3	5.0	5.2	5.7	5.8
Manufacture of tobacco products thsd. person	1.1	1.2	1.1	0.9	0.9	0.9	0.6	0.5	0.5

Sources: stat.gov.az

It should be noted that, share of food industry in total employement is very low.

Table 3.7 Volume of products (works, services), at factual price

Indicators / Years	2004	2005	2006	2007	2008	2009	2010	2011	2012
Manufactur of food products (million manat)	986.6	1094.5	1154.3	1254.9	1381.0	1520.3	1924.6	2107.6	2574.8
Manufacture of beverage (million manat)	49.8	72.5	97.0	132.0	147.2	153.2	170.2	169.0	175.5
Manufacture of tobacco products (million manat)	21.0	30.5	27.0	22.4	21.7	21.7	22.3	22.8	19.6

Sources: stat.gov.az

Extending the network for processing cattle-breeding products is one of the main tasks. There are 45 meat- and 127 small milk-processing enterprises in the country. The capacity of these processing enterprises does not meet the demand in full. For example, as a result of limitation of milk processing industry, at least 150 thousand tons of milk loses its quality each year.

Thus, relevant works must be conducted in the country to enlarge the network of meat and milk processing enterprises that meet modern requirements and that has exports potential.

14% or 23 thousand tons of slaughter weight is sold with no processing. Only 43.5 percent of produced milk is industrially processed. And as the result the demand for butter, cheese, curds and sour cream is met via import. So, the proposals of private sector for the establishment of new meat and milk processing entities meeting modern demands in the territories near the material sources and construction of fridges to conserve reserves should be supported.

The development of entrepreneurship is one the main conditions of the population's reliable food supply. In connection with this, constant improvement of entrepreneurship environment in the country forms one of the important directions of the state's economic policy. As a result of implemented policy, the number legal bodies that registered have significantly increased to 15669. 9521 legal entities deal directly with agriculture, and 6148 are entrepreneurs in the field of processing.

In order to extend entrepreneurship activities in the field of production of agricultural and food products, the state's financial support activities are being successfully implemented.

In addition to gained achievements, there is a serious need to extend entrepreneurship activities in the field of food supply, taking additional stimulating measures regarding this. Particularly important measures are to establish store-houses, refrigeration cells, elevators for the storage of food products, as well as enterprises for the production of agricultural equipments and fertilizers, packaging enterprises, to extend the production of grains, feed, meat and meat products, fruit and vegetables, rice paddy, honey and other food products, to develop processing industry.

3.2.1 Food production

At present, development of processing industry is of an urgent need. For example, there are different processing enterprises engaged in grains processing like mills, bakeries, macaroni factories etc.. And this played a positive role in the development of the field. But still tere's need for further development.

According to statistics, number of the food industry enterprises was 439 units in 2013 in Azerbaijan. 17 of these are public enterprises and the rest 422 private enterprises.

Number of processing enterprises of agriculture, forestry and fishing in the regions is given in the table below.

Table 3.8 Number of processing enterprises of agriculture, forestry and fishing in 2013

Regions	Total number of enterprises	Including individual entrepreneurs
Absheron	263	226
Ganja-Gazakh	289	113
Guba-Khachmaz	183	107
Lankaran-Astara	506	195
Aran	1769	1204
Yukhari Kharabakh	288	124
Kalbajar-Lachin	21	15
Dagkhlıg Shirvan	142	125
Nakhchivan	171	149

Sources: stat.gov.az

At present, 22 refrigerated warehouses have been constracted to store agricultural products. Only 5% of producers use these warehouses because of the lack of proper usage mechanism, and high prices.

Packaging and transportation depend on decisions and financial opportunities of the producers. Packaging and transportation mostly depend on decisions interim mediators. They carry bought products by cars and trucks, offering them to different markets. Most of the times the amount of the product is higher than freight rate of the machine and makes a potential danger on the road.

But in fruit and vegetable sectore the situation is different. The production power of processing sectore is not enough to accept the whole production of fruits and vegetables. Also, lack of warehouses as well as non-eligible storage conditions are the main factors which make the use of these warehouses unefficient. When we look to the structure of food products in the country, we can see that, 16% of fruit and vegetable juices, 10% of canned fruits and vegetables come from import.

The main pupose of development of fruit and vegetable processing industry is reducing crop loss, processing and packing products according to international standards, ensuring the safety of products and ensuring the economic efficiency of the sectore.

Poor development of the sectore compared to others is also connected to low level of salaries.

Table 3.9 Average monthly nominal wages of employees in food processing, manats

Years	2004	2005	2006	2007	2008	2009	2010	2011	2012
Manufacture of food products	32	46.1	58.5	99.2	134.6	140.9	224.0	224.5	229,8
state sector		31.1	55.0	44.8	70.9	89.0	93.9	136.9	190,1
non-state sector		46.6	58.6	100.2	135.3	141.5	225.7	225.6	230,3
Manufacture of beverage	111,7	116.9	139.3	201.6	260.5	284.2	304.6	307.7	319,8
state sector		47.9	47.7	45.4	-	27.1	51.3	134.8	166,8
non-state sector		119.6	141.8	205.5	260.5	284.4	305.1	308.1	320,6
Manufacture of tobacco products	122,9	165.9	169.8	244.1	228.0	253.1	314.2	322.2	316,6
non-state sector		165.9	169.8	244.1	228.0	253.1	314.2	322.2	316,6

Sources: stat.gov.az

3.2.2 Structure of the food sector

In processing industry, the main share belongs to few of companies. Azersun Holding and Gilan Holding are on the top of the list. Other companies are small and after privatization process they are still in recovery process.

Table 3.10 The number of acting enterprises

Years	2004	2005	2006	2007	2008	2009	2010	2011	2012
Manufactur of food products (unit)	528.0	534.0	492.0	499.0	472.0	416.0	409.0	396.0	427.0
Manufacture of beverage (unit)	108.0	110.0	104.0	113.0	116.0	136.0	134.0	127.0	127.0
Manufacture of tobacco products (unit)	11.0	12.0	11.0	12.0	10.0	9.0	8.0	8.0	8.0
Textile industry (unit)	109.0	94.0	98.0	97.0	101.0	114.0	85.0	77.0	72.0
Manufacture of leather and related products (unit)	25.0	29.0	30.0	26.0	25.0	25.0	21.0	20.0	21.0
Manufacture of wood and of products of wood and cork, except furniture (unit)	67.0	74.0	77.0	79.0	79.0	87.0	73.0	72.0	68.0

Sources: stat.gov.az

Azersun Holding[3] started out back in 1991 to become a strong market leader position in the food production, retail and farming sectors throughout the country and region wide. Consistent with the considerable role it plays in shaping the country's producing and exporting image today Azersun Holding takes pride in its wide overseas market network powered by a huge production capacity of its factories countrywide.

Today the Group operates more than one dozen enterprises engaged in the following areas of industry:

- Food-processing
- Farming
- Trade
- Packaging and Paper Industry

Azersun Holding has well enough large export geography.

Presently, Azersun Holding products are successfully exported to Russian Federation, Ukraine, Republic of Belorussia, Georgia, Kazakhstan, Turkmenistan, Tajikistan, Kyrgyzstan, Uzbekistan, UAE, Lithuania, Poland, Iraq, Germany, USA, Turkey, Israil and China. Our exported products include tea, canned goods, edible oil, paper products, salt, sugar, hazelnut and other foods manufactured by our Holding.

3.2.3 Prices, costs and performance indicators

Prices of main food products, beverages and tobacco products have been on an upward trend (**Erreur ! Source du renvoi introuvable.**11)

Table 3.11 Produce price index of products

Indicators / Years	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013
manufacture of food products (percent)	128.4	96.7	112.3	126.6	147.4	89.7	106.9	113.7	97.0	107.2
manufacture of beverages (percent)	105.5	108.2	105.0	104.8	123.5	105.5	105.2	102.0	101.9	104.5
manufacture of tobacco products (percent)	146.7	98.6	95.5	110.1	127.1	107.6	102.7	102.2	92.0	101.8

*Sources: www.*stat.gov.az

3.2.4 Food law

Ensuring the quality of food products is of the highest importance for Azerbaijan. Also, Azerbaijan has chosen the way of development with the close integration to developed world and EU and that's why legislative and legal framework of the country is is being fit to EU framework. In line with that, Azerbaijan is going to enter WTO and that's why modernization of sanitary and phytosanitary measures is implemented. Azerbaijan has corresponding legal framework and also, there's a separate organization carrieng out the phytosanitary control. Our country is the member of International Plant Protection Convention (IPPC) form 2000 and an assessment of phytosanitary control system was implemented by IPPC. The work in this direction is going on.

In 2004 the State Phytosanitary Control Service was established, legal basis in this field set up, legislation acts were re-developed and new laws were adopted. 25-50% of product is lost because of harmful organisms during a plants vegetation period and products' storage. Thus, the protection of agricultural products from diseases, pests and weeds is important for increasing their productivity.

[3] http://azersun.az/includes/export_catalogue.pdf

In order determine the diagnostics and development intensity of harmful organisms for conducting proper fighting activities, besides phytosanitary diagnostics, phytosanitary examination of the field must be conducted, all the elements that impact the development of harmful organisms must be analyzed, the forecast and danger level of mass spreading of harmful bio-object must be determined, a protection system that is biologically and economically efficient for the farm must be selected.

It is necessary to take actions to strengthen the logistics of the Service. A series of activities in the area of the country's veterinary-sanitary health, prevention of hazardous infectious diseases, and production of cattle-breeding products that is fit and safe for human health, as well as protection of population from diseases that are dangerous for humans and animals.

Specialists that work in veterinary offices conduct preventive and mandatory vaccinations on the account of public funds against animal diseases in average of 32.7 million heads of agricultural animals and bird each year. Specialists that work in 162 diagnostic and veterinary-sanitary examination laboratories conduct on average 5.2 million diagnostic examinations against 24 infectious diseases and that does not meet demand.

Weakness of the logistics and shortage of human recourses does not allow for full and efficient performance of veterinary activities. Besides increasing the control function of the State Veterinary Service, certain works have been done in the area of enlarging private veterinary service, as well. 307 veterinary specialist deals with the purchase-sale of treatment-preventive preparations used in veterinary throughout the country, 25 private veterinary service centers function.

A lot of positive works have been done in our country in the area of ensuring food security, improving the quality of main food products, increasing export potential in recent years. Modern laboratories with high material-technical base and staff potential were established in Baku city, as well as Nakhchivan, Jalilabad, Ganja, Khachmaz, Shaki and Saatli cities. Quality and safety indicators of a number of food products undergo organoleptic, physical-chemical, toxic, microbiological tests in these laboratories in accordance with the requirements of national and international standards and relevant comments are issued.

Equipments and laboratory devices that are controlled by modern computers and that have several international certificates were purchased for increasing control over the quality and safety of food products, as well as to reveal toxic elements, nitrides, nitrates, micro organisms. Specialists are regularly invited from foreign countries for strengthening laboratory works.

However, various foodstuffs in trade, public catering, welfare and other services areas do not meet requirements of normative-technical documents, storage period and conditions of foodstuffs are not observed, foodstuffs with unknown sources are revealed in the market. In order to eliminate these cases, there is a need to improve the management system over quality control, making relevant amendments to the legislative framework regarding this, full compliance of national standards to international requirements, extension of the network of modern laboratories, deepening of cooperation with international organizations.

3.3. Bioenergy production

On 21 October 2004 "State Program on the use of alternative and renewable energy sources in the Azerbaijan Republic" was accepted. In the program it is noted that rapid development of industry, agriculture and socio service sectores opens new opportunities for production of energy using biomass. Following sources of biomass exist in the country:

- combustive industrial waste;
- wastes from forestry and wood processing industry;
- agricultural products and organic wastes;
- household and communal wastes;
- waste from areas polluted with oil and oil products.

Application of new technologies for production of bio substances using industrial, agricultural and household wastes, application of new small power stations is planned in State Program.

To improve the management system in alternative and renewable energy sectore, State Agency on Alternative and Renewable Energy Sources has been established on 01 February 2013 (http://area.gov.az/).

The Agency, takes part in formation and implementation of state policy in this sectore. Also the agency is responsible for development of this sectore, establishment of the infrastructure, application of alternative and renewable energy in economy and social sectores, implementation of measures on production and consumption of alternative and renewable energy, also for state accounting and state cadastre.

But the agency mainly prefers solar and wind energy. The agency tries to implement some projects connected to bioenergy but this is still on idea level. As, only Gobustan Biogas thermal power station with the total power of 1MVT was built till this moment.

3.4 Food retail and consumption patterns

3.4.1 Food retail sector[4]

Since the independence of Azerbaijan in 1991, producer groups in the country have been classified into three categories: family farms and households, agricultural enterprises, and private owners and entrepreneurs. Among them, the category of family farms, which amount to 1,206,710 households, takes up more than 99 percent of the total producer groups as of the end of 2013. In terms of producer groups, the most noteworthy aspect in the farming structure in Azerbaijan is that the structure is absolutely focused on the category of family farms and households. This group includes family farms, peasants, and households.

Trading relationships in agrarian sectore is mainly based on verbal agreements. Number of specialized wholesale trade bases is low. That's why the objects of general trade network is used for trading. It is hard to say the exact number of wholesale and retail outlets. But generally, agricultural produts are sold in 1366 wholesale markets and more than 30 thousand retail markets. In line with this, in markets and fairs with approximate number of 100, 12 thousand public catering establishments, nearly 500 wedding palaces agricultural products are sold, used and consumed.

Provision of agricultural producers by the means of production is also realised in wholesale and retail outlets. Specialised trade services is provided only by leasing.

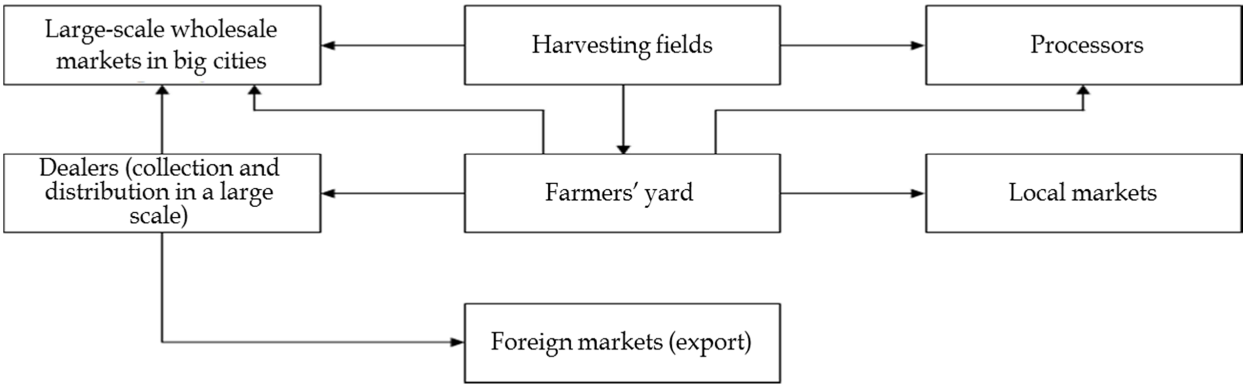
The current market infrastructure of the country doesn't allow to local producers freely enter the trade networks. Producers have to sell the ready product on low prices offered by the mediators. Incorrect formation of market infrastructure, including wholesale and retail markets is the reason for the differences between producer prices (farm-gate price) and arket prices. Market prices are 5-10 times (sometimes even more) higer compared to producer prices.

In the current distribution process of agricultural products in Azerbaijan, dealers play not only crucial but also various roles. They collect a small amount of products from each family farm, gather them in a large volume by using transport vehicles, and distribute products to wholesale markets in big cities and regional markets or sell them in person at markets. Dealers also select and pack collected products to export them to overseas markets. Moreover, in the process of distributing products to wholesale markets or exporting them outside the country, dealers are engaged in logistics ranging from classification to grading, standardization, and packaging based on their subjective criteria. They also perform other various activities related to shipment and cargo handling. All these facts prove that

[4] The results of the researche "KSP-2014 Support to Azerbaijan Republic to increase the export of Agricultural products', of which the authors have taken part, have been used in this chapter.

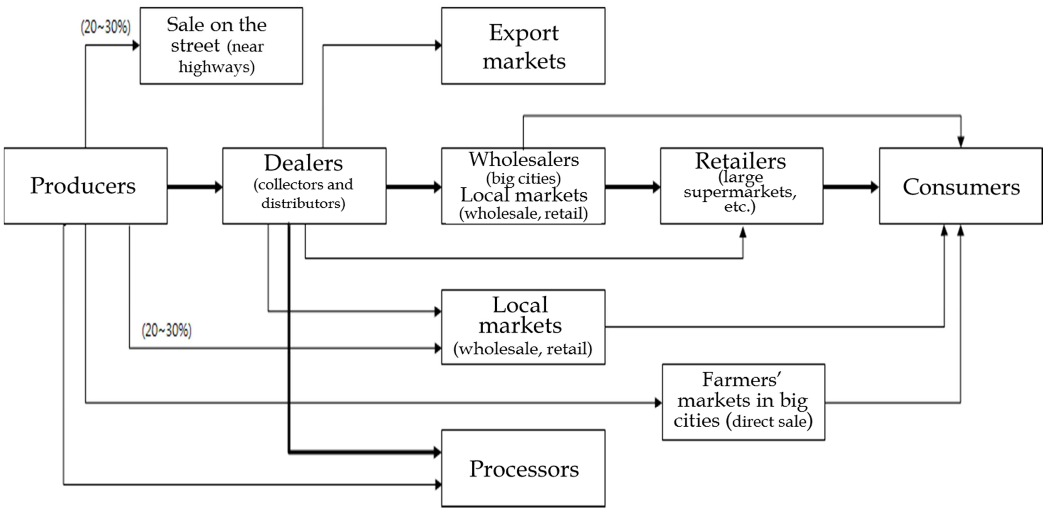
dealers are the core players in distribution channels and the entire supply chain of agricultural products in Azerbaijan. In comparison, individual farms are not capable of commercialization or high value-added logistics, including classification, grading, and packaging, due to the lack of distribution and logistics facilities and the small scale of individual distribution practices. Selling harvested agricultural products without package to dealers is all farmers do in relation to distribution.

Figure 3.1 General Distribution Structure of Agricultural Products in Azerbaijan



Based on the general distribution structure of agricultural products in Azerbaijan, typical distribution channels can be divided into three types. First, the most important distribution channel (supply chain) works as follows: farmer's yard/field → dealer (collector and distributor) → wholesale markets in big cities (Baku, Ganza, etc.) → retail markets (traditional markets, modern retailers, etc.) → consumers. Another channel that takes up a relatively large proportion works as follows: producer (farmer's yard/field) → local markets or wholesale markets in big cities. The other channel flows directly from producers to processing companies. In case of the second channel, some producers sell commodities directly to wholesalers or retailers at regional markets, but this case accounts for a very small proportion in the entire trades. Most products are collected and sold by dealers. The third channel is a stable way of selling agricultural products, in which producers make a contract with processors and provide commodities in a direct method. In addition to these distribution channels, some producers sell products directly to consumers (direct sale).

Figure 3.2 Major Distribution Channels of Fruits and Vegetables in Azerbaijan



There are two channels for producers to sell products directly to consumers. First, farms located near expressways or national highways sell agricultural and livestock products in person on the street. In this case, farms sell their products at vacant lots near roads targeting cars passing by, without a particular market facility or space. Second, producers can sell their products at weekend markets arranged at vacant lots in big cities such as Baku, which is provided by the government of Azerbaijan to enhance market access of producers. This is a kind of farmers' market in which producers in areas near big cities bring their harvest and sell them directly to consumers. This type of market is not a permanent one but a periodical market that opens on a particular day of weekend. Weekend markets are held on a particular day by using temporary facilities (large tents, etc.) at vacant lots in cities without fixed market facilities.

In order to reduce the loss of product during harvesting and the following stages and to improve the quality of products it is necessary to improve the market infrastructure.

It is necessary to create that kind of market network, which would allow to establish direct relations between the producer and consumer. In line with that, it is important to raise the awareness of the producers about international market standards in order to raise the competitiveness of the products.

The work in this direction has already begun but it should be more intencive.

There are different sales channels for agricultural products in our country. Existing sales channels allow to sale the products in local markets as well as in foreign markets. There are no contracts in tradiing process. The sales channels differ according to the products. The main plant products are wheat, barley, potato, vegetables, melons and fruits.

It should be noted that only 10% of total production is sold to the State grain reserve fund and processing enterprises. 30-40% of production is sold to livestock and poultry farms as feed. The rest of the production is used as seed and for home consumption.

Also, we should note that, in Guba-Khachmaz region we have 19131 ha of apple orchards. The costs to keep 1 ton of fruits in refrigerator warehouse is 40 manats per manth. Farm gate price of the apples is 0.10.15 manats per kg. The price in the market is 0.3 manats. As the prices for keeping the fruits in the warehouse the farmers prefer to keep it on their own yards and as the result 50-60% of the production is lost.

It shoud be noted that sometimes there are several intermediaries in the sales channel. As, sometimes these intermediaries buy the products from producers and deliver it to other regions and resale it to the next intermediary which will continue the process.

Agricultural producers sell their products to intermediaries from the field, from the yard on harvesting period. Nearly 50-100% of the ttoal amount of the product is sold in this process. The amount of sold product depends on the financial needs of the producer. The rest of the product is kept to be sold later.

For example Ganja-Gazahk region is specialised in potato production. The main part of the product is produced in irrigated area and this factor makes the storage costs high. Relatively, producers has to sell the product as son as possible.

Fruit producers and especially grape producers (90% of grape producers) prefer to sell the product (100% of the product) right from the field.

In some cases the farmers use the chance of being near to highway. In this case 20-30% of product (vegetables, potato, fruits and berries, grape) is sold on highway sides.

In Aran region, this kind of sale is organised by intermediaries during harvesting period. The main products for this region are melons and watermelons, apple and pomegranate.

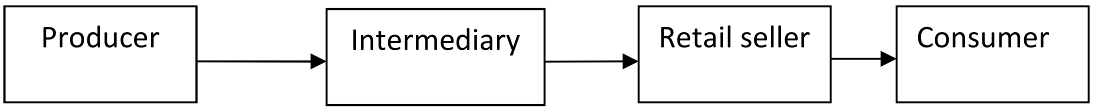
In Guba-Khachmaz region producers prefer to sell the products (mainly vegetables and fruits) from the field or from their yard. Sometimes producers keep the products for some time and sell it later in order to get higher incomes.

The main markets for agrifood products are regional markets (rayon bazars placed in regional centers) and the markets of big cities like Baku, Ganja, Mingachevir and Sumgait. Smal scale farmers, especially family peasant farms prefer to sell the products in regional markets in retail. These are those farmers who live near to regional centers and the ones living far from regional centers prefer to sell the product from field or yard. And just small part (5%) of farmers get the big markets in big cities.

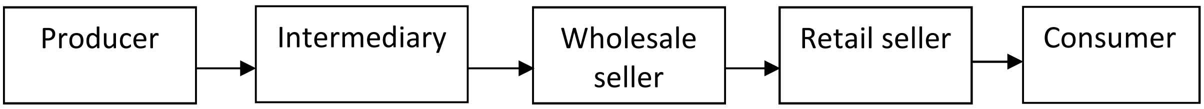
Though grain production is rapidly growing, the quality is still quite low. And this causes the problems in sale of the product. Only 10% of produced product is bought by State Reserve Fund of Grains and by flour mills. The rest is bought by livestock farms as feed or used for home consuption.

Livestock products (milk, meat (alive weight), eggs) are mainly sold in 2 forms as shown in the following schemes.

(1)



(2)



Milk and eggs are sold mainly by the first scheme. Meat is mainly sold by the second scheme in alive or slaughtered form. This is tha main selling mechanism of small scale farms. In big farms the product (mainly poultry meat and eggs) is sold to wholesale and retail centers.

To develop Azerbaijan's distribution sector for agricultural products, it is necessary to set directions, visions, and goals for improving the future agricultural distribution based on analysis of the current state of agricultural distribution and problems in priority and establish strategies by drawing policy initiatives. Considering the current state of distributing agricultural products in Azerbaijan from this perspective, the initiative which should be carried out urgently the most is to turn the current agricultural distribution system with concealed and closed dealers into a competitive system with an open and fair distribution order.

First, it is necessary to exclude excessive participation by dealers and reduce their functions in the agricultural supply chain. To realize this aim, market accessibility for small-sized producers and consumers needs to expand in the agricultural products market. It would be desirable to carry out remodeling projects for public-managed wholesale market and regional market, in which the government takes a role as the central player for investment by selecting proper locations based on analysis of the agricultural distribution system and relevant problems in Azerbaijan. Considering various elements such as the current trend of agriculture in Azerbaijan, characters of the existing distribution system, and effects of improving the distribution system, it is necessary to prepare a government-financed pilot project for constructing public-managed agricultural wholesale markets, which can remarkably expand the function of wholesale agricultural products in major metropolitan areas.

Establishing a cooperation system could play an important role in improvement of the current state in trade of agricultural products. Establishing of production and consuption cooperatives can devide the economic relations in agroindustrial complex into three stages: production, buying and sale. The producers can only implment producer relations. And the consumption cooperatives could play a great role in the next stages as storage, packaging, transportation, sale, processing, provision of the producers by production means etc.

Within the consumption cooperative good coordination and integration among producers, wholesale and retail organizations and all the other members of the cooperative can be established. An effective trading and public catering network for the cooperative members can be created. For more rapid and effective solving of the problem acceptance of a low on agriculture and trade of the Republic of Azerbaijan could be very useful.

With the economic growth and increased national income of Azerbaijan, consumers' patterns of purchasing agricultural products and the propensity of consumption are rapidly changing.

Table 3.12 Consumption of food products by main products groups in 2004- 2013, annual, kg.

	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013
Bread and bakery products	155,7	156,5	157,9	158,9	156,8	155,7	153,4	147,7	144,3	141,6
Potatoes	48,1	48,5	49,1	50,8	51,5	52,2	54,6	59,3	63,1	64,2
Vegetables and market gardens	78,8	77,9	78,4	78,6	78,7	83,5	84,1	90,9	98,5	103,8
Meat and meat products	29,3	29,4	29,1	29,2	30,2	31,2	31,5	32,4	33,5	33,8
Fish and fishery	6,6	6,6	6,6	6,6	6,7	6,8	6,9	6,9	7,1	7,1
Milk and dairy products	277,6	274,8	279,0	280,2	282,6	291,3	301,0	312,8	294,4	285,0
Eggs, piece	123,9	125,6	119,7	122,8	123,8	127,8	131,4	141,4	155,0	155,4
Fruit and berries	54,6	54,5	55,3	55,5	57,6	63,0	65,0	68,5	74,8	75,2
Sugar and confectionery	30,9	30,8	30,9	31,0	31,3	31,4	31,5	32,0	31,7	31,5
Vegetable oil and margarine	8,3	8,3	8,3	8,4	8,4	8,6	8,8	9,3	9,9	9,9

Sources: stat.gov.az

As a result of agrarian reforms, the production of agricultural products has dynamically developed in recent years, production of food stuff per capita significantly increased.

The balance of food supply in the country started to change towards positive direction. The annual requirement of the population for potato, vegetables and water-melon products and fruits is over fulfilled with domestic production and export potential increases (see Tables 3.13 and 3.14).

In meeting demand for food products, vegetable oils are most dependent on imports. Meanwhile, there is big potential to increase this production, especially olive production. It is possible to increase production through intensification of farm activity in the field of production of potato, vegetable, sugar beet and other agricultural products.

During last years, production of vegetables has increased and paralelly the level of self sufficiency by vegetables has increased too. Also, vegetables hold an important share in export of agricultural products (Table 3.15).

During last eyars, all types of cattle and poultry meat production has increased in Azerbaijan and this affected the consumption (Table 3.16).

As, we can see from the table 3.17, milk and dairy products resources has increased too.

Development of poultry farming resulted with the development of egg production (Table 3.18).

Table 3.13 Grain resources and utilization (excluding leguminous and paddy) (ton)

	2007	2008	2009	2010	2011	2012	2013
RESOURCES							
Stocks at the beginning of year	655 498	699 933	1 020 145	1 229 222	1 016 266	1 117 778	1 414 312
Production	1 940 079	2 416 171	2 899 008	1 924 848	2 367 128	2 703 525	2 858 305
Import	1 466 181	1 403 937	1 016 665	1 484 441*)	1 286 702	1 498 367	1 611 458
Total of resources	**4 061 758**	**4 520 041**	**4 935 818**	**4 638 511**	**4 670 096**	**5 319 670**	**5 884 075**
UTILIZATIONS							
Seed	177 294	231 198	199 530	198 858	213 892	219 979	216 934
Fodder for cattle and poultries	879 987	1 002 748	1 187 108	1 084 488	1 040 470	1 248 565	1 441 406
Production of foodstuffs	2 016 965	1 923 478	1 936 323	1 965 649	1 936 327	2 034 695	2 155 030
production of flour and groats	1 899 054	1 761 447	1 770 672	1 765 604	1 774 477	1 845 230	1 922 202
production of spirit	3 993	6 264	4 243	4 707	4 892	5 553	7 583
production of beer	5 531	6 911	5 858	9 062	7 543	8 604	9 938
production of other kinds of food prod.	108 387	148 856	155 550	186 276	149 416	175 308	215 307
Directly consumed as food products (without processing)	81 590	75 986	84 885	92 316	94 679	99 140	99 945
Production of non-food products	12 442	37 071	41 361	48 744	35 198	39 772	46 868
production of mixed fodders	10 244	34 687	38 745	46 110	32 704	36 943	43 268
production of starch	248	384	421	439	376	426	468
production of other kinds of non-food products	1 950	2 000	2 195	2 195	2 117	2 403	3 132
Export	352	1 960	164	288	8	-	-
Losses	193 195	227 455	257 225	231 902	231 744	263 207	299 903
Stocks at the end of year	699 933	1 020 145	1 229 222	1 016 266	1 117 778	1 414 312	1 623 989
Total of utilizations	**4 061 758**	**4 520 041**	**4 935 818**	**4 638 511**	**4 670 096**	**5 319 670**	**5 884 075**

Sources: www. stat.gov.az

Table 3.14 Resources and utilization of potato (ton)

	2007	2008	2009	2010	2011	2012	2013
RESOURCES							
Stocks at the beginning of year	770 714	734 699	713 766	590 617	552 202	530 217	553 153
Production	1 037 317	1 077 114	982 979	953 710	938 517	968 545	992 780
Import	84 627	49 154	38 165	64 998	76 579	76 605	78 054
Total of resources	**1 892 658**	**1 860 967**	**1 734 910**	**1 609 325**	**1 567 298**	**1 575 367**	**1 623 987**
UTILIZATIONS							
Seeds	208 428	213 627	203 670	197 394	195 561	198 012	195 945
Fodder of cattle and poultries	50 250	55 025	51 298	47 584	35 159	35 392	36 793
Directly consumed as food products (without processing)	747 689	696 756	717 871	648 649	653 250	668 224	692 165
Export	62 976	86 386	82 345	69 853*)	91 755	58 811	53 942
Losses	88 616	95 407	89 109	93 643	61 356	61 775	64 300
Stocks at the end of year	734 699	713 766	590 617	552 202	530 217	553 153	580 842
Total of utilizations	**1 892 658**	**1 860 967**	**1 734 910**	**1 609 325**	**1 567 298**	**1 575 367**	**1 623 987**

*Sources: www.*stat.gov.az

Table 3.15 Resources and utilization of all sorts of vegetables (ton)

	2007	2008	2009	2010	2011	2012	2013
RESOURCES							
Stocks at the beginning of year	175 509	184 520	189 938	201 800	199 434	206 299	199 515
Production	1 227 350	1 228 312	1 178 595	1 189 465	1 214 758	1 216 240	1 236 331
Import	68 033	26 849	50 207	84 921	121 117	69 952	37 752
Total of resources	**1 470 892**	**1 439 681**	**1 418 740**	**1 476 186**	**1 535 309**	**1 492 491**	**1 473 598**
UTILIZATIONS							
Seeds	1 426	1 395	1 351	1 375	1 378	1 332	1 319
Fodder of cattle and poultries	27 354	32 564	32 090	33 390	33 183	32 258	31 849
Production of food products	49 515	50 377	52 312	53 220	59 417	54 936	54 232
for production of vegetable canned food	49 500	50 362	52 312	53 194	59 417	54 936	54 232
for production of other kinds of food products	15	15	-	26	-	-	-
Consumed as food products (without processing)	1 076 777	1 000 951	984 150	1 046 696	1 080 287	1 062 910	1 039 208
Export	53 147	80 476	64 274	55 958*)	67 182	56 417	65 955
Losses	78 153	83 980	82 763	86 113	87 563	85 123	84 045
Stocks at the end of year	184 520	189 938	201 800	199 434	206 299	199 515	196 990
Total of utilizations	**1 470 892**	**1 439 681**	**1 418 740**	**1 476 186**	**1 535 309**	**1 492 491**	**1 473 598**

Sources: stat.gov.az

Table 3.16 Resources and utilization of all types of cattle and poultry meat, including meat production (ton)

	2007	2008	2009	2010	2011	2012	2013
RESOURCES							
Stocks at the beginning of ye.	13 833	9 061	8 591	8 858	9 030	9 212	11 461
Production	225 535*)	232 313*)	237 078*)	253 772*)	263 692	285 636	297 916
Import	30 900	29 478	45 811**)	36 019**)	38 731**)	26 511	27 557
Total of resources	**270 268**	**270 852**	**291 480**	**298 649**	**311 453**	**321 359**	**336 934**
UTILIZATIONS							
Directly consumed as food products	256 917	257 152	277 883	286 135	298 907	306 098	321 593
For production food products[1)]	-	-	2 177	3 689	5 720	16 658	16 824
For production of non-food products	108	110	110	100	-	-	-
Export	1 239	1 600	1 291	1 519	1 290	1 853	1 581
Losses	2 943	3 399	3 338	1 865	2 045	1 947	2 197
Stocks at the end of year	9 061	8 591	8 858	9 030	9 211	11 461	11 563
Total of utilizations	**270 268**	**270 852**	**291 480**	**298 649**	**311 453**	**321 359**	**336 934**

Sources: stat.gov.az

Table 3.17 Resources and utilization of milk and dairy products (ton)

	2007	2008	2009	2010	2011	2012	2013
RESOURCES							
Stocks at the beginning of year	223 386	202 301	167 217	172 641	171 588	119 719	154 448
Production	1 341 278	1 381 625	1 433 114	1 536 232	1 622 291	1 719 620	1 820 474
Import	191 619	162 616	612 303*)	647 229*)	654 608*)	642 255*)	573 587*)
Total of resources	**1 756 283**	**1 746 542**	**2 212 634**	**2 356 102**	**2 448 487**	**2 481 594**	**2 548 509**
UTILIZATIONS							
Fodder of cattle and poultries	26 826	34 931	44 253	47 122	46 077	46 700	47 959
Directly consumed as food products	1 473 384	1 506 107	1 952 351	2 100 127	2 254 932	2 227 757	2 279 916
Production of food products[1)]	873 624	1 384 533	1 440 627	1 359 224	1 323 663	1 872 898	1 871 194
production of cheese	281 374	343 572	349 040	356 948	364 805	388 200	391 259
production of milk and sour cream	154 685	603 587	652 124	410 845	359 031	853 304	859 807
production of butter	314 165	308 897	311 264	458 133	461 877	478 868	478 949
production of kefir and caucasian milk	106 914	128 477	128 199	130 147	130 932	129 513	129 551
production of other kinds of products	16 486	-	-	3 151	7 020	23 013	11 629
Export	4 641	677	133	56	38	47	6 072
Losses	49 131	37 610	43 256	37 209	27 721	52 642	54 061
Stocks at the end of year	202 301	167 217	172 641	171 588	119 719	154 448	160 501
Total of utilizations	**1 756 283**	**1 746 542**	**2 212 634**	**2 356 102**	**2 448 487**	**2 481 594**	**2 548 509**

Sources: stat.gov.az

Table 3.18 Resources and utilization of egg (thousand units)

	2007	2008	2009	2010	2011	2012	2013
RESOURCES							
Stocks at the beginning of year	21 455	14 337	26 246	28 770	19 554	25 274	24 901
Production	953 627	1 101 187	1 209 399	1 178 586	1 010 997	1 226 711	1 401 473
Import	19 512	16 834	21 641	25 734	294 895	53 900	47 354
Total of resources	**994 594**	**1 132 358**	**1 257 286**	**1 233 090**	**1 325 446**	**1 305 885**	**1 473 728**
UTILIZATIONS							
Fodder of cattle and poultries	15 789	17 976	19 959	19 575	21 041	20 731	23 395
Incubation	61 822	70 385	78 150	76 646	82 387	81 171	91 603
Directly consumed as food products (without processing)	898 194	1 005 905	1 119 283	1 113 003	1 190 168	1 167 394	1 322 713
Export	958	4 325	2 571	666*)	-	5 212*)	605*)
Losses	3 494	7 521	8 553	3 646	6 576	6 476	7 310
Stocks at the end of year	14 337	26 246	28 770	19 554	25 274	24 901	28 102
Total of utilizations	**994 594**	**1 132 358**	**1 257 286**	**1 233 090**	**1 325 446**	**1 305 885**	**1 473 728**

Sources: stat.gov.az

3.4.2 Consumption

A goal of achieving 100 percent in food self-sufficiency for food crops reflects Azerbaijan's strategic value is on food independence, while it serves as an engine for agricultural policies. Development of agriculture is accompanied by the increase of the level of self-sufficiency by main food stuffs. In recent years, the tendency of improvement of self-sufficiency indicators on all main food stuffs is observed. This can easily be seen fron the next table. As, the level of self sufficiency of plant products has increased.

Table 3.19 Level of self-sufficiency of plant products

	2007	2008	2009	2010	2011	2012	2013
Total of grains	57,0	63,3	74,0	56,5	64,8	64,3	64,0
Wheat	48,0	55,7	69,2	48,9	57,7	56,8	56,0
Barley	99,2	97,2	98,7	87,7	93,7	95,1	97,8
Maize	76,4	68,1	67,2	64,5	68,0	67,3	60,0
Porridge	68,2	88,6	94,5	80,6	82,8	84,4	89,3
other kinds of grains	10,0	4,4	0,4	1,0	4,0	8,7	2,3
Leguminous	76,4	77,7	68,9	65,8	70,4	71,6	76,6
Potato	98,0	103,6	104,7	100,5	101,6	98,2	97,6
Vegetables of all kinds	98,8	104,6	101,2	97,6	95,7	98,9	102,3
Market garden crops	100,1	100,2	100,2	100,0	100,2	100,1	100,0
Fruit and barries	138,1	161,4	136,0	107,9	116,8	125,7	121,8
Grape	93,7	93,3	90,7	90,4	89,9	94,3	95,0

Sources: stat.gov.az

Looking at the self-sufficiency rate of the major produce, the total output of grains has been on the decrease since its peak of 74 percent in 2009 and recorded 64 percent in 2013. Self-sufficiency of wheat fell to 56 percent in 2013 from 69.2 percent in 2009, and that of corn also dropped to 60 percent in 2013 from 67.2 percent in 2009. Self-sufficiency rate of potato decreased from 104.7 percent in 2009 to 97.6 percent in 2013. Meanwhile, self-sufficiency of vegetables inched up from 101.2 percent in 2009 to 102.3 percent in 2013 while that of horticultural crops inched down from 100.2 percent in 2009 to 100.0 percent in 2013. Self-sufficiency of fruits came down from 136 percent in 2009 to 121.8 percent in 2013. The level of self sufficiency of livestock products has also increased (see Table 3.20).

Table 3.20 Level of self-sufficiency of basic livestock products

	2007	2008	2009	2010	2011	2012	2013
All kinds of meat and meat products	88,4	89,3	84,2	88,0	87,6	92,1	92,0
beff and beef products	95,7	95,3	95,8	95,5	88,1	92,6	86,5
mutton and goats meat and meat products	99,8	99,9	98,7	99,7	99,8	98,7	97,8
pork and pork products	26,0	24,4	13,9	19,7	14,7	25,7	36,0
poultry meat of and meat products	74,6	77,3	66,2	71,5	80,6	88,2	96,2
Milk and dairy products	87,8	89,5	70,1	70,4	71,3	72,8	76,2
Egg, unit	98,1	98,9	98,4	97,9	77,4	96,2	96,8
Fish and fish products	72,6	62,5	77,6	76,6	72,4	72,1	71,7

Sources: www.stat.gov.az

Food consumption of Azerbaijan people is very low compared to dayly or annual consumption norms set by WHO. Especially, consumption level of high calorie products is very low. According to statistical data, annual consumption norm of meat and meat products is 84 kg. In reality, people consume nearly 33 kg meat. Although the consumption norm of milk and dairy products is 360 kg, the factual consumption is 248 kg, in fish and fish products these figures are respectively 20 and 6,8 kg, in eggs 2280 and 131 units. Daily consumption amounts 2242 kilocalories and this figure is significantly lower than the norms.

All of population groups do not have the same access oportunities to agri-food products. Especially, the people of vulnerable group need improvement in this direction.

But as the result of implemented reforms and state policy the situation is getting better. The increase of the role of agrarian sector in economy is important for development of long-term agricultural production and ensuring food security in Azerbaijan. The physical volume of agricultural production increased by 1,87 times in 2000-2013, 1,33 times in 2005-2013, 1,18 times in 2010-2013.

4. AGRI-FOOD TRADE AND TRADE RELATIONS

4.1 Agri-food trade[5]

4.1.1 Overall agri-food trade

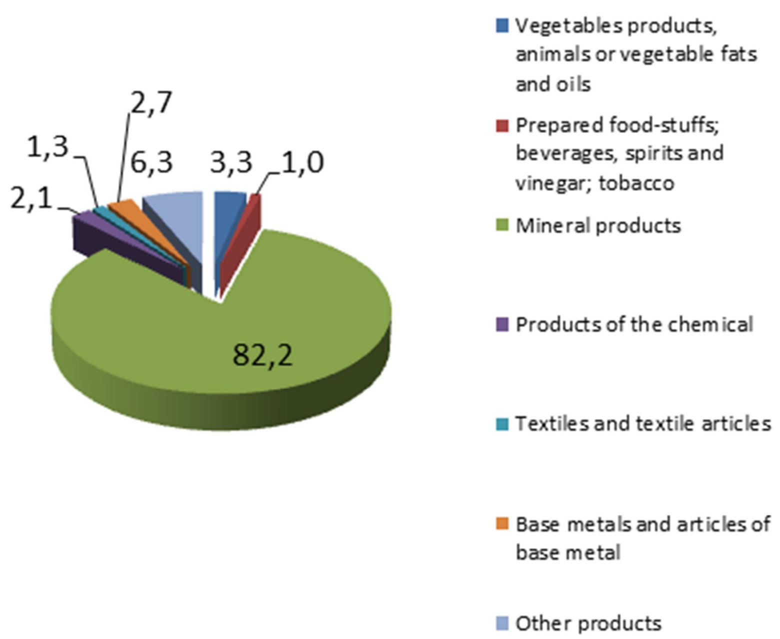
According to the statistical data for the last year (1991) of former Soviet Union (USSR), 1.6% of the GDP was sproduced in Azerbaijan. 2.3% of the population of the USSR lived in Azerbaijan and 0.4% of the total land area belonged to Azerbaijan. More than 70% of the equipements used in oil and gas industry, 100% of air conditioners produced, 15% of raw silk, 2.4% of wool, 7% of raw cotton, 4.5% of all canned food, 29% of grapes, 4.6% of green tea leaves, 10% of fruits and berries of USSR was produced in Azerbaijan.

That time, 24% of exportation of Azerbaijan consisted of light industry products (cotton fibre, cotton yarn, silk, textile and so on), 23.4% consisted of foodstuff (wine, juce, sturgeon, caviar, tomato paste, tobacco and so on), 18.4% consisted of energy industry (electricity, oil and so on), 15% consisted of machine building industry, 9.8% consisted of chemistry and oil and chemistry products (rubber, different semifinished products and so on).

In agriculture and food industry exportation was 3-3.5 times more than importation. 90% of exportation was consisted of plant growing sector (cotton, grape, tobacco etc.). 30% of the demand for cereals, 43% of demand for meat and meat products, 43.7% of milk, 32.3% of potato, 7.8% of fish was provided by means of local prodduction.

During the first years of independance oil and chemistry products, alcohol, mashines, equipments, the products of metal industry kept the most part of exportation. In this period the share of agriculture and food industry in exportation rapidly decreased.

Figure 4.1 Structure of exports by product 2004 (%)

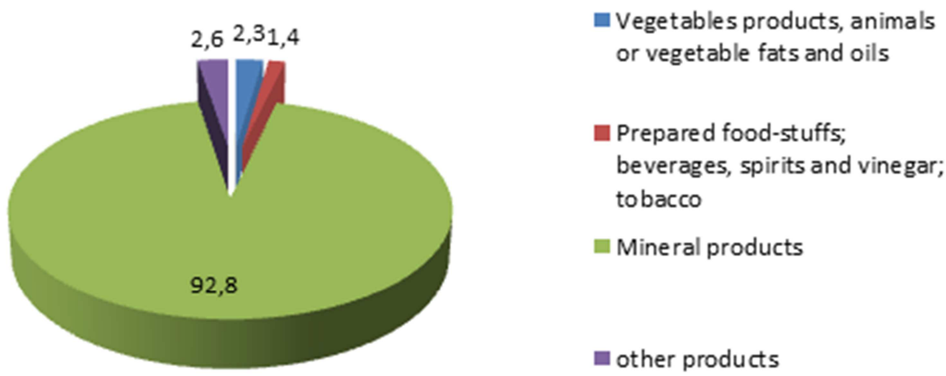


Sources: stat.gov.az

[5] The results of two researches (‘Anteja ECG. Rapid analysis for the horticulture sector in Azerbaijan’ and KSP-2014 Support to Azerbaijan Republic to increase the export of Agricultural products’), of which the authors have taken part, have been used in this chapter.

As we can see from the figure 1, share of mineral products in exportation amounted 82.2% in 2004. But the share of agriculture and food industry amounted only 4.3%. Analogical situation was observed in 2013 too. During the last 10 years share of mineral products reached the level of 92.8%. The share of agriculture and food industry amounted only 3.7%.

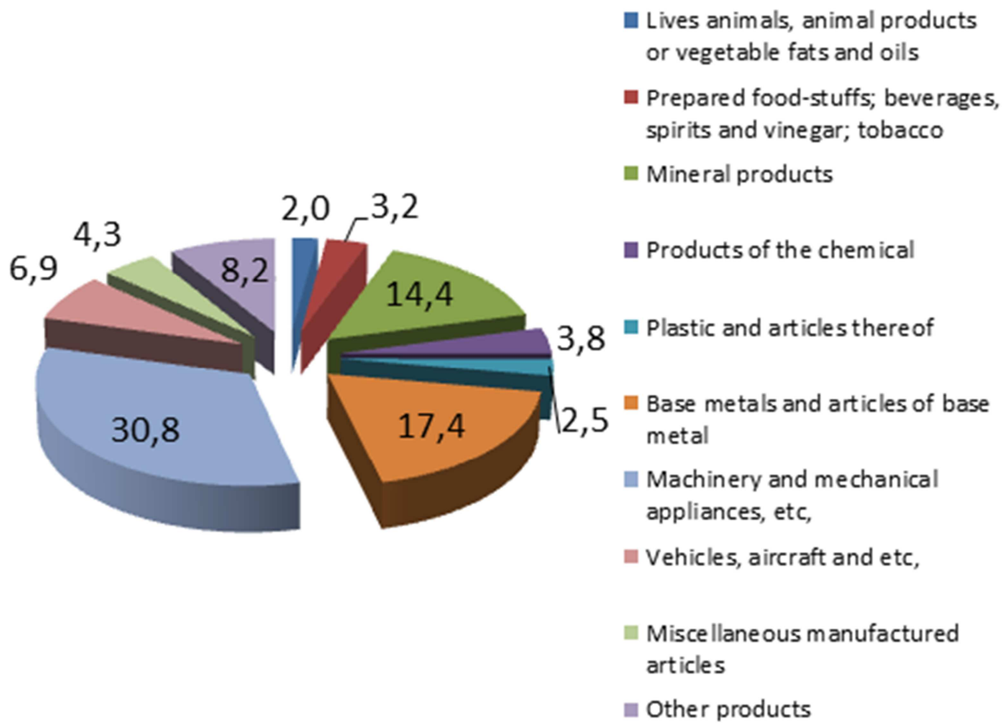
Figure 4.2 Structure of exports by product 2013 (%)



Sources: stat.gov.az

In case of import the situation is different. So that, share of agriculture and food industry amounted 5.2% in 2004.

Figure 4.3 Structure of imports by product 2004 (%)

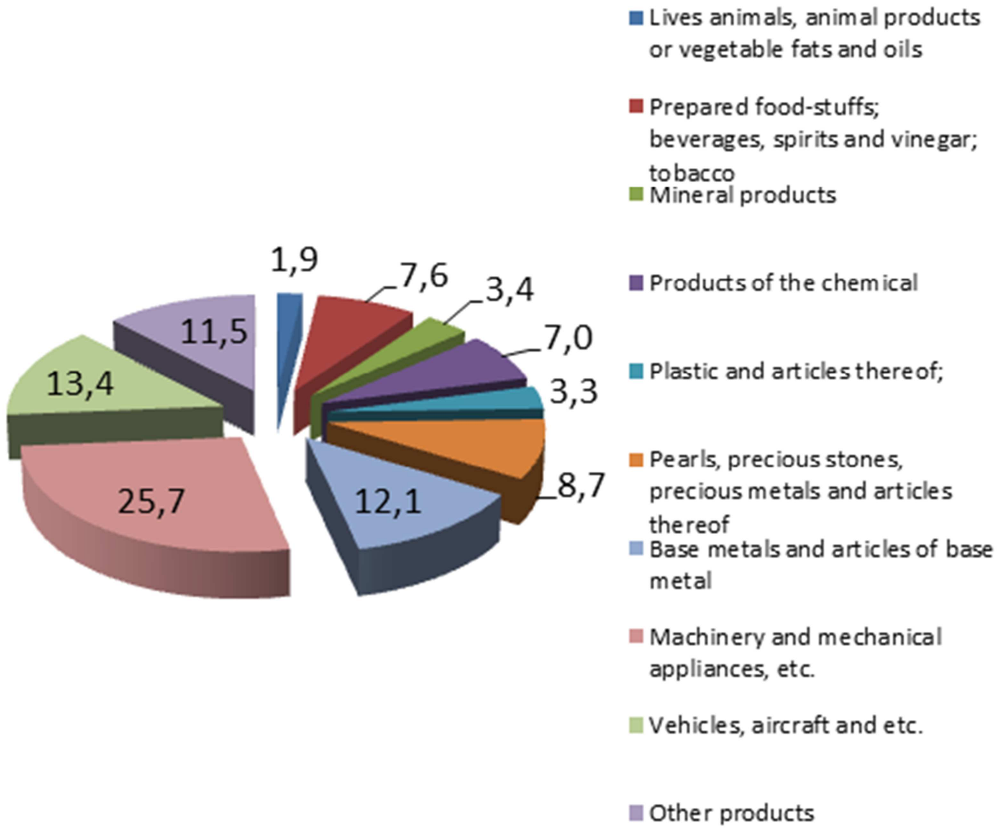


Sources: stat.gov.az

Share of agriculture and food industry in import reached the level of 9.5% in 2014.

We have to note that in appendix 1-4 the dinamics of importation and exportation can be observed more detailed.

Figure 4.4 Structure of imports by product 2013 (%)



Sources: stat.gov.az

It should also be noted that, during the last 10 years EU countries became the main trade partrners of Azerbaijan. Share of these countries in foreign trade amounted 44% (more than 15.3 billion dollars) in 2013.

According to the State Customs Committee of the Republic of Azerbaijan, the foreign trade turnover of the Republic of Azerbaijan with the CIS countries was amounted 15.276,18 million U.S. $, including volume of import 3.762,84 U.S. $, export 11.513,34 million and foreign trade balance was positive 7.750,50 million U.S. $ for 2013.The share of the EU countries in foreign trade turnover of Azerbaijan was 44.04 % including 35.13% for import and 48.02% for export during the mentioned period.Trade turnover with the EU countries increased by 7.56% in 2013 compared to 2012.

According to the State Customs Committee of the Republic of Azerbaijan, the foreign trade turnover of the Republic of Azerbaijan with the CIS countries was amounted 4.062,88 million U.S. $, including volume of import 2.553,24 U.S. $, export 1.509,64 million for 2013. The share of the CIS countries in foreign trade turnover of Azerbaijan was 11.71 % during the mentioned period.Trade turnover with the CIS countries increased by 11.84%, including export by 20.58% in 2013 compared to 2012.

According to the State Customs Committee of Azerbaijan Republic, during 2013 foreign trade turnover was 34.687,92 million US dollars, including import 10.712,50 million U.S. $, export 23.975,42 million U.S. $. During the period Azerbaijan mutually cooperated with 149 countries and foreign trade balance was accounted positive 13.262,92 million U.S. $.The foreign trade turnover increased by 3.35% in 2013 compared to 2012.

Table 4.1 Main trade partners of Azerbaijan Republic in 2013

In export				**In import**		
Countries	**Million, U.S. $**	**Special weight, %**	**Place**	**Countries**	**Million, U.S. $**	**Special weight, %**
Italy	5 989,66	24,98	**1**	Russia	1 505,18	14,05
Indonesia	2 771,82	11,56	**2**	Turkey	1 463,80	13,66
Thailand	1 665,49	6,95	**3**	Great Britain	1 333,99	12,45
Germany	1 356,74	5,66	**4**	Germany	823,02	7,68
Israel	1 260,70	5,26	**5**	Ukraine	589,07	5,50
France	1 131,12	4,72	**6**	China	566,34	5,29
India	1 098,41	4,58	**7**	France	425,44	3,97
Russia	1 077,84	4,50	**8**	USA	376,49	3,51
USA	990,28	4,13	**9**	Brazil	371,80	3,47
Greek	810,33	3,38	**10**	Kazakhstan	306,76	2,86
Turkey	525,99	2,19	**11**	Japan	288,36	2,69
Portugal	525,76	2,19	**12**	Italy	249,26	2,33
Georgia	519,18	2,17	**13**	Korea	229,29	2,14
Great Britain	484,36	2,02	**14**	Iran	207,68	1,94
Taiwan	467,31	1,95	**15**	Netherlands	180,99	1,69
Other	Other	Other	Other	Other	Other	Other
3 300,43	3 300,43	3 300,43	3 300,43	3 300,43	3 300,43	3 300,43

Source: www.economy.gov.az/index.php?option=com_content&view=article&id=1185:azxt2013&catid=111:2013-xt&lang=en

According to the State Customs Committee of Azerbaijan Republic, share of state sector was 22,365.52 million US dollars (93.29%), share of private sector was 1,381.14 million U.S. $ (5.76%), physical persons 228.76 million U.S (0.95%) in export operations in 2013. Last year share of state sector was 3,283.45 million US dollars (30.65%), share of private sector 6,961.92 million U.S. $ (64.99%), physical persons 467.14 million U.S (4.36%) in import operations.

4.1.2 Agri-food trade by trading partner

Total exports of Azerbaijan are about US$24 billion in 2013, which increased by about 13 times compared to 2000. The amount of agricultural exports has increased by about 14.5 times from US$57 million to US$880 million in the same period, but the share of agricultural exports in the total exports has remained at around 3 to 4 percent.

Table 4.2 Trend of Export and Share of Agricultural Export (2000-2013 - Unit: US$ Million)

	2000	2005	2010	2011	2012	2013
Total exports	1,745.2	4,347.2	21,360.2	26,570.9	23,908.0	23,975.4
Agricultural export	56.7	326.9	593.3	717.1	832.2	878.3
Share of agricultural export(%)	3.25	7.52	2.78	2.70	3.48	3.66

Source: <http://www.stat.gov.az/source/agriculture/indexen.php>.

In terms of agricultural export by Azerbaijan in 2000, vegetable-related items were exported the most, which accounted for about 50.3 percent of the total export of agricultural products. In 2013, the top rank was occupied by processed food, beverage and liquor, which account for 39.5 percent, US$347 million, while vegetable-related items recorded at 34.4 percent, US$302 million. During the same period, the amount of export of animal and vegetable fat and oil increased from US$3.6 million (6.3%) to US$228 million (30%). These changes in the structure of agricultural export are mainly caused by the fact that export of processed foods increased rapidly while export of labor intensive items such as fresh fruits and vegetables increased continuously but modestly.

Table 4.3 Structure of Agricultural Export in Azerbaijan (2000-2013 - Unit: US$ Million)

	2000	2005	2010	2011	2012	2013
Exports of agricultural products	56.7	326.9	593.3	717.1	832.2	878.3
- Animal-related items	0.5	1.5	0.6	0.7	0.7	1.9
- Vegetable-related items	28.5	193.6	190.3	268.8	308.1	301.7
- Animal and vegetable fat and oil	3.6	68.4	188.3	173.8	221.8	227.9
- Processed food, beverage, liquor, etc.	24.2	63.5	214.2	273.8	301.7	346.8

Source: <http://www.stat.gov.az/source/agriculture/indexen.php>.

In 2012, however, Iraq outpaced Russia to become the largest export market, recording the amount of export at US$400 million and over. The amount of export to Kazakhstan and Turkmenistan also increased rapidly. As the amount of agricultural export to each market can be largely fluctuated by international political situations, exchange rate, crop harvesting conditions, commodity analysis for each country is essential in order to select emerging markets.

Table 4.4 Amount of Agricultural Export to Major Markets for Azerbaijan (2008-2012 - Unit: US$ Thousand)

		2008	2009	2010	2011	2012
	All foreign countries	532,989	527,572	593,343	717,080	832,207
1	Russia	428,938	384,416	451,361	467,230	295,904
2	Iraq	1,491	1,607	3,710	87,896	406,830
3	Georgia	42,967	26,650	36,447	24,247	27,387
4	Turkmenistan	10,938	19,124	18,076	14,442	22,045
5	Kazakhstan	2,702	2,170	19,767	34,990	17,938
6	Germany	7,129	16,317	7,395	13,147	10,547
7	Afghanistan	-	25,928	15,898	4,224	4,301
8	Iran	7,384	9,771	5,671	8,341	8,995
9	Ukraine	10,827	4,743	6,578	6,887	9,504
10	Italy	1,977	9,042	3,416	13,110	703

Source: ITC based on UN COMTRADE data, <http://www.stat.gov.az/source/agriculture/indexen.php>.

The Russian Federation represents the most important export market for fruit and vegetable products. Exports of fruit had grown with Fruits, fresh nes, Apples, fresh, and Hazelnuts or filberts, fresh or dried, shelled or peeled, being the most important export categories in terms of volume and value. Export of vegetables recorded negative trends with exception of 2011 when majority of exported products recorded one of the highest levels. Potatoes, fresh or chilled nes, Tomatoes, fresh or chilled, and Cucumbers and gherkins, fresh or chilled represent the most important export categories in terms of volume and value.

The shares of export to the Russian market are nearly 100 percent for potatoes and fresh vegetables. It is 76.4 percent for fresh fruits. Export of vegetable fat and oil to the Iraqi market is US$103 million, which accounts for 93.5 percent of the total export to the world (US$110 million), followed by margarine (92.2 percent) and tea (56.2 percent). In such case with high dependency of export to specific countries, diversification of export market is urgently needed since export can be fluctuated significantly depending on international situations, foreign exchange rate, or changes in the price of raw materials in the world market.

Table 4.5 Current Status of Export of Major Commodities by Market (2013)

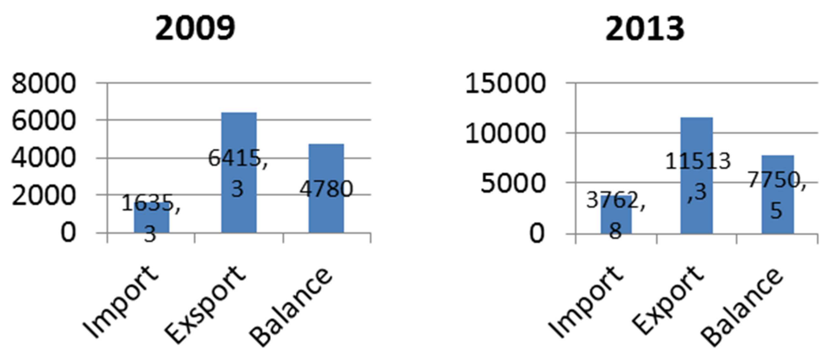
Export commodity	Export market	Quantity of export (1,000 t)	Amount of export (US$ Million)
Sugar	(Total) Iraq Afghanistan Turkmenistan Kazakhstan Kyrgyzstan Uzbekistan Tajikistan	(249.3) 82.9 73.5 38.0 23.2 15.9 11.1 4.1	(243.6) 85.5 95.5 25.1 15.8 11.1 7.5 2.6
Fresh fruit	(Total) Russia Ukraine Kazakhstan Germany Italy Georgia Poland France	(173.2) 145.6 15.1 8.2 1.8 1.4 0.3 0.2 0.2	(173.3) 132.4 6.9 10.5 10.7 9.2 0.4 0.8 1.0
Vegetable fat and oil	(Total) Iraq Georgia Turkmenistan Tajikistan	(37.0) 32.4 4.1 0.3 0.2	(110.0) 102.8 6.4 0.5 0.2
Fresh vegetable	(Total) Russia Georgia	(65.5) 64.5 0.9	(55.6) 55.3 0.1
Margarine	(Total) Iraq Georgia Uzbekistan Turkmenistan	(29.2) 17.3 2.2 0.4 0.2	(45.0) 41.5 3.0 0.3 0.3
Tea	(Total) Iraq Russia Georgia	(7.6) 4.1 2.9 0.4	(44.3) 24.9 15.9 2.5
Potato	(Total) Russia Georgia	(53.9) 53.8 0.1	(21.5) 21.5 0.0

Source: <http://www.stat.gov.az/source/agriculture/indexen.php>.

The fact that current major export commodities are fresh fruits and vegetables indicates relatively low effects of expanding added value by increase in export. Beyond a simple processing process for juice and paste products including dry and heat processing tasks or addition of some food additives, the agricultural industry needs to develop high value-added processed products and enhance benefits from export by producing and processing organic products conducting various high-tech physical and chemical treatments.

Low-quality infrastructure of domestic and external export logistics in Azerbaijan has caused to shrink price competitiveness. Especially, the country has vulnerable accessibility to ocean shipping. According to the report released by World Bank, expenses spent for exporting one container in Azerbaijan were US$2,905 in 2012, which were remarkably higher than those in its neighboring countries such as Georgia (US$1,595) and Armenia (US$1,815). Moreover, numbers of documents necessary for export in Azerbaijan were eight, a double of that of Georgia (four documents)[6]. Accordingly, export of Azerbaijan takes 38 days, which make the export delay by more than 20 days compared to 13 days in Georgia and 18 days in Armenia. According to the Ease of Doing Business Ratings for Trading Across Borders, Azerbaijan is ranked 170th, lagging behind Georgia (54th) and Armenia (104th). A research result by ADB (2003) has also presented high transport costs to market destination as one of difficulties which exporters of agro-processing products in Azerbaijan face[7].

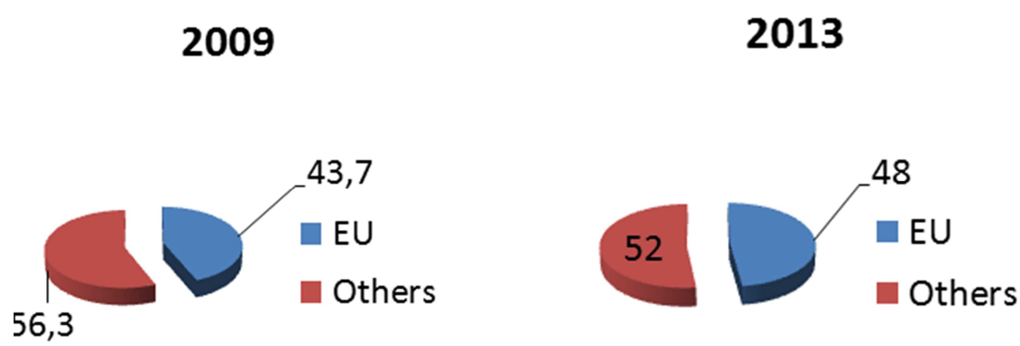
Figure 4.5 Trade balance of Azerbaijan-EU, USD$



*Sources: www.*stat.gov.az

During last years share of imports from EU has increased. And this tendency is in progressing state.Share of exports to EU has also increased during last years.

Figure 4.6 Share of exports to the EU (%)



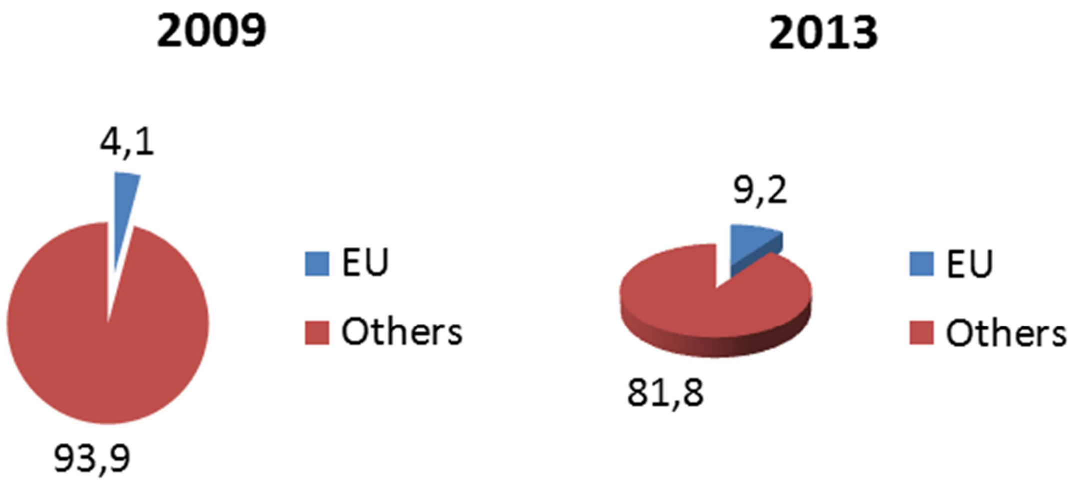
*Sources: www.*stat.gov.az

6 World Bank/IFC(2012) pp.79-80, 97; UNDP(2013). Secondary source citation from p.15.

7 ADB, *Azerbaijan Trade and Trade Facilitation Review*, 2003, p.54

Unfortunately share of agricultural products in total turnover of international trade with EU is still low. In particular, when it comes to food products share of agriculture in export to EU is very low. As we can see from the figure 4.10 share of EU in food imports amounted only 9.2% in 2013. But it is higer for 2 times compared to 2009.

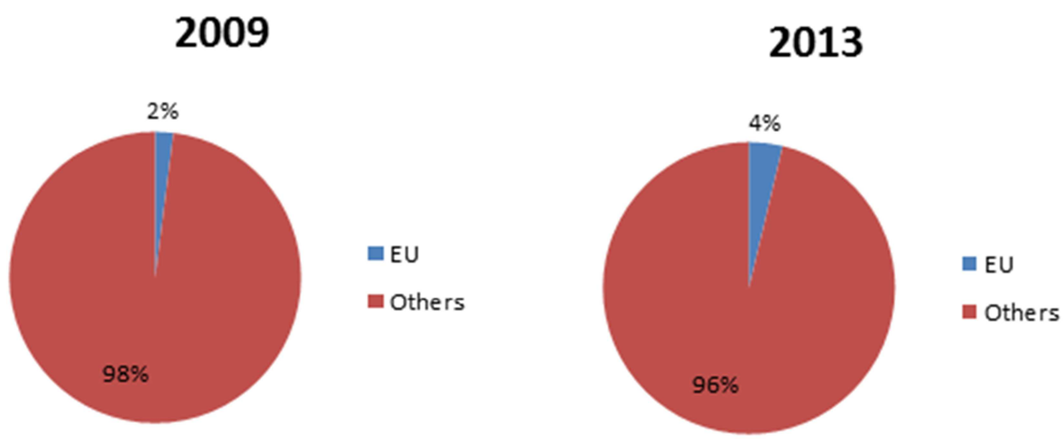
Figure 4.7 Share of the EU in food imports (%)



*Sources: www.*stat.gov.az

The same goes for food products imported from EU. In 2013 this figure amounted only 4%. This fact is also connected to food preferences of the population. Indeed, the population of Azerbaijan mainly prefers fresh products.

Figure 4.8 Share of food products in import from EU to Azerbaijan



*Sources: www.*stat.gov.az

From the figure 4.12 we can see that the total amount of international trade on food products with EU has considerably increased during last eyars. And the increase was achieved mainly by means of increase in import from EU.

Figure 4.9 Balance of trade in agricultural and food products from the EU Member States, Mil.US$

*Sources: www.*stat.gov.az

4.1.3 Agri-food trade by products

The commodity whose export has increased the most since 2008 is sunflower oil (4.1 times), followed by other products such as cucumbers (3.8 times), cherries (2.8 times), corn oil (2.7 times), sugar (2.6 times), and tea (2.0 times). On the other hand, the amount of export of apples, citrus, potatoes, tomatoes, fruit juice, and distilled alcoholic beverages has been on the decrease.

Table 4.6 Trend of Agricultural Exports in Azerbaijan (2008-2012 - Unit: US$ Thousand)

	Commodity	**2008**	**2009**	**2010**	**2011**	**2012**
	Total	532,989	527,572	593,343	717,080	832,207
1	Sugar	83,410	102,052	145,948	198,300	214,164
2	Fresh Fruits	57,997	46,079	51,872	63,068	103,455
3	Animal fat and oil	-	54,422	87,563	72,266	74,666
4	Corn oil	20,256	20,657	21,946	32,246	55,755
5	Sunflower seed oil	12,190	25,169	44,567	30,130	50,399
6	Hazelnut	30,119	52,437	35,172	57,179	45,781
7	Margarine, others	24,653	25,212	33,393	33,029	40,945
8	Tea	18,640	26,938	32,987	32,284	37,431
9	Apples	49,287	30,071	14,436	19,296	27,596
10	Potatoes	30,622	22,583	16,237	29,746	20,168
11	Tomatoes	24,130	20,630	17,986	31,793	19,162
12	Cucumber	3,148	2,469	4,578	9,349	11,895
13	Distilled alcoholic beverages	15,096	8,455	9,651	8,234	11,735
14	Cherry	3,431	3,163	2,169	3,811	9,695
15	Fruit juice, other	19,017	16,477	15,394	13,228	8,814
16	Citrus	6,086	4,500	5,627	1,376	3,320

Source: ITC based on UN COMTRADE data, <http://www.stat.gov.az/source/agriculture/indexen.php>.

Fruits, fresh nes category represent the most important export category among all fruit and vegetables, both in terms of value and volume. According to ITC, Azerbaijan's share in world exports was 3.8 percent, and Azerbaijan ranked seventh in 2012. While export volume has been facing some fluctuations in the analyzed period, export value has been steady increasing (78 percent growth from 2008 to 2012) and recorded above average growth rates. With the exception of 2012, when 109,009 tons and 85,669 thousands USD of persimmons' export (90 percent and 83 percent respectively of total Fruits, fresh nes category) was recorded in the UN Comtrade database; contribution of individual products (e.g. pomegranate, feykhoa, etc.) cannot be estimated due to data recording limitations. The great majority of Fruits, fresh nes category export went to the Russian Federation (93 percent in 2012), making Azerbaijan the second most important supplier of this category to the Russian market (14 percent value share in 2012), while the remaining 6 percent went to Ukraine.

Apples, fresh represent the second most important export item in terms of volume. However, exported volume has almost halved in the analyzed period (from 122,448 tons in 2008 to 59,810 tons in 2012). Consequently the export value had fallen significantly, and apples' had fourth ranking in 2012, while in 2008 they were the second most important export category in value terms.

Hazelnuts or filberts, fresh or dried, shelled or peeled, exports had grown, both in terms of value and even more in terms of volume. According to ITC, Azerbaijan's share in world exports of Hazelnuts or filberts, fresh or dried, shelled or peeled was 3.2 percent in 2012, and Azerbaijan was the fourth most important exporter. Exported volume and value indicate year-to-year production and price fluctuations. Majority of Hazelnuts or filberts, fresh or dried, shelled or peeled is exported to Russian Federation (76 percent share in value exported in 2012), with increasing quantities exported every year. Important destination is also Germany, to which 16 percent of value was exported in 2012. However, exported volumes fluctuated widely from year to year, which is also the case with other export destinations. Only a small amount of hazelnuts is exported in shells, mainly to Georgia (52 percent share in value exported in 2012) and to the Russian Federation (40 percent).

Cherries, fresh exports show one of the most positive trends, but on a significantly lover absolute level than previously mentioned products. Exported volume had grown by 144 percent (from 2,719 tons in 2008 to 6,635 ton in 2012), and export value by 183 percent in the analyzed period. Again, the Russian Federation is the main export destination, and only a minor quantity has been exported to Kazakhstan.

Among vegetables, potatoes, fresh or chilled nes still represent the most important export category, both in terms of volume and value, but has recorded one of the highest declines among the analyzed products (exports in 2012 were on around 70 percent of the 2008 levels). Almost all potatoes are exported to the Russian Federation. The same trends can be observed with tomatoes, fresh or chilled.

Cucumbers and gherkins**,** fresh or chilled had one of the most positive trends among all analyzed products. The volume of exports increased by 109 percent and export value recorded impressive 278 percent growth in the analyzed period. In absolute term, Cucumbers and gherkins export figures (12,345 tons and 11,895 thousand USD in 2012) achieve approximately one tenth of the Fresh fruit, nes category.

Volume of produced potatoes declined in the analyzed period 2008-2012, with the exception of 2012, when it increased by 3 percent (due to expected high prices). The same trends can be noticed in the sown area as well as in yields. Production of potatoes records very high loses, which might be explained by the fact that with one exception there are no modern cold storage facilities. Almost all potatoes are produced by private owners, family - peasant farms and households (99.4 percent in 2012). However, their production has been decreasing (from 1,081 thousand tons in 2005 to 965 thousand tons in 2012), while the output of agricultural enterprises had been slowly growing (from 1.7 thousand tons in 2005 to 3.6 thousand tons in 2012). Overall, Azerbaijan contributes 0.3 percent of total world potatoes production (45th producer in 2012), with China (23.3 percent), India (12.2), the Russian Federation (8), Ukraine (6.3) and the United States of America (5.2) being the most important producers of potatoes globally.

Table 4.7 Vegetables Azerbaijan export volume, 2008 – 2013 (tons)

HS code	Product label	2008	2009	2010	2011	2012	2013	Change 2013-12 (index)
07	**Vegetables**							
70190	Potatoes, fresh or chilled nes	86385	82343	63978	91700	58797	**53936**	**92**
70200	Tomatoes, fresh or chilled	48951	44627	40279	42922	35677	**46,122**	**129**
70490	Cabbages,kohlrabi,kale and sim edible brassicas nes,fresh or chilled	901	79	104	55	51	**8**	**16**
70700	Cucumbers and gherkins, fresh or chilled	5902	5093	7800	10281	12345	**13,689**	**111**
71320	Chickpeas, dried, shelled, whether or not skinned or split		39	46	9	50	**60**	**120**

Source: ITC based on UN COMTRADE data

Tomatoes as the second largest vegetable category experienced positive trends between 2008 and 2012, especially the ones produced under the canopy lands.

Cabbage as the fourth most important vegetable product in terms of produced quantities recorded positive trends in the analyzed period (110.6 thousand tons in 2012 compared to 101.2 thousand tons in 2008), as its yields increased by 18 percent from 2008 to 2012.

Apples represent the most important fruit product in terms of volume produced, and experienced positive trends in the analyzed period, including increase in orchards.

151 thousand tons of grapes were produced in Azerbaijan in 2012, 30 percent more than in 2008 and 10 percent more than in 2011 due to intensive governmental vineyards' restoration program (aiming at reviving and modernizing the Azerbaijani wine industry) as they were demolished due to Gorbachev alcoholism prohibition campaign in the 1980s. Of the total quantity produced, 87 percent came from private owners, family peasant farms and households, and the rest from the agricultural enterprises and other organizations, whose share has been increasing (from around 10 percent in 2008 to 13 percent in 2013).

Pomegranates are the third most important fruits products in terms of produced quantities (141.6 thousand tons in 2012). The history of Azerbaijan is inseparably linked to the culture of pomegranate cultivation, going back deep into centuries, and traditionally, pomegranates have been cultivated almost in every region of Azerbaijan. Production of pomegranates has been constantly increasing. Also sown areas increased in the analyzed period (by 10 percent), but their yields were quite stagnant. This is also a consequence of new orchards planted, as although pomegranates begin bearing an economic crop in the third year after planting, yield maturity is not reached until the sixth year.[8]

Persimmons are the fourth most important Azerbaijan's fruits in terms of produced quantities (140.1 thousand tons in 2012). Production faced a slight decrease in 2012 (by 4 percent) after a constant growth in the previous years. Sown areas increased in the analyzed period (by 14 percent), but orchards were not productive at the time of data collection, and the yields show decreasing trends. It is produced in northern parts of Azerbaijan only, and it is characteristic for persimmon that it can be damaged easily and it is difficult to keep it for a long time.

Azerbaijan produced 29.6 thousand tons of hazelnuts in 2012, while in 2011 the produced quantity was 32.9 thousand tons. In 2011 Azerbaijan produced around 4 percent, and ranked fourth most important

[8] Source: University of California Cooperative Extension: Sample costs to establish and produce pomegranates, 2010, where expected yields in year 3 were 2,354 kg/Ha, in year 4 4,708, in year 5 7,061 kg/Ha, in year 6: 9,415 kg/Ha and in year 7+: 12,554 kg/Ha.

global producer of hazelnuts in shells after Turkey (430 thousand tons), Italy (128.9), and the United States of America (34.9).

The highest growth rates of production were recorded among citrus fruits (lemons by 117, mandarins by 85 percent, and oranges by 83 percent from 2008 to 2012), but at a lower level of production. Their yields increased in the analyzed period, too. In 2012 3.9 thousand tons of lemons, 23.3 thousand tons of mandarins, and 1.1 thousand tons of oranges[9] were produced.

According to The State Statistical Committee of the Republic of Azerbaijan production of **cherries** increased from 18.5 thousand tons in 2008 to 23.1 thousand tons in 2012.[10]

Figs production in Azerbaijan had been decreasing, but grew by 6 percent in 2012 to 9.3 thousand tons (around 0.8 of the global figs production).

Production of **walnuts** increased during the analyzed period (from 8.4 to 9.2 thousand tons between 2008 and 2012). Azerbaijan's production of walnuts accounts for 0.3 percent of the global production, which has been increasing (by 40 percent from 2008 to 2011 - from 2,429 to 3,419 thousand tons).

Kiwi production in Azerbaijan has been stable at 0.2 thousand tons per year between 2008 and 2012, while global production increased by 10 percent.

4.2 Trade policy and infrastructures

Although new farms, established on the bases of former huge farms (kolkhoses and sovkhoses) were singificantly smaller and less developed, their establishment stopped the economic crises in the country in the first years of independence. Production of grains, potato, vegetables, fruits and milk even become higher than the level of 1990. But, the researches show that, the economic grow of agriculture in last 10 years doesn’t meet the demand of the population of the country. And, that’s why the country continues to import food products.

4.2.1 Measures directly affecting trade imports and exports

The level of self-sufficiency by agricultural products can be considered satisfactory, excepting grains. In 2013 the level self-sufficiency on the grains made 64,5%, while on potatoes this figure amounted 97,6%, on vegetables 102,9%, on melons 100%, on fruits 121,8%, on meat 92%, on milk and dairy products 76,2%, on eggs 96,8%. But, in line with the progress gained, we still have import dependency on some plant products (See Table 4.8).

Also, in livestock products we have import dependency on some products. This figure is especially high in pork and pork products (Table 4.9). Level of self-sufficiency of basic industrial food products is given in the table 4.8.

4.2.2 Logistics and infrastructure

In Azerbaijan, private wholesale markets in big cities and regional and traditional markets in major cities are typical types of distribution facilities of agricultural products. In big cities, the number of large-size modern supermarkets and super supermarkets for agricultural products and foodstuff is on the rise. Plus, the number of farmers’ markets operated as part of the government policy to expand market access of producers is also increasing. Some bazaars are also run to sell only agri-food in a traditional way.

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9 Discrepancy in figures for oranges exists, as FAOSTAT reports 12,616 tons in 2008, 7,550 in 2009, 7,970 in 2010 and 8,450 in 2011.

10 FAOSTAT database presents different figures for Azerbaijan cherries production (6,845 tons in 2008, 6,877 tons in 2009, 6,327 tons in 2010, and 6,347 tons in 2011). These figures are similar to the ones, recorded for sour cherries at The State Statistical Committee of Azerbaijan, therefore indicating a possible mistake in transfer of the data.

Table 4.8 Import dependency of plant products, percent

	2007	2008	2009	2010	2011	2012	2013
Total of grains	43,0	36,8	26,0	43,5	35,2	35,7	36,1
Wheat	52,0	44,3	30,8	51,1	42,3	43,2	44,0
Barley	0,8	2,8	1,4	12,3	6,3	4,9	2,2
Maize	23,6	31,9	32,8	35,5	32,0	32,7	40,0
Porridge	31,8	11,4	5,5	19,4	17,2	15,6	10,7
other kinds of grains	136,5	95,9	99,7	103,6	96,1	91,3	97,7
Leguminous	23,6	22,5	31,7	34,9	29,6	28,9	24,2
Potato	8,0	4,7	4,1	6,9	8,3	7,8	7,7
Vegetables of all kinds	5,5	2,3	4,3	7,0	9,5	5,7	3,1
Market garden crops	-	-	-	-	-	-	-
Fruit and barries	7,7	7,2	11,8	22,4	12,3	10,1	4,9
Grape	6,4	7,0	9,5	10,3	10,2	5,9	5,8

*Sources: www.*stat.gov.az

Table 4.9 Import dependency of basic livestock products, percent

	2007	2008	2009	2010	2011	2012	2013
All kinds of meat and meat products	12,1	11,3	16,3	12,5	12,9	8,5	8,5
beff and beef products	5,3	6,1	5,4	5,4	12,8	8,8	14,6
mutton and goats meat and meat products	0,2	0,1	1,3	0,3	0,2	1,3	2,2
pork and pork products	74,0	75,6	86,1	80,3	85,3	74,3	64,2
poultry meat of and meat products	25,5	22,8	33,8	28,9	19,6	11,8	3,8
Milk and dairy products	12,5	10,5	29,9	29,6	28,8	27,2	24,0
Egg, unit	2,0	1,5	1,8	2,1	22,6	4,2	3,3
Fish and fish products	30,3	39,1	23,3	23,8	28,1	27,9	28,4

Sources: stat.gov.az

The main producers of perishable agricultural products are the small scale farms. These farmers have limited opportunities to export their products indipendently. And this factor makes the farmers to give up the additional incomes in favor of intermediaries, processing enterprises and other logistic chains.

Most of agricultural producers don't have their own storage facilities. But the last years definite measures are taken in this direction. As, different wheat storages, fruit and vegetable storages have been built in the regions. Producers can store their products in these storages for a definite fee. But the storages do not have any resposibilities for the quality of stored products. The transportation is on the producers' responsibility. We think improvemts in transportation and other services could be useful.

As, in most of cases, big companies with more financial opportunities hold the biggest share in logistic chain and they use the servicies of loqistik providers. There are several logistics companies in Azerbaijan like: Azfintrans, Caspian Logistics and Freight Forwarding Services, ABA Company, Caspian Logistics and so on. These companies mainly implement the whole system of services connected to logistics. But we have to note that these companies provide the trucks for 20 tons for transportation of perishable products. And this factor increases the risks.

The Russian Federation represents the most important export market for Azerbaijan. Azerbaijan enjoys a land border with Russia and is in a better situation than for example Georgia (whose goods are banned) or Armenia (who does not enjoy a land border with Russia). Therefore, Azerbaijan's export growth has generally been directed towards Russia.

Table 4.10 Import dependency of basic industrial food products, percent

	2007	2008	2009	2010	2011	2012	2013
Brown rice	84,5	88,3	86,5	87	86,8	87,3	85,5
Flour of all kinds	4,0	11,4	6,8	5,4	16,2	6,4	6,5
Groats of all kinds	46,5	75,6	79,8	90,8	98,7	86,1	85,4
Fresh bread without syrups, egg, cheese and fruit jam	0,01	0,01	0,01	0,01	0,01	0,02	0,02
Pies, sweets and other bakery products with sweet substances	20,4	22,4	27,9	30,1	40,1	39,8	41,5
Cracker, cookies and confectionery for long storage	76,7	80,6	95,1	81,7	83,4	76,4	79,9
Sugary-floury confectioneries	80,8	80,5	83,5	85,7	85,5	93,4	101,0
Macaroni products	57,8	54,6	23,3	22,5	55,4	50,1	65,0
Vegetable oils	84,6	83,9	82,8	85,9	74,6	78,5	80,4
Margarine	4,7	2,6	1,4	7,9	0,3	1,1	0,5
Juices of fruits and vegetables	152,8	72,6	47,1	41,4	29	28,5	18,1
Canned fruits and vegetables	17,1	17,8	13,0	13,7	20,9	13,7	15,3
Milk and cream of 1-6 percent fat content	1,8	1,8	0,8	1,6	2,3	1,3	1,4
Milk and cream more than 6 percent of fat content	14,6	11,2	11,2	12,3	11,4	5,4	5,0
Butter	23,4	15,8	47,8	50	49,8	49,5	49,9
Cheese of all kinds	9,7	8,7	12,3	14,3	13,5	11,4	19,4
Kefir, caucasion milk,yoghurt and other products	5,1	6,2	6,4	6,5	10,5	7,8	6,3
Raw products for production of sugar	97,3	93,8	95,9	97,6	95,9	96,9	95,5
Sugar and products of sugar industry	86,3	32,9	30,7	41,6	34,6	33,7	29,4
Tea	86,4	84,6	72,5	83,9	80,6	77,6	100,7
Salt	89,2	91,1	86,7	72,3	54,1	31,8	22,3

Sources: stat.gov.az

Agricultural products within Azerbaijan and outside are transported by railways, highways and sea.

Last years transportation of products is mainly implemented by trucks. Especially, transportation to Russia and Ukraine is well organized. As, special firms engaged in this kind of business, take the product from farmer and transport it to the last destination.

Unfortunately, there's no official data on transportation costs.

Modern retail chains are stimulating fresh fruit and vegetable sales by offering a wide assortment of fruits, competitive prices and convenient locations in residential areas. The move in Russia away from street markets to supermarket chains may have an impact on export possibilities of Azerbaijan. In this case Azerbaijan will have to change the approach and to be adapted for trade under new conditions.

In line with this, during last ten years lots of refrigerator storages are built. But, in most of cases the terms and high prices are not suitable for farmers and they simply don't use this service.

In addition to gained achievements, there is a serious need to extend entrepreneurship activities in the field of food supply, taking additional stimulating measures regarding this. Particularly important measures are to establish store-houses, refrigeration cells, elevators for the storage of food products, as well as enterprises for the production of agricultural equipments and fertilizers, packaging enterprises, to extend the production of grains, feed, meat and meat products, fruit and vegetables, rice paddy, honey and other food products, to develop processing industry.

The most fundamental issues in the current agricultural distribution structure in Azerbaijan are as follows. First, the intervention of mediators (dealers) is too much proactive in the supply chain. Mediators include collectors and distributors in the stage of producing areas, consigned wholesalers in wholesale markets, and ordinary merchants in traditional retail markets. In the changes in the distribution systems all over the world, including European countries, Korea, and Japan, various mediators play a core role in the distribution process in the early stage of economic growth and commercialized farming, although the specific period varies depending on countries. However, when a country enters the era of commercialized farming with per capita national income exceeding ten thousand, the intervention of mediators is rapidly weakened. Instead, the government emerges as a major player of investment to and management of various distribution facilities for the purpose of enhancing the distribution structure. The government also takes the initiative in making plans and developing programs not only for distribution facilities as hardware but also for distribution-related education, training, and consulting as software.

4.2.3 Main trade agreements

Following Commission have activities in Azerbaijan : Azerbaijan-France Economic Commission, Joint Commission for scientific-technical cooperation and trade-economic relations between the Government of the Republic of Azerbaijan and the Government of Romania; Joint Commission for economic cooperation between the Government of the Republic of Azerbaijan and the Government of the Republic of Hungary ; Intergovernmental Commission for economic cooperation between the Republic of Azerbaijan and the Republic of Italy ; Joint Commission for trade-economic and scientific-technical cooperation between the Government of the Republic of Azerbaijan and the Government of the Republic of Bulgaria and etc.

Azerbaijan and WTO

The appeal reflecting Azerbaijan's accession to WTO was submitted to the WTO Secretariat on June 23, 1997. Azerbaijan Republic bilaterally negotiates with 13 countries (U.S, EU, Canada, Japan, Norway, Brazil, South Korea, Ecuador, Chinese Taipei, Sri-Lanka, India, Switzerland, Honduras) on accession process to WTO. During the negotiations are discussed the issues on market access of Azerbaijani goods and services, necessary measures are taken to protect important areas.

39 normative legal acts were considered in the "Action Plan" approved by the 2 August 2006 signed No 1583 decree of the President of Azerbaijan. In Compliance with document drafts, laws on "Plant Quarantine" and "Plant Protection" lost force and 18 normative-legal acts out of 37 were adopted and entered into force.

Currently, projects of 10 documents were prepared and agreed with relevant authorities, including, Law Project on "Technical regulation" was submitted to the Presidential Administration of Azerbaijan Republic. Moreover, the preparation of 10 projects is under consideration.

The legal framework of relations of the Republic of Azerbaijan with the European Union

- The Partnership and Cooperation Agreement (PCA) - was signed on April 22, 1996 and came into force on July 1, 1999
- Action Plan adopted on November 14, 2006, within the framework of The European Neighborhood Policy (ENP)
- Memorandum of Understanding aimed at strategic partnership in the field on energy signed between EU and Azerbaijan on 7 November 2006
- Framework Agreement signed between the Government of the Republic of Azerbaijan and the European Union's Commission on June 16, 2008

- Eastern Partnership Declaration signed on May 17, 2009
- "Joint Declaration" on the establishment of the Southern Gas Corridor signed on January 13, 2011
- "Intent Protocol" on the establishment of a working group on the Southern Gas Corridor signed on January 13, 2011.
- Memorandum of Understanding on National Indicative Program (NIP)for 2011-2013 within the framework of the EU's European Neighborhood and
- Partnership Instrument signed between the Republic of Azerbaijan and European Commission on January 13, 2011.
- Memorandum of Understanding on Framework Document of Comprehensive Institution Building (CIB) Program signed between Azerbaijan Republic and EU on January 13, 2011 within the framework of Eastern Partnership.

Partnership and Cooperation Agreement (PCA)

A legal basis of comprehensive relations between Azerbaijan and the European Union is "(PCA) Partnership and Cooperation Agreement between the European Communities and their Member States, of the one part, and the Republic of Azerbaijan, of the other part" signed in Luxembourg on April 22, 1996 and came into force in 22 June of 1999. This agreement covers all possible, including social and economic spheres of cooperation between Azerbaijan and EU. The agreement ensures frameworks of all kinds of cooperation between Azerbaijan and EU, except military area. PCA was signed for 10 years period and because of the ending of the implementation of the agreement, its execution is extended for a period of one year each year.

The European Neighborhood Policy (ENP)

The recommendation on attraction of South Caucasus countries of the European Commission to the ENP was adopted in the meeting of Council of the heads of European Union state and government in 2004. 5 years Action plan was signed by the minister of Foreign Affair of the Republic of Azerbaijan after accepting to the ENP on November 14, 2006. The Action Plan was determined in 10 directions; 1) Contribute to a peaceful solution of the Nagorno-Karabakh conflict, 2) Strengthen democracy in the country,3) Strengthen the protection of human rights and fundamental freedoms, 4)Improve the business and investment climate,5) Improve functioning of customs, 6) Support balanced and sustained economic development, 7) Further convergence of economic legislation and administrative practices, 8) Strengthening of EU-Azerbaijan energy and transport cooperation, 9) Enhancement of cooperation in the field of Justice, Freedom and Security, including in the field of border management, 10) Strengthen regional cooperation.

Memorandum of Understanding aimed at strategic partnership in the field on energy between Azerbaijan and European Union

Memorandum of Understanding aimed at strategic partnership in the field on energy between Azerbaijan and European Union was signed by the President of the Republic of Azerbaijan on November 7, 2006. There are 4 areas of memorandum:

1) Gradual harmonization of Azerbaijani legislation with the Community legislation,
2) Enhancing the safety and security of energy supplies from Azerbaijan and Caspian basin to the EU
3) Development of a comprehensive energy demand management policy,
4) Technical Cooperation and the exchange of expertise.

The supervision for Memorandum of Understanding are carried out by sub-committee on the issue for energy, transport and environmental.

"Eastern Partnership" initiative

"Eastern Partnership" (EP) initiative nominated by Poland and Sweden embraced to strengthen the existing co-operation bilaterally and continue as multilateral direction between countries Azerbaijan, Georgia, Armenia, Ukraine, Belarus, Moldova referred as "east partners" within the framework of ENP and EU countries. Within the framework of the EP new co-operation agreements on deep and comprehensive Free Trade Areas, the programs financed by EU, "mobility and security pacts", visa-free travel, accession to EU labor market, Adaptation to EU legislation and standards, cooperation in the field of relations among population were considered. The following platforms were established for carrying out discussions within the multilateral format of EP

1) Platform on Democracy, good governance and stability (Platform 1);
2) Platform on Economic integration and adaptation to EU policies (Platform 2)
3) Platform on Energy security of the (Platform 3);
4) Platform on the relations between people (Platform 4).

The Ministry of Economic Development takes part at the general meetings of Platform 2 and meetings of the panels on Trade" and "Small and medium-sized enterprises" created under this platform.

The 1st meeting of the Panel on Agriculture and Rural Development was held in Brussels on 13 May 2013. The Panel was established within the scope Eastern Partnership Platform 2 on "Economic Integration and Convergence with EU Policies".

The signing of the Association Agreement between the EU and the Republic of Azerbaijan

Within framework of the Eastern Partnership is considered to sign an Association Agreement between the members of the initiative and EU. This agreement is a type of international treaties concluded by the EU with third countries. It will replace the agreement on Partnership and Cooperation and provide a legal basis for creating closer relationship between Baku and Brussels. In order to conduct the negotiations on Association Agreement 4 task groups were established:

1) Political dialogue and reform, cooperation in the fields of foreign and security issues,
2) Justice, Freedom and Security issues,
3) Economic cooperation, cooperation policy on sectors and financial issues
4) Trade issues.

The Ministry of Economic Development leads for 3rd and 4th of task groups. In order to start the official negotiations on The Association Agreement between the Republic of Azerbaijan and European Union, the event was held in Baku on 16 July of 2010. On April 9, 2013 the next plenary meeting of the Association Agreement was held in Brussels. Holding of video conferences is continued for the effective conduct of the negotiations on the Working Group.

Comprehensive Institution Building (CIB) Program

CIB program is designed for creation of Association agreement between EU and Azerbaijan Republic, conducting negotiations, including strengthening the capacity of main institutions for implementation of the agreement. CIB's directions are following below:

1) Rule of law, the reforms on justice, freedom and security areas.
2) Reforms on state governance and civil servant areas
3) Reforms on trade areas.

Pilot Program Regional Development (PPRD)

According to the provisions of Prague Declaration May 7, 2009 dated, creation of PPRD in the framework of the Eastern Partnership is ordered by European Commission in order to support good governance in financial sector, reducing social disparities and regional development strategies on the basis of rapprochement policy and conducting of political dialogue model with partner states. Supporting of the development of necessary legal and institutional framework on regional development, including, improvement of human resources, development of innovation and infrastructure will the main priorities during the preparation of the PPRD. Pilot Program Regional Development is considered to qualify as regional and country programs depending on the territory of the country.

The coordinator of the program is the Ministry of Economic Development.

State Commission of Azerbaijan Republic on integration to Europe

In accordance with the order of the President of the Republic of Azerbaijan dated June 1, 2005, the State Commission on Integration Azerbaijan to EU and some task groups under this Commission were established to strengthen further relations with the EU, to ensure effective and coordinated work, to coordinate activities of the relevant government agencies in this area and ensure promptly learning of projects provided by the EU.

Action Plan for Legal Approximation

In order to fulfill the obligation undertaken on the harmonization of the legislation of the Republic of Azerbaijan to the EU the "Action Plan on approximation of the Azerbaijani legislation to the EU's legislation (2010-2012)" was approved in accordance with the 43rd Article of the PCA. AP covers 15 areas. Technical regulations and standards, safety of food and fodder production, veterinary and phytosanitary control and protection of consumer rights can be marked of the mentioned areas as great importance for the process of Azerbaijan's integration into the world economy. Moreover, AP also covers important measures such as competition and state support, telecommunications, customs legislation, the protection of employees in the workplace, public procurement and legislation on the legal entities. Important measures will also be taken on the area of financial services, taxation, intellectual property, transport, environment and energy regarding on approximation of legislation. It is intended to harmonize the legislation into 126 normative legal acts of the EU in these areas.

Cooperation on assistance between Azerbaijan and EU

Within the framework of the EU TACIS Program, the Emergency Assistance Program (EXAP), ECHO Humanitarian Assistance Program, Food Assistance Program, Food Security Program (FSP), Rehabilitation Program (REHAB), Emergency Humanitarian Assistance Program (EHA) humanitarian, technical and food assistance were provided to Azerbaijan over 1992-2006.

European Neighborhood and Partnership Instrument (ENPI)

European Neighborhood and Partnership Instrument (ENPI) have been applying since 2007. Within the framework of this instrument to provide the assistance is indented in order to implement European Neighborhood Policy. Assistance instruments such as budget support, twinning, technical assistance, TAIEX, SIGMA include to ENPI. The assistances provided to Azerbaijan during the years mentioned in the National Indicative program signed for the purpose of determination of the priority cooperation areas between EU and Azerbaijan, including providing assistance to these areas within the framework of the ENPI for the years 2011-2013 will aimed at the following three areas

1) Strengthening of democratic structures and good governance;
2) The socio-economic reform and sustainable development, trade and investment, legislation, regulation and support for reforms;
3) Supporting of Action Plan on The Partnership and Cooperation Agreement and the European Neighborhood Policy, comprehensive institutional building, including the mobilization and security issues.

5. AGRICULTURAL POLICY AND INSTITUTIONAL ENVIRONMENT

5.1 Agricultural policy framework

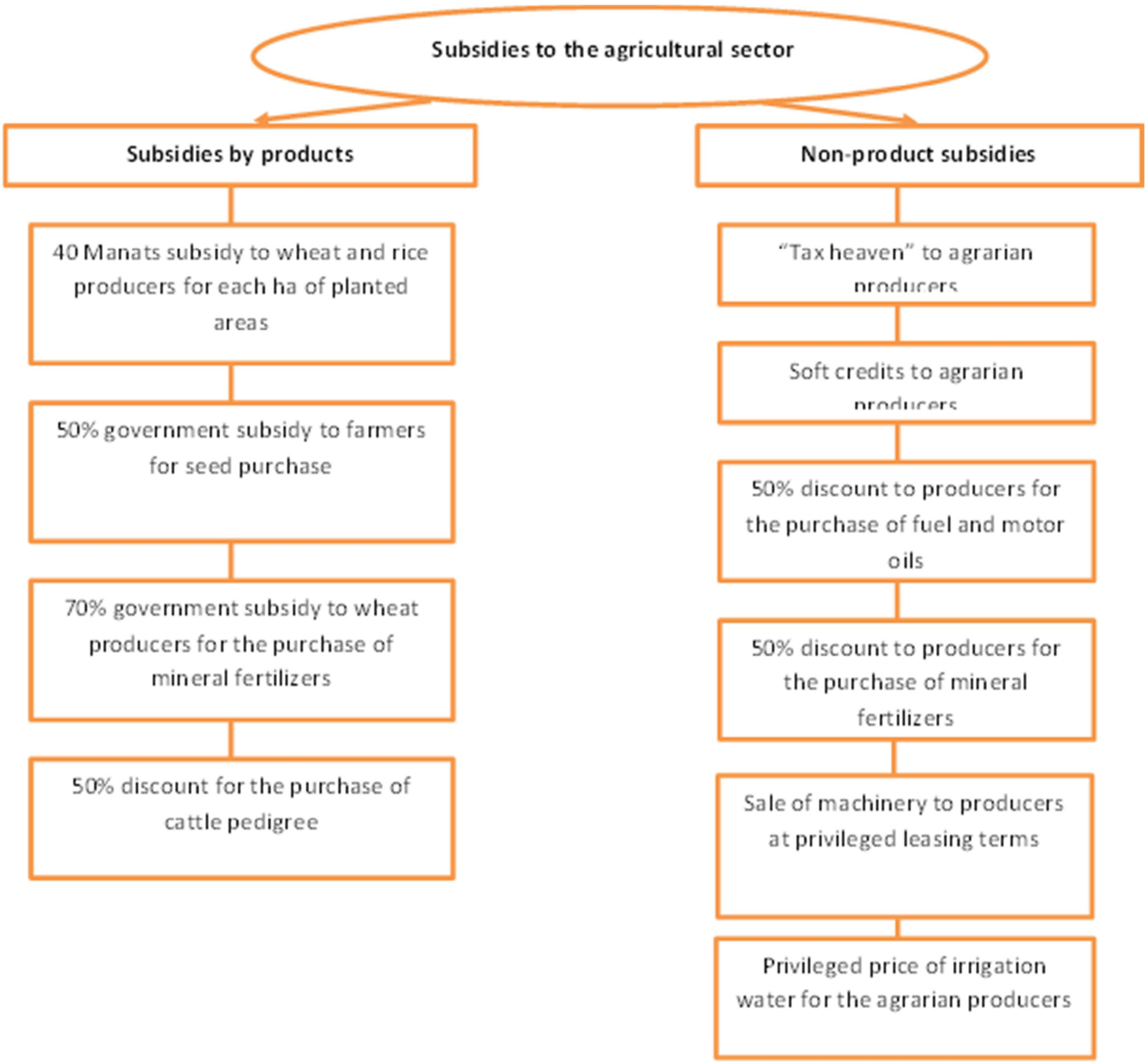
5.1.1 Agricultural policy objectives and mechanisms

The main focus of the agricultural policies implemented in Azerbaijan is state support policy to this sector. For this purpose government has declared the agricultural sector tax free. Government subsidies cover crop and seed production, fertilizer, agricultural machinery and more recently livestock production. We can divide the subsidy experience to the agricultural sector of Azerbaijan into two stages:

- 1999-2006;
- 2007-to present.

The direct subsidies by commodity covers only the production of wheat, rice and pedigree cattle. Other subsidies cover any farm commodities. We can see distribution of subsidies allocated to the agricultural sector by type of product and non-product in the following picture (Figure 1).

Figure 5.1 Distribution of state support for agriculture by product and non-product



As we know an agricultural subsidy is a governmental subsidy paid to farmers and agribusinesses to supplement their income, manage the supply of agricultural commodities, and influence the cost and supply of such commodities.

Government of Azerbaijan has decided to sell petroleum products (gasoline for trucks, diesel fuel and motor oils) to agricultural producers at a discounted price in 1999. At that time the farmers can buy gasoline, diesel fuel, motor oils approximately 40% discount price. However, this support was not successful and since 2001 it was not applicable. Therefore, during 200-2004 farmers couldn't by oil products on discountprice, even if it was intended according to "Food securty Programme of Azerbaijan Republic»[11]. but this was not realized. Another economic support of Azerbaijan government to farmers is setting agricultural producer free of all taxes except land tax. The main contribution of the government began since 2007.

- Since 2007 farmers get 40 manats[12] per ha that they plant.
- Wheat producing farmers get additional 40 manats per ha. That is why wheat producing farmers get total 80 manats;
- In Azerbaijan farmers free from all taxes except land tax until 2014;
- The policy for discount of irrigation water is being continued;
- Azerbaijan government subsidies special sort of animals;
- In wheat production, 50 percent of the costs for elite seed and 70 percent of the costs for the fertilizers are paid by the state.

The serious works have been started in the direction of development of the seed production to achieve the main goals of the Sate Program. For this purpose it is very important to assume the measures regarding the implementation of state care for seed farming and to cover the requirements for high quality seeds (original, super elite, elite, R_1 and R_2). It's essential to note that the State Program and the Seeds Act, the cereal breeding, the increase of wheat production and productivity, the quality improvement are stimulated by the government. "The State Program on reliable food provision in the Republic of Azerbaijan in 2008-2015" for providing the population and farmers by super-elite, elite and high reproduction seed grain. Cabinet of Ministers of the Azerbaijan Republic stimulates the development of wheat and rice production and scientific provision of seed production.

In subsidy policy in Azerbaijan following features is noted:

- As a result of agricultural policy agricultural production increased last 10 years;
- The level of self-provision for most of the main food products has also increased;

The increase in agricultural production is based on extensive factors by increases in the atea planted and not very much increase in the yield or quality;

- The increase of sown area of wheat is made on the bases of the sown area of other crops, especially cotton, grapes and etc.

The Government of Azerbaijan began to apply subsidies in order to achieve self-sufficiency in wheat and rice production. In 2012 60.2% of arable lands used for grain grown. However we can increase productivity of grain and produce the requrired grain on less land and use this land for other purposes.

Increasing the productivity of the land is used for grain production will allow use for other purposes. The current subsidy policy based on area planted does not increase the productivity of wheat. Average yield is 2.6 tons per hectare in the country. At the moment Azerbaijan can not meet domestic

[11] http://www.e-qanun.az/print.php?internal=view&target=1&docid=4467&doctype=0

[12] 1 manat = $0.785.

demand because productivity of grains is still low and that's why import of wheat is needed. In 2012 the import of wheat was increased for 200000 tons compared to 2011. 1,6 mil. tons of wheat was exported in 2012.

Table 5.1 Direct subsidies to agricultural producers, manats per hectar

Years	Wheat	Rice	All of the rest crops, fruits, vegetables etc.
2007	40	40	40
2008	80	80	40
2009	80	80	40
2010	80	80	40
2011	80	80	40
2012	80	80	40
2013	80	80	40

Source: www.agro.gov.az

On the other hand there is a problem with the quality of wheat which is produced by local farmers. For example, The State Grain Fund can't buy local wheat because of quality is low and grain is impoted. This shows that the subsidy policy to produce the product, does not solve the problem. The quality of product is important.

One of the reasons for the increase of cost price of wheat is connected to subsidy policy, as to get the subsidies the farmers begin to plant wheat, even in areas where it is not economically efficient. Also farmers want to get subsidy every year. For this reason they forget about intensive use of lands and don't implement sowing rotation. So, annually planting of lands for wheat causes the yield to fall down and cost price to increase.

5.1.2 Institutional arrangements

The Ministry of Agriculture is the central executive body, responsible for implementation of state policy in agrarian sectore in Azerbaijan.

The main points for activities of the mininstry and other relative organisations are determined by the Order of the President of the Republic of Azerbaijan "On the maintenance of functioning of Ministry of Agriculture of the Republic of Azerbaijan" and the amendments to the order number 1015 of the President of the Republic of Azerbaijan "On approval of the structures of a number of central bodies of executive power" dated 14 July 2010".

Governed by Clause 32 of Article 109 of the Constitution of the Republic of Azerbaijan, it was decided:

1) Create State Service on Management Agricultural Projects and Credits under the Ministry of Agriculture of the Republic of Azerbaijan on the basis of the State Agency on Agricultural Credits under the Ministry of Agriculture of the Republic of Azerbaijan.
2) Create State Service for Registration of Plant Varieties and Seed Control under the Ministry of Agriculture of the Republic of Azerbaijan on the basis of the Republican Seed Inspectorate, the State Commission for Testing and Safety of Selection Achievements of Azerbaijan and the Republican Cotton Seed Control Station.
3) Rename State Veterinary Service under the Ministry of Agriculture of the Republic of Azerbaijan to the State Veterinary Control Service under the Ministry of Agriculture of the Republic of Azerbaijan.
4) To approve "The structure of the Ministry of Agriculture of the Republic of Azerbaijan".
5) To determine count limit for staff of the Apparatus of Ministry of Agriculture of the Republic of Azerbaijan 215 staff units, count limit for staff of regions and cities offices 780 staff units, count limit for staff of the State Veterinary Control Service under the Ministry of Agriculture of the

Republic of Azerbaijan 36 staff units, count limit for staff of the State Phytosanitary Control Service under the Ministry of Agriculture of the Republic of Azerbaijan 26 staff units, count limit for staff of the State Service on Management Agricultural Projects and Credits under the Ministry of Agriculture of the Republic of Azerbaijan 40 staff units, count limit for staff of the State Service for Registration of Plant Varieties and Seed Control under the Ministry of Agriculture of the Republic of Azerbaijan 24 staff units, count limit for staff of the Main State Technical Supervision Inspectorate 7 staff units, count limit for staff its subordinate district (city) state technical supervision inspectorates 87 staff units.

In line with these, according to the Presidential Decree No. 392 dated 21 June 2009, the "Agroleasing" JSC has been given to the management of the Ministry of Agriculture.

Ministry of Agriculture has departments in all regions and cities. Recently, “Development strategy of Agro-industrial complex of the Republic of Azerbaijan for 2015-2020„ has been developed by the Ministry of Agriculture. This document will come into force upon approval by the President.

Also in the “Food Security Concept” adopted in Azerbaijan in 2 March 2001 the Ministries of Economic Development and Agriculture are obliged to establish Export Assistance Fund and an Agency which will support trade. However, “State Program on socio-economic development of the regions (2004-2008)” approved the decree of President of Azerbaijan Republic by 11 February 2004. It is intended to establish Export Assistance Fund. But in the next stages Export Assistance Fund was not established. And the main reason for that was the obligation of Azerbaijan before WTO on not subsidizing the export.

But one of the most important issues is to take measures for simplification of export procedures in order to find foreign markets for agricultural and food industry products of local production. Azerbaijan Export and Investment Promotion Foundation (AZPROMO) could play an important role in this regard.

AZPROMO is a joint public-private-initiative, established by the Ministry of Economy and Industry of Azerbaijan in 2003 with the aim to contribute to the economic development through attracting foreign investments in the non-oil sectors of economy and stimulating expansion of country's exports of non-oil goods to the overseas markets. AZPROMO is a unique body in Azerbaijan that operates as a "one-stop-shop" for assisting and advising foreign-based companies interested in investigating and utilizing investment opportunities in Azerbaijan[13].

AZPROMO plays a role of a single body guiding foreign investors in their negotiations with all relevant government agencies and local entrepreneurs. Mission of the AZPROMO is to sustain economic growth and diversification by maximizing inflow of FDI and utilizing effectively export capacities. Main functions AZPROMO are as follows:

- Promotes Azerbaijan as a business location
- Assists international companies setting up business in Azerbaijan
- Assists companies based in Azerbaijan with reaching foreign markets
- Promotes improvement of business and investment climate.

AZPROMO services on export promotion include market and industry reports, information on applicable trade legislation, matchmaking with potential buyers, organization of trade missions and participation in trade fairs, marketing support, trainings, and constructing export database and catalogues.

The construction of the first Azerbaijani logistics center abroad has started in Kazakhstan's Aktau city. The implementation of this project will pave the way for the development of the two countries' non-oil sector, the expansion of transit and export opportunities in the region. This center will export Azerbaijan's industrial and agricultural products to Kazakhstan, and vice versa. Implementing the first stage of the project requires $20 million which will be financed by the National Fund for Entrepreneurship Support under Azerbaijan's Economy and Industry Ministry. The logistics center in

[13] http://www.azpromo.az/1/en/5#1425025136351

Aktau will become Azerbaijan's first relevant projects abroad and will create new export opportunities for entrepreneurs. The construction and management of the center will be carried out by Azersun Holding.

5.2 Main agricultural policy instruments and measures

5.2.1 Market price support measures

Market price support measures are not taken in Azerbaijan. But, The State Grain Fund buys wheat from the farmers. And there are no barriers in trade of agricultural products.

The Presidental decrees on “Increasing the efficiency of foreign trade in Azerbaijan Republic” (10 January 1994) and “Making easy the foreign trade in Azerbaijan Republic” (5 April 1994) served in enhancing the foreign trade activities in the country.

As the continuation of these decrees, the Cabinet of Ministers accepted a resolution on “Making easy the foreign trade in Azerbaijan Republic” on 15 November 1995 in order to assure the implementation of the decrees. This resolution was very important as, according to this resolution licensing the exportation operation was abolished from 1995. The Cabinet of Ministers in close relation with the related orgaanizations prepares a list of products of exportation and importation and the issues regarding the documentation is simplified again.

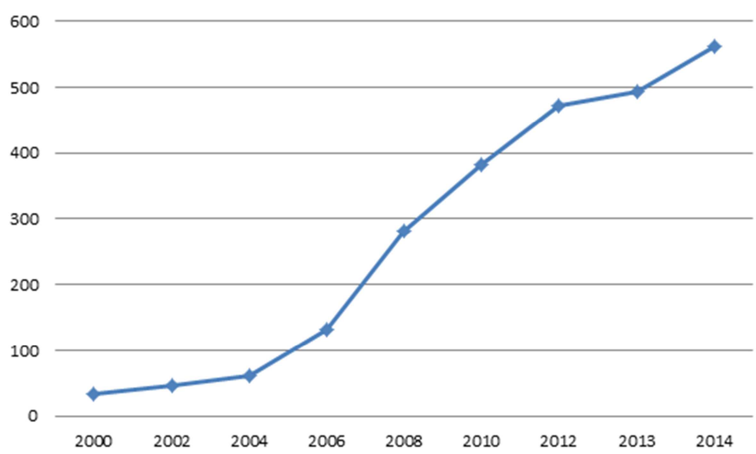
According to the Presidental decree on “Improvement of regulation of foreign trade in Azerbaijan Republic” issued on 17 December 1996 the following points are taken into consideration:

- to ease the exportation and importation operations fully and set it without registration;
- abolishment of the export duty
- enhance the trade in borderland zones.

5.2.1 Budgetary and other transfers to agriculture

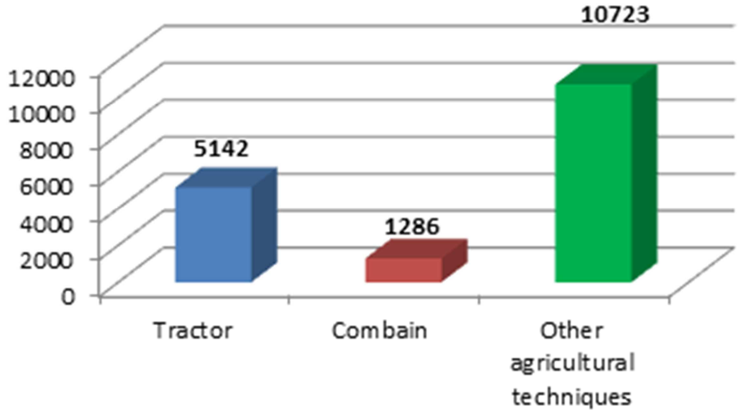
For agriculture, forestry, fishing, hunting and environmental protection expenses 562.9 million manats were allocated from the state budget in 2014. This figure is higher for 68,6 million manats or 13,9% compared to 2013, and 94,7 million manats or 20,2% compared to 2012. For implementation of “The State Programme on reliable food supply of Population in the Republic of Azerbaijan in 2008-2015” 131 million manats were allocated in 2014 from State Budget. This figure is higher for 6 million manats or 4,8% compared to 2013. In 2014, 536 million manats were allocated to ensure stable funding of agriculture, forestry, water management and irrigation systems from State Budget. And 26.9 million manats were allocated for the implementation of fishing, hunting, environment, hydrometeorology, land reform, geodesy, topography, land cadastre and mapping and other environmental measures.

Figure 5.2 Budget costs on Agrarian sectore



As the factual result of all measures taken, the total amount of tax incentives to agrarian sectore for the period of 2004-2013 amounted 1 billion 400 million manats.. In line with this, 17151 units of agricultural techniques were provided to agricultural producers.

Table 5.2 State support to Agrarian sectore till August 2013 (units)



Source: www.agro.gov.az/index.php?cat=18&ses=59fed

Also, provided 797.61 million manats of finansial support by state played a big role in development of agrarian sectore. As we can see, 44.77 million manats for sale of seed and young plants of first and second reproduction, 129.79 million manats for 50% of the cost of fertilizers, 430.05 million manats for 50% of the cost of fuel and motor oil, 186.55 million manats for sowing of wheat and rice were provided to agricultural producers during this period as state support.

Tabel 5.3 Subsidies from state budget to agricultural producers for 2007-2014 (million manats)*

Years	**For fuel and lubricants** (40 manats per hectare)	**For wheat and paddy cultivation** (extra 40 manats per hectare)	**For mineral fertilizers** (The 50% of the value (up to 50 manats) of 300 kg fertilizers per hectare)**	**For I and II reproductive seeds** (according to sales of seeds on the approved schedule)	**For incurred expenditures on production of the original, superelite and elite seeds by the research institution** (cost of production of 1 kq seed or a piece of sapling)	**Total**
2007	42,19	20,21	2,43	0,89	0,39	**66,11**
2008	53,79	29,68	6,72	3,78	0,59	**94,56**
2009	59,84	22,92	6,54	4,60	0,93	**94,83**
2010	55,51	23,41	24,50	5,95	0,93	**110,30**
2011	52,78	25,19	12,10	5,83	0,93	**96,83**
2012	56,74	24,89	20,10	7,30	0,93	**109,96**
2013	57,40	20,15	24,90	7,32	0,82	**110,59**
2014	51,80	20,1	32,50	9,10	0,93	**114,43**
Total	**430,05**	**186,55**	**129,79**	**44,77**	**6,45**	**797,61**

* Data collected from annual reports of Cabinet of Ministers of Azerbaijan Republic

** Rules for subsidies for fertilizers have been changed after 2014: The 70% of applied fertilizers per hectare, not exceeding 80 manats.

** Information will be presented after the review at the Commission.

That is the fact that agricultural subsidy policies have been implemented in Azerbaijan in recent years. Millions of dollars from oil income are spent for this purpose. Unfortunately decision makers are not interested in Impact Assessments of these programmes and limited resources are spent for Impact Assessments. Azerbaijan should focus on this area.

But an impact assessment is important, because access to the information as a result of impact assessments will contribute to better decision-making in Azerbaijan. Impact assesment gives us chance to not repeat mistakes made in previous years. It should be noted that beginning from 2007 agricultural producers get subsidies from state budget and the total amount of the subsidies increasing year by year. during the 2007-2014 years farmers were provided 797,61 million manats totally as subsidies from the state budget.

Also Cabinet of Ministers of the Azerbaijan Republic stimulates the development of grain production and scientific provision of seed production. There are provided subsidies from the state budget to seed farms for the 1st and 2nd reproduced seeds in accordance to the rules of Cabinet of Ministers of the Republic of Azerbaijan. On the basis of the determined quota the production expenses of original, elite and super-elite seeds at the scientific research institutes and experiment farms are provided by the state budget.

In the current stage, assessing the impact of subsidy policy has not been implemented and any research or monitoring in this direction was not applied. That's why there's need for implementation of assessment of the results of subsidy policy implemented in agrarian sector.

1) Improvement in input of farms
2) The availability of subsidies for small scale farms

As well as subsidies for grain production may create conditions for increasing the efficiency. For example, 689468 hectares of sown area of wheat was given 80 AZN subsidy per hectare in 2013. That was 55.2 million AZN for wheat production in 2013, excluding the other subsidies. If the subsidy policy would stimulate the increase of productivity and decrease the arable land in Azerbaijan we could have more effective results. If we could increase the productivity of wheat to 3,5 tons per hectar (30%), we could get the same corps from 482,6 thousand hectares instead of 689.5 thousand hectares. And according to this, we could divide the money spent for 689.5 thousand hectares among 482.6 thousand hectares and farmers could get much higher subsidy (approximately 114 AZN) per hectare.

We think it will be very useful if to stimulate more effective crops instead of grain production in less efficient areas. For example, in Guba region, grain yield / ha was 24.7 cents in 2013. It is not a good indicator from the economic point of view. However, in Guba region productivity of tomatoes was 249 cents / ha in 2013. This is higher than than the average productivity (186 cents /ha) in Azerbaijan.

We think Guba region is more expedient to cultivate tomatoes or other suitable crops. Also, a similar situation was observed in other regions. That is why stimulate of grain production in the special regions is very useful for Azerbaijan. The objective is that over time the farmers will be able to produce grains without subsidies in these regions.

Subsidies control is carried out by relevant government agencies. However, civil society organizations did not have acsses to control of provision of subsidies. Generally experience of the last 5 years show than Azerbaijan government did not provide transparency in subsidy system and that is one of the reasosns reducing its effectiveness.

The negatives on subsiding process were even confirmed by the head of state. We can see it closing speech by president Ilham Aliyev at the conference dedicated to the results of the fourth year of the "State Program on the socioeconomic development of districts of the Republic of Azerbaijan in 2009-2013", Baku, 12 February 2013[14]: "Of course, the subsidies, i.e. the material support, are provided by us,

[14] http://en.president.az/articles/7340

but unfortunately sometimes we can not achieve transparency in this area. The subsidies either do not reach their destination or someone embezzles them. In some cases a part of the subsidies meant for farmers disappears in the pockets of government officials. In others, the volume of production and the size of the farmland are exaggerated in order to receive more subsidies. In some cases the necessary equipment and facilities are imported from abroad at high prices. In other words, we need to ensure complete transparency in this area.

Therefore, we think that in the coming months it is first of all necessary to re-examine the experience available in the provision of subsidies, make suggestions and, along with the positive sides, identify shortcomings. In this I am urging the farmers to submit their proposals to the Presidential Administration, the government, the Ministry of Economic Development, the Ministry of Agriculture and local executive authorities. Make your suggestions so that we know more precisely what the issues of concern are for you. I am aware that there are problems in this area and that transparency is not at the required level. These deficiencies must be rectified in a short time. Farmers should be able to receive whatever they are entitled to. Let no one set his eyes on this money!”

As the result of the policy production level of agricultural production have been increased. Also the level of self-sufficiency for most of food products has increased. But, still some problems exist:

- The subsidizing mechanism needs to be improved;
- Transparency is not provided;
- The subsidies stimulate extensive development not intensive;
- No subsidies for animal breeding farms, which causes discrimination.
- The farmers sharply reduce the area of cotton, tobacco, grapes, tea and etc. and increase the area of cereals, this reduces agricultural GDP, exports and employment;
- The subsidy policy does not increase the productivity of wheat. Average yield is 26 centers per hectare in the country. At the moment Azerbaijan can not meet domestic demand because productivity of grains is still low and that’s why import of wheat is needed. In comparison with 2011 in 2012 the import of wheat is increased for 200 000 tone.

At the moment the amount of subsidies is much higher than the requirements of WTO in Azerbaijan. However, subsidies can not play an active role in agricultural development and food supply in the country if it is to be a part of the international trade community.

At present Azerbaijan government wants to give subsidies to the livestock sector. Ministry of Agriculture suggests that farmers get 100 manats for each calf which was born by artificial insemination. Also in the Development Concept “Azerbaijan 2020: Look into the Future” it is noted that especially the production of eco-friendly agricultural and food products in the country will be stimulated. But I think first of all Azerbaijan has to implemented Impact Assessment of subsidy policy on how to apply it.

Also Azerbaijan has oil income and these subsidies aren’t big load for budget at the moment. However, when oil income will decline, government will have to reduce agricultural subsidies. After that some new problems can arise in this area. That is why mechanism of subsidies in Azerbaijan is not perfect and it is very important to improve it. As the subsidies should stimulate sustainable agricultural development and improve food security.

6. FUTURE PERSPECTIVES FOR THE AGRICULTURAL AND FOOD SECTOR

6.1. Strengths and weaknesses of the agricultural and food sector

The analyses show that considerable growth was acheived in grain production. But this growth was mainly acheived by means of extensive methods, that is to say the growth was acheived by enhancing the arable lands of grains.

Azerbaijani government plans to pay a special attention to maize (corn) production. It is planned to increas the arable lands and as well as the productivity (to 60 cent/ha) and reach 330 thousand tons maize (corn) production per year.

The reason for decreas in production of industrial crops mainly is the low prices and lack of cooperation between producers and processors.

Azerbaijani government plans to widen the arable lands of industrial crops, to apply intensive technologies, to regulate the relations between producers and processors. So that, being one of the most perspective sectores, sugar beet and maize (corn) production will be paid special attention and the investments directed to this field will be increased.

According to consumption norms proved by the government, the demand of the population of the country can be easily provided by means of local production. In line with that, there are potential possibilities to increase the productivity in fruit production or in vegetable production taking into account the export possibilities and its importance. To acheive this goal first of all we need to solve the following problems:

- establishment of procurement, stock, refrigeratory and selling bases;
- application of modern growing systems and technologies;
- establishment of modern cargo enterprises;
- to simplify the credit system and application of seasonal credits;

With the application of the noted measures it is possible to produce more than 1 million tons of fruits and more than 1.5 million tons of vegetables intented to be reached till 2020 noted as the important goals.

In milk production we have to note the low level of productivity of the animals and lack of measures taken to abolish thes factor can be shown as the problems in this sector. Also, problems in feeding base and lack of modern feeding technologies are of importance.

To reach the intensive development of the livestock it is planned to reestablish the works in pedigree stock-breeding and selection and application of the newest world experiences in this direction. The results of SWOT analyses of agricultural and food sector of Azerbaijan can be summarized as in the table herafter.

We want to stress that Azerbaijan, first, the country has financial capability to grant subsidies and invest in promoting agricultural export owing to a massive amount of oil export; second, as the country can produce fresh agricultural products all year round based on various climate zones, it has not only sufficient production capability for seasons when neighboring countries suspend their production of farm products, but also an advantage in producing high quality organic farm products because the country has relatively many farms utilizing organic fertilizers; third, export of agricultural products has continuously increased by about 56 percent for the past five years; fourth, among Commonwealth of Independent States (CIS) members, Azerbaijan has an international airport with the latest facilities (Heydar Aliyev International Airport in Baku); and fifth, the country has a relatively low level of prejudice towards foreign companies and allows businesses to save operation costs thanks to the procedure for starting up business swiftly as well as for opening and closing business.

Internal factors	External factors
Strengths • Favourable agri-climatic conditions • Organic aspects of local products • Tax exemptions and state support in agriclture • Relatively cheap labour • Competitive advantage (cheap feed and raw materials supply) for livestock and food processors due to competitive crop sector • Developed railway and main connecting roads infrastructure	**Opportunities** • High growth rate of demand for products • High potential capacity of the market • Good macroeconomic environment (low inflation) • Depreciation of national currency • Access to knowledge • Support to agricultural insurance • Organic production • Ban to Russian market
Weaknesses • Low productivity • High share of households production • Low access opportunities of the farmers to market • Lack of qualified staff (especially highly skilled) • Old machinery • Lack of modern technologies and modern managerial practices • High dependence on agro-climate conditions • Inefficient system of insurance of agricultural risks • Underdeveloped agri-finance infrastructure	**Threats** • Aggravation of competition in domestic and foreign markets; • Deeper penetration of the foreign producers to domestic market; • Decreasing content of nutrients in soils, erosion, worn-out melioration systems; • Urbanization of rural population, thus lack of labour for agriculture. • Lack of specialists for new areas. • High custom rates for foreign products • Dependence on Russian market

On the contrary, in terms of internal weaknesses of Azerbaijan, first, it takes too much logistics expenses and time due to severance of international marine transport to the western world; second, with the development of logistics based on oil export, the country has a weak infrastructure for export of commodities other than oil; third, time can be delayed due to vestiges of bureaucracy in the procedure of import and export such as customs clearance; and fourth, with a high interest rate, the country's access to the official financial sectors such as banks is limited[15].

6.2. Potential of production and yields by sectors

The factual production indicators of plant growing and livestock are considerably lower than the potential. Average yields have generally increased since around 2000. But sector performance is still

[15] USAID (2009). pp.33-34. According to the result of "Principal Problems Cited by Survey Respondents" in Table 11, nearly all exporters selected "Access to Financial Resources" as the biggest obstacle.

lagging behind in comparison to other countries. The average yield of the cereals and dried pulses in Azerbaijan amounted 27.5 s/ha in 2013. But by means of application of modern technologies it is possible to increase the total amount of production. To increase the yield it is planned to apply crop rotation system according to local climatic conditions of the Republic.

Table 6.1.Yield of agricultural products, (ton/ha, kq/head)

Product	Potential	Factual (2013)
Cereals and dried pulses	7	2.75
Potatoes	30	15.2
Grape	20	9.2
Tobacco	3	2.84
Fruits and berries	15	7.4
Vegetables	40	15.4
Green tea leaves	5	1.2
Water-melons and melons	20	15.1
Meat (from 1 head), kg	250	-
Annual milk yield per cow and water buffalo, kq	4000	1381
Average wool sheared per sheep, kg	3,5	2.1
Poultry meat (from 1 head), kg	1,2	0,9
Average number of eggs per laying hen in agricultural enterprises, unit	320	247

Source : http://www.stat.gov.az/source/agriculture/indexen.php

As we can see from the table there are potential opportunities to increase the yield of agricultural products.

6.3. Bottlenecks for the future development of agri-food sector

There is no any policy/strategy for the development of agriculture sector. However, the Government of Azerbaijan is active in the area of rural and agriculture development through a number of different State Programs and Presidential and Ministerial Decrees. Among these, the 'State Program on Reliable Provision of the Population with Food in the Azerbaijan Republic - SPRPPF' for 2008-2015, provides priority to complementing traditional agricultural growing systems with modern growing technologies for obtaining high-quality harvests (including in fisheries and forestry). Its main goals for 2015 are:

- Ensuring macroeconomic stability and stable development;
- Improving the infrastructure;
- Ensuring the country's food independence.

Similarly, the "State Program on Social-Economic Development of Regions - 2009-2013" is focused on the support to the economic development of the country. Out of nine priorities, three are related to improvement of market access, information and capacity development, namely priorities:

1) Upgrading and development of infrastructures required for efficient farming and food products storing and marketing;

2) Assist in facilitating food markets supply and access to new markets;
3) Strengthen information and consultation services for agriculture and rural development.

A number of existing laws and regulations, governing agricultural and agri-business activities, address the different aspects of overall marketing system; however there are gaps in this legislation which need to be harmonized with international standards.

There are big development prospects of agricultural and food sector in Azerbaijan. At present the demand of the people to some of food products as – meat, milk, fish is not provided fully and for this reason the market of these products has enaugh growth potentials. And it is important to develop and implement definite measures in order to make the biggest share of the market belong to local producers.

Azerbaijan has adopted a number of laws to encourage agricultural growth and rural development. However, there has not been enough progress in agricultural manufacturing legislation and national programmes or in trade liberalization. Privatization processes and other reforms are still in progress, and although the government has taken steps to ease regulations and restrictions on foreign investment to encourage non-oil sector development, the country still has an opaque and arbitrary regulatory environment, a heavy handed bureaucracy and a large state sector that monopolizes many areas of the economy.

Azerbaijan became a member of the Codex Alimentarius Commission in 2011. The country is also a member of the International Organization of Standardization (ISO). Regarding sanitary and phytosanitary (SPS) issues, Azerbaijan has been working towards WTO accession and gradual harmonization with Codex Alimentarius and, to some extent, with EU rules. Using international assistance, it has improved laboratories and trained staff. Food is the subject to the Act on Food Stuffs (1999), aimed at managing quality, manufacturing and organization of the food stuff s and provision of the food security. It developed several food standards on milk and canned meat and advanced work on amendments to the food safety and hygiene laws.

Quality control, certification and supporting institutions: National standards are registered by AZSTAND and bear the abbreviation “AZS”. The regional standards “GOST” adopted by the Interstate Council for Standardization and Certification of CIS are also used. Under the State Committee for Standardization, Metrology and Patents, in 2009, the Technical Council of Standardization and a Technical Regulation and the Experiment and Testing Centre were established to develop a national system in line with regional and international standards. The Testing Centre is working to receive accreditation based on ISO. In January 2010 Azerbaijan became an affiliate member of the European Committee for Standardization.

Azerbaijan made some progress on the free movement of goods and technical regulations by adopting 162 new standards of defining properties in the fields of food production in 2009.

According to “Azerbaijan 2020: Look to the future” Development Concept the main goal of the country is to establish an economic system with wide application of innovations, competitive production and the higest level of economic efficiency. So that, different state support measures will be implemented and relevant legislative framework will be developed to establish this kind of economic system. Because, closing the yields gap and increasing production and export volumes as consequence will require more capital-intensive agriculture.

Increasing of financial costs for application of scientific and technical achievements to production by agro industrial enterprises, also state subsidies in this direction can play important role in provison of competitiveness of these enterprises.

In line with that, strengthening the potential of small scale farms would increase their competitiveness. And this in its turn, would help to increase the level of employment, the incomes of the people as well as of the government, widen the export. Thus, formation of competitive producers will help the development of the sectore.

Also, to ensure the development of agro-industrial complex, the competitiveness of products and establishment of export oriented production it is necessary to improve standardization and certification activities and continue targeted actions in the country. State regulation and appropriate measures for stimulation of growth of competitive production, modernization are of highest importance. Especially, formation of national brends, increasement of export opportunities of agricultural products, establishment of samll processing enterprises, establishment of the whole processing network around the country should be supported.

6.4. Growth attractiveness for specific commodities

There are suitable opportunities to develop agriculture in the regions of Azerbaijan. For example, there are good opportunities to increase the production and exportation of citrus fruits (mandarin, lemon, kiwi, pineapple and so on.) in Lankaran-Astara region and appropriate measures should be taken. Development of export oriented processing industry will make it possible to diversify the exportation and access the markets not only in CIS countries also in EU and other parts of the world.

State support in stimulation of production of agro industrial products with comparative advantages should be strengthened in The Respublic of Azerbaijan. The activities to improve the legal framework for stimulation of ensuring sustainable development of agrarian sectore, increasement of competitiveness of agricultural products, solving the problems of the sectore and development of competitive environment, improvement of state support mechanisms should be continued. Solving the problems of rapid development of the producers will have positive impact on increasement of their competitiveness.

Plant growing sectore took a considerable share in total non-oil export according to the analyses of the data for 2008-2013. Fresh fruits, potato, tomato, cucumber and gherkins are of the most important products in export.

Production of competitive plant products is of priority for Azerbaijan. The researches show that plant products have good opprtunities to increase the competitiveness. According to this, the sown area and the level of yield of the plants with comparative advantage should be increased and the specialization issues should be paid more attention. Solving of these problems and sthrengthening of export potential is of vital importance for our republic. To reach this goal the complex of state support measures - stimulation of the production, increasing the competitiveness, subsidies for food supply of population by means of local production and export expansion, tax incentives, expansion of leasing services - should be continued.

The most important food products produced in Azerbaijan for the internal market are: fruits(apples, peaches, kurma, pomegranates, grapes, apricots, citrus), vegetables (tomatoes, cucumbers, cabbages, eggplants, sugar beet, onions), tubers (potatoes) and cereals (wheat). Azerbaijan exports fruits (apples, pomegranates, citrus), vegetables (tomatoes, cucumbers, cabbages), tubers (potatoes) and animal products (canned meat, eggs, wool and leather) and imports wheat, grapes (fresh and dry), maize, potato seeds, tobacco, strawberries, citrus. Agricultural production is somewhat specialized by region: the Northern region produces mainly apples, cucumbers, tomatoes; the Southern region produces potatoes, tomatoes, cucumbers, and citrus; while the region around Baku specializes in livestock and sheep.

Most products are produced by small and medium farms: cereals (97.2 percent) fruits and vegetables (99.4 percent), potatoes (99.8 percent), sheep, goats and cows (96.7 percent). The average farm in Azerbaijan is less than three hectares, has a few head of livestock and virtually no machinery or agricultural inputs. Many farmers have little or no farm management experience let alone knowledge about how to market their products. Farmers have concentrated on the production of fruits and vegetables, potatoes, grains and livestock products such as beef and milk.

Azerbaijan agricultural sector has a great potential for development, even if it still faces some important challenges. A major opportunity is represented by the steady increase in the export of fruits and vegetables to Russia in the past five years. Although the State statistics are not currently disaggregated by product, experts estimate that over 70 percent of the agricultural products are exported to Russia, with apples and persimmons alone accounting for approximately 65 percent of fruit exports, and greenhouse vegetables (mainly tomatoes and cucumbers) accounting for 45 percent of vegetable exports.

Despite these very positive results, some of the most pressing constraints include: small and scattered land plots and a fragmented farm system; limited use and access to fertilizers and irrigation technology; and limited access for small farmers to existing financing and leasing programs for agricultural inputs, including machinery. Complementary but serious issues are also the lack of business management know-how and experience, which go together with the lack of modern marketing skills and relatively weak links to the international markets.

Another important issue is the situation of the rural and productive infrastructure and equipment: outdated, dilapidated or non-existent equipment and technology; deteriorated irrigation systems; insufficient and high-cost refrigerated trucks; limited warehouse space , which plays against the possibility of taking advantage of seasonal variations in prices ; high cost and scarcity of raw materials and inputs (including good quality/high-yielding varieties and quality packaging materials and equipment).

7. RECOMMENDATIONS

Azerbaijan has taken further steps towards liberalizing its foreign trade regime and has adopted new legislation on patents, import and export activities, technical barriers to trade, sanitary and phytosanitary measures and services. However, it does not yet meet the relevant WTO requirements. The Customs Code was adopted in September 2011 and entered into force on 1 January 2012. It incorporates several best practices and generally complies with the EU Modernized Customs Code. All these developments will adjustments in the mandate and responsibilities of the Ministry of Agriculture, which will need to move away from just promoting production to supporting farmers and private sector in areas such as input supply, finance, marketing, agribusiness, farm management and post-harvest handling, as well as to facilitation of supply chains by supporting the role of the private sector. Opportunities to expand agricultural trade between EU and the Republic of Azerbaijan are as follows.

First, agricultural trade turnover between EU and Azerbaijan has dynamically increased during 2009-2013. But the scale of trade is far behind of potential. In line with that, the increase is mainly based on increase of import from EU. Second, increase in export from Azerbaijan to EU is closely connected to efficient use of opportunities to expand the sale of traditional export products – fresh fruits and vegetables, also processed products from fruits and vegetables. At present, export potential is on the way to increase due to establishment of different modern processing enterprises. Also, the policy of dvelopment of ecological agriculture has begone to be realized and in connection with this factor, the opportunities for exportation of “green” processed products is rapidly increasing. In order to use export opportunities to EU market, it is important to establish more susitable environment for bilateral trade through development of integration to EU. Due to continuation of modernization processes in agrarian sectore, means of production for agriculture (breed animals and birds, fertilizers, machinery and equipment for agriculture and food industry) is expected to be in the top of import list from EU to Azerbaijan.

Second, utilization of air transport needs to expand to export high quality farm products such as organic fresh fruits, vegetables to high-income markets including European countries, Singapore, China. Since Azerbaijan’s agricultural practices have somewhat advantageous characteristics of inputting large amount of organic rather than chemical fertilizer, it can produce various high-quality organic products with relatively low costs. Differences in transport costs between for land and airline may be partially supported by the government or export promotion institutions. The WTO also accepts the support for distribution expenses as permitted subsidies only for developing countries.

Numerous public institutions are involved in agricultural marketing: Ministry of Agriculture, Ministry of Economy and İndustry, State Land and Cartography Committee, Amelioration and Water Farm Joint Stock Company and Azerbaijan Export and Investment Promotion Foundation. However, there is a lack of coordination and information exchange among them.

The focus of agricultural policy and interventions being undertaken in Azerbaijan is targeting inefficiencies of market access by small farmers and food supply system. The Government has recently launched the initiative for establishment of so called “regional procurement centres” which should be based on private initiative and investment. This calls for the development of enabling conditions for farmers, peasants and individuals to address a range of constraints limiting agribusiness expansion, and relating to production, processing and marketing of agricultural products. This requires the promotion of agricultural value chains which in turns implies comprehensive value chain analysis, rapid market appraisals, strengthening of actors’ business linkages, improving agricultural services, review of legislation and regulations, building friendly business environments based on public private partnership of targeted value chains for fresh and processed products, accessing financing etc. In all of these measures, the MoA should play a coordinating role.

While MoA might face difficulties to perform alone comprehensive value chain analysis, they need this type of information to design proper policy and define support measures. It is therefore recommended to involve value chain stakeholders in the information collection, dissemination and policy design. The best positioned to implement value chain analysis work are experts and organisations involved in the sector, or in case of strong value chains or sector producer organisations. In developed countries the later often drive the whole process. In emerging countries the governmental organisations might still be the one needed to initiate and drive the process. To get all concerned departments on board, it is crucial that to establish the dialogue also with higher hierarchical strata who must be committed to ensure that all relevant departments fulfil the necessary tasks.

According to official information[16], as the result of the establishment of large farms, level of self provision grain production will increase for 70 percent in 2013 and they estimate that as a result of the establishment of 50 large farms of grain production in Azerbaijan self provision will be provided. But environmental issues have to be taken into consideration in the process of establishing large farms. Establishment of large farms with 200 thousand hectares of land in total on the bases of pastures and meadows can cause ecological and environmental problems which will be very serious for the future food security of Azerbaijan. Because, these lands are very sensitive and once they are damaged they can never be restored.

In line with the establishment of 50 large farms we should support development of small farms and increasing the investment component of the subsidies for small farms. The small farms produce more than 90% of agricultural output in Azerbaijan and they need support to achieve growth. Small farm support also contributes to the development of the rural areas through the reduction of poverty and food insecurity and the creation of jobs that will slow down rural migration. International evidence shows that if you provide the needed technology, information, infrastructure and services, small farmers are more efficient than large farms – especially in countries with high unemployment. Increasing the competitiveness of small farmers will therefore stimulate growth. Because the majority of the poor are small farmers, it will reduce poverty. Increasing incomes will reduce rural-urban migration and political instability.

Also there’s need for implementation of assessment of the results of subsidy policy implemented in agrarian sector.

- New subsidy mechanism must be applied. Because, per hectare approach is not suitable from the long term view;
- Improve the transparency of the subsidy mechanism;
- Average area of 42% of agricultural producers have 1-2 ha, 54% have 2-5 ha. This fact should be taken into consideration and technologies, support and markets that are relevant to small farmers put in place to help them to be more productive;
- The conceptual approach approved by FAO that includes access to food by all citizens should be accepted as a bases for food security policy;
- Using the elite seeds farms contribute the increase of grain production in the country and enhance the productivity;
- Also gives primary importance to increasing small and medium famers productivity and incomes, and strengthening processing and marketing capacities;
- Implementation policies that address the particular issues of the rural poor, so that the subsidies improve agricultural competitiveness and reduce rural poverty;
- Establishing effective information systems for production, food security, social support and markets;
- Improve food security decision-making.

[16] http://en.president.az/articles/7340

PROBLEMS	SOLUTIONS AND RECOMMENDATIONS
Low yield	To meet the increasing demand for plant products, production volume should be increased and this goal is planned to be reached by means of increasing the yield. For this pupose, it is intended to improve the ecosystem through efficient use of resources (land, water, climate, biodiversity etc.). Especially, implementation of measures to prevent the land degradation in Kur-Araz lowland, prevent erosion in mountainous and foothill areas, application of modern cultivation technologies, to return salinized soils to circulation by rehabilitation of collector-drainage network is included to future plans of the government. Exicting small scale farming system makes application of crop rotation system almost impossible. And this is one of the problems preventing efficient use of land resources. That's why there's urgent need for stimulation of cooperation of small scale farms under big farms. Equipment park renewal and improvement of the quality of services will be paid more attention in order to improve the level of technical provision of agriculture. Also, necessary steps will be taken to improve the insurance market. Measures will be taken to establish direct relations between producers and processors in order to solve the problems in marketing. Access of farmers to discounted credits will be improved.
Improvement of subsidy mechanism	Current subsidy system which is based on per hectare bases stimulates extensive development in the country. That's why the subsidy mechanism should be changed and be based on yield bases.
Low market access opportunities of the farmers.	It is intended to develop procurement rules and appropriate mechanisms for agricultural products, also establish fully equipped fairgrounds. Exicting storage and refrigeration network will be enlarged and the terms of use will be softened for the farmers.

8. CONCLUSION

Growth potential for Azerbaijani agriculture is considered huge as the country has abundant natural resources and manpower, and regards the agriculture as the core area in non-oil sectors. However, a number of weak points still exist. According to the Country Partnership Strategy for Azerbaijan prepared by the World Bank, the Azerbaijani agricultural sector has following problems: inefficiency in the legal and institutional system; constraints of market access from producers; and uncertainty of profitability for farmers due to agricultural product prices lower than production cost. All of these three issues are directly or indirectly connected to agricultural production.

Other factors that hamper the development of agricultural sector in Azerbaijan are poor management of farmland and grass land, underdeveloped agricultural infrastructure (namely for irrigation and drainage), weakness in the education and training system for agriculture, insufficient loan programs, and low quality agricultural materials such as seeds and machinery. Worse yet, the vulnerability of the country to climate change is also considered high as it suffers an increasing number of floods and drought.

Azerbaijan has favorable natural conditions (soil and climate) for raising livestock, as well as for producing high value products such as fruits, vegetables (both fresh and processed products) and dairy products. Therefore, Azerbaijan has a comparative advantage in their production and exports (World Bank, 2005). In particular, organic tomatoes, pomegranates, and hazelnuts have great potential. For hazelnuts, they are easily produced in mountainous areas.

Azerbaijan achieved a previously unparalleled economic growth in 2005 when the GDP increased by 26.4 percent owing to its oil and gas extraction and export. The growth rate continued to rise in 2006-2007. During 2005-2013 real GDP increased by 2.9 times, to $466, 63 billion and in per capita terms by more than 2.2 times, to $7,164 at current exchange rates. Likewise, the service sectors such as transport, communications and construction have seen high growth, just as the agricultural sector is having a relatively better development rate with a 36 percent growth in output between 2003 and 2013.

The sources of aggregate demand in Azerbaijan are oil exports and domestic consumption and investment, which have been supported by rising public spending. However, the projections on the medium-term show that oil production is expected to level off for several years, and decline thereafter in the absence of major new discoveries. Diversified development of the non-oil sector and non-oil export development will be critical for the generation of new jobs and the sustainability of the economy. Improved human capital will be also an important ingredient for the country's success and for diversifying its economy.

Agriculture remains a major pillar of Azerbaijan's economy, contributing substantially to its GDP (5 percent in 2013, down from 30 percent in 1991), providing employment and safety nets in rural areas (38 percent of total workforce in 2013) and bolstering international trade (second only to oil exports). Employment in the agriculture sector grew by 35 percent between 1995 and 2002, while it fell in the services and industrial sectors. This is largely explained by the land reform carried out in 1996, which distributed 1.3 million ha of agricultural land, livestock and property to rural residents, thereby creating 40 000 individual farms and 5 000 other farming units. Rural inhabitants produce 50 percent of the products they consume and 65 percent of poorer peasants rely entirely on their own production. With some 45 percent of the population living in rural areas, agriculture must play a key role in improving the living standards and in overcoming the food insecurity of the rural population.

The agriculture sector has good potential to make important contributions to economic growth, diversification, poverty reduction and employment creation in rural areas of Azerbaijan, but to realize this potential more must be done to improve markets in the country. A major challenge for Azerbaijan today is to diversify its economy away from oil and to spread the benefits of economic growth to rural areas. Agriculture can help the country to reach these goals because it is the largest economic sector in

Azerbaijan after oil, and is the largest employer in the country and contributing more than any other sector to poverty reduction in rural areas.

Overall, the increasing importance of internal supermarkets and other demanding buyers in food markets all over the world implies that Azerbaijan will be increasingly required to invest efforts for improving production standards and introducing modern management systems in agriculture. And this challenge appears even more relevant in relation to the planned membership to WTO.

Opportunities to expand agricultural trade between EU and the Republic of Azerbaijan

1) Agricultural trade turnover between EU and Azerbaijan has dinamically increased during last years (total value of trade on agricultural products and food, also means of production for agriculture increased for nearly 3 times in 2009-2013). But the scale of trade is far behind of potential. In line with that, the increase is mainly based on increase of import from EU.

2) Increase of export from Azerbaijan to EU is closely connected to efficient use of opportunities to expand the sale of traditional export products – fresh fruits and vegetables, also processed products from fruits and vegetables. At present, export potential is on the way to increase due to establishment of different modern processing enterprises. Also, the policy of dvelopment of ecological agriculture has begone to be realized and in connection with this factor, the opportunities for exportation of "green" processed products is rapidly increasing.

   To use export opportunities it is important to:

   a) Strengthen the marketing of Azerbaijan products in EU market;

   b) To establish more susitable environment for bilateral trade through development of integration to EU.

3) Increase of import of agricultural products and food from EU to Azerbaijan is mainly based on increase of import of cigarette. In line with that, livestock products (butter, cheese and cottage cheese, milk and cream) could be paid more attention as the products with high potential.

4) Due to continuation of modernization processes in agrarian sectore, means of production for agriculture (breed animals and birds, fertilizers, machinery and equipment for agriculture and food industry) is expected to be in the top of import list from EU to Azerbaijan.

5) Shifting-the-direction strategy includes not only a strategy for entering into the European market through Georgia and Turkey by using Baku-Tbilisi-Kars railway, which is supposed to be newly built to overcome drawbacks for being a land-locked country, but also a strategy for pioneering emerging markets adjacent to the Caspian Sea, such as Kazakhstan, and Turkmenistan. Especially, if fresh fruits and vegetables, which receive a high level of positive responses from consumers in the existing major export markets, are exported to these emerging markets, it is expected to have significant effects. Further, relevant systems and legislations need to be reformed to enjoy most favored nation (MFN) benefits by striking deals, which are currently in progress, for joining in the EU and WTO. Expansion of bilateral free trade agreement (FTA) with major countries can also contribute to promote export of agricultural commodities through the benefits from preferential tariffs.

To increase the role of agro-industrial sectore in national economy and ensure the future development, it is important to develop and implement the system of regulation measures. The following can be included into the system of measures:

- state regulation of prices in order to ensure equivalent commodity Exchange in agro-industrial complex;
- regulation of cooperation and integration relations in agro-industrial sectore;
- finalisation of formation of financial and credit system which will create suitable environment for perspective development of agriculture;
- continue to support agricultural producers with financial and technical resources;
- stimulation of application of scientific and technical achievements in agro-industrial sectore;
- development and application of necessary protection measures in order to avoid the problems and obstacles in marketing activities (for example: to establish nformation and consultancy service for consumers, special subsidies for keeping agricultural products in newly constructed strages and warehouses etc.);
- Increasing the efficiency of production by means of development of infrastructure elements in agrarian sectore etc.

In the end we would like to note that, according to the Presidental decree, 2015 has been declared The Year of Agriculture in Azerbaijan. And we think this factor will give extra opportunities to develop agriculture in all directions and solve the existing problems in the shortest period and in the most effective way.

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