

DIFID-WB Collaboration on Knowledge and Skills in the New Economy

Skills for the Knowledge Economy

Issues and Challenges in VET Reform in the Middle East and North Africa

Lebanon Country Paper

September 2003

Table of Contents

Skills for the Knowledge Economy
Issues and Challenges in VET Reform
in the
Middle East and North Africa
Lebanon Country Paper

1. Introduction

Beginning in the late 1980's many of the economies of the Middle East and North Africa (MNA) region committed to far reaching programs of social and economic reform. Despite a measure of improved economic growth, significant challenges lie ahead. Integration with the global economy lags behind that of other regions, unemployment rates currently average more than 15%, with low female participation rates in the labor force. High population growth rates are leading to an expected growth rate in the labor force of between three to four percent per year during the period 2000 - 2010. This will result in a total of about 40 million net new entrants into the labor market in the MNA region. This expansion occurs in countries that continue to be characterized by large public sectors with centralized governments, large and overstaffed civil services, and lagging private sector investment. Within this context, the World Bank strategy for the region is built on the following five areas of focus:

- Public sector efficiency and governance
- Private sector development and employment creation
- Education for a global world
- Water
- Gender

In the areas of employment creation and education for a global world, the Bank recognizes that large resource allocations have not yet produced a competitive workforce, and that issues of quality, lifelong learning and appropriate vocational training are among key challenges.

During the past decade the World Bank has assisted several countries in the region to introduce different elements of reform designed to increase the quality, relevance and efficiency of their VET systems. These interventions, many of which are now coming to an end, have met with varying degrees of success in achieving their intended development objectives. The purpose of the current study, which is being undertaken in five countries in the MNA region, is to take stock of what has been achieved, bring focus to lessons learned, and to identify the broad axes for future intervention by the Bank or other donors.

The following paper provides an assessment of the current status and future directions for VET in Lebanon. Recognizing that Lebanon is still emerging from a

post conflict situation that defines the social, institutional, and economic context for change and development, the paper opens with a description of the country background within which the VET system is presently developing. This is followed in Chapter 3 by information on the characteristics of the labor market in Lebanon that the system is designed to serve.

Chapter 4 provides information on the structure and current status of the VET system in Lebanon in terms of the mandate and structure of the Directorate General of Vocational and Technical Education (DGVTE); the activities of non-governmental VET providers; details of the vocational program framework; instructor profiles; facilities and equipment; and, labor market linkages.

Chapter 5 focuses on governance, policy and planning. Information is provided on the legislative framework, advisory bodies and institutional arrangements within which the system currently operates. This is followed by a description of recent initiatives to establish a strategic framework and planning capacity that would guide future development. The chapter concludes with commentary on the current status and future plans as they relate to priorities for future interventions.

Chapter 6 addresses the issue of VET system financing in Lebanon. Total public expenditure and anticipated expenditure trends are outlined, together with a description of financial resource allocation and cost recovery procedures. This chapter also concludes with commentary on the implications of current trends, and a discussion of options to enhance the efficiency of VET financing in Lebanon.

Chapter 7 provides a review of VET training program quality and relevance in Lebanon. This includes a description of recent initiatives designed to enhance labor market linkages; develop competency profiles upon which to build curricula and related learning resource materials; increase the efficiency of evaluating learning outcomes; and, improve facilities, equipment and the quality of instructional staff. An assessment of the external efficiency of the present system is also provided through information on a recently completed series of comprehensive tracer studies.

The final chapter of the document places the VET system in Lebanon within the wider context of a human capital development strategy for the country. This includes the presentation of a generic Human Capital Development System Diagram, together with an analysis of the current status of system development in Lebanon. This analysis provides clear directions for future VET interventions for the country.

2. Country Context

This section of the document provides a macro level overview of the external environment within which the VET system in Lebanon is situated. The purpose of the section is to provide a sketch of those characteristics that would need to be taken into account for the success of future interventions in the sector.

Geography

Lebanon is set geographically between the three continents of Europe, Africa and Asia, bordering the eastern shore of the Mediterranean Sea. Located between Israel and Syria, Lebanon has a total land area of 10,230 sq km, including a narrow coastal plain and two parallel north/south mountain ranges separated by the fertile Bekaa valley. The climate has mild to cool, wet winters with hot dry summers. Mountain areas experience heavy winter snows.

History

Lebanon has been inhabited for some 200,000 years. First traces of settlement by the Phoenicians have been dated at around 3000 BCE. The country was subsequently invaded by the Amorites, Egyptians, Persians, and Romans. Between the 9th and 11th centuries Lebanon became divided between two crusader kingdoms, the one of Tripoli and the one of Jerusalem. This period gave strength to the Maronite Christians who entered into a union with the Church of Rome. During the 12th century, a Muslim re-conquest began, leading in the 13th century to the country being controlled by the Egyptian rulers, the Mamluks. During the 16th century, Lebanon was taken over by the Ottomans. A civil war in 1858 resulted in much bloodshed with the Druze finally taking a dominant position in society.

In 1926, the Republic of Lebanon came under French protection with political power being divided between Shi'is, Sunnis and Christians. This situation prevailed until 1944 when the French government in London recognized Lebanese independence, leading to a period of further political turbulence both internally and with neighboring countries in the region. It is the complexities of this history that finally culminated in 1975 in civil war between the Muslims and Maronite Christians.

Socio-Political Context

Although the civil war ended in 1991, the confessional, regional, feudal and cultural frictions that caused the war remain. The political accommodation imposed by Syria at Ta'if, in 1989, produced an executive power-sharing troika based on confession as it's parliamentary representation. The constitution of Lebanon currently divides power between the Shi'is, the Sunnis, and the Maronite Christians. The President is always a Maronite Christian, the Prime Minister a Sunni Muslim, and the Speaker of the National Assembly, a Shi'i Muslim. The National Assembly has 128 seats, which are filled by free elections

every four years. These seats are however distributed in advance between the different religious groups as follows:

Maronite Catholics	34
Sunni Muslims	27
Shi'i Muslims	27
Greek Orthodox	14
Druze	8
Armenian Orthodox	5
Greek-Melkite	
Catholics	5
Alawites	2
Armenian Catholics	1
Protestants	1
Other	1
Total	128

At the present time, social and political stability is achieved through maintenance of this confessional balance in all aspects of political and institutional life. It is this factor that has become the defining characteristic and, in many cases a defining constraint, to institutional change and development.

Economy

Prior to the civil war, Lebanon enjoyed a burgeoning economy, increasingly based on services, banking and tourism, with some light industry and an indigenous agriculture sector. Sustained economic growth had created a large middle class and the demographics of Lebanon were increasingly reflective of European Mediterranean countries, resulting in 1974 in a per capita income equivalent to that of Portugal. The war and its effects initially destroyed the tourism sector, severely depressed industry and agriculture, and resulted in a high level of emigration of the middle class. During this period, the hostilities left massive destruction of infrastructure and housing, and weakened institutions. By 1990 per capita income had fallen by two thirds in real terms, and stood at US\$1,000, one seventh of that of Portugal.

This situation left the new government with the massive task of social, institutional, and economic reconstruction. By 2000, Lebanon's war-damaged physical infrastructure had been substantially reconstructed, public services were operating, basic education and health care were being provided and internal security was fully restored. Real GDP had almost doubled from the post-war level. During the latter part of the decade however, the economic situation worsened with the overall deficit in 2000, reaching almost 25% of GDP and the public debt one and a half times Lebanon's GDP. This situation has resulted in low levels of private sector confidence and investment, and high interest rates, thus depressing economic growth. Against this background, the government

established in the year 2000, a comprehensive strategy to resolve the debt dilemma through sustained domestic effort and external support. At the domestic level, public expenditure constraint has resulted in a freeze on public service hiring thus limiting the potential for institutional development and reform.

Fiscal developments and public debt for the period 2000-2002, together with the budget for 2003 are shown in Table 1 on page 6.

Major sectors of the economy can currently be characterized as follows:

- **Services**

The Lebanese economy is based primarily on the service sector, which accounts for approximately 60% of GDP. Major sub-sectors are commerce, tourism and financial services. Other components include health care and higher education.

- **Financial Services**

Currently, the main financial services offered are commercial banking, investment banking and insurance. Since 1992, the banking sector has witnessed unprecedented growth with commercial banks increasing deposits from US\$6.5 billion in 1992 to US\$33.9 billion in 1999. Government has adopted a strategy designed to widen and deepen the financial services sector through the establishment of a facilitative regulatory framework. Several commercial banks have recently established investment banking services including debt and equity raising and corporate finance advisory services. The government reopened the Beirut Stock Exchange in 1996.

- **Commerce**

The port of Beirut plays an important role in Lebanon's commercial activities. After World War II, Beirut became the most important Arab port on the Eastern Mediterranean serving the Arab world. A free-port area for re-exports added to Beirut's success. During the civil war, the Port of Beirut virtually closed down and related commerce ground to a halt. Work has now been completed on the reconstruction of the Duty Free Zone to restore its pre-war capacity and a project for the rehabilitation and expansion of the Port of Beirut is underway.

- **Tourism**

The strategic position of Lebanon together with its mild climate and natural beauty make it an attractive tourist destination. Significant private investment is currently being made in the modernization and expansion of the sector. The global political climate has resulted in a significant increase in tourists from the region. The sector also benefits from the large number of Lebanese living abroad who return regularly to the country during the summer season.

- **Construction**

The post-conflict era has witnessed a significant boom in construction, fueled by a mixture of local, expatriate and Gulf Arab funds. Real estate prices have risen steeply with residential construction concentrated mostly at the upper end of the housing market. The market has recently cooled as witnessed by decreasing cement deliveries and the associated number of construction projects.

Table 1
Fiscal Developments and Public Debt 2000-2002 and Budget 2003

	2002	2001	2002 Jan-Sept	2002 Estimate	2003 Projected
Fiscal Development					
<u>% of GDP</u>					
Revenue and Grants	19.6	18.7	22.3	22.3	23.7
Tax Revenue	11.9	11.8	15.4	15.6	16.1
Non-Tax Revenue	7.3	6.7	6.9	6.7	7.6
Grants	0.4	0.1	0.0	0.0	0.0
Expenditures	44.2	38.1	36.9	37.9	32.4
Non-Interest	27.2	20.9	20.1	19.7	19.5
Interest	17.0	17.2	16.8	18.2	12.6
Primary Balance	-7.6	-2.3	2.2	2.6	4.2
Overall Deficit	-24.6	-19.4	-14.6	-15.6	-8.4
Public Debt					
<u>US\$ Billion</u>					
Domestic Currency Debt (net) ^a	15.7	16.8	17.3		
Domestic Currency Debt (gross)	17.4	18.1	18.6		
Banks and Private Sector	14.5	11.9	12.7		
Public Sector	3.0	6.2	5.9		
BdL	1.1	4.1	3.8		
Other	1.8	2.0	2.1		
Public Sector Deposits	-1.7	-1.3	-1.3		
Foreign Currency Debt	7.5	10.3	12.3		
Official Creditors	1.7	1.8	1.8		
Other ^b	5.8	8.5	10.5		
Total Public Debt (net), Incl. Accr. Interest	23.2	27.0	29.6	30.7	25.0
Total Public Debt (net) ^c				30.0	24.7
<u>% of GDP</u>					
Domestic Currency Debt (net)	95.7	100.8	100.9		
Foreign Currency Debt	45.9	61.6	71.9		
o/w Official Creditors	10.6	10.6	10.7		
Total Public Debt (net)	141.6	162.4	172.8	173.0	135.8
<u>Composition (%)</u>					
Domestic Currency Debt (net)	67.6	62.1	58.4		
Foreign Currency Debt	32.4	37.9	41.6		
o/w Official Creditors	7.5	6.6	6.2		
Total Public Debt (net)	100.0	100.0	100.0		
<p>(a) The net domestic debt equals gross domestic debt less Government deposits with the BdL and commercial banks. It includes accrued interest on discount Treasury bills.</p> <p>(b) This includes about US\$1.0 billion in Eurobonds held by BdL at end September 2002.</p> <p>(c) Excluding accrued interest on discount Treasury bills.</p>					

Source: Lebanon: Paris II Meeting: "Beyond Reconstruction and Recovery-Towards Sustainable Growth.

- **Industry**

The industrial sector is primarily concentrated in the production of furniture, paper, detergents, pharmaceuticals, cosmetics, cement, garments and processed foods. Virtually all industry is privately owned and while government is attempting to promote investment through fiscal incentives in the form of reduced customs duties and tax exemptions, the private sector continues to regard the complexities of the administrative environment a serious disincentive.

- **Agriculture**

Approximately one third of Lebanon is considered to be arable with the most fertile areas being located along the coastal strip and the Bekaa valley. Cultivation includes a wide variety of vegetables, fruits, industrial crops and cereals. Agriculture currently contributes approximately 12% to GDP and about 10% of merchandise export earnings.

Country Context Summary

It can be observed from the foregoing paragraphs that there are a number of characteristics of the macro external environment within which the VET sector is situated, that need to be recognized in shaping future interventions. These include:

- A society and economy still emerging from a post-conflict situation where there are many more demands than available resources, and where reconstruction has taken precedence over development
- A modest natural resource base to fuel growth and development
- A society where the primary determinant of stability in government and the bureaucracy is the maintenance of confessional balance, leading to constraints in merit based appointments.
- Public institutions that are not performance based, and who have low potential for growth as a result of the emigration of many experienced professionals, high degrees of regulation, and a public sector hiring freeze
- Limited potential for new public sector investment until the current fiscal imbalance is addressed and new sources of investment found

3. Employment and Labor Market Information

Recognizing that the primary objective of vocational education and training is "skilling for employment", it is important that any discussion of VET should be cast in the context of the current and projected labor demand in the country. This section of the document provides information on employment in Lebanon, and the current stage of development of labor market information systems in the country, together with an assessment of future employment demand.

Information Sources

Information regarding the structure and dynamics of the labor market in Lebanon is fragmented and irregular in collection and analysis. The following agencies are engaged in the assembly of labor market data:

National Employment Office

The National Employment Office (NEO) is the lead agency for the collection, analysis and distribution of labor market information in Lebanon. NEO was established under Decree 77/80 as a semi-autonomous body governed by a Board of Directors chaired by the Minister of Labor. Other Board members include representatives from education, employers and unions. Functions of the National Employment Office include:

- The conduct of labor market studies and research
- Facilitating the establishment of employment policy
- Improving the quality of labor market entrants through accelerated vocational training
- Operating Employment Bureaus for job seekers
- Provision of training for the disabled

With respect to manpower statistics, NEO has undertaken the following:

- Adopted the 1988 Arab Standard for Occupational Classification as the framework for all data collection. This is currently under revision in accordance with the 1998 international occupational classification standard. Employment statistics are currently collected at the four digit level.
- Collaborated with ILO and UNDP in 1997 in undertaking a survey and analysis of unemployment issues in Lebanon.
- Collaborated with ESCWA on a study to evaluate linkages between higher education and the labor market in Lebanon
- Conducted a survey of labor market status and needs in 1997 in collaboration with ILO and UNDP
- Updated the 1997 survey in 2000 in collaboration with ILO and UNDP

Educational Center for Research and Development

The Educational Center for Research and Development (ECRD) was similarly established in 1971 as a semi autonomous body under the jurisdiction of the Ministry of Education and Higher Education with a mandate to participate in the formulation of education policy, planning, curriculum development, evaluation and research. This mandate includes the generation of statistics regarding all aspects of pre-university education. This latter activity provides a body of knowledge regarding the supply side of the human capital equation.

Central Statistics Administration

The Central Statistics Administration (CSA) was created in 1959 as a function of the Ministry of Planning, reporting to the Council of Ministers. As the national statistics agency, CSA generates monthly reports relating to many aspects of society and economy including such things as finance, imports, exports, transport, construction etc. One important missing element in terms of human capital planning and development however, is the absence of current demographic data as the last official census was undertaken in 1932. While this

fact is linked to the need to the confessional balance issue, it continues to represent an important constraint to many aspects of national planning.

Of relevance to the current study, the CSA using the best available data, analyzed a survey conducted by the Ministry of Social Affairs regarding demographic distribution, which was undertaken undertaken with UNDP assistance. This analysis, together with an employment survey undertaken by ONE with the assistance of ILO, was used then used to estimate employment supply for the period 1999 to 2002. These data are used in the discussion regarding the labor market in Lebanon provided at the end of this section of the report.

Line Ministries

Some information relating to employment in a number of economic sectors is available on a limited and sporadic basis from the respective line ministries.

These include:

- Ministry of Industry,
- Ministry of Tourism
- Ministry of Agriculture
- Ministry of Health
- Ministry of Finance
- Ministry of Transport
- Ministry of Social Affairs
- Ministry of Finance

While it is possible to garner incomplete quantitative and qualitative snapshots of the status of human resources from the publications of the foregoing ministries, data is not collected against a standard taxonomy, or with any frequency that would allow any form of trend analysis.

Other Sources

Other potential non-government sources of labor market information include, employer associations, unions, professional associations, and occasional academic research studies. While the primary interest of employer associations relates to the creation of an open and efficient climate for investment, production and export, they are nevertheless acutely aware of the need to build effective human resource policies, including labor market information systems. This however is not their primary mandate and, in consequence, much of the information available from employer associations is either perceptual, anecdotal or incomplete. Similarly, the primary interest of unions is the furtherance of the interests of the membership, and while some labor market indicators could be drawn from their statistics, they are of limited value for national planning. Further discussion of a potentially more effective partnership between government, employers and unions is provided in Chapter 8 of the report.

A Labor Market Supply Demand Scenario

As noted earlier in the text, while recognizing gaps in all sources, the most definitive and reliable data regarding labor market supply and demand are to be found in the following:

- Ministry of Social Affairs study regarding population trends undertaken in 1994/95. This study received criticism from a number of sources and was subsequently revised in 1997 by CSA. Data subsequently used in this report is based on the CSA re-analysis.
- On the supply side, statistics on graduates up to the present time are based on actual data provided by DGVTE. Projections are based on estimates associated with the projected expansion of the VET system
- Employment levels and the structure of the labor market is based on the 1997 ONE survey. While the 2000 survey is more current, this survey was less extensive in the number of enterprises surveyed, and lower geographic coverage. This latter survey covered only 17 sectors of the economy as opposed to 33 in 1997.

Using the above data, the following analysis represents a potential supply demand scenario for the period 1997 to 2010:

Population

The following table provides estimates of total population and population distribution as projected by the NSA re-analysis of MOSA data.

Table 2
Population Distribution by Age and Sex

Age	Men	Women	Total
0-4	162,663	157,820	320,483
5-9	205,102	187,627	392,729
10-14	209,895	195,016	404,911
15-19	224,973	214,987	439,960
20-24	211,942	185,031	396,973
25-29	179,838	181,186	361,024
30-34	149,732	169,653	319,385
35-39	122,572	142,493	265,065
40-44	96,210	110,989	207,199
45-49	88,571	95,162	183,733
50-54	82,630	84,028	166,658
55-59	74,791	71,596	146,387
60-64	67,951	63,957	131,908
65-69	53,273	50,527	103,800
70 and over	78,286	77,238	155,524
Unknown	3,295	5,991	9,286
Total	2,011,724	1,993,301	4,005,025

Source: Ministry of Social Affairs

Based on the current population growth rate of 1.4%, the total population may be expected to reach 4.72 million by 2010.

Enrolment levels in VET

The following table shows the actual levels of VET enrolment for 1997 to 2002, and projected level for 2010 based on the increased availability of places arising from the construction of an additional 50 schools over the next ten years.

Table 3
Projected Enrolment Levels in Public and Private VET Schools in Lebanon
1997 to 2010

School Year	Public VET School Enrolment	Private VET School Enrolment	Total VET Enrolment	% Distribution Public/Private Enrolment
1997/98	16,284	29,700	45,984	35.4
1998/99	17,582	33,097	50,679	34.7
1999/00	18,448	47,560	66,008	27.9
2000/01	21,743	56,174	77,917	27.9
2001/02	25,918	56,729	82,647	31.4
2002/03	30,897	47,800	78,697	39.3
2009/2010	60,000	30,000	90,000	66.6

Source: DGVTE

Note: The 2009/2010 enrolment levels are indicative only. As noted above, inflows into public VET are based on the government policy objective to enroll 50% of secondary level students into technical vocational education. These projected enrolment levels are also based on the increase in seat availability associated with the ongoing construction of new VET schools. Similarly, while a redistribution of flows into public and private schools can be assumed on the basis of seat availability in public schools, this can not be predicted with any reliability.

Graduates from VET

Based on the current program framework initial vocational training (ISCED-2) lasts one year with BT (ISCED-3) and LT (ISCED-4) each lasting three years. Assuming that 40% of new VET students would be channeled into vocational training this would provide by 2010, an annual output of 36,000 students at the ISCED 2 level, and a cumulative total of 18,000 students per year at the ISCED 3 and 4 levels. This would result in a total annual output of 54,000 new entrants into the labor force.

Labor Market Demand

Based on the 1997 ONE/ILO survey, the total breakdown of workers by economic sector and regional distribution is as shown in Table 4.

Table 4
Distribution of Workforce by Economic Sector
and Geographic Region

Sector of Activity	Beirut	Greater Beirut	Rem. Mount-Lebanon	North Lebanon	South Lebanon	Nabatieh	Bakaa	Total Lebanon
Men and Women								
Agriculture & Fisheries	...	1747	10,582	32,844	22,561	13,028	30,847	111,806
Mining	...	...	...	2,096	...	...	...	4,941
Industry	16,819	58,998	25,706	29,449	15,024	8,735	15,873	170,603
Electricity, gas & Water	...	...	2,047	...	...	...	...	7,038
Construction	9,484	28,750	30,448	23,110	20,015	12,827	14,375	139,008
Commerce	35,887	73,623	42,627	46,619	32,394	16,521	30,796	278,466
Hotels & restaurants	4,343	8,535	6,938	5,041	3,045	...	4,892	34,091
Transport & communications	7,138	17,770	12,029	12,529	6,489	3,145	7,238	66,335
Financial brokerage	7,737	7,787	5,990	1,847	...	...	1,747	26,704
Business services	10,682	14,126	11,980	5,391	2,945	...	2,945	49,364
Public administration	9,233	24,308	17,869	23,460	6,838	5,341	18,668	105,716
Education	13,626	23,409	17,769	21,314	11,430	7,936	11,430	106,914
Health & social work	6,938	10,582	7,038	5,840	5,341	2,047	3,644	41,428
Other services	6,489	13,926	7,537	6,489	3,394	...	3,244	42,276
Domestic services	17,919	15,074	8,835	4,193	4,492	...	2,695	54,655
International Bodies	...	...	...	...	...	...	...	4,043
Unknown	...	...	...	...	...	...	...	2,785
Total	148,197	302,134	208,644	222,221	137,815	75,721	151,442	1,246,173

Source: ONE/ILO

Based on the same survey, a distribution of employment by occupation and qualification level is as shown in Table 5.

Table 5
% Distribution of Workforce by Occupation and Level of Qualification

Occupation	% of the Active Population	Qualification Level (ISCED)
Senior Managers and Proprietors	15.0	5
Specialists	14.1	4
Intermediate Occupations	15.1	3
Clerical Employees	27.6	3
Service and Sales Staff	0.8	3
Agriculture and Skilled Workers	0.1	2
Craftsmen and Manual Workers	11.0	2
Machine Operators	7.4	1
Unskilled Employees	8.9	1

Other findings arising from the 1997 employment survey showed that the potential rate of new employment creation across all sectors of the economy was expected to average 1.69%. Similarly, the replacement coefficient arising from retirement, illness, incapacity etc. was estimated to be 1.8%. This would lead to a projected annual employment demand by 2010 of approximately 56,000 new and replacement workers. Based on the foregoing macro-analysis, there would appear to be a measure of equilibrium between the projected employment demand and the proposed increased supply of new graduates from the expanded VET system. This conclusion should however be treated with extreme caution. This is due to the fact that the analysis is founded on a single survey, and that the level of data available does not allow detailed supply/demand comparisons between demographics, the enrolment and output from individual program specializations, and the specific occupational and skill requirements of the labor market.

The Syrian Factor

A further issue that has to be taken into account when using labor market data as an input into VET policy and planning is the Syrian factor. As Lebanon's post-war construction boom gained steam in the early 1990's, a variety of agreements were implemented which resulted in the unrecorded entry of many Syrian workers into Lebanon. Under these agreements, Syrian workers do not have to pay for work permits or to pay taxes. Economist Marwan Iskander, who has produced annual reports on the Lebanese economy for the past 18 years, has estimated the number of Syrian workers in Lebanon at about 1.4 million. The Syrian workforce is estimated to be roughly distributed as follows: construction (39%), seasonal agriculture (33%), municipal and sanitation work (20%), services (8%), and industry (2%).

The impact of this issue on Lebanese employment is significant. Since Syria's per capita GNP is less than a third of Lebanon's, Syrian workers are prepared to work for wages that are extremely low by Lebanese standards. In some sectors of the economy, a high percentage of employers have used this situation to avoid paying minimum wages, and to evade the social security system. This results in a large pool of abnormally cheap labor, driving up the level of unemployment amongst working class Lebanese. Efforts were made in 1998 to address this situation through the introduction of a regulation requiring employers to provide health, accident and life insurance to all foreign workers. In order to obtain or renew work permits, non-Lebanese would be required to provide proof that they had insurance. According to the Central Statistics Administration however only 530 Syrians were issued work permits in 1999, indicating a low level of enforcement. While this is clearly a political issue, as opposed to a planning issue, pragmatic recognition of the fact is required when investing public funds in the delivery of training programs targeted at entry level employment in the lower skill domains of the labor market.

Emigration

A concluding factor that impacts on the labor market in Lebanon is that of emigration. Lebanese have traditionally been a highly mobile society, seeking opportunity wherever it may be found. Rates of emigration however fluctuate as a function of internal conditions in the country. Many Lebanese left the country during the civil war and are now established in other parts of the world. During the construction boom years in the Gulf countries, others left Lebanon in pursuit of higher wages. This phenomenon has once again increased as a result of economic stagnation, with many young males in particular leaving the country. (There are now an estimated 11 males in the 25 to 35 year age group, for every 20 females) Emigration is most prevalent amongst those who have either economic mobility or skill mobility, resulting in a loss to the country of both financial and human capital. In the VET context, those having BT, TS and higher skills are those who potentially have skill related mobility and in consequence are more likely to be lost to the domestic labor force.

Labor Market Information Summary

In the design of future VET interventions in Lebanon, the following issues are of relevance:

- A national occupational classification system has been adopted in Lebanon but is not being consistently used by all public and private employers, resulting in inconsistencies in the labor market information that does exist. Efforts to expand country-wide adoption of the occupational classification system should be encouraged.
- An agency (ONE) is in place with a mandate to develop and operate a national labor market information system. This agency is however not resourced in a manner sufficient to fulfill it's mandate, and has relied upon

sporadic external assistance to undertake employment surveys. Strengthening the capacity of ONE to undertake all functions associated with an effective labor market observatory should be considered a priority. Such an observatory has the potential to demonstrate clear economic benefit in guiding future investments in human capital development.

- All current information regarding the labor market is essentially quantitative. Additional qualitative information is required for the design and delivery of relevant VET programming. An effective approach to enhancing both the quantitative and qualitative information regarding those segments of the labor market directly served by the VET systems is the establishment of mini observatory units within each of the VET schools. These units would be coordinated nationally but would be responsible for undertaking tracer studies, maintaining contact with employers within their catchment area, to assess employment demands and trends, facilitate occupational profiling as a support to DACUM initiatives, and identify needs for in-service upgrading amongst the present workforce.
- In order to ensure a positive rate of return on VET investments, mechanisms need to be built that effectively engage government, education and training providers, and the entire employer community in a dialogue that focuses at the national level on both human resource policy, planning and programming. This issue is further discussed in Section 8 of the report.

4. Structure of Education and the Current Status of VTE in Lebanon

Lebanon has a long tradition of education through local institutions and various foreign religious missions. As a former regional and cultural trading center, Lebanon used to be considered "the classroom of the Middle East" attracting local and expatriate students to both secondary schools and universities from all the countries of the Arabian gulf, middle East and North Africa. Since the civil war however, Lebanon's public and private educational institutions have deteriorated and are struggling to maintain basic standards.

The following section of the report provides an overview of the current status of the education system in Lebanon, together with details on the structure and status of VTE in the country.

The Education Ladder

Lebanon's school system is based on the French Baccalaureate system with some adjustments to accommodate local culture. Public education is compulsory at the primary level only.

The education ladder comprises the following four parts:

- Primary education of six years duration is free and compulsory for children aged between 6 to 11 years

- Intermediate education of three years duration is provided free to children aged 12 to 15 years
- Secondary education of three years duration which provides the choice of an academic track or a vocational track
- Higher education

At the end of each of the last two years of the secondary cycle, students sit for government administered Baccalaureate examinations, similar to the French system. Successful completion of Baccalaureate exams is required for entry into Lebanese universities.

During 2002, Lebanon had a total of 2,677 schools of which 1,324 were public, 1,353 private, and 381 religious or other specialty schools. Approximately 60% of schools in Lebanon use French and Arabic as the primary languages of instruction. 20% use English and Arabic, while the remaining 20% use French, English and Arabic equally.

During the 2001-2002 academic year, some 899,508 students were enrolled in general education with 188,411 at the intermediate level (44% in public schools) and 106,293 at the secondary level (54% in public schools).

At the Higher Education level, in 2002 there were some 124,730 students enrolled in 41 registered institutions of higher education, resulting in 15,686 graduates.

VTE Background

The history of technical and vocational education in Lebanon begins in 1863 when a religious mission established the first vocational school. This was followed in 1904 with the construction of the Beirut Arts and Crafts School as the first public technical school. Since that time there has been progressive development of the VTE system by both the public and private sector. Following independence, under the auspices of the Directorate of Technical and Vocational Education within the Ministry of National Education and Fine Arts, new technical schools were built in Tripoli, Zahleh, Saida, Beirut and Deir al Kamar. By 1975, the public VTE system had expanded to serve in excess of 5,000 students, with a further 4,000 students, enrolled in private VTE schools. In 1993, a dedicated Ministry of Technical and Vocational Education was established for the first time with a mandate to "reorganize vocational and technical education, to enhance it and to develop it according to the development and reconstruction needs of the nation." Following a further reorganization in 2000, all education streams are now administered under a single Ministry of Education and Higher Education, with responsibility for VTE being assigned to a Directorate General of Vocational and Technical Education. The public administration is supported by a Higher Council for VTE, headed by the Minister of Education and Higher Education with

representatives from other ministries, public administration bodies, and the private sector.

VTE Providers and the Program Framework

Vocational and Technical Education in Lebanon is provided by both the public and private sector. The Directorate General of Vocational and Technical Education of MEHE is the primary public sector VET provider, operating 54 schools distributed throughout the country as shown in Annex - . There are currently 382 accredited private or non-governmental providers, some of which are operated wholly for profit while others are subsidized by charitable foundations.

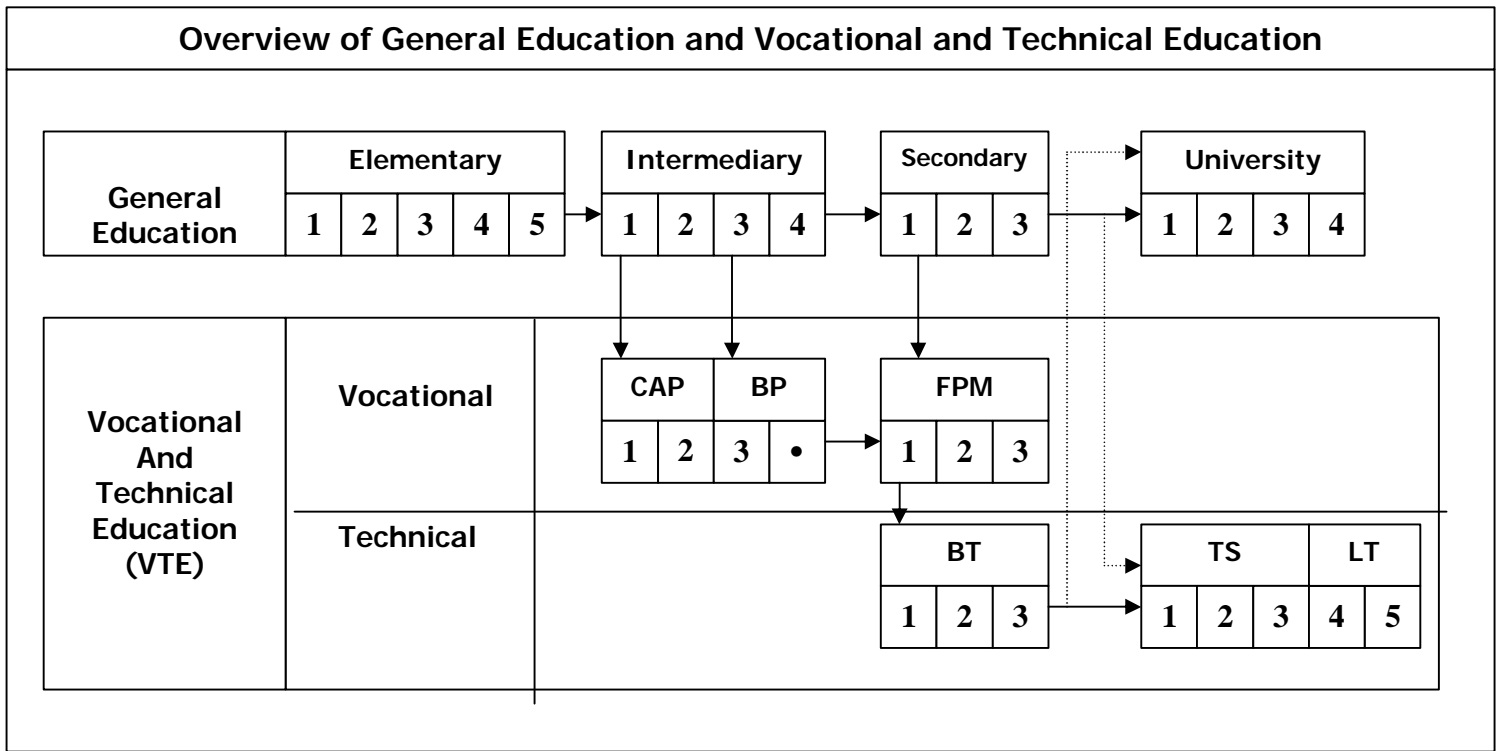
The VET system in Lebanon is broadly divided into two fields. Firstly vocational training which focuses on jobs that do not require extensive theoretical knowledge but focus on the development of applied skills and competencies, and secondly, technical education which requires a more solid theoretical and scientific foundation as a pre-requisite for effective employment.

Programs offered by the VTE system currently include the following:

- Vocational Aptitude Certificate (CAP) accessible to students who complete five years of general education.
- Vocational Brevet (BP) accessible to students who have fulfilled the requirements for the award of a CAP or who have completed the first year of intermediate general education.
- Technical Baccalaureate (BT) offered to students at the intermediate level or holders of a BP
- Higher Technician Diploma (TS) offered to holders of a secondary education diploma
- Technical Licence (LT) offered to holders of a TS diploma
- Teaching Technical Licence (LET) for those who have obtained a secondary education diploma or met the requirements for award of a Technical Baccalaureate.

The relationship between programs at the general education, vocational education and higher education are shown in the following diagram:

Fig. 1
Structure of the Education Ladder in Lebanon



As noted above, the VTE system in Lebanon currently comprises a network of 54 public schools and 382 VTE schools operated by the private sector and NGO's. Enrolment trends in public and private VTE schools during the period 1997 to 2003 are shown in Table- below.

Table 5
Enrolment Levels in Public and Private VET Schools in Lebanon
1997 to 2003

School Year	Public School Enrolment	Private School Enrolment	Total Enrolment	% Distribution Public Private Enrolment
1997/98	16,284	29,700	45,984	35.4
1998/99	17,582	33,097	50,679	34.7
1999/00	18,448	47,560	66,008	27.9
2000/01	21,743	56,174	77,917	27.9
2001/02	25,918	56,729	82,647	31.4
2002/03	30,897	47,800	78,697	39.3
% Increase 1997-2003	90%	61%	75.5%	

Source: DGVTE

The current regional and public/private distribution of students shown in Table 6 below.

**Table 6
Regional and Public/Private Distribution
Of VET Schools in Lebanon**

Region	Regional Distribution of Students Enrolled in Public VET Schools	Regional Distribution of Students Enrolled in Private VET Schools
Greater Beirut	61%	38%
Mount Lebanon	14%	8%
North	13%	18%
South and Nabatiyeh	8%	15%
Bekaa	4%	21%
Total	100%	100%

Source: DGVTE

Specializations offered at the respective levels of the VET program framework are shown on the following page. A complete listing of programs offered by each of the public VET schools in Lebanon, together with student enrolment levels is provided in Annex 3.

List of Specializations by Qualification Level	
<p>Vocational Training Certificate (CAP)</p> <ul style="list-style-type: none"> ▪ Typing ▪ Waiter ▪ Dressmaker's assistant ▪ Joiner ▪ Lathe operator ▪ Metal worker ▪ Welder ▪ Electrical Fitter (buildings) <p>Technical Diploma (LT, LET)</p> <ul style="list-style-type: none"> ▪ Electronics/Telecoms ▪ Industrial electronics ▪ Electricity ▪ Mechanical engineering ▪ Civil engineering ▪ Management computing ▪ Nursing care ▪ Physiotherapy ▪ Medical lab techniques ▪ Accountancy ▪ Topography ▪ Optometry 	<p>Higher Technicians' Diploma (TS)</p> <ul style="list-style-type: none"> ▪ Social services ▪ Physiotherapy ▪ Medical lab techniques ▪ Nursing care ▪ Accountancy ▪ Interpreting and executive secretary ▪ Tourism techniques ▪ Special education ▪ Pre-primary and primary education ▪ Civil engineering ▪ Topography ▪ Electricity ▪ Electronics ▪ Management computing ▪ Aviation engineering ▪ Dental laboratory technician ▪ Interior decoration ▪ Banking techniques ▪ Fashion and dress design ▪ Hotel management ▪ Optometry ▪ Radiologist ▪ Industrial automation ▪ Industrial computing

Technical Baccaureate Diploma (BT)	Vocational Certificate (BP)
<ul style="list-style-type: none"> ▪ Preschool education ▪ Commercial sciences ▪ Secretariat ▪ Documentation ▪ Hotel and catering (sales) ▪ Hotel and catering (production) ▪ Nursing care ▪ Industrial chemistry ▪ Interior decoration ▪ Advertising trades ▪ Air conditioning ▪ Industrial engineering ▪ Automobile engineering ▪ Aero engineering ▪ Electricity ▪ Electronics ▪ Computer Programming ▪ Music ▪ Architectural drawing ▪ Buildings and public works ▪ Topography ▪ Dental nurse 	<ul style="list-style-type: none"> ▪ Accounting clerk ▪ Shorthand-typist ▪ Restaurant waiter ▪ Pastry chef ▪ Beautician ▪ Auxiliary nurse ▪ Dressmaker ▪ Cabinet maker ▪ Motor mechanic ▪ Panel beater ▪ Electrical fitter (buildings) ▪ Machinery electrician ▪ Radio and TV repair ▪ Offset printer ▪ Vehicle engineering

Summary Observations

Observations regarding the distribution, growth and program framework, that are of relevance to future interventions in the sector include the following:

- The VET program framework has not undergone critical examination in terms of efficiency of structure, and labor market matching, for several decades. Recognizing that many students progress from one level to the next prior to seeking employment, and that there is a significant amount of repetition of instructional material within each of the respective levels, this clearly impacts on both internal and external efficiency.
- An overall increase in the overall VET participation rate is occurring, together with an increasing percentage of students seeking places in public schools. This is attributable to an increase in available places in public schools, coupled with the high cost and lower success rate associated with many private schools. A significant increase in capital and operating cost can be expected associated with the proposed expansion of the public VET system. This occurs within a climate of severe fiscal constraint, together with uncertainties regarding the external efficiency of the system associated with a projected doubling of enrolment. This is clearly an issue calling for detailed investigation.

- In the public VET system, 91% of BT level students are currently concentrated in 9 out of 28 specializations offered. This is attributable to the high costs associated with wider distribution of industry related programming as opposed to service sector programming, rather than being a response to identified labor market need. This once again calls for a rationalization of the program framework within the context of significantly enhanced labor market data if the external efficiency of the system is to be maintained or improved.
- 41% of BT level students in DGVTE schools are concentrated in a single specialization. See note above.
- 80% of TS level students in DGVTE schools are concentrated in 9 specializations out of the 26 offered. See note above.
- A number of programs have unsustainably low levels of enrolment. In the interest of internal efficiency this calls for the development of clear criteria against which programs would be offered or cancelled.
- Programs offered by private schools tend to concentrate on those fields of instruction that do not require high levels of capital investment, thus potentially creating an oversupply of graduates in a number of fields
- A significant variance is noted between success rates in candidates for national examinations between public and private schools. Figures cited for the 2002 academic year are an 80% success rate for candidates from public schools and less than 50% for candidates from private schools. This suggests a requirement for stronger accreditation processes and making public the results of candidates for national examinations.

5. VTE Institutional Arrangements, Governance, Policy Objectives and Planning

The following section of the report describes the VTE governance structure in Lebanon. Details of the VTE Law are provided, together with the mandate and organizational structure under which the Directorate General of Technical and Vocational Education operates. Information is provided regarding the mechanisms adopted for policy development and planning, together with an outline of proposed future directions. Commentary is provided on issues arising, together with recommendations for consideration when formulating future interventions.

5.1 Institutional Arrangements and Governance

Office of the Minister of Education and Higher Education

As with other ministries, the Minister of Education and Higher Education is appointed by the President of the Republic and sits as a member of the Council of Ministers. The Minister is responsible for policy formulation and the effective achievement of policy objectives as ratified by the Council of Ministers. During the past decade, MEHE has operated under four different Ministers.

It has been the traditional practice of each Ministers to engage on a full time or part time basis a group of trusted Ministerial Advisors. These advisors undertake research, engage in constituency consultation and communication, provide guidance and perspectives on policy directions, and also undertake oversight activities associated with ongoing operations. This mode of operation has led to highly centralized decision making processes.

Higher Council for VTE

A Higher Council for VTE was established under Decree 5768 in December 1960. Under this decree, the Council is comprised of 11 members representing:

- Minister, MEHE who chairs the council
- DG of VTE who serves as Secretary
- 4 members drawn from public administration
- 4 representatives drawn from economic sector associations
- 1 representative of public VTE schools
- 1 representative from private VTE schools
- 1 member from the consultative committees

The mandate given to the Higher Council under the decree is to provide long term policy advice to the Minister and to express an advisory opinion on:

- Laws and decrees regulating VTE
- DGVTE budget
- Creation of new public schools
- Accreditation of new private schools
- Contents of the Annual Report
- Other issues raised by the Minister

While a council of this nature can play a potentially valuable role, it is understood that no meetings have been held for a number of years, leaving all decision making in the hands of the Minister and his personally appointed advisors.

VTE Act

The VTE Act was promulgated under Decree 15742 dated 11/03/1964. Main provisions of the act relate to the following:

- **Structure of DGVTE**

The Act specifies that this will be determined by related decrees

- **Staffing of DGVTE**

The Act specifies that this will be determined by related decrees

- **Creation of IPNET**

This section of the Act establishes an Institute for the training and retraining of teachers

- ***Creation of the Independent Internal Fund for DGVTE***

This section of the Act addresses incomes, disbursement and management. Subsections relating to incomes address tuition fees paid by students, fees for participation in public examinations, revenues from school production, government contributions and miscellaneous revenues. Subsections relating to disbursements address contributions to multi-lateral project budgets, financing domestic and foreign school visits, equipment procurement, procurement of materials for school production, and miscellaneous disbursements. Subsections relating to management describe the establishment and composition of a management board headed by the DG.

- ***Creation of Multilateral Projects***

This section of the Act addresses the objectives, authorities and budgeting rules governing the engagement of DGVTE in multilateral projects.

VTE Private Schools Law

Recognizing the important role played by private and non-governmental schools in the provision of VTE in Lebanon, an important related law is the VTE Private Schools Law No 62/64 promulgated in December 1964. Principal clauses of this law include the following:

- ***Private School Accreditation.***

This section outlines a two-stage process for the establishment and accreditation of private VTE schools. The first stage includes application of a decree to establish the school, and the second, the provision of ministerial approval based on the proposed specializations to be offered, together with the associated staffing levels, facilities and equipment

- ***Granting of Diplomas***

The law specifies that private schools may not grant diplomas. This remains the prerogative of DGVTE based on candidate performance in public examinations.

- ***Types of Curricula***

Private schools are empowered to offer two types of curricula. Firstly, the official curricula established by MEHE. Students pursuing these curricula are subsequently eligible to sit public examinations. Secondly, private schools may offer non-accredited programs for which no diploma would be granted.

- ***MEHE Monitoring***

Under the law, MEHE, through DGVTE, undertakes monitoring of private schools to ensure compliance with the delivery of mandatory civic education, the maintenance of health and safety, provision of appropriate educational facilities and equipment, conduct of examinations and student performance evaluation, and other fields as defined by the respective decrees.

Laws Relating to other VTE Providers

In addition to the two principal VTE training providers, DGVTE and private schools, a number of other ministries are empowered under their respective laws to deliver occupational training. These include:

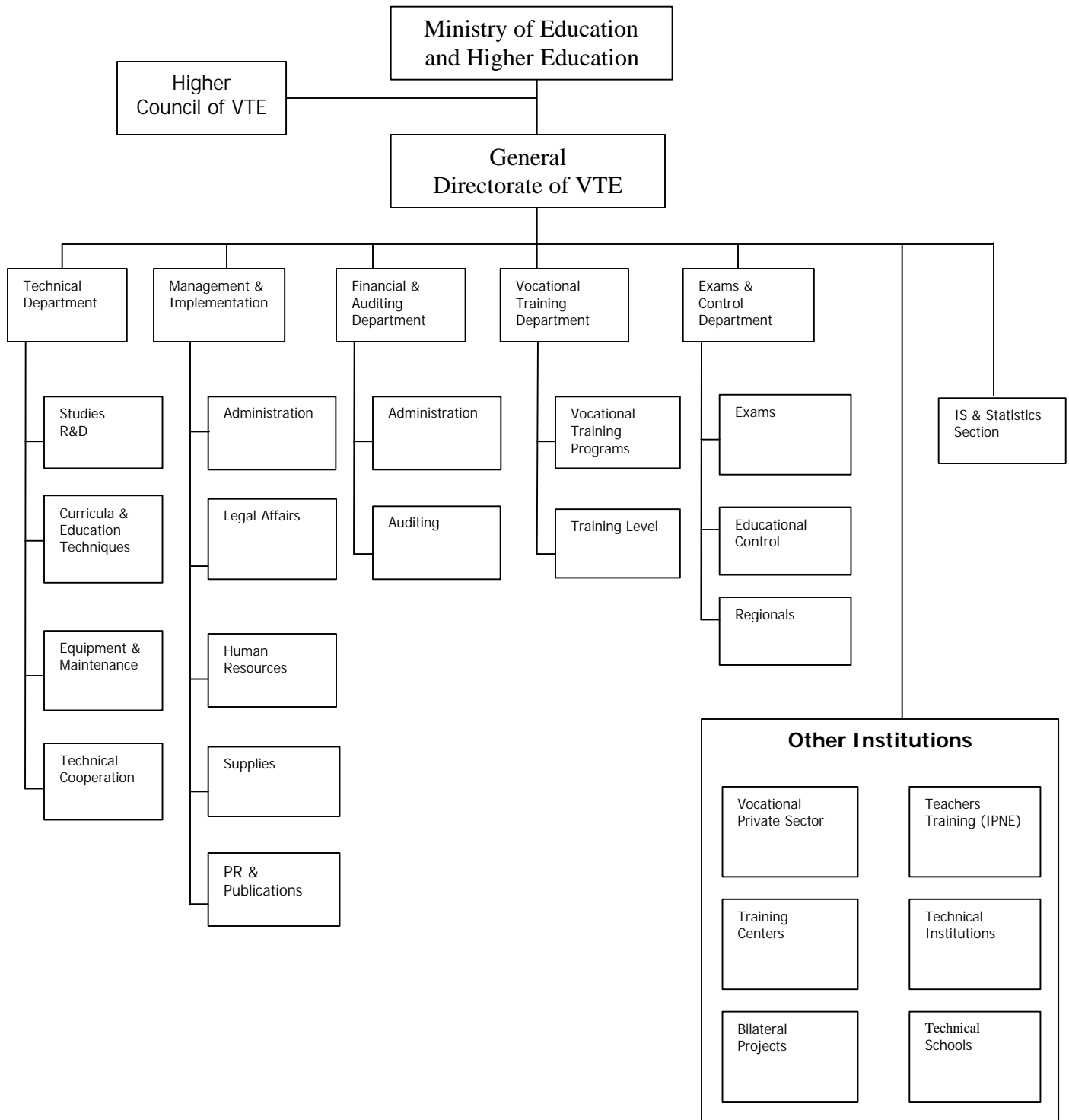
- The Ministry of Agriculture who operate a number of schools delivering both formal and non-formal training
- The Ministry of Labor through the Office for National Employment provides training for handicapped and youth from disadvantaged families
- The Ministry of Social Affairs is mandated to provide humanitarian assistance, including the provision of basic education and training
- Employment related training is also offered by the Ministry of Tourism and the Ministry of Health

As a conclusion to this section, it should be noted that all providers operate within a highly regulated environment that tends to inhibit initiative and promote passing all decision making upwards, thus burdening the executive level with administrative detail as opposed to policy analysis and strategic planning for system development.

Directorate General of Vocational and Technical Education

The organization chart for DGVTE is as shown on the following page.

Fig. 2
DGVTE Organization Chart



Staffing of DGVTE represents a major problem for efficient operation of the system. The total approved staffing level for the directorate comprises 246 positions of which 201 are currently vacant. This is particularly serious at the senior levels. Examples include:

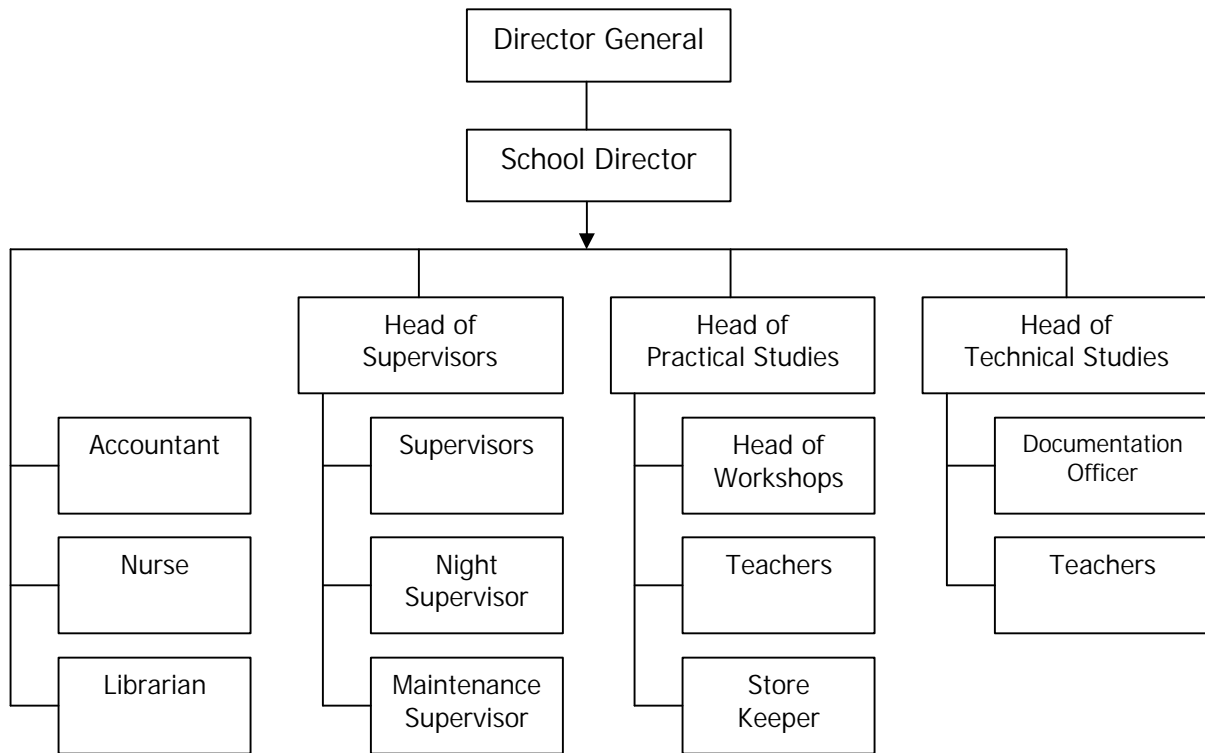
- The Management and Implementation Department which is responsible for administration and control does not have managers for three out of five sections, namely: Supplies, Legal Affairs, and Public Relations
- The Technical Department which is responsible for preparing and modernizing the curriculum does not have a manager, and has no manager for its four sections, namely: Studies, Research and Development; Curricula and Education Techniques; Equipment and Maintenance; and, Technical Cooperation
- The Vocational and Technical Training Department is wholly inactive and has no managers for the two sections
- The Finance and Auditing Department has numerous vacancies including the head of the Auditing Section
- The Exams and Control Department has many vacancies including the head of the Exams Section.
- The Information Systems and Statistics section is similarly understaffed.

The foregoing situation has led to the development of an organizational culture that is directly opposed to that which is required for future healthy development of the VET system. While the incumbent Director General provides constructive leadership, within the operating departments there are continually changing priorities, an absence of the skill sets required to fulfill their assigned mandate, a strong resistance to share information or assume identifiable responsibility, and a shortage of resources to meet critical deadlines. This issue is further discussed in the summary paragraphs to this section of the report.

VET Public School Organization

The organization chart for public VTE schools, as provided under the law is as shown on the following page.

Fig. 3
VET School Organization chart



It should be noted that the structure and composition of staff for each school is dependent upon the size of the school and specializations offered. Most School Directors and Supervisors have come from the teaching staff. While the quality of leadership is clearly variable at the school level, and the opportunity to demonstrate initiative severely constrained by the regulatory framework, those Directors interviewed during the course of this study and previous studies undertaken by the team, demonstrate a strong commitment to their regions, schools, programs and students. As such, they represent an underutilized resource in further development of the VTE system in Lebanon.

The primary forum for communication between Directors and the DG/Minister level at the present time, is a monthly meeting where system-wide issues are discussed. While those Directors interviewed appreciate the value of this forum, there is a desire to see an agenda more focussed on development as opposed to administration.

5.2 Commentary on Organization and Governance of the VET System in Lebanon

The following section of the report summarizes the current status of organization and governance of the VET system in Lebanon and identifies issues that would need to be addressed for effective future development.

As can be observed from the foregoing, the current organizational model is rigid, hierarchical and tightly regulated. Decision-making is highly centralized at the DG and ministerial level and the DGVTE is understaffed to the point where it is unable to undertake only the most basic of administrative tasks.

This situation is another legacy of 15 years of civil war and is not restricted to MEHE. In an attempt to address the issue, in 1994 the government established an Office of the Minister of State for Administrative Reform (OMSAR) with a mission to:

"Bring the Lebanese post war public administration into the 21st century through an optimal and coherent introduction of Institutional Development (rehabilitation and reform) and Information Technology (systems and communications) measures that render streamlined, transparent and traceable processes fulfilled by productive civil servants for the benefit of both the general public and government"

This ambitious mission was established against a situation characterized by OMSAR as follows:

- Office space not available in most cases as many war damaged buildings require considerable repair and rehabilitation
- Office equipment is minimal and obsolete
- Most ministries and public agencies are operating with skeleton staff despite the governments recruitment effort after the end of the war
- The distorted and inadequate compensation system does not attract qualified local professionals, let alone the Lebanese living abroad
- The civil service is aging (with an average age of 54) reflecting the impossibility over the prolonged war years to practice their skills and keep abreast of changing international practices in their fields of activity
- While there is a shortage of qualified staff, there is an excessive number of unqualified daily workers
- The basic procedures of public administration , established 35 years ago or longer, are over-centralized and outmoded

Since its establishment OMSAR has completed baseline studies, developed and implemented a reform strategy, initiated many administration-wide IT projects, launched a Job Description and Position Description program and proposed revised salary scales. In undertaking this work however OMSAR has faced many challenges, recognizing that the very concept of reform is neither cherished or

supported in the way that it should be. While the work of OMSAR continues, the issue of changing the internal culture and operating practices within the respective government departments and agencies can not be left to a single external entity. Reform of the governance and administrative culture and practices must come from within, and be led at the executive level of the respective ministries and directorates.

While there are no ready answers to staff complement issues, compensation, or instantaneous transformation of the regulatory environment, there are identifiable starting points for those changes that are essential to efficient and effective institutions. In the context of VET in Lebanon, the starting points for institutional change and development lie in the articulation of a set of values that DGVTE would strive to work towards in its daily operations, followed by the development of practices and procedures that would be progressively institutionalized. What should those values be, and what should drive them? VET essentially provides a service to society, economy and employers through the development of employment ready human resources. Thus, as with all aspects of VTE operations, the derivation of its governing values should be founded in those same features that are necessary for any enterprise to survive in a global society and economy characterized by openness, responsiveness, flexibility, devolved accountability, team based operations, rapid adoption of technology, and continuous strategic planning. During the course of this study, the foregoing characteristics were clearly articulated by employer representatives, with frustration being expressed that they were not evident in DGVTE or being inculcated into new entrants to the workforce.

The culture of educational administrative systems around the world fall somewhere between the poles of a "Classic Bureaucracy" or a "Participatory Democracy". The characteristics of each system type are shown in the table below.

Figure 4
Bureaucracy Cultural Characteristics

CULTURAL CHARACTERISTICS OF THE CLASSICAL BUREAUCRACY	FEATURE	CULTURAL CHARACTERISTICS OF A PARTICIPATORY DEMOCRATIC BUREAUCRACY
Centralized and Hierarchical	POWER	Devolved and Distributed
Regulation Based	CONTROL	Efficiency Based
Controlling	ADMINISTRATION	Facilitating
Need to Know	COMMUNICATION	Universal
Structural	RESPONSIBILITY	Individual
Procedure Driven	ACCOUNTABILITY	Objective Driven
Directed	DEVELOPMENT	Team Based
Operational	PLANNING	Strategic

It is self evident that DGVTE currently exhibits all the characteristics of a classical bureaucracy. It is similarly self evident that these characteristics comprise a major constraint to further development of a VET system in Lebanon if it is to become both relevant to the labor market, and efficient in operation. Consequently, it is believed that any future investments in VET development should include as a core component, a commitment to governance change, institutional change, and a specific program of institutional development designed to achieve a set of guiding values agreed between the government and the intervenor, while remaining sensitive to the confessional balance issues referred to in Section 2 of the report .

5.3 Policy and Planning

Up until 2001, there were few explicit or documented policy objectives for further development of VET in Lebanon, and no internal institutional capacity to undertake strategic planning. Policy directions appear to have been established primarily as a function of political needs and perceptions, rather than being linked to measurable social and economic objectives. Evidence of this fact may be found in the intent to double the supply side of the VET system by increasing the participation rate in VTE to 50% of secondary enrolment during the next 5 years from the current level of approximately 25%. This is to be achieved through building schools founded on the same program framework, and delivering essentially the same programs that have been in place for the last two decades. Using loans and grants from the Arab Fund for Social and Economic Development, the Islamic Development Bank, the OPEC Fund, and the Government of Lebanon, a total of 52 new schools are currently scheduled to be built throughout the country. This expansion is proceeding in the absence of identifiable measures to engage the demand side of the labor market in policy dialogue or to build the institutional capacity required to address systemic quality issues, or to manage the system.

In 2001, based on a condition of the World Bank VTE loan that the Government of Lebanon would provide a strategic framework for development of the VET sector, the then incumbent Minister of Education and Higher Education assembled a working group to undertake preparation of the strategy paper.

The process adopted by the working group comprised three principal steps. Firstly, a paper was prepared identifying key issues in the sector together with a list of alternative solutions to address each issue. This paper was then distributed to all principal stakeholders including employers, syndicates, education and labor market experts, teachers, administrators and government officials. Secondly, a national workshop, representative of the stakeholder groups was convened in order to receive feedback on the issue paper and to develop a preliminary consensus on priorities. Finally, having taken all viewpoints into account, a

strategic framework document was prepared, approved by the Minister and subsequently ratified by the Council of Ministers.

The VTE Strategy Framework prepared by the working group provides a context and current status of VTE in Lebanon, together with some discussion of issues facing the sector. This is followed by a listing of twelve thematic headings, each one accompanied by a series of “statements of intent” that indicate the purpose and steps to be taken by MEHE in a reorientation of the system.

The following paragraphs summarize the principal themes of the strategic framework, while the full text is provided in Annex 1.

Orientation of the Sector, Access and Equity.

Issues and objectives identified under this heading are based on a recognition that there is an imbalance in investment in human capital development in Lebanon as illustrated by the fact that there are nine students enrolled in university level programs, for each one in a technical or vocational program. A similar imbalance is recognized in terms of the production of VTE graduates and the requirements of the labor market. The MEHE proposes to address these imbalances while also ensuring equity of access to employment driven training by citizens of all social and economic backgrounds in all regions of the country.

Stakeholder and Labor Market Linkages

Strategic issues under this heading relate to the need to develop dialogue and close working partnerships between the public and private VTE sectors, productive sector employers, NGO's and those agencies responsible for the production of labor market information. Statements of intent in the strategy framework indicate that the VTE system will rationalize course offerings between public and private sector providers, promote expansion of programs in order to respond to a wider range of employment opportunities, work closely with employers to design flexible in service training programs, and to develop an observatory function that would monitor quantitative and qualitative changes in the labor market.

Relevance, Quality and Efficiency

Issues and objectives under this heading recognize that many of the current program offerings relate to narrow occupational specializations as opposed to providing graduates with a range of competencies that are relevant to a diversity of occupations within different sectors of the economy. There is also a recognized need to promote a culture of quality and lifelong learning amongst both students and instructional staff. Steps proposed to address these issues include the development of mechanisms to ensure increased employer input into the definition of training program content; the introduction of structured

workplace training; quality and accreditation measures; and, continuous professional development for instructional staff.

Governance, Finance and Accountability

The strategic framework recognizes that, if the VTE system is to become more open, flexible, and accountable, there is a parallel need to move from the current hierarchical government dominated system of governance, to a more inclusive model that gives the productive sector a strong sense of ownership and participation in the human capital development process. It is also recognized that there is a positive rate of return to employers arising from a more productive workforce. In consequence, the private sector should increase their level of financial participation in the skill development process. Specific steps proposed include the establishment of a national representative body; empowering sector councils; devolving more authority to the local and community level; promoting cost recovery mechanisms; and, encouraging the private industrial sector to invest in VTE.

Institutional Capacity Development and Management

In order to achieve the proposed ambitious reform of the VTE system in Lebanon, it will be necessary to develop the leadership and the institutional capacity to manage and implement the change process. The strategic framework proposes a comprehensive restructuring of the DGVTE and all its administrative procedures. A planning monitoring and evaluation function will be established, served by a Vocational Education Management Information System. There will be a focus on continuous review of staff performance, and staff development. Information, communication technologies will be used extensively as a management tool.

Undertaking the exercise of engaging all VET sector stakeholders in a dialogue regarding policy and strategic directions has proven to be an important step insofar as the resultant document clearly identifies issues and long term strategic goals. Subsequent ratification by the Council of Ministers provides the required validation for future action.

5.4 Future Initiatives Relating to Policy and Planning

Three important initiatives are currently under way regarding policy and planning for the VET sector in Lebanon. These activities are being funded under the World Bank VET project and include:

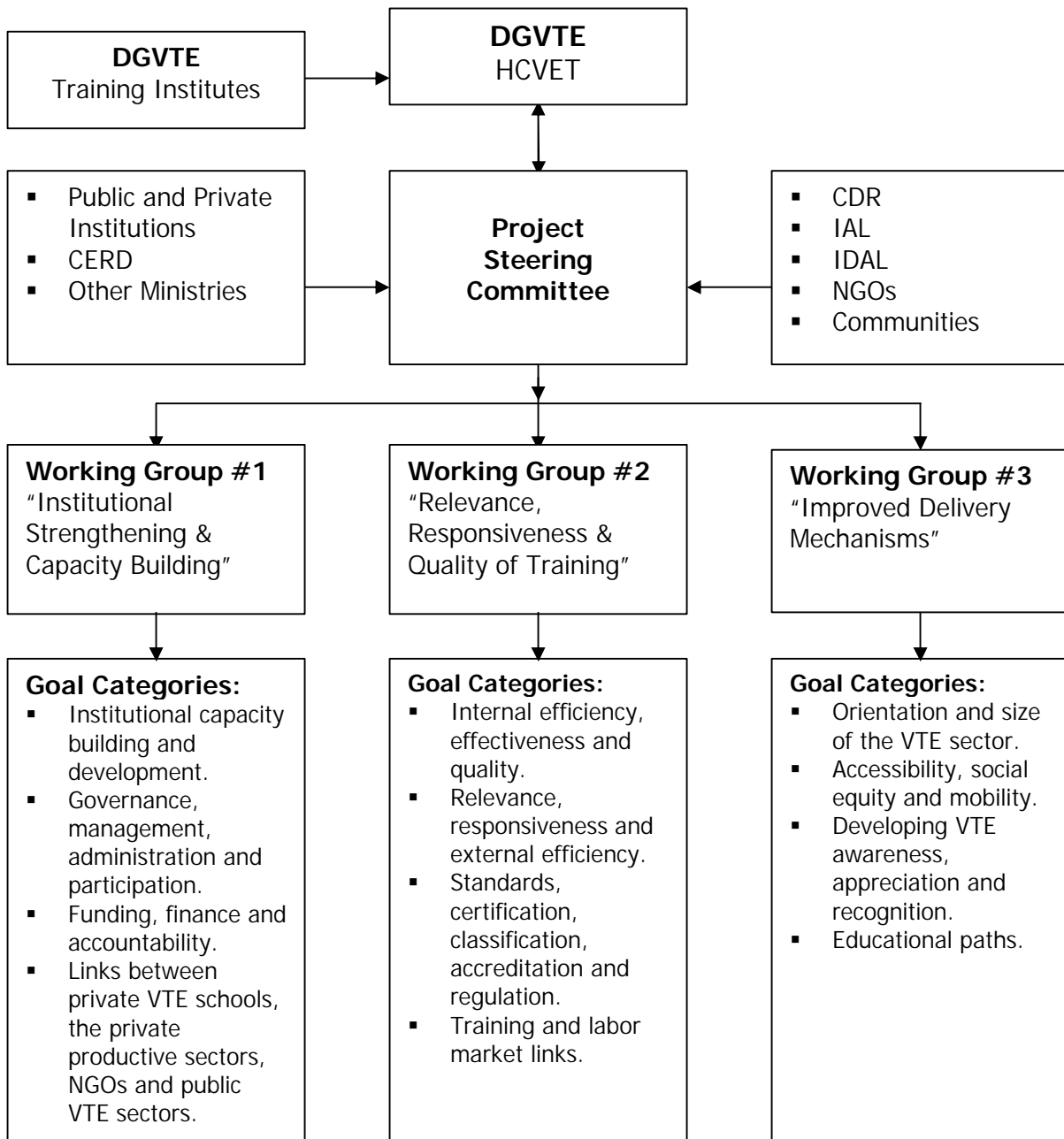
- The formulation of a specific strategic plan
- The establishment of a Planning Monitoring and Evaluation capacity
- Establishing a Vocational Education Management Information System

Brief details of each of these initiatives is provided in the following sections:

Strategic Plan

A contract has been awarded to an international company in association with a Lebanese company to prepare a strategic plan based upon short, medium and long-term goals for the future development of the VET sector in Lebanon. This work is to be undertaken adopting a participatory approach through working groups assigned to address clusters of goal categories as shown in Fig. 5 below.

Fig. 5
Organization of the Strategic Planning Process



The work program is designed to produce a strategic plan that articulates a mission, values, and commitments, together with an analysis of issues and the formulation of strategic goals. More importantly, the work is expected to result in a 3 year operational plan in results based format that will: establish a series of specific objectives associated with each goal; detail the actions necessary to achieve the objectives; identify responsibilities, timelines and resources; and, establish measurable performance indicators.

Planning Monitoring and Evaluation

As can be observed from the DGVTE organization chart shown on p. DGVTE currently has no provision or capacity to undertake planning monitoring and evaluation activities. This is a capability gap well understood at the Ministerial level and steps have been initiated to identify the functions, practices, and procedures that are required to engage in effective operational and strategic planning. Under a contract awarded to a consortium of local and international consultants, a three-phase work program has been undertaken which included consideration of the following issues:

Phase 1

- Identification of the mandate, tasks and activities assigned to DGVTE
- Analysis of DGVTE planning monitoring and evaluation needs and requirements
- Initial definition of the role and tasks that would be assigned to a DGVTE PM&E unit
- The elements of a plan to establish a DGVTE PM&E unit

Phase 2

- Establishing an organizational framework for the proposed unit
- Defining staffing levels for each sub-unit
- Establishing recruitment criteria
- Designing an operational framework

Phase 3

- Developing operational procedures and processes for typical activities to be carried out by the unit
- Defining the characteristics of a planning software that would meet the needs of the proposed PM&E unit, and identifying interface requirements with the EMIS being established under the World Bank funded VTE Project.

This work has now been completed and accepted by DGVTE. Core staff for the establishment of a PM&E unit have been identified. A Ministerial decision is awaited to formally launch the unit and appoint the staff.

Information for Policy and Planning

Effective policy analysis, strategic planning, and efficient operational planning can only be built on a foundation of current information. The absence of such data underlies many of the present constraints to decision making and

appropriate investments related to building human capital in the country. Up until the present time, information regarding all aspects of the VET system are collected and analyzed manually. The need to develop an effective Vocational Education Management Information System (VEMIS) was recognized during the design of the World Bank funded VET project and the design is currently in hand. The proposed system will serve the central level and the individual school level. Systems to be provided at the respective levels will be as shown below.

Fig. 6
DGVTE MIS

DGVTE MIS		
NO.	SYSTEM	REMARKS
Administrative Systems		
1	Legal Affairs	
2	Document Archiving and Retrieval	
3	Document Tracking	
Human Resources		
4	Personnel	
5	Payroll	
6	Benefits	
7	Time Attendance	
Stock Management		
8	Purchasing	
9	Inventory	
Financial Management		
10	Government Budget Control	
11	General Accounting & Revenue Fund	
12	Cost Accounting	
13	Fixed Assets and Maintenance	
Academic Systems		
14	Student Services & Academic Records	
15	Teachers Management	
16	School Information System Public/Private	
17	Curriculum Management	
18	Teacher Training & Technical Cooperation	
19	Library Management	
20	Vocational Training	
21	Student Employment System	Internet Deployed
Decision Support		
22	Executive Support System	
23	Decision Support & Data Mining	
Office Systems		
	Text Processing - Word	Off the shelf
	Spreadsheet -Excel	Off the shelf
	Presentation- Powerpoint	Off the shelf
	Design Tools - Visio	Off the shelf
	Internet Browser - Outlook	Off the shelf

**Fig. 7
School Management System (SMS)**

VTE School Management System (VTE SMS)		
No	Systems	Remarks
Administrative Systems		
1	Legal Affairs	Same as DGVTE
2	Document Archiving and Retrieval	Same as DGVTE
3		Same as DGVTE
Human Resources		
4	Personnel	Same as DGVTE
5	Payroll	Same as DGVTE
6	Benefits	Same as DGVTE
7	Time Attendance	Same as DGVTE
Stock Management		
8	Purchasing	Same as DGVTE
9	Inventory	Same as DGVTE
Financial Management		
10	General Accounting & Revenue Fund	Same as DGVTE
11	Budget Control/Cost Control	Same as DGVTE
12	Fixed Assets	Same as DGVTE
Academic Systems		
13	Student Management System	
14	Teachers Management System	
15	School Management	
16	Curriculum Management	
17	Teacher Training & Technical Cooperation	
18	Library Management	
19	Vocational Training	
Office Systems		
	Text Processing – Word	Off the shelf
	Spreadsheet –Excel	Off the shelf
	Presentation- Powerpoint	Off the shelf
	Design Tools – Visio	Off the shelf
	Internet Browser – Outlook	Off the shelf

The government of Lebanon and MEHE have made a full commitment to the introduction and adoption of ICT in all areas of operation. An IT Higher Council has been established at the national level, with IT advisory committees at the ministry level. MEHE has a particularly effective committee with strong leadership and well qualified members. This committee is working closely with consultant who has been engaged to establish the functional requirements of the MIS and assist in the preparation of bid documents for procurement. The work is on schedule and the system is expected to be operational by mid 2005.

Summary Observations on Policy and Planning for VTE in Lebanon

The following summary points are made with respect to policy and planning:

- In the past, the information necessary to formulate VET policy based on demographic, economic, or labor market data has been absent. This resulted in decisions being made primarily against political considerations.
- At the present time MEHE and DGVTE does not have a policy and planning function in their organizational design, and no human resources with the skill sets to undertake such work.
- Major investments that will incur a high level of recurrent cost have nevertheless been made.
- The need to develop the sector against clear objectives has been recognized. A Strategic Policy Framework for VET has been developed and approved by the Council of Ministers.
- MEHE/DGVTE recognize that the Policy Framework is broadly based and that further development needs to occur around a specific set of prioritized goals.
- Consultants have been engaged to assist in the above work and a Strategic Development Plan for the sector is expected to be approved by mid 2004.
- With respect to the establishment of a long term planning capacity, technical assistance has been completed outlining the mission, tasks, practices, processes and products that would arise from a fully operational PM&E unit. Preliminary steps have been made to establish such a unit. This should be considered to be a pre-requisite to further external intervention in the sector.
- Work on the establishment of a comprehensive EMIS that would serve as the primary planning tool is well in hand and is expected to be operational by mid 2005

6.0 VTE System Financing

The following section of the report addresses the financing of VET in both the public and private sectors. Commentary is provided on steps that might be taken to increase the efficiency of the system.

6.1 Public Sector VET Financing

Financing of public VET in Lebanon has historically been undertaken exclusively by the government, supplemented by modest student registration and examination fees.

Public expenditure on Vocational and Technical Training for the past five years has been as shown below:

Table 7
Public Expenditure on Vocational and Technical Training
According to the Budget Laws

Year	Current Expenditure (LL Billion)	Capital Expenditure (LL Billion)	Total Expenditure (LL Billion)
1998	27.0	6.0	33.00
1999	32.75	10.33	43.08
2000	38.57	5.68	44.25
2001	48.44	0.83	49.27
2002	49.37	0.35	49.72
2003	51.54	0.15	51.69
2004(Est.)	66.75	0.15	66.90

Source: Ministry of Finance

Based on enrolment levels during the same period, the public cost per student per year of instruction is as shown below.

Table 8
Student Cost per Year

Year	Student Enrolment	Expenditure (LBP Billion)	Cost per Student (LBP Million)	Cost per Student (US\$)
1998	16,284	33.00	2.03	1343.60
1999	17,582	43.08	2.45	1641.10
2000	18,448	44.25	2.40	1603.20
2001	21,743	49.27	2.27	1513.60
2002	25,918	49.72	1.92	1279.80
2003	30,897	51.69	1.67	1115.20

Student registration and examination fees for the respective program levels are currently as shown below, together with supplementary fees for those students for whom boarding facilities are provided.

Table 9
Student Registration, Examination and Boarding Fees
(All figures in LBP)

Program Level	Registration	Entrance Exam	Diploma Exam	Half Board Supplement	Full Board Supplement
CAP	120,000	5,000	3,000	50,000	90,000
BP	120,000	5,000	3,000	50,000	90,000
Dual System	160,000	5,000	4,000	50,000	90,000
BT	160,000	5,000	5,000	50,000	90,000
TS	200,000	10,000	5,000	50,000	90,000
LT LET & other levels	200,000	10,000	7,000	50,000	90,000

Based on the 2003 enrolment levels in the respective programs, fees paid by students for registration and examination would be as shown below.

Table 10
Revenues from Student Fees
(Excluding Boarding)

Program Level	Student Enrolment	Registration Fees (LBP'000)	Entrance Exam (40% Enrolment)	Diploma Exam (60% Enrolment)	Total Fees
CAP	317	38,040	634	2,377	41,051
BP	1,951	234,120	3,902	14,632	252,654
Dual System	820	131,200	1,640	8,200	141,040
BT	16,976	2,716,160	33,952	212,200	2,962,312
TS	8,479	1,695,800	33,916	105,987	1,835,703
LT LET & other levels	2,354	470,800	9,416	41,195	521,411
	30,897	5,286,120	83,460	384,592	5,754,172

Based on the above, student fees in the 2002/2003 academic year amounted to 11.28% of the total budgetary allocation to the VET sector.

Distribution of Current Account Expenditure for the 2002/2003 academic year is as shown below.

Table 11
Distribution of Current Account Expenditure
2002/2003 Academic Year

Item	Cost (LBP 000's)	% Distribution
Boarding School Food	2,005,508	3.9
Electricity	300,000	0.5
Instructional Consumables	400,000	0.7
Expert Salaries	30,000	0.1
Permanent Staff Salaries	16,300,000	31.6
Contract Staff Salaries	25,500,000	49.5
Social Charges	975,000	1.9
Personnel Transportation	1,642,000	3.4
Contributions to Non Profit	1,400,000	2.7
Other	2,990,000	5.8
Total	51,542,508	100.0

Budgeting and Financial Management

The budgetary process follows the standard practice of projected requirements being prepared at the individual school level, for consolidation at the central level. The approved budget is subsequently administered centrally. Student fees are transferred to an "Internal Fund" which is administered by the School Principal. These funds are used for facility maintenance, purchase of equipment, transportation, consumables or hiring support services such as a gardener. The financial section of DGVTE administers all other resources.

Commentary on Public Sector VET Financing

As can be noted from the foregoing, all financial management is highly centralized leading to a situation where there is no incentive to engage in cost recovery activities at the school level, no mechanism to link internal efficiency with performance, and no mechanisms to allocate resources to achieve specific human capital development objectives.

During the course of the field work, the following range of financing mechanisms were outlined as options that could be explored to increase the efficiency of the sector. Each of the foregoing mechanisms is designed to achieve the specific employment or economic objectives of the individual, the employer, or the government. These options are to be considered during the formulation of a strategic plan for the sector that is to be prepared during the latter half of 2003.

- (i) direct financing of technical and vocational education by government
- (ii) apprenticeships where the costs are shared between the company who provide experiential learning opportunities, the apprentice who receives

- low wages in return for the opportunity to learn, and the government who support the cost of related academic or institution based training.
- (iii) the adoption of payroll taxes or levies that are reinvested by government or the employers in training activities
 - (iv) tax rebates for companies who undertake identified workforce development programs
 - (v) the award of grants to companies operating in specific sectors of the economy in order to meet short term skill gaps
 - (vi) the provision of vouchers to specified categories of individuals in order that they may purchase training relevant to their individual career aspirations
 - (vii) training purchased by individuals to enhance their own employability
 - (viii) training provided directly by employers to enhance the efficiency of their own workforce
 - (ix) contract training undertaken by training institutions on behalf of individual employers
 - (x) technology transfer grants
 - (xi) sale of continuing education services
 - (xii) the introduction of fees and associated student loan programs
 - (xiii) the introduction of training funds with specific mechanisms to achieve objectives relevant to different characteristics of the labour market
 - (xiv) the sale of goods or services arising from institutional training activities

Linking financing, to policy goals, to performance measurement, is an issue that needs to be considered as a central component to future interventions in the VET sector in Lebanon.

6.2 Private VTE Financing

Section 4 of the report identifies that 68.6% of VET students are currently enrolled in one of some 382 schools operated either on a "for profit" basis or run by NGO's and religious organizations. Each school is required to be registered and publish it's tuition fees. Fees are paid directly by the student or student's family. No other data is available. The following table provides a sample of fees for programs at the various levels of the VET ladder, together with a subjective assessment of the quality of instruction based on prior experience of these institutions by one of the authors.

Table 12
Annual Tuition Fees Paid by Students in Private Schools
(All figures are US\$ Equivalent)

No.	Descriptor	Program Level							
		CAP	BP	BT			TS		
				Yr.1	Yr.2	Yr.3	Yr.1	Yr.2	Yr.3
1	Wealthy clientele. Excellent school			1950	2150	2350	2100	2500	2800
2	NGO Very good school			500	500	500	1000	1000	1000
3	Moderately wealthy Passable school	1300	1300	1500	1600	1700	1700	1800	1900
4	NGO Good School			1200	1200	1200	1500	1500	1500
5	NGO Good school			1000	1000	1000	1200	1200	1200
6	Moderately wealthy. Passable school			1200	1200	1200	1200	1200	1200
7	Popular clientele. Weak level			600	750	850	1000	1050	1150
8	Popular clientele. Barely passable			1150	1150	1150	1750	1050	1150
Average		1300	1300	1138	1194	1244	1431	1500	1563

It is apparent from the above that different fee rates are attributable to the fact that some schools are "for profit" while those of NGO's are subsidized by their sponsor. It is also interesting to note that the average fee rates charged by private schools is somewhat lower than, but not significantly divergent from the average cost per student enrolled in public schools.

Commentary on VET School Financing.

Two primary considerations arise regarding VET financing. Firstly, the adoption of mechanisms that would distribute costs of the public system more appropriately amongst stakeholders and beneficiaries. Secondly, what will be the impact on private providers associated with a potential doubling of intake into public schools.

With respect to the first issue, it is self evident that the design, implementation and performance monitoring of many of the VET financing mechanisms described in para. 6.1 need to be built on a solid foundation of policy goals, information, close collaboration amongst all stakeholders and well developed institutional administrative capacity. As noted in other sections of the report,

while these conditions are currently under development, they are not yet present. Consequently, while it would be appropriate for DGVTE to gain an understanding of the objectives, structure, and implementation of a range of financing mechanism options, it is nevertheless considered premature to adopt any particular approach, until other readiness conditions have been satisfied.

The second issue of impact on private providers is unpredictable, and surrounded with numerous political, financial, and economic considerations that can not be addressed within the scope of this report.

7.0 Training Program Quality and Relevance

The following section of the report provides an overview of those factors that impact on the instructional program design and delivery. For each factor, the current status is outlined, together with a summary of those development initiatives arising from other donor or financing agencies.

Labor Market Linkages

Current Status

Reverting to the definition of VET as "skilling for employment", the starting point for all aspects of training program quality and relevance lies in the quality of the relationship between the VET providers and the employer community that they are mandated to serve. In a well-developed relationship, these linkages are built at the government level, the directorate level, the school level, and the individual instructor level. They are manifested in policy dialogue, labor market analysis, occupational profiling, provision of workplace training, support for curriculum development, and other ways. At the present time, the relationship between providers and employers ranges from fragility to extreme frustration.

As an indicator, a leader from the Chamber of Industry and Commerce speaks of a recognition amongst members that with full implementation of the provisions of the Arab Common Market by 2005, they must export or die. Challenges already facing Lebanese companies in this area are: operating in a comparatively high cost economy; labor costs of up to 3 times higher than those of other countries in the region; high energy costs; and, an unmanageable regulatory overburden. In order to survive, companies must increase their productive efficiency through the application of technology, better management and more efficient use of human resources.

In accordance with global trends, many of the larger companies are becoming ISO registered, in which case they are required to maintain a Quality Manual containing competency profiles of all levels of employees. Graduates from the VET system are found to fall well short of these profiles and employers are resorting to hiring consulting companies to deliver training to close the gap.

Deficiencies are even found within those trainers who are engaged through consulting companies, calling for an urgent need to train trainers.

The Chamber of Commerce and Industry express frustration that no meaningful forum exists for dialogue between DGVTE and the employer community, and indicate a readiness to fully engage with providers should such a forum be brought into being. Discussions regarding a training tax or levy would also be favourably considered if employers were given an appropriate role in the design and delivery of training programs.

Specific weaknesses of VET graduates identified by employers related to insufficient applied training, TS graduates with weak skills, and particularly an absence of employability skills such as teamwork, communication abilities, a quality focus, initiative and analytical skills.

Looking at the question of linkages from the supply side, the DGVTE organizational structure does not include a unit that has a mandate for employer liaison or labor market monitoring. Representatives drawn from the employer community are sometimes engaged as contractual instructors, or to serve on specific curriculum committees. A number of the more experienced School Directors do engage in informal dialogue with employers within their catchment areas in order to assess potential employment demand, but no formal channel exists to translate their findings into enhancement of learning outcomes.

The issue of training provider/employer coordination is further discussed in Chapter 8 of the report.

Future Plans

The employer community is currently being more actively engaged with VET providers through a number of TA activities of the World Bank funded VET Project. This includes participating in tracer studies, collaborating in manpower demand analysis, preparing competency profiles and providing practitioners at various levels to participate in DACUM processes that will underpin curriculum revision.

These initiatives have proven to be effective as a result of the efforts of high quality services from local consultants supported by strong leadership and coordination from the PIU. In terms of future interventions in the sector however, the institutionalization of an effective liaison mechanism to provide ongoing dialogue at all levels should be considered a high priority if quality and relevance issues are to be addressed.

Curriculum and Learning Resource Materials

Current Status

The first post conflict effort to upgrade curricula was undertaken in 1997 when the ministry commissioned the development of 56 curricula for the BT and TS levels. This work was coordinated by a consulting company who established a committee for each subject, comprising mostly academics in the field. In the absence of occupational competency profiles, the resultant curricula was information based and academically oriented as opposed to being competency based and applied. No attempt was made at this time to simultaneously develop teachers guides or student learning resource materials. Similarly, the curricula were not supported by identified evaluation tools to measure the achievement of learning outcomes. Consequently, instructional staff were left to develop their own teaching materials based on their individual interpretation of the intent of the curriculum. In 2001, recognizing shortcomings of the initial effort, the curricula were again revised. This revision represents the curricula currently in use.

Future Plans

Technical assistance activities are currently in hand, which address the whole continuum of the teaching learning process. This process began with an assessment of employer expectations regarding the labor market and similarly, their expectations regarding new entrants. This was followed by an exhaustive tracer study of graduates and their experience while in school and subsequently in the workplace. The study has examined the socio-economic background of students, the internal efficiency of the VET program from students perspectives, career making decisions, comparative employment and earning experiences of graduates from different program levels, pre-service and in-service training needs, and also, the experience of those graduates who are unemployed. Information contained in the findings and conclusions arising from this work represents an invaluable resource to the currently ongoing strategic planning activity, and subsequent adjustments that will need to be made to the program framework, curriculum outlines and the instructional process.

The needs assessment technical assistance has also included a component which has used the DACUM process to develop competency profiles for 45 occupations that are being served by the VET system in Lebanon. The consultants undertaking this work followed the standard DACUM process of bringing together practitioners in the occupation under consideration, and, using a trained facilitator, to progressively analyze the duties, tasks, knowledge and skills associated with that occupation. Each session also included a definition of the tools and equipment used by the employee and an analysis of those traits and attitudes required for successful employment experience.

In order to establish a new standard for curriculum and learning resource materials a pilot project has been completed for subjects in electrical and electronic disciplines. This includes definition of the curriculum in competency based format, the preparation of teachers guides and student manuals. Upgrading of curriculum for other subjects will now proceed adopting this model.

Student Evaluation

Current Status

Ongoing evaluation of learning outcomes is currently left to the discretion of individual instructors. The most critical evaluation process is the conduct of national exams at each of the program levels. This takes place annually with examination questions being prepared by committees of instructors established for the respective subject areas. Examinations are subsequently administered in each school and marked manually by a team of evaluators. This process is conducted with efficiency, but it is nevertheless labor intensive and is potentially biased in favor of students taught by those instructors responsible for setting the examinations.

A more critical concern relates to the fact that the current process evaluates student performance wholly against academic skills rather than workplace competencies and employability skills. A need to improve student performance evaluation methods has been recognized as discussed in the following paragraph.

Future Plans

In order to increase the efficiency and objectivity of evaluating the acquisition of academic knowledge and understanding, as well as to close the loop of consistency between curriculum, instruction, and evaluation, a pilot technical assistance activity has recently been completed focusing on the development an electronic database of examination questions. The working group that undertook this work began by clarifying the curriculum outline, followed by the preparation of teacher guides and student manuals. Different categories of examination questions were then developed with progressively increasing degrees of difficulty. These questions, together with solutions, were subsequently entered into an electronic database with fully developed protocols relating to access, control, additions, deletions etc. The foregoing evaluation tool has been field tested and validated and found to fully meet the design objectives. It is now proposed to expand the application of this tool to other subject areas.

The issue of diversifying the evaluation process to include assessment of practical skills and employability skills remains outstanding.

Instructional Staff
Current Status

In accordance with regulations currently in force, teaching staff in the VET system are classified as follows:

Table 13
Instructor Qualifications

Designation	Academic Qualifications	Required Experience	Assigned Teaching Load (Hrs. per wk.)
Professor: Higher VTE Education	Ph.D	5 years in Higher Education, (or 10 yrs in secondary VTE)	12 - 14
Deputy Professor: Higher VTE Education	Ph.D (or University Degrees requiring 7 years of study)	2 years in Higher Education (or 5 yrs in secondary education)	14 - 18
Assistant Professor: Higher VTE Education	Ph.D (or University Degrees requiring 7 years of study)		18 - 24
Professor (Technical) For VTE	University Degree		22 - 28
Teacher (Vocational) For VTE	BT		26 - 32

It is of interest to note the total focus on higher education qualifications, and the parallel absence of either a requirement for, or credit given, to occupational and professional experience for the engagement of instructional staff.

At the present time, there are approximately 12,000 teachers working full time or part time in public and private schools in Lebanon. In public VET schools in the 2001-2002 academic year, the cadre of permanent teaching staff comprised 800, while an additional 4,900 teachers were retained to teach one or two subjects. Annex 3 provides a listing of the number of students, and total number of staff in each of the public schools. Extreme examples include the Ain Wzein Nursery Institute where a complement of 45 full and part time teachers are on staff to teach 61 students, or the Halba Technical School where 190 teachers are engaged to teach 287 students. Most part time teachers hold other positions. Some are practitioners in the field in which they are teaching. Most have academic qualifications. Few have any formal pedagogical training.

While there is clearly merit in the process of using contract teachers in VET institutions as a means to bring practical experience and example into the classroom, the current level of fragmentation of teaching staff inevitably leads to discontinuity and inconsistency in program delivery.

Future Plans

DGVTE have identified as a first priority, the need to upgrade the pedagogical skills of teaching staff. In this context, technical assistance has been provided under the World Bank funded TVET project to undertake a teacher training component having the following objectives:

- To undertake a needs analysis for VET teacher upgrading requirements in (i) pedagogical skills and abilities; and (ii) occupation related skills and knowledge.
- To enhance the administrative and technical capacity of the national VET teacher training center (IPNET) to design and deliver pedagogical and specialized training to VET instructional staff.
- To identify a core of approximately 120 Master Trainers who would be used by IPNET in the subsequent delivery of training.
- To design and deliver Master Trainer training in both pedagogical and specialized skill areas.
- To provide technical and administrative support to IPNET and the Master Trainer team in the design and delivery of training to approximately 2000 VTE instructional staff.
- To develop a long-term plan for continuous professional development of VTE teachers in Lebanon.

A call for proposals to undertake this work has been issued. Training is expected to be completed by early 2005. In addition to the TA, the issue of instructional staff development will be further addressed during the strategic planning activity currently in progress.

Facilities and Equipment

Current Status

Facilities presently used for the delivery of instruction range from excellent to dangerous. During the past two years, a full structural survey of all schools has been completed, and remedial work is now in progress where necessary.

Perhaps the most pressing need in terms of building graduate applied skills and competencies, relates to the availability (or non-availability) of functional, and technologically current, instructional equipment. While various donors have assisted with the provision of equipment on a specific school or subject basis, virtually all schools have pressing needs for basic laboratory or workshop tools.

Future Plans

In terms of redressing current deficiencies, while also further expanding the VET system, the following loans and provisions have been negotiated:

- US\$50 million from the Arab Fund for Social and Economic Development to fund the design, construction and equipping of 14 new public VET schools
- US\$30 million from the Islamic Development Bank to partially finance civil works and provision of equipment for 10 new public VET schools
- US\$ 4 million from the OPEC Fund for International Development to finance the construction of 4 schools in North Lebanon
- US\$ 18.2 million from the Government of Lebanon to cover building and equipping 14 schools.
- DM 5 million is being provided by GTZ to assist with introducing the Dual System training model and upgrade training methods.

Overall, a total of 56 new public VET schools are to be built in various regions of the country.

In order to ensure that the purchase of instructional equipment is directly linked to employer identified competencies, curriculum learning objectives, and student learning outcomes, technical assistance has been provided under the World Bank funded TVET project to establish a rational needs analysis and procurement process. This work is being undertaken in two phases. Firstly an inventory of existing equipment has been completed in all schools identifying technical specifications, status, and level of utilization. This has been followed by the compilation of basic, generic equipment needs to deliver the official curriculum. Procurement lists together with asset management procedures have been developed and bids invited from potential suppliers. The second phase of procurement will be carried out when work on the development of competency profiles has been completed and the characteristics of required tools and equipment can be identified with increased specificity.

Concluding Observations on Training Program Quality and Relevance

As can be noted from the above, investments are being made to move what was an information based supply driven VET model to a more competency based, employer demand driven model. Much of the technical assistance to achieve this change has been provided by Lebanese consultants who have demonstrated an ability to produce deliverables of the highest order, and to fully satisfy all the objectives in their terms of reference. In undertaking this work, mechanisms were established to transfer knowledge to DGVTE through a group of young professionals who comprised a Professional Support Unit. This latter initiative is recognized as having been only partially successful, thus raising questions regarding the ability of DGVTE to fully utilize the results and to replicate the various program development steps into a continuous cycle of renewal.

While the foregoing initiatives are necessary and important, and have been effectively accomplished, they are essentially process steps and, are not of themselves sufficient to induce the building of a learning culture within the whole VET system.

It is universally accepted that the rate of change of society, technology, communications and economy require all citizens to adopt an orientation towards lifelong learning. Recommendations arising from the UNESCO International Congress on Technical and Vocational Education held in Korea in 1999 contained the following regarding lifelong learning:

"Lifelong learning is a journey with many pathways and TVE is an integral part of the voyage. Therefore TVE systems should be designed as developmental life experiences with cultural and environmental aspects in addition to their economic dimensions. To make the maximum contribution to lifelong learning TVE systems need to be open, flexible and learner oriented. They must do much more than just provide the learner with knowledge and skills for specific jobs. They must also prepare individuals more generally for life and the world of work. TVE is for personal, social and economic benefit."

Pursuit of this objective begins with the lead institution. DGVTE must become a learning organization if the VET system is to truly serve the future society and economy of Lebanon.

8.0 Concluding Observations on the Development of Human Capital in Lebanon

Historically VET policy and VET investments have tended to address "supply" side issues such as curriculum development, instructional methods, institutional management, training facilities and equipment, and training materials in isolation from the larger questions of labor market operation. A review of donor investments in TVET in the MENA region during the past decade illustrates that these issues have comprised the principal focus of the majority of interventions.

The dramatic emergence of a global knowledge based economy has thrust human capital formation into the spotlight as the most critical area for national development. As such the line between TVET policy and labor market policy has all but disappeared. It is the view of the authors that a failure to adopt a systemic approach to the labor market aspect of human capital development is the central factor that underlies the weak performance, and low levels of both internal and external efficiency, associated with many VET sector investments.

Fig. 8 shown on the following page, provides a conceptual system framework for labor market human capital development. The system operates within the political, social, community and economic domains. As such the characteristics and demands of each domain need to be recognized if the system is to function efficiently. In the VET context, those cells lying on the right of the diagram represent the supply side of the human capital formation system, while those on the left, the demand side. What is of essential importance is to recognize the links that connect each cell of the system. Failure to build and maintain those linkages results in partial failure of the system. It is suggested that this framework represents a diagnostic tool that helps to identify the status of any human capital development system and similarly, to identify those areas where investment must be made if the wider social and economic policy objectives are to be met.

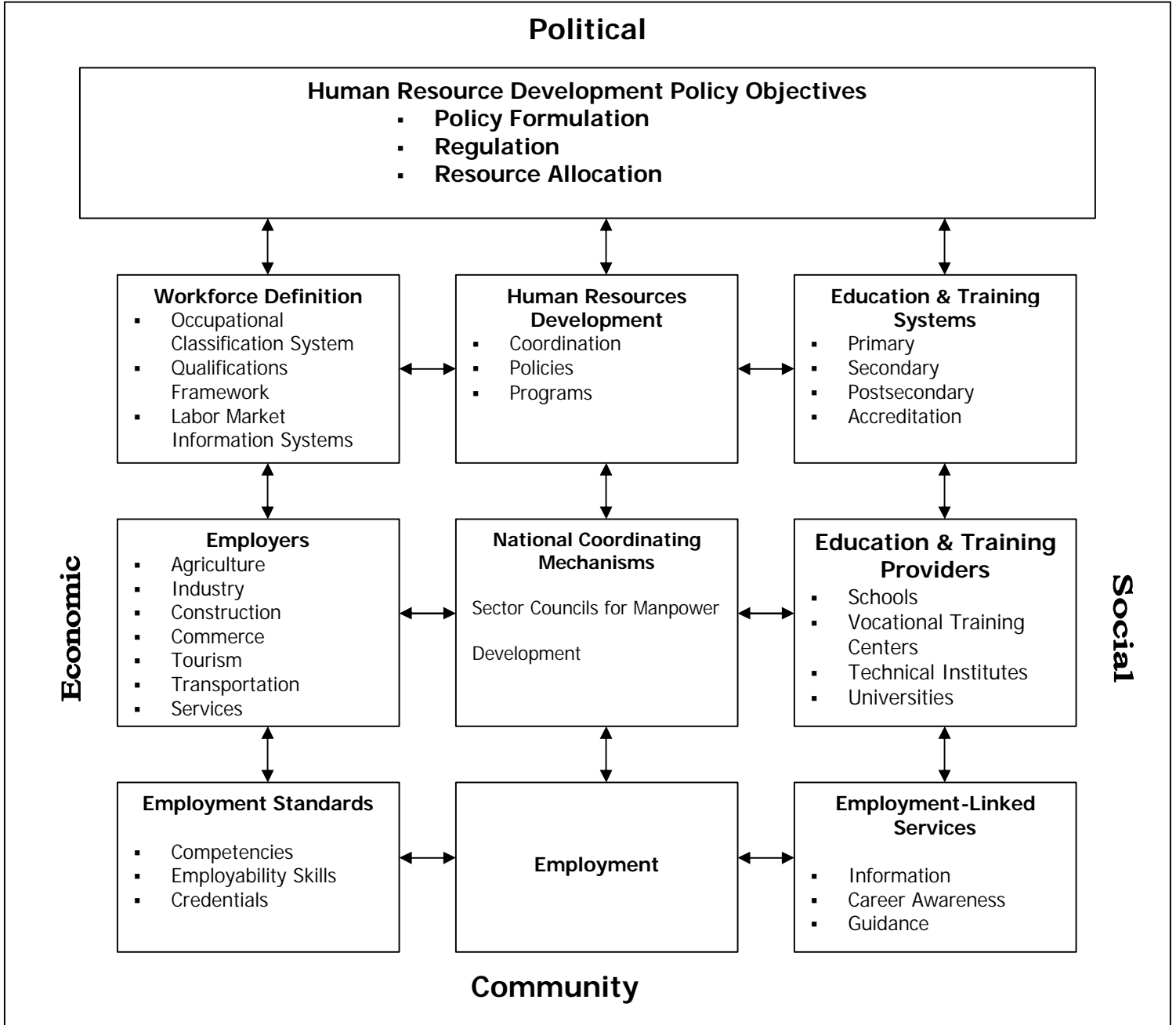
The following paragraphs briefly outline the purpose associated with each cell shown in the diagram, together with a summary of the current status of the human capital development system in Lebanon.

Human Resource Development Policy

HRD policy objectives cover a wide spectrum of social and economic development concerns. In the context of the labor market in Lebanon, the overall goals should aim to:

- Build and sustain a skilled labor force that will support a productive economy and attract inward investment
- Make technical and vocational training and applied occupations attractive pathways for young Lebanese citizens

Fig. 8
Conceptual System Framework For Labor Market Human Capital Development



- Promote high standards and innovative capacity within the private sector, enabling Lebanese companies to succeed in increasingly competitive markets.

These goals should be thematically developed into policy objectives relating to issues such as: making labor force development an explicit element of Lebanon's inward investment policy; promoting sectoral collaboration among firms in key sectors of the economy; aligning TVET programs with internationally recognized skill standards; aligning public sector employment regulations with other policy goals etc.

At the present time, responsibility for HRD in Lebanon is divided between the Ministry of Education and Higher Education, and the Ministry of Labor and Social Affairs. Policies relating to HRD tend to be reflected primarily through regulations, and are identifiable with respect to individual issues. However, no nationally coordinated policy framework addressing human capital development for the labor market presently exists.

The Demand Side of the HRD Framework

Three domains lie on the economic, or demand side of the Human Resources Development Framework, namely (i) workforce definition, (ii) employers, and (iii) employment standards. The current situation with respect to these three areas is discussed below.

Workforce Definition.

This area contains three inter-related functions.

- (i) ***The establishment of a national occupation classification system.***
This provides a standard taxonomy for describing and coding occupations within the workforce. Lebanon has adopted the ILO Arab ISOC classification system and is using this in the collection of employment and unemployment data. This represents a sound framework and needs to become universally adopted across all sectors of the economy
- (ii) ***The adoption of a national qualifications framework.*** National vocational qualifications are qualifications about work, covering occupations from unskilled to professional levels. They are based on standards of competence set by employers. They are a mechanism to maintain workforce quality and are linked to occupational classification. Achievement of the competencies can be measured and certified by academic, industrial, professional or sectoral bodies recognised by the national authority charged with responsibility for maintenance of the framework. The qualifications framework in Lebanon at the present time continues to be an adaptation of an older European system that is more academically oriented than linked to the world of work. Significant revision is required if the larger policy objectives are to be achieved.

- (iii) ***The development of a labor market information system (LMIS).*** Real time knowledge of the structure and behavior of the labor market is essential to HRD policy formulation. While this is recognized by the Ministry of Labor and steps have been taken to build a labor market analysis capability through support provided by ILO, no resources have been provided to develop a sustained capacity to undertake regular labor market surveys. Such regular surveys would generate those understandings regarding labor market dynamics that are necessary to support policy development and subsequent redistribution of public resources.

Employers.

Employers are all those public and private sector entities who provide financial payment to an employee in return for labor or services. The approach to hiring and performance measurement by private employers is guided wholly by the ability of the employee to contribute to the profitability of the enterprise. Hiring and performance measurement by public sector employers is guided more by the ability of the employee to provide an efficient and effective public service. Employers are the end user of all human resource development investments and consequently must be regarded as the starting point for all human resources development strategies.

Public and private sector employers currently operate in a different manner to solve human resource availability issues. In the public domain proactive strategies are seen with respect to the training of teachers or health care workers. In the private domain, employers operate exclusively in an opportunistic and reactive mode, engaging either locally available labor or expatriates in order to ensure their competitive advantage and meet obligations to customers and clients. This unplanned dynamic is ultimately unsustainable, particularly within the context of the unfolding demographic in the country coupled with the imperative to integrate with regional and international economies.

As noted earlier in the report, there are well-established employer associations in Lebanon whose primary function in the past has been to lobby government regarding the regulatory and taxation environment. While recognizing the constraints arising from an unplanned human capital development environment, no forum is currently available for discussion of the issue

Employment Standards.

In parallel with Workforce Definition, this area encompasses three inter-related issues, namely:

- (i) ***Adoption of a competency based approach to human resources development.*** Employers require the ability to do, more than the ability to know. This becomes increasingly important in a knowledge economy

context where the "doing" is dependent upon abilities to observe, to think, to analyze and to conceptualize viable solutions. Consequently, all human resource development activities need to provide contextualized education, and competency based employment training. The general education system in Lebanon is currently engaged in a reform program that will progressively result in a change from information based teaching and the ability of learners to respond to standardized question formats, to a more contextualized learning approach. Similarly, investments are currently being made in the VET system in Lebanon that will result in curricula being expressed in competency based format. These are regarded as important directional changes.

- (ii) **Building employability skills.** During the course of the field-work, and discussions with employers, observations were made regarding the attitudes of Lebanese employees towards work. Concerns were raised regarding timeliness, efficiency, lack of concern for employer owned equipment, customer service etc. These attitudes were attributed to current social and economic conditions in the country. They may also be used by employers as an excuse to engage expatriate labor who are hired on an hourly basis, and have no other commitment or opportunity than to work. Building employability skills in the Lebanese workforce is however an issue that must be addressed within the context of the HRD Framework. Clusters of employability skills are well documented, as are strategies for their development. The building of employability skills does not currently feature in the activities of DGVTE. The issue will need to be addressed in terms of the long-term economic development objectives of the country.
- (iii) **Credentialling.** Credentialling is an issue closely allied to the qualification issue discussed under "workforce definition". There are currently no mechanisms in Lebanon for entry level workers to have their experience recognized, or prior learning assessed, should they wish to seek alternate employment or to pursue further studies. This impacts on worker mobility and the articulation of training. The issue could be addressed through the National Qualifications Framework.

The Supply Side of the HRD Framework

Three domains lie on the social, or supply side of the Human Resources Development Framework, namely (i) education and training systems, (ii) education and training providers, and (iii) employment linked services. The current situation with respect to these three areas is discussed below.

Education and Training Systems

Education and training systems are designed to address the social and economic development priorities of the country. The systems include primary, secondary, and post-secondary training systems. No policy framework or national strategy

currently exists for any of the above educational systems with the exception of VET. The need to have such frameworks is recognized, and initial steps have been undertaken prepare a strategic plan for the primary and secondary sectors. Institutional capacity to support policy development, engage in strategic or operational planning, or to provide effective administration is inadequate and fragmented at all levels of the education systems in Lebanon.

Education and Training Providers.

Education and training providers are those institutions, private companies, NGO's or other entities who deliver instruction to the citizenry. In the context of human capital development in Lebanon, education and training providers include:

- (i) Public and private primary and secondary schools
- (ii) Public and private VET providers
- (iii) Public and private universities
- (iv) Employers

The following observations are made with respect to the foregoing providers in terms of their contribution towards building the human capital necessary to achieve national development objectives.

- (i) **Public and Private Primary and Secondary schools.** A national curriculum has been adopted for primary and secondary school education and universal access to basic education has been accomplished. While this is scheduled to change, instruction continues to be information based as opposed to being contextualized and exploratory. This latter mode of instruction builds a stronger foundation for the analytical and critical thinking skills required for subsequent levels of learning and productive employment. Effective exit points are available for learners to opt for academic or vocational education and training.
- (ii) **Public and Private VET Providers.** A network of public and private training institutions is in place. Investments are being made, designed to enhance the quality and relevance of programming. A number of these investments will benefit both public and private providers. The public system is being significantly expanded with unpredictable impacts on private providers.
- (iii) **Public and Private Universities.** The social demand for university level education in Lebanon is high. This has resulted in an expansion of both public and private capacity, and the production of graduates well beyond the capacity of the labor market to absorb. As a result, many graduates seek employment outside the country.
- (iv) **Employers.** In the absence of relevant skill development by public or private providers, a number of employers report providing on the job training, or purchasing training from outside. Examples were provided from employers in the hospitality sector, agro-industries, financial services and manufacturing. These examples represent entirely appropriate

responses by employers to invest in the development of their own human resources and are to be encouraged.

It can be seen from the foregoing survey of education and training providers that while there are strengths and weaknesses in the system, the imperative to be addressed at the national level is one of policy coordination.

Employment linked services

The final domain on the supply side of the Human Resources Development Framework is the provision of employment linked services. This includes the delivery of career guidance to students in school, to VET students, and to the community at large. Other services include the provision of labor market information and information regarding the nature of work and career outlook for various occupations. No national policy or programs to provide the above services are currently in place in Lebanon.

Linking the Demand and Supply sides of the HRD Framework

The connections between the demand and supply sides of the Human Resource Development Framework are clearly illustrated in Fig 8 . In Lebanon, supply and demand in the labor market currently operate within two virtually independent solitudes.

The central objective of any future VET intervention in Lebanon should be to promote a systemic approach to the building of human capital in the country, in order to ensure increased coordination between education, training and employment. The following observations are made with respect to those elements of the HRD Framework that link supply and demand.

Human Resources Development

This domain contains all those functions designed to develop policy, formulate regulatory mechanisms, ensure collaboration between all stakeholders involved in human capital formation and efficient operation of the labor market. Policies guiding the activities of this function would address a combination of economic and social objectives. The economic objective would be to ensure that the economy could draw on a competitive and skilled workforce, and that the labor market operated smoothly. Social objectives would include ensuring equitable access to opportunity, promoting employment and protecting workers rights. Strategies to achieve these objectives would include:

- Formally defining occupations and skill standards in order to improve communication in the labor market
- Gathering and disseminating information on labor market demand for particular skills

- Developing and operating VET institutions to produce skills of the quantity and quality needed by the labor market
- Developing and coordinating systems for workplace based training
- Providing incentives for employers to provide training and raise skill levels
- Regulating working conditions and compensation, both to protect workers rights and to create incentives for individuals to work in particular occupations and invest in skills development
- Encouraging firms in particular industry sectors to work together on human resource development issues.

As previously noted in the commentary on national policy formulation, no entity in Lebanon has been assigned a mandate to implement a coordinated strategy for human resource development in the country. Some of the strategies outlined above are being partially addressed by different agencies, but the resources invested are showing no rate of return as the outputs are either insufficient to be useful, or are not integrated into an overall policy framework.

National Coordination Mechanism

The complete absence in Lebanon of any forum or institutional mechanism for dialogue between the employer community and education and training providers is seen as one of the most critical gaps in human resource development, management and planning. Until this gap is closed, inefficient use of public resources on the supply side of the HRD equation will continue. Recognizing that all sectors of the economy are at different stages of development, and that all have different needs with respect to their human resource requirements, many countries are adopting variants of the sector council model. These councils are individually representative of the principal economic sectors and work collaboratively with government, employers, and training providers to address issues such as:

- Identification of policy issues impacting on labor market efficiency and working with government to achieve their resolution
- Collaboration with government in the development of a National qualifications framework through the development of occupational profiles and related competencies
- Providing information regarding levels and categories of employment demand in order to enhance the labor market information system
- To engage in funded training or other staff development initiatives, that would enhance the financial and economic efficiency of employer members of the council
- Providing information that would enhance the effectiveness of career guidance initiatives.

Lessons learned from other experiences has shown that, in order to be effective Sector Councils need to satisfy the following criteria:

- They must be empowered. That is they need to be formally and legally established
- They must have a clearly defined mandate. The purpose for which they are established and the activities in which they will engage need to be agreed and documented between the stakeholders.
- They need to be resourced. Sector Councils are not effective unless they are supported with funds necessary to achieve their purpose. Provision of these funds should be shared between the stakeholders i.e. employers and government
- They need to be facilitated. Serving and harmonizing the priorities of all stakeholders in a Sector Council is a challenging task. This can be achieved more readily if the process is facilitated by an objective third party during the initial years of establishment.
- They must be accountable. Focus, rigor and results must be the guiding principle of Sector Councils if they are to be seen to be of value to government and membership. This issue is linked to funding and facilitation.

Discussions with employer groups in Lebanon during the past two years has shown a positive climate of interest in the concept. A pilot project is recommended in order to explore the development and implementation of a Sector Council model that would be appropriate for Lebanon. This would begin to address the critical issue of developing a coordination mechanism between labor market demand and supply.

Employment.

All objectives and activities within the HRD Framework ultimately lead towards the goal of employment. It is well understood that employment creation is a function of macro-economic policy and many other exogenous factors. Education and training per se do not create employment. It is the responsibility of the government however to ensure that its citizens are as effectively prepared as possible to access those employment opportunities that are created, thus enabling them to contribute to further economic development of the country.

Summary

Based on the foregoing, the following areas would appear to be candidates for a holistic approach to strengthening the human capital development system in Lebanon:

- Re-evaluating the governance model and providing assistance for the establishment of a fully functioning multi-stakeholder body for the development of HRD policy in the country

- Provision of further Technical Assistance to prepare and implement a plan of institutional capacity development for DGVTE, with particular reference to policy, planning, monitoring and evaluation.
- Undertaking an assessment of present and future financing of VET in Lebanon
- Strengthening the Labor Market Information System to provide improved understanding of labor market dynamics in Lebanon
- Undertake a fundamental review of the existing program framework within the context of an agreed series of social and economic objectives for VET in Lebanon
- Initiate the introduction of a National Qualifications Framework
- Place top priority on the establishment of functioning and effective mechanisms for dialogue between sectoral stakeholders on the supply and demand side of the human capital development equation.

Annex I

A Strategic Framework for VTE

1. The Need for A Sector-Wide Framework for VTE

In the early nineties, the Government developed plans to expand the public VTE system to meet the large shortage of skilled manpower. A Plan for building 100 new schools evolved in 1996. However, the plan was based on a number of technically flawed studies, which were not justifiable on the basis of student population. In 1997 the plan was reviewed and the number of schools was scaled down to 34 schools with a student capacity of about 18,000. The loans from the Arab Fund, the Islamic Development Bank and OPEC were obtained to finance these schools.

During the year 2000, the plan was reviewed again due to the high demand on VTE. The reviewed plan included building about 12 training centers and 40 new schools. Studies for school standards and demanded trades were conducted by the MEHE. A new plan for school distribution was presented and a construction plan was developed. Some schools are currently under construction.

The Government's current target is to increase the participation rate in VTE 50% of secondary enrollment from the current 25% in the next 5-6 years. This translates roughly to 62,000 places (50% of 124,000, the projected secondary enrollment in 2004) of which 32,300 (52%) would be in the public sector. This is reasonable when compared to similar neighboring countries like Jordan (31%), Egypt (60%) and Turkey (41%).

In the European Union, for example, the less industrialized countries enroll between 19-41% of their secondary students in VTE.

Industrialized countries enroll over 70% of their secondary students in VTE. In Lebanon during the 1996-97 period, the secondary cycle enrolled 17,600 students in private VTE schools (16%) and 9,500 students in public VTE schools (9%). The post-secondary cycle (TS level and other special certificates) enrolled 5,700 students in private VTE schools and 3,300 in public VTE schools. Enrollment in VTE increased by about 110% in the last three years and is expected to accelerate when more affordable public places are created.

Plans aiming at improving quality technical education and training were also implemented. In 1997, 35 of the existing specializations were reviewed and new curricula for them were developed. The curricula were not focused and further reviews were requested. The Ministry is still waiting finalizing the reviews before putting it in action. The curricula development was accompanied with some teacher training programs, but the process was not properly planned and had to stop.

Past government efforts to improve VTE lacked coherence due to an absence of a clearly articulated VTE policy. However, the current administration is actively seeking to provide a well-defined framework to promote a balanced development of both private and public VTE. Since 1992, the Lebanese government has been trying to secure funding to develop VTE in Lebanon. Its efforts resulted in securing loans and grants from international agencies, which would help in establishing an effective system.

Currently public VTE can benefit from an 84 million dollar loan from the Arab Fund, The Islamic Bank and OPEC allocated for building and equipping new schools. Another loan of 29 million dollars from The World Bank is allocated to the development of VTE in general. Some grants from the German Government are also available for the development of the system.

2. VTE Critical Issues

2.1 VTE Administration

VTE in Lebanon is managed by the Directorate General of VTE (DGVTE) and operates within the Ministry of Education and Higher Education. The Directorate General manages the VTE system in the Public and Private sectors through the following departments:

- Management and Implementation Department
- Technical Department
- Accounting and Auditing Department
- Vocational Training Department
- Control and Exams Department
- Information Systems and Statistics Department
- Educational Departments in the Regions (schools, institutes, training centres).

Severe shortages in civil servants working at DGVTE can be noted. Only about 52 persons are present with an organizational capacity of more than 200.

A Higher Council for VTE supports the public administration. The Council is an advisory body headed by the Minister of Education and Higher Education with representatives of the various education sectors in the country, other ministries and public administration bodies and the private sector. Its role is to plan the formulation of relevant policies and assist in the development sector strategies. The council is not fully practising its role due to the absence of implementation mechanisms, coordination between the different bodies, the poor contribution of the private productive sector, and the poor capacity of the DGVTE.

2.2 Governance, Participation and Administration

The absence of legislation, which makes VTE open for investments, the strong central administration segregates VTE institutes from the surrounding communities. Stakeholder's contribution is very limited and planning is done by the public administration.

2.3 Orientation and size of VTE Sector

Enrollment rates in VTE remain low. Student/ teacher and trainee/instructor ratios are low and vary between VTE institutions. This lowers the internal efficiency of the system and raises the operating costs.

The Lebanese VTE system has to be changed from a rigid supply based system to a more flexible demand based system. Appropriate legislation has to be passed allowing private sector provision of education at all levels.

2.4 Funding

The economical problems in the country limit the financial contribution of the government. The annual allocated budget is hardly enough to cover employee's expenses; new funds must be secured and wisely spent.

2.5 Internal Efficiency and Quality

The reform of Lebanese education has required a revised curriculum at all levels and this, in turn, has created needs for new approaches to teacher pre-service education, teacher in-service training to accompany the provision of textbooks and educational materials. The other common element also comes from curriculum change and is highly inter-related with the provision of textbooks and materials appropriate for the new curriculum. Another element of vital importance is raising the level of student participation in VTE programs. Each of these areas continues to be government priority.

Most educational buildings are now more than 20 years old and are in acute need of renovation and refurbishment. Heating systems in many school buildings either do not function or are in poor condition, a major difficulty in a country that experiences severe winter conditions. Much of the equipment in schools is also in poor condition. These physical requirements cannot be ignored and a vast quantity of resources will be needed to rectify them.

The quality of education remains the main factor in the whole process. Quality curricula, teachers, facilities and management are required.

2.6 External Efficiency, Responsiveness and Relevance

Recent VTE programs are not responsive to market needs. A big gap exists between the VTE sector and the requirements of the productive sector. The scope of offered programs and skills are not relevant to market requirements. The external efficiency of the system is considered very low.

2.7 Standards and Accreditation

There are urgent need for occupational standards and accreditation system across VTE institutes.

2.8 Vocational Awareness and Work Behavior

VTE in Lebanon is considered as having a very low social status. Community acceptance and VTE image must be studied and improved. Student attitudes have to be understood and realized.

2.9 Private Productive and VTE Sectors Involvement

A critical element in developing VTE is the involvement of the private productive sector in the VTE system to ensure responsiveness. One of the key aspects of the policy framework is to give employers, especially in the private sector, a more active advisory role in VTE policy matters. This would help ensure that sector policies are responsive to the needs of employers and that training is geared towards the acquisition of skills in demand.

Another issue is to establish a real partnership with the private VTE sector and encourage private schools to bare some of the burden of industrial VTE programs.

2.10 Training

Training is a key element in the development of Lebanese manpower, through upgrading performance standards and reinforcing the basic skills acquired during VTE studies. The productive sector should adapt training through a policy of pre-service and in-service training approach.

2.11 Relationship Between VTE and General Education

There has always been a big debate about the relationship between general education and VTE and whether VTE graduates should be allowed to join universities. There is no clear vision or mechanism to organize this process.

3. Developing Strategic Directions for a Sector-Wide Framework

The Government recognizes the need to address institutional and sectorial issues in VTE in parallel to investments in physical infrastructure. Realizing the scope of work, the MEHE initiated a process aiming at formulating a VTE strategy framework. The process involved the following steps:

- 1- The MEHE prepared a paper which incorporated all VTE problems and expectations. The general framework presented in this paper suggested major elements that are worth considering when formulating a strategy including goals, which incorporate perspectives that are sector-wide and sensitive to the particular interests of donors, teachers, administrators, government officials, and other stakeholders in the VTE system.
- 2- Each goal was followed by a set of suggested solutions presented in a question format.
- 3- The paper was distributed to a selected group of key agencies, stakeholders, administrators, educational and labour market experts, private VTE sector, syndicates, and government officials.
- 4- One week following the distribution of the paper a national workshop on VTE sector strategy was held at the MEHE offices on Jan 10, 2001, led by His Excellency the Minister of Education and Higher Education, for further consideration and reactions
- 5- The national workshop involved almost 50 invited participants. It included officers from other ministries, key educational administrators and teachers, other stakeholders, and representatives of donor organizations. The participants discussed issues presented in the MEHE paper and presented their view, concerns and expectations.
- 6- At the end of the workshop, all participants were invited to express their views in writing and submit their response within two weeks. A committee of five experts was nominated to follow up on the process. A VTE consultant was assigned by the Minister to study all responses and prepare a report including a proposed strategy framework.
- 7- Ten substantial responses were received. Outcomes of the process are presented in this report. The consultant reviewed outcomes from the workshop and prepared a strategy framework along with associated policies. These recommendations were discussed with key Ministry staff and the Minister of Education and Higher Education, final revisions made, and the report submitted for MEHE and government approval.

4. Results

The process of developing a strategy framework was a strength, because it brought together educators, consultants, MEHE officials, donors, and other stakeholders with a common interest and concentrated high levels of expertise and effort. While the process and outcomes from the adapted process may not have met all expectations from stakeholders, it did reflect a sector-wide approach. Most stakeholders were pleased to have the opportunity to provide feedback on the draft report. The consultant tried to incorporate as many relevant stakeholder suggestions into the recommended framework. The major policy directions for goal categories to be addressed while formulating a strategy for VTE are grouped into the following categories:

A. Institutional Capacity Building and Development

1. The MEHE will undertake administration reform in VTE management. This will include the structure of the DGVTE, administrative procedures, school management, employment criteria and mechanisms, staff qualifications and job descriptions, ensuring flexibility, equal opportunities and quality. The MEHE will proceed in staffing DGVTE with suitably competent staff and give the management of VTE the opportunity to respond to the continuous growth and demand of the sector.
2. Continuous development of VTE staff and administration will be conducted through providing a comprehensive staff development program, career path and procedures reform.
3. Capabilities related to information technology skills will be given special attention. A comprehensive information system and computer competency program will be put in place to develop national capabilities. This includes the provision of staff development, software, research tools, modern equipment and technologies.
4. Mechanisms for collecting adequate information, statistics, indicators, human resources development and market progress added to research studies will be developed and applied ensuring proper planning and program execution.

B. Governance, Management, Administration & Participation

1. VTE policies and strategies will be developed by a national body consists of key agencies and stakeholders under the guidance of the MEHE. The direction of VTE will be guided by thorough studies and research involving all sectors forming the economy.
2. VTE planning and implementation will be carried out by MEHE selected staff, assisted by key agencies and stakeholders.
3. VTE system will be rationalized through the consolidation and restructuring of secondary technical education, post secondary

technical education, vocational education and vocational training, including reorganizing their governance.

4. More freedom will be introduced to the VTE system allowing the introduction of decentralization to the VTE giving the local authorities a wide role in administering, financing and guiding schools towards fulfilling community needs.
5. The administration and management of VTE will be supported by an EMIS to achieve maximum efficiency.

C. Orientation and size of the VTE Sector

1. The current VTE system will be reviewed and developed to meet national needs.
2. Ratio of VTE graduates to university graduates will be regulated and balanced
3. VTE will meet both social and market demand. Short term planning will focus on meeting social demand. Medium and long term planning will be directed towards meeting market demand.
4. Special attention will be given to trades related to the services, maintenance and operation sectors. Production trades will be readjusted to suit the local needs.
5. VTE number of graduates per trade will be rationalized in accordance to local and surrounding market needs.
6. VTE public school system will be expanded to absorb more students, trainees, specializations, levels, trades and training disciplines.

D. Internal Efficiency, Effectiveness and Quality

1. VTE graduates will acquire specific skills and knowledge in particular trades, which will help them in finding and keeping jobs and take self-employment.
2. VTE graduates will be occupationally flexible and possess dynamic skills and technical knowledge. This will be achieved through acquiring extra generic skills; thus students will be able acquire develop their skills and adapt with the changing demand.
3. VTE programs will be reviewed and readjusted to ensure that key competencies incorporated into all curricula areas. Programs will guarantee that students are well equipped to contribute effectively at an early stage to workplace productivity and satisfy employer's requirements.

4. The range and content of VTE programs should reflect the needs of work and employers and allow for the continuous change in skill requirements in the workforce.
5. VTE institutes will be suitably equipped to deliver quality education and training.
6. Instructional quality will be ensured through introducing quality teachers and trainers to the system with relevant practical work experience.

E. Relevance, Responsiveness, and External efficiency

1. VTE programs will be appropriate for all students and should be accessible to all, including those who drop out from secondary, higher education, working people and people who want to improve their skills. Courses will be offered in sufficient variety to satisfy different student needs, and will be responsive to demand established from market needs.
2. VTE will offer skills relevant to the industries in the national training profile; rather than; to narrowly focused occupations. Strong linkages with employers will be established to determine course and program priorities. Graduates performance will be evaluated.
3. VTE will adopt structured work place training to allow for competencies to be developed and assessed in the work place to the extent deemed appropriate for accreditation by industry and the MEHE. Employment placement will be introduced to the system as a part of development of skills and serving the community.
4. VTE will cooperate with the different economy sectors to bring all vocational education and training courses within a single framework under broad industry groupings, consistent with standard national profiles.
5. The MEHE and in cooperation with the National Employment office will produce a unified occupation and job classification framework, which will be adopted by the all economy sectors. Job practicing license will be enforced, relevant legislative frameworks will be developed.
6. The scope of decentralized management in the delivery of VTE will be studied. The option of giving more freedom to public technical institutes in managing their resources will be exploited.

F. Funding, Finance and accountability

1. The government will invest properly in VTE to ensure high quality of education, responsiveness, relevance and equity.

2. VTE financing will be diversified. More funds will be secured and an effective expenditure system will be developed.
3. VTE institutions will improve on using available financial resources. Great emphasis will be put on developing cost recovery mechanisms and self-funding resources.
4. The private industrial sector will be given more space to invest in VTE. Legislation allowing private industries in investing in VTE will be found and initiated.

G. Accessibility, Social Equity and Mobility

1. Equal access to and opportunity to everyone to succeed in VTE, training and consequently employment will be ensured to all those needing VTE training and teaching.
2. Students will be prepared for employment and equipped with the necessary employability, academic, and occupational skills in the context of economic indicators and career objectives.
3. VTE will be supported by a flexible, community based system that matches in its services social demand, and serves the objectives of realizing social equity and satisfy immediate social objective by serving those needing most, including un-employed, young people and low-income persons.
4. The non-formal VTE will be integrated to the system through organizing it into models, which can be recognized and accredited, by formal systems.

H. Standards, Certification, Classification, Accreditation and Regulation

1. Occupational standards and accreditation system across VTE institutes and schools will be developed and implemented.
2. Emphasis will be on the establishment and development of national standards for VTE graduates, teachers, facilities, curricula, inputs and outputs.
3. Admissions procedures in VTE institutes will be regulated.
4. Standards for certification will be established and developed.
5. VTE certificates will be classified and supported; private and public employers will nationally accept Classification of certificates.

I. Developing VTE Awareness, Appreciation and Recognition

1. The work attitudes of students since early training stages will be identified.

2. The varied interests and needs of trainees and their professional capabilities will be explored. Their work attitudes should be identified and developed.
3. The MEHE will invest in developing a positive attitude and social acceptability for VTE and VTE graduates as well as general and higher education.

J- Links between Private VTE schools, the Private Productive Sector, the NGOs and Public VTE Sectors

1. Private VTE institutes will be encouraged to maximize their potential to expand their provision of educational and training services, in conformity with the regulations of the public VTE system.
2. The number of entrants to private sector schools must be increased through encouraging schools to broaden the scope of offered courses, and allowing them to develop and share responsibility.
3. The private industrial and services sectors will be invited to finance some specialized VTE schools and training facilities. Flexible legislative frame works to support such projects will be developed.
4. Partnership with NGOs will be enhanced. New regulation will be brought into service to enhance the performance of joint projects.

K. Training and labor Market links

1. Training programs and training curricula will be made more flexible and responsive to the requirements of changing social status, employment and employability requirements and technology.
2. Standards for accreditation of training and transferring trainees to regular technical programs will be developed.
3. Training as an ongoing process providing national manpower with flexibility needed to adapt to advances in technology, will be strongly supported.
4. Short-term training programs for unskilled adults and youths not enrolled in schools will be adapted in order to establish a pre-service vocational preparation.
5. In-service training in both private and public sectors will be activated and developed.
6. The establishment of National Training Centres will be introduced to the system to serve education, industries, communities and the national economy.

L. Educational paths

1. VTE students and trainees will be encouraged through an “open door” policy for higher education, thus paving the way for VTE schools graduates to study in higher education.
2. The MEHE will regulate the movement of VTE students to other educational paths, and determine which vocational education and training courses can count towards entrance to other educational institutes.

Annex 2 Distribution of Instruction Staff

School Name	Students	Teachers	Ratio
Al Imadad Tech & Vocation Institute	238	105	2.27
Tourism Tech Institute	1116	140	7.97
Hotelery Tech Institute	441	100	4.41
IPNET-Dekwaneh	520	150	3.47
High Industrial Technical Institute	779	167	4.66
E.T.T.T.S.	869	99	8.78
Arts & Crafts Institute	970	130	7.46
Hotelery School	758	70	10.83
Industrial Technical Institute	992	313	3.17
Hotelery Tech Institute	610	98	6.22
Bir Hasan Tech School	1296	332	3.9
Industrial Technical School	737	130	5.67
Nat. Ins. of Medical Care	840	220	3.82
IPNET- Bir Hasan	331	51	6.49
Barja Tech School	346	115	3.01
Hamana Tech School	388	92	4.22
Dir Al Kamar Tech School	192	55	3.49
Sheim Tech School	262	125	2.1
Ajaltoun Tech School	693	130	5.33
Nursary Institute – Ain Wzein	61	45	1.36
Bakhoun Tech School	161	74	2.18
Bezal Tech School	128	42	3.05
Halba Tech School	287	190	1.51
Douma Tech School	171	60	2.85
Dir Omar Tech Institute	1058	260	4.07
Zgharta Tech Institute	697	43	16.21
Tripoli Tech Institute	2722	613	4.44
Mechmech Tech School	249	56	4.45
Wadi Khaled Tech School	249	116	2.15
Al Shouhadaa Tech School	63	33	1.91
Hachem Fahes Tech Institute	563	74	7.61
Al Wafaa High Tech Institute	746	185	4.03
Tyre Tech Institute – Alabasieh	326	105	3.1
Nabatieh Tech School	979	250	3.92
Bint Jbeil Tech School	740	175	4.23
Jebaa Tech School	205	85	2.41
Maria Aziz Tech Institute	119	40	2.98
Jwaya University Institute for Tech	472	80	5.9
Jwaya Tech School	406	117	3.47
Tyre Tech School	470	131	3.59
Saida Tech School	1542	410	3.76
Marj Oyoun Tech School	225	63	3.57
Mayes al Jabal Tech School	27	11	2.45
Bekaa Tech & Vocational Institute	1342	298	4.5
Sheik Yaakoub Tech & Vocational Institute	1132	328	3.45
Hermel Tech School	391	150	2.61
Hermel Typical School	89	43	2.07
Bednayel Tech School	661	140	4.72
Balabeck Tech School	858	255	3.36
Rashaya Tech School	182	65	2.8
Zahleh Tech School	426	68	6.26
Aarsal Tech School	362	103	3.51
Mashghara Tech School	298	85	3.51
Maghdoucheh Tech School	0	0	0
Kfarseer Tech School	0	0	0
Totals	30785	7415	4.17

	School Name	Students	Teachers
1	Al Imadad Tech & Vocation Institute	238	105
2	Tourism Tech Institute	1116	140
3	Hotelery Tech Institute	441	100
4	IPNET-Dekwaneh	520	150
5	High Industrial Technical Institute	779	167
6	E.T.T.T.S.	869	99
7	Arts & Crafts Institute	970	130
8	Hotelery School	758	70
9	Industrial Technical Institute	992	313
10	Hotelery Tech Institute	610	98
11	Bir Hasan Tech School	1296	332
12	Industrial Technical School	737	130
13	Nat. Ins. of Medical Care	840	220
14	IPNET- Bir Hasan	331	51
15	Barja Tech School	346	115
16	Hamana Tech School	388	92
17	Dir Al Kamar Tech School	192	55
18	Sheim Tech School	262	125
19	Ajaltoun Tech School	693	130
20	Nursary Institute – Ain Wzein	61	45
21	Bakhoun Tech School	161	74
22	Bezal Tech School	128	42
23	Halba Tech School	287	190
24	Douma Tech School	171	60
25	Dir Omar Tech Institute	1058	260
26	Zgharta Tech Institute	697	43
27	Tripoli Tech Institute	2722	613
28	Mechmech Tech School	249	56
29	Wadi Khaled Tech School	249	116
30	Al Shouhadaa Tech School	63	33
31	Hachem Fahes Tech Institute	563	74
32	Al Wafaa High Tech Institute	746	185
33	Tyre Tech Institute – Alabasieh	326	105
34	Nabatieh Tech School	979	250
35	Bint Jbeil Tech School	740	175
36	Jebaa Tech School	205	85
37	Maria Aziz Tech Institute	119	40
38	Jwaya University Institute for Tech	472	80
39	Jwaya Tech School	406	117
40	Tyre Tech School	470	131
41	Saida Tech School	1542	410
42	Marj Oyouun Tech School	225	63
43	Mayes al Jabal Tech School	27	11
44	Bekaa Tech & Vocational Institute	1342	298
45	Sheik Yaakoub Tech & Vocational Institute	1132	328
46	Hermel Tech School	391	150
47	Hermel Typical School	89	43
48	Bednayeil Tech School	661	140
49	Balabeck Tech School	858	255
50	Rashaya Tech School	182	65
51	Zahleh Tech School	426	68
52	Aarsal Tech School	362	103
53	Mashghara Tech School	298	85
54	Maghdoucheh Tech School	0	0
55	Kfarseer Tech School	0	0
	Totals	30785	7415