1. Higher Education System in Syria - An Overview

Higher education is provided by Universities, Higher Institutes, and intermediate institutions of Professional and Technical training under the responsibility of the Ministry of Higher Education (MOHE). Except the four private universities just opened, all higher education institutions are state controlled and state financed. The main body responsible for overall policy concerning Teaching and Scientific Research is the Council for Higher Education, which consists of representatives of the universities, teachers and students, and of the Ministries of Education, Health, Planning and Higher Education. The Council coordinates higher education, teaching programmes and their relation to social and economic plans and takes decisions concerning equivalence of University Degrees.

Academic year:

Classes from: September to June

Languages of instruction: Arabic

Stages of studies:

Non-university level post-secondary studies (technical/vocational type):

Non-university level:

Technical and vocational Institutes, known as intermediate Institutes, offer post-Baccalaureate courses in Industry, Agriculture, Engineering, Medical Sciences, Economics, Administration, Teacher Training, Transport, Tourism, etc. Courses last two years after the Technical Baccalaureate. They award the Wathîqat Takharruj or Musaddiqat Takarruj Certificate (Associate Degree). Students are required to undertake one month of practical training during the summer vacation. The Supreme Council of intermediate Institutes is the responsible body

University level studies:

University level first stage: Licence/Bachelor:

The Licence/Bachelor Degree is awarded after four to six years study depending on the subject. In Arts, Humanities, Law, Islamic Law, Economics, Social Sciences and Fine Arts, studies last four years; in Engineering, Architecture, Agriculture, Pharmacy, Dentistry and Veterinary Science, five years. In the faculties of Engineering, including Architecture, the Licence is awarded on the

results of the final year examination and of a practical project. In Medicine, the Licence/Bachelor of Docteur en Médecine is awarded after six years, marking the end of the first stage of medical studies.

University level second stage: Master's Degree, Postgraduate Diploma:

. A Postgraduate Diploma of Higher Studies is conferred after one year's further study

The Master's Degree is awarded after a minimum of two years' study beyond the Diploma of
Higher Studies

University level third stage: Doctorate:

The highest University Degree. It is awarded after three years' study following the Master's Degree. It involves personal research work and the defence of a thesis.

Teacher education:

Training of primary/basic school teachers

Primary school teachers are trained at Teacher Training Schools, Teacher Training Intermediate Institutes and Sports Institutes where they obtain a Primary Teaching Certificate, Shahâdat Ahliyyat Al-Ta'lîm Al-Ibtidâ'I.

Training of secondary school teachers

Teachers for intermediate education who hold the Baccalaureate attend a two-year training course. Graduates may teach without special training. Secondary school teachers attend the Faculty of Education at the Universities. They must be Graduates. A Diploma and a Special Diploma in Education are conferred after one year's study. For subjects where there is a shortage, preparatory school teachers are trained in two-year courses at an intermediate Institution. Vocational secondary teachers must hold the Technical Baccalaureate and follow a two-year course at an intermediate Institution. As from 1997, Teachers and Teacher Assistants will be trained in the Faculties of Education.

Training of higher education teachers
Teachers must hold an MA or a PhD.

2. Admission to Higher Education

Admission to non university higher education studies

Name of secondary school credential required: Al-Shahâda Al-Thânawiyya Al-Fanniyya

For entry to: Institute of Technical Education

Admission to university-level studies

Name of secondary school credential required: Al Shahâda Al Thânawiyya Al'Amma

Alternatives to credentials: The top ranked two students of Al-Shahâda Al-Thânawiyya Al-

Fanniyya in each related fields.

Foreign students' admission

Admission requirements: Foreign students must hold a Secondary School Leaving Certificate or an equivalent qualification. Scholarships are granted. Information on accommodation and social services is available at all universities.

Entry regulations: Foreign Students must obtain visas from Syrian Embassies abroad, and a residence permit.

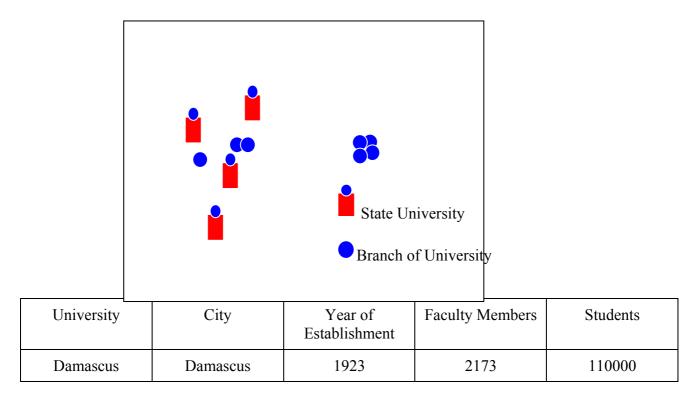
Health requirements: They should meet health requirements.

Language requirements: For foreign students whose language proficiency (Arabic) is insufficient, language courses are organized at the Language Center at each university. In foreign language sections, courses are in English or French.

3. Syrian Education Sector

To uphold the principle of equal opportunities, Syria has introduced free education at all levels, with access to higher education depending on the results obtained in the school-leaving examination. Technical and vocational training is strongly encouraged with large numbers of technical colleges recruiting school leavers, depending on their ages and results, with the objective of providing technical and vocational training for half of all school leavers. University Institutes of Technology (two years' higher education) take school leavers whose results are not high enough for university entry or who do not wish to continue with lengthy theoretical studies. Each of these institutes is under a ministry, depending on the field covered (National Education, Industry, Agriculture, Health etc.), but the majority come under the Ministry for Higher Education.

There are four main universities in Syria: Damascus University, Aleppo University, al Ba'ath University at Homs and Tichrine University at Lattakia. All four come under the Ministry for Higher Education, cover theory and practice in all fields and offer almost the same courses, with a few variations. Al Baath University, for example, is the only one with a petrochemical engineering faculty, since it is close to the top oil refinery in the country. There are also two management institutes providing continuous training for public sector management staff, one attached to Damascus University, the other to the Ministry for Industry.



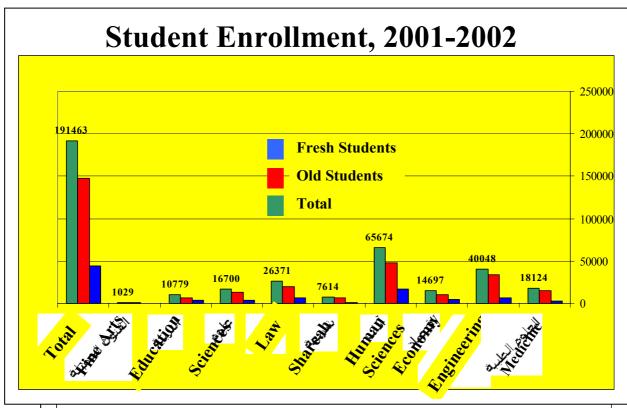
Aleppo	Aleppo	1958	1150	65000
Tishreen	Lattakieh	1971	892	40000
Al Baath	Homs	1979	525	30000

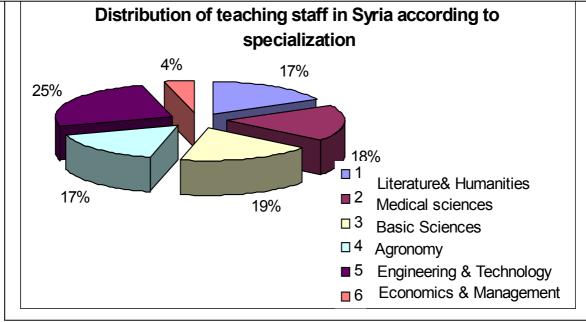
The Higher Institute of Applied Sciences and Technology (HIAST) is the only engineering college for elites in the country. It was set up in 1983, based on the French model, and has trained over 300 engineers in Europe, in co-operation with the leading French colleges in particular, after three years of preparatory classes in higher mathematics in Syria.

Recently, two important Higher Institutes were established:

- The Higher Institute for Business Administration (HIBA) established in Damascus with the help of the European Union,
- The Institut National d'Administration (INA) establishe in Damascus with the help of the French Governmebt.

The following tables present basic information about the aforementioned four universities and also about Intermediate institutes and vocational training institutes. Data also present information about the evolution of the Access of Syrian Students to National Institutions of Tertiary Education (Universities + Institutes) during the years 2001 and 2002.





Hospitals	Research Centers	Institutes	Stude nts	Teaching Staff	Faculties	YEAR OF ESTABLISHMENT	UNIVERSITY
AL ASSAD University Hospital AL Mowasst Hospital Childrens Hospital Maternity Hospital Nuclear Medicine Center Cardio Surgery center Skin and Venereal Diseases Hospital Oral Surgery Hospital Blood Transfusion Center	Strategic Research studies center Poisoning Struggle center- Center for the Treatment of Epilepsy Seismic Observation- Center For Land Sciences Center of Oncotherapy Demographic Research STUDIES CENTER	Laser Researches Institute Business Administration Institute Environment Researches Institute	87506	2173	Faculty Of Medicine Faculty Of Law Faculty Of Sciences Faculty Of Education Faculty Of Shari' a (Islamic Studies and Jurisprudence) Faculty Of Economics Faculty Of Civil Eng. Faculty Of Pharmacy Faculty Of Agriculture Faculty Of Fine Arts Faculty Of Mechanical Electrical Eng. Faculty Of Architecture Faculty Of Informatics Faculty Of Dentistry	1923	DAMASCUS UNIVERSITY

Hospitals	Research Centers	Institutes	Stude nts	Teaching Staff	Faculties	YEAR OF ESTABLISHMEN T	UNIVERSITY
ALEPPO University	Agricultural Researches Center	Institute For the	49089	1150	Faculty Of Civil Eng		
Hospital		History Of Arabic			Faculty Of Electrical and		
	Demographic Research	Science			Electronic Eng		
Alkindi Hospital	Studies Center				Faculty Of Architecture	1958	University of
					Faculty Of Mechanical Eng.		ALEPPO
Obstetrics and Genecology					Faculty Of Informatics		
Hospital					Faculty Of Agriculture		
					Faculty Of Medicine Faculty		
Al Bassel Cardiology					Of Dentistry Faculty Of		
Hospital					Pharmacy		
					Faculty Of Agriculture II in		
					DER EZZOR		
					Faculty Of Law		
					Faculty Of Sciences		
					Faculty Of Humanities		
					Faculty Of Economics		

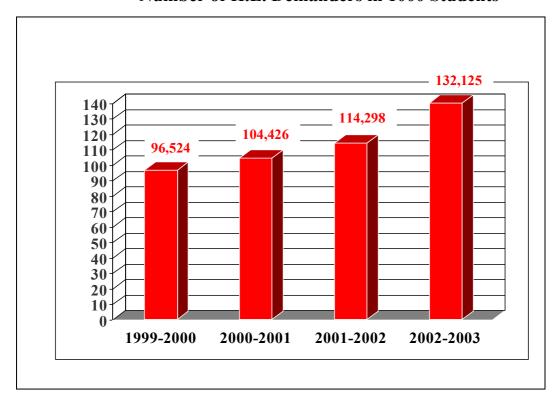
					Faculty Of Education		
Hospitals	Research Centers	Institutes	Stude nts	Teaching Staff	Faculties	YEAR OF ESTABLISHMEN T	UNIVERSITY
AL Assad University Hospital	Demographic Research STUDIES CENTER Research center for Oceanic Studies-	The Institute Of Marine Research	32848	892	Faculty Of Civil Eng. Faculty Of Mechanical and Electrical Eng. Faculty Of Architecture Faculty Of Informatics Faculty Of Education Faculty Of Agriculture Faculty Of Medicine Faculty Of Dentistry Faculty Of Pharmacy Faculty Of Nursery Faculty Of Sciences Faculty Of Humanities Faculty Of Economics Faculty Of Sport Education	1971	TISHREEN UNIVERSITY LATTAKIA

Hospitals	Research Centers	Institutes	Stude nts	Teaching Staff	Faculties	YEAR OF ESTABLISHMENT	UNIVERSITY
-	-	-	22020	525	Faculty Of Veterinary Faculty Of Petrochemical Eng Faculty Of Sciences Faculty Of Civil Eng. Faculty Of Dentistry Faculty Of Humanities Faculty Of Architecture Faculty Of Agriculture- Faculty Of Mechanical and Electrical Eng. Faculty Of Medicine Faculty Of Education Faculty Of Pharmacy	1979	ALBA'ATH UNIVERSITY

Country-wide Existing Technical Intermediate Institutes (TIIs) (Belonging to MHE. or other Ministries)

Institutes	City
Civil Engineering T.I.I- T.I.I for Mechanical & Electrical Engineering- T.I.I for dentistry- Commercial T.I.I- Agricultural T.I.I- Medical T.I.I- T.I.I for Commuter Engineering- Statistical T.I.I T.I.I. for Applied Arts- T.I.I. for Hostelry & Tourism- T.I.I. for Printing & Publishing- T.I.I. for Technical Auditors- T.I. for Chemical Industries- T.I.I. for Applied Industries- T.I.I. for Agro food- T.I.I. for Textile Industries- T.I.I. for Sanitary- T.I.I. for Electricity and Mechanics- T.I.I for Telecommunication- Financial T.I.I- T.I.I. for Archaeology & Museums	Damascus
Civil Engineering T.I.I- T.I.I for Mechanical & Electrical Engineering- T.I.I for dentistry- Commercial T.I.I- Agricultural T.I.I- Medical T.I.I- T.I.I for Commuter Engineering- T.I.I. for Hostelry & Tourism- T.I.I. for Technical Auditors- T.I. for Chemical Industries- T.I.I. for Applied Industries- T.I.I. for Textile Industries- T.I.I. for Sanitary- T.I.I. for Electricity and Mechanics- T.I.I. for Agricultural Mechanization- T.I.I. for railways	Aleppo
Civil Engineering T.I.I- Commercial T.I.I- Agricultural T.I.I- Medical T.I.I- T.I.I for Commuter Engineering- Statistical T.I.I. T.I.I. for Electricity and Mechanics- T.I.I. for Technical Auditors- Veterinary T.I.I- T.I.I. for Hostelry & Tourism	Latakia
Civil Engineering T.I.I- T.I.I for dentistry- Agricultural T.I.I- T.I.I for Commuter Engineering- T.I.I. for Technical Auditors- T.I.I. for Hostelry & Tourism- T.I.I. for Technical Auditors- T.I.I. for Agro food- T.I.I. for Sanitary- T.I.I.for Petrol and Minerals	Homs
Agricultural T.I.I- T.I.I. for Technical Auditors - Veterinary T.I.I	Hama
Commercial T.I.I - Agrichtural T.I.I- T.I.I for Comuter Engineering- Vetirinary T.I.I.	Idleb
Agrichtural T.I.I- T.I.I. for Hostelry & Tourism- T.I.I. for Technical Auditors-T.I.I. for Sanitary- T.I.I. for Maritime Transport	Tartous
Commercial T.I.I-Agrichtural T.I.I- T.I.I for Comuter Engineering- Vetirinary T.I.I- T.I.I. for Land Reclamation	Al- Rakka
Commercial T.I.I- Agrichtural T.I.I- T.I.I. for Sanitary- T.I.I. for Hostelry & Tourism- T.I.I. for Land Reclamation- Vetirinary T.I.I T.I.I. for Technical Auditors	Der- El-zor
Agricultural T.I.I. for Sanitary- T.I.I. for Petrol and Minerals- T.I.I. for Agricultural Machines- Vetirinary T.I.I.	Hasakeh
Commercial T.I.I- Agrichtural T.I.I- T.I.I. for Technical Auditors- T.I.I for Comuter Engineering	Dar'a
Agrichtural T.I.I	Sweida
Agricltural T.I.I	Quneitra

Number of H.E. Demanders in 1000 Students



Evolution of the Access of Syrian Students to National Institutions of Tertiary Education (Universities + Institutes), 2001 and 2002.

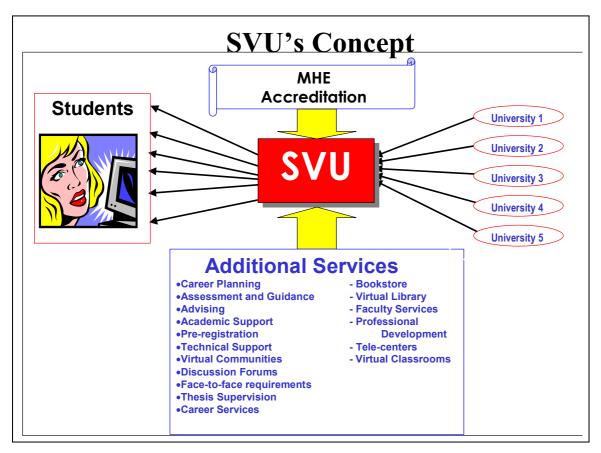
Enrollement Year	Damacus Univ	Aleppo Univ.	Tishreen Univ.	Al-Baáth Univ.	Technical Intermediate Institutes (M.H.E & others)	Total
2001 scientific	8895	7373	3534	2872	27384	50058
2001 Literature	6647	4282	3360	1638	29831	45758
Total Enrolment 2001	5542	11655	7894	4510	57215	95816
Non- Enrolled Students		Scientific: 966		Literat	8610	
2002 scientific	8021	7177	4184	2638	29284	51304
2002 Literature	6019	4364	3024	1474	29040	43921
Total Enrolment 2002	14040	11541	7208	4112	28330	95231
Non-enrolled Students		Scientific: 3246		Literati	ure: 15827	19067

4. The Syrian Virtual University (SVU)

In just eight months, the Ministry of Higher Education in Syria has built and opened the country's first electronic university. The new, state-owned institution, known as the Syrian Virtual University, has become operational since 2002 with an enrolment of 600.

The university is entirely online. Initially, the university will act as a clearinghouse for courses from 20 American and European universities it has signed agreements with, all accredited by the international accreditation associations and by the Ministry of Higher Education in Arab Republic of Syria. At a later stage, SVU is planning to have partnership with more than 40 accredited academic institutions.

The virtual university will concentrate on science, engineering, and information technology. While instruction will be in English and European languages at first, ambitious plans call for eventually franchising the university throughout the Middle East, with courses taught in Arabic or other regional languages.



5. The Syrian Higher Education and Research Network (SHERN)

The Ministry of Higher Education has launched in collaboration with the UNDP a project to establish a network connecting the Syrian universities called SHERN. The network is operational since 2002 and it includes the four Syrian universities and the Higher Institute of Applied Sciences and Technology, which all operate under the umbrella of the Ministry of Higher Education.

The underlying infrastructure of this local university network, which has its own gateway to the Internet, will lead to developing academic applications such as distance learning, and courseware content sharing and development, in addition to tele-working and scientific research.

The Main objective of the project was to create a starting base for connecting the four Syrian universities with the ministry of higher education and to create a self-riling Syrian team with the knowledge of implementing and configuring a project in the future.

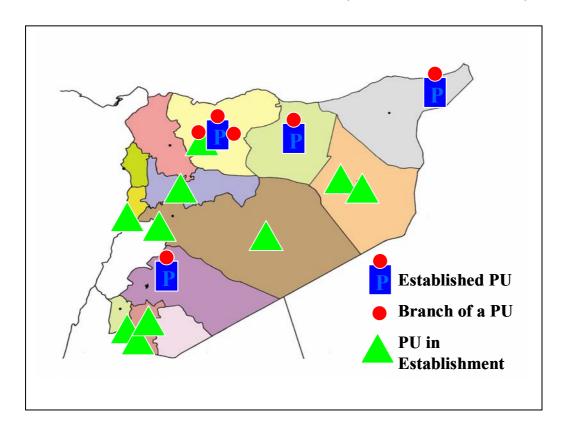
6. The Rise of Private Universities

Private universities are allowed in Syria since the 2001 when the legislative decree no 36 for which provides for organising private educational establishments for after secondary school learning has been issued.

It permits the establishment of private or joint venture educational establishments in the Syrian Arab republic that would contribute, together with Syrian standing state run universities and intermediate institutes to provide best education and contribute to raising the level of higher education, scientific research and increasing university learning opportunities.

As soon as the implementing regulations have been issued, there has been a rush of applications for establishing private universities. The following table shows the already established universities. More than ten other universities have applied to be licensed. They are shown on the geographical map.

7. Private Universities already established in Syria



University Name	Location	Faculties	Planned N° of students	Cooperation with	Start- up Date	Туре	Capital (in millions of \$)
University		Architecture	100				1.0
for Arts and	Aleppo	Archaeology	100	Free European University	2003	Private	10 (National)
Sciences		Fine Arts	100	omversity			(Ivational)
University		Business Administration	800	French Universities			
Al	Deir Atiaa	Informatics	500		2003	Private	10
Kalamoun		Engineering	1000	British Universities	_000	Tilvace	(National)
		Business Administration	1400	Sunderland Universities	2003	Private	12 (National)
Al-		Tourism	600	Universities			
Ma'amoun University	Kamishli,	Engineering & Technology	1300	American Universities			
for Science	Outskirts	Science	600	Universities			
& Technology	of Aleppo	Languages & Human Sciences	700	London City College			(Ivadional)
recimology		Fine Arts	400	College			
		Business Administration	800	Bently College			
Union		Advanced Agricultural Sciences	400	Victoria University of			20
University for Applied	Aleppo	Information Technology	750	Technology	2003	Private	30 (Foreign Investors)
Sciences		Engineering	1150	Polytechnique			111703(013)
		Management Sciences	700	de Lile			

8. Challenges Facing Syria's Higher Education System

The education sector in Syria, as shown by the exposed information, is facing several challenges. The system overall needs to tackle a number of issues:

- The enrolment trend shows how intense the pressure of numbers of students seeking admission to the university is. This may be the main reason for bringing in the private sector.
- The female segment of this pressure is significantly high
- Vertical expansion has taken place; it originally started in the humanities (literatures and law) but has now expanded into all fields including the sciences and engineering.
- The pressure on higher education is caused by several factors:
 - a) Bigger age cohorts,
 - b) Migration to the cities,
 - c) Larger portion of students, who pass the secondary school exams,
 - d) Fewer chances to study abroad (however, more than 4000 students go abroad each year) and,
 - e) The regulation to defer military service for university students
- Secondary school examination is of a general nature or is not much differentiated into concentrations or pre-specialisation fields of study, thus permitting the entry into the majority of higher education programs of persons who might ignore the requirements for success in the chosen field. This leaves the less selective programs, particularly in the humanities and social sciences, with huge numbers of unprepared students, most of them unable to succeed in the first year of study and who are stacked there for more than a year, thus increasing the institutions burden, repetition and drop out rate.
- Other factors worked for the detriment of quality and relevance of university education:
 - Universities stress rote learning and memorisation of facts and do not encourage creative thinking

- Poor mechanisms to systematically evaluate student learning outcomes.
- Employment and staffing policies in the sector mirror those of the public sector at large: overstaffing, promotion by years of service, and poor remuneration ultimately works to the detriment of education quality
- One of the problems in Syria, as in other developing countries, many young people are emerging from higher education institutions with no jobs to go to. Rigid labor markets and a failure to connect to global trade routes have led to relative isolation and economic stagnation in much of the Middle East. Having a lot of well-educated young people sitting around with nothing to do can be a recipe for unrest.
- ICT tools (PCs, networks, multimedia authoring tools, etc...) needed to build computer-based teaching systems are available to faculty, but systematic and continuous training that enables them to make effective use of these tools in building modern courses is highly needed.
- In spite of the availability of funding to acquire the needed hardware and software, there are other reasons abound for the delay in serious and large scale use of ICTs and integrating technology in the curriculum of most universities. These reasons include:
 - scarcity of local expertise
 - resistance to change at all level
 - lack of awareness to the benefits of these technologies

The Ministry of Higher Education's vision relative to the reform of higher education stems from the following main points:

- 1. Higher education is essential to promoting sustainable human development and economic growth. It is no longer a luxury that only rich countries can afford, but an absolute necessity for all countries, and especially for poor countries.
- 2. The pressures of globalization make it urgent that we devote substantially more resources to the tertiary education sector, and that we also reform it at both the level of individual institutions and the system as a whole.
- 3. Good ideas are not enough focusing on implementation is at least as important as policy design. The harsh realities of taking an idea to the field and bringing it to scale must be considered in the design of policy.

The prospects for modernization of higher education system in Syria are, however, good given the serious move that can be felt in higher education institutions to accelerate the pace of change. In effect, Syria has already started reforming rules and regulations, to pave the way toward modernization and development, stressing the role of education and developing human resources to be the turnkey of the comprehensive development and subsequent task in every sense. This pace of change could be particularly felt by the following measures already taken:

- A. Allowing Private Educational Establishments
- B. Opening the first internet university in the Arab world, The Syrian Virtual University, SVU
- C. Strengthening ICT infrastructure and related technologies for the creation of a conductive environment for the educational business development. This includes the establishment of network of higher education institutions (The Syrian Higher Education and Research Network, SHERN)

9. Reform Strategy

Main Objectives:

Create the appropriate conditions to improve the quality, relevance and efficiency of higher education in order to build the human and social capital required for economic growth and social development through achieving:

- a) Universal completion of compulsory education of **good quality**,
- b) Internationally **competitive performance** standards of learning achievement,
- c) Education system **effectiveness** in building human capital and engendering social cohesion to support the **development of knowledge-based economy**,

- d) Transparent information on education, and
- e) A sustainable financial foundation for education

Strategic Guidelines, Windows of Opportunities:

- Expansion of higher education coverage in a sustainable way:
 - o Review the criteria used for admission
 - o Diversification of programs
- Improvement of educational quality, competency and relevance
- Introduction of effective governance structures and management practices:
 - > Decentralization Policy
 - ➤ Autonomy of Universities
 - Incentives Mechanism
 - ➤ Allocation and exercise of authority
- Enhancing the quantity, quality and relevance of scientific, basic and applied research
- Promotion of entrepreneurship and innovation skills within graduates to stimulate their capabilities in self-job creation
- Creating the demand for graduates by diversification of programs both horizontally and vertically
- Establishing links between the dynamics governing higher education institutions and those governing employment market
- Diversifying the sources for financing and encouraging income generation
- Introducing fee-paying systems:
 - » "Parallel education"
 - » Open education
- Strengthening university-industry linkages and supporting joint actions between universities/research institutes and the private sectorEncouraging new players in higher education (Private Universities, foreign universities ...) Harnessing technology in education. Information and Communication Technologies (ICTs) are a Proven Tool for Speeding up Development and "leapfrogging" stages of development in higher education.
- joint-research programsMobility of students and Faculty Members
- Building solid and extensive database on the various elements

 Making information available to undertake quality assessment on the basis of transparency and accountability.

I