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ABSTRACT

Data for studies of vocational education and training systems in the Hashemite Kingdom of Jordan and five other countries in the region were gathered through an analysis of existing studies and visits to the main stakeholders in the countries. Some of the main conclusions reached by the study of Jordan include the following: (1) with a high commitment in Jordan for a reform of the vocational education and training system as part of an overhaul of the entire human resources development system, the reform of the vocational education and training system has already become an integral part of the Education Reform Program that started in 1988; (2) international donors have played an important role in financing educational expenditures in Jordan; (3) support from the Canadian government has helped to identify problems in the current vocational education and training system, and a reform policy has been created and steps toward implementation have been taken; and (4) the reform of the Training Centers catering to basic school drop-outs has only just begun and the development of a Continuing Vocational Training system has hardly begun at all. Recommendations include improving the lower and middle segments of the occupational qualification structure, implementing an apprentice system, and developing a mechanism for interface between industry and the educational establishment. (Contains 24 references.) (KC)

An overview of vocational education and training in the Hashemite Kingdom of Jordan

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The European Training Foundation is an agency of the European Union, which works in the field of vocational education and training in Central and Eastern Europe, the New Independent States, Mongolia and the Mediterranean partner countries and territories. The Foundation also provides technical assistance to the European Commission for the Tempus Programme.



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List of abbreviations

BAU	Al Balqa' Applied University
BAUCCS	Al Balqa' Applied University Community College System
CC	Community College
CEDEFOP	European Centre for the Development of Vocational Education and Training
CIDA	Canadian International Development Agency
EU	European Union
EUDEL	Delegation of the European Commission in Amman
GDP	Gross Domestic Product
GTZ	Deutsche Gesellschaft fuer Technische Zusammenarbeit
HEC	Higher Education Council
ILO	International Labour Organisation
IMF	International Monetary Fund
JD	Jordanian Dinar (about 1,407 USD)
MEDA	EU Programme of co-operation with the countries of the Mediterranean region
MOE	Ministry of Education and Culture
MOHE	Ministry of Higher Education
MOL	Ministry of Labour and Social Insurance
MOP	Ministry of Planning
MT	Management Training
NCERD	National Centre for Educational Research and Development
NCHRD	National Centre for Human resources Development
Phare	EU Assistance programme for the countries of Central and Eastern Europe
QIZ	Qualifying Industrial Zone
SMEs	Small and Medium sized Enterprises
TA	Technical Assistance
UNDP	United Nations Development Programme
UNESCO	United Nations Organisation for Education, Science and Culture
UNRWA	United Nations Relief and Works Agency
USD	US dollar
VTC	Vocational Training Corporation
WTO	World Trade Organisation

Introduction

This report is one of a series produced by the European Training Foundation in the second half of 1999 on the state of play of vocational education and training systems in six countries of the South Mediterranean region. The countries covered are Algeria, Jordan, Lebanon, Malta, the Republic of Cyprus and Turkey.

Objectives

These reports were prepared at the request of the European Commission and seek to provide a complete overview of the national vocational education and training systems and indications of the key challenges faced by them in a wider development strategy.

It is important to note that, unlike most other studies on the subject, these reports do not aim principally to contribute to project identification. This factor has enabled a broader set of issues to be tackled and has facilitated the integration of information on specific circumstances and political issues that may hinder the development of responsive vocational education and training systems in the countries concerned and are usually not relevant or covered in project identification cycles.

Methodology

Staff from the European Training Foundation worked in team to produce the reports.

Work began with an analysis of existing studies carried out for the European Commission or other international organisations. This form of desk research was used to identify the main issues faced by each country and to select key interlocutors.

The second phase of preparation involved visits to the main stakeholders in the countries themselves.

The initial conclusions drawn from these first two stages were then discussed with the national authorities.

An on-going process

These are the first reports that the Foundation has prepared on these countries and, as with other partner countries, we see this as very much an on-going process, each new edition being used as a measure of the progress achieved.

Furthermore, given the dynamic nature of the economic and social transformation the countries concerned are undergoing and bearing in mind the medium term goals of the Euro-Mediterranean policy, developments in the vocational education and training systems would benefit from regular evaluation through the updating of the information and the conclusions provided in the reports.

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The work carried out has been possible thanks to the active collaboration of the following people and organisations:

- The European Commission and in particular its local delegations, whose role in facilitating and advising the team has been crucial;
- The many interlocutors met at different levels in the countries themselves, who have helped the team to focus on the key issues at stake;
- The members of the Foundation's Advisory Forum for the role that they played in the country visits and for the liaison function they played with the relevant national authorities.

1. Executive summary

1.1. Summary of main conclusions

The Hashemite Kingdom of Jordan is a small developing country, consisting mainly of semi-desert and desert land with a fast growing population and poor in natural resources. It is ruled by a hereditary Monarchy. Its fate has been directly related to the outcomes of the Middle-East Peace Process and the conflicts in the Gulf region, politically, socially and economically. The late King Hussein played an active political role in the peace process. This policy is being continued by his son King Abdullah. Jordan has been a major refuge for Palestinians. Its economy has been dependent on workers remittances and international financial assistance (grants and loans) and has suffered a lot from the Gulf crisis in the 1990s. Financial assistance from international financial institutions has been dependent on the introduction of macro-economic and industrial restructuring policies.

The Jordanian economy developed its own productive basis at a late stage, on the initiative of the State. It is still very weak and comprises a few large public and quasi-private companies (mainly in mining and minerals production) and a large majority of small and medium sized businesses that provide the vast majority of employment in the private sector. Local industry was mainly export oriented and until recently was protected by a high import tariff system forming the third major source of income for the government. Jordan is basically a service economy with the State acting as the main employer. There is a complex pattern of interdependencies between the State and the private sector resulting from the fact that the State has taken the initiative and provided funds and infrastructures for the recent industrialisation.

The main challenge for the Government has been, and still is, to turn the traditional rentier economy into an "extractive" one based on local tax incomes to finance the national budget. This should make the country less dependent on foreign financial assistance and increasingly uncertain workers remittances. It would involve strengthening (quantitatively and qualitatively) national productive capacities in order that they will be able to survive in an increasingly open and competitive environment. The new King Abdullah and the Government have embarked upon a policy of reduced budget spending, privatisation and liberalisation of prices and markets in order to reduce the budget deficits and to progressively integrate Jordan into the world economy. This has already produced macro economically extraordinary results but obviously does not alleviate the social situation in the country. Unemployment and poverty rates remain relatively high and the country remains heavily dependent on State initiatives and foreign assistance for the implementation of reforms. The Government has reached agreement with the international financial institutions on another loan to support the reform process and bi-lateral and EU assistance – considered disappointingly low by the Jordanian authorities given the country's peace-making efforts in the region - increasingly focuses on strengthening local industry. The

attention focussed on the small and medium sized business sector is still low, however, both from the Jordanian Government and the major donors.

There is a high commitment in Jordan, both within the Government and among the main vocational education and training stakeholders, for a reform of the vocational education and training system as part of an overhaul of the overall human resources development system. Given the extreme scarcity of natural resources and the increasingly competitive environment in the region, it has become recognised that a well qualified workforce, characterised by a balanced distribution of qualifications (from semi-skilled workers to professionals) will be a *sine qua non* for the successful achievement of both the necessary diversification of national industry in Jordan and the continuing competition for jobs on the regional Arab labour market. Larger numbers should be channelled into vocational education and lower numbers into academic higher education. Vocational education and training is becoming more and more regarded as an effective tool for combating poverty and unemployment.

The reform of the vocational education and training system has already become an integral part of the Education Reform Programme that started in 1988. While the overall policy objectives are basically sound and fully in line with vocational education and training policy conceptions from EU countries - including the focus on lifelong learning - implementation has been facing a series of obstacles. These obstacles include:

- difficulties in overcoming *traditional values* of gender, education and work among the population;
- a fast – and sometimes unexpectedly – *growing population* asking for disproportionate educational spending from the public budget;
- a strong assumption among citizens that *education is a public good* to be provided by the State combined with
- a *reluctance among the private sector to transfer financial means to the state budget* without having control over its spending;
- apart from small pockets of excellence, an inherited fragmented, vocational education and training provision structure that has little labour market relevance and is largely supply-driven;
- serious deficiencies in the teacher training and employment system;
- the *absence of a well-structured information and communication system* at all levels between vocational education and training institutions and the labour market;
- and the *lack of local funds* to finance improvement of the vocational education and training system and of human resources development in general.

International donors have played an important role in financing educational expenditures in Jordan (cf table in annex A for a summary of main actions in the field of VET). For a long time, there has been – on both sides - a preference for institution-based projects rather than for policies. This situation has dramatically changed with the formulation of the Education Reform Programme in 1988 and the establishment of the National Centre for Education Research and Development (now called National Centre

for Human Resources Development) in 1990. The Education Reform Programme provides a strong policy framework for international donors that include actions against many, if not all of the analysed shortcomings of the present vocational education and training system. The Centre has provided necessary background analyses and has functioned as a co-ordinator of national implementing agencies and international donors. In many respects it could be a model institution for other countries that also have to combine donor assistance and local funds for the financing of educational reform. The Centre has gained recognition in the country and its development from a pure technical role into a platform to support policy making for vocational education and training would be desirable. The Centre already involves all the major stakeholders in its current operations.

In the field of vocational education and training, and with additional support from the Canadian Government, problematic aspects of the current vocational education and training system have been effectively identified, a clear reform policy has been formulated and agreed upon and important steps towards implementation and realisation have been made. The reform concept is based on the model of secondary *Comprehensive Schools* (allowing for "liberalisation" of vocational education and "vocationalisation" of general education) followed by *Community Colleges* at the post-secondary level, preparing both for middle level qualifications relevant for local labour markets, and for higher education in an applied stream.

The reform of secondary *Comprehensive Schools* and *Community Colleges* is well under way (though by no means finalised). In theory, the fundamentals of an educational system that is open and allows for horizontal and vertical flexibility are in place, at least within formal – State-organised - education, for young people and in the upper parts of the system. However, the reform of the Training Centres catering for basic school drop-outs, and of the Vocational Training Corporation (supplying the labour market with semi-skilled and skilled workers) has only been initiated and the development of a Continuing Vocational Training system (including retraining of the unemployed and unskilled) has hardly begun. The lack of public attention paid to SMEs is also reflected in the almost complete absence, both in the formal and the informal system, of dedicated vocational education and training provision.

Another shortcoming identified is the involvement of social partners. Even if entrepreneurs are involved in training, often on individual basis, the involvement of trade unions and entrepreneur organisations in training issues is at the moment inexistant. The development of mechanisms that can ensure their participation is a condition for the development of a training system relevant to the labour market needs.

1.2. *Summary of main recommendations*

The Jordanian authorities have clearly chosen their concept of a vocational education and training system and there is no need to question that policy at all, especially since the concept appears to match the current educational aspirations of Jordanian population.

However, and despite the good policy intentions, it remains open whether the reformed Comprehensive Schools and Community Colleges will be able to take the pressure away from higher education and direct larger numbers of young people with intermediate skills to the labour market. Instead, as experiences from other countries show, they may simply develop into alternative – and less academically demanding – routes towards higher education. It may therefore, prove necessary to **pay far greater attention to improving the quality and reputation of the lower segments of the education system** (catering for the less academically successful and/or interested if the goal of filling the gap in the qualification structure is to be successfully achieved). This, in turn, may imply more attention to recent European experiences with vocational education and training reforms in addition to the present focus on North American models of education that tend to focus on middle and high qualification levels.

The experiences of several European countries have shown that it is possible to develop alternative routes of education and training which allow different target groups to reach similar qualification levels: one characterised largely by a school-based route (and including short practical experience periods) and another characterised by the integration of work and learning (such as in modern apprenticeship schemes). The latter has proven to be attractive for the less academically inclined (and consequently less successful) but not necessarily less competent students. The pre-condition, however, is the existence of a national qualification structure.

Following on the conclusions above a number of recommendations could be made. It must be noted that some of the shortcomings identified have already or are being covered by assistance programmes funded from different donors. The recommendations below refer, therefore, to areas that have not yet been covered sufficiently by past or present assistance:

- At the policy level, the intensification of the exchange of experiences with European and other partner countries in the region at the level of policy makers, vocational education and training experts and practitioners with a view of developing policies to improve the lower and middle segments of the qualification structure could be recommended.
- Policy and strategy needs to be designed for the implementation of a modern apprenticeship type of vocational education for young people, on the one hand, and continuing vocational education and training for adults.
- The development of a mechanism for interface between industry-education in particular:
 - the establishment of a *labour market information system* that would include information on employment trends and developments in economy and also a follow up system for school graduates (this will be partly covered by the second phase of the Canadian project, EDLINK);
 - the promotion of the *involvement of social partners* in governance, organisation and financing of VET systems;

- the development of a *tripartite platform* as basis for discussion on policy issues. The NCHRD already involves in its operations all stakeholders. It would be desirable that the Centre develops its role as policy-making support body in the field of VET.
- Efforts should also be made for the development of *entrepreneurship training and training for SMEs*.
- To develop an *experimental training scheme for developing the hotel and tourism industry as a way to integrate a European vocational education and training approach to the existing Jordanian policy concept*. This would aim at training semi-skilled and skilled workers based on the occupational profiles developed in EU countries, for both large and small and medium sized firms. Training capacities in this sector are quantitatively and qualitatively insufficient. The choice of the tourism sector has been motivated by our interlocutors as it is one of the key sectors for the future of the economy. Besides it is an area where the *experience of other MEDA countries*, with developed hotel and tourism training infrastructures, could become very relevant constituting the basis for a regional project.
- A last recommendation concerns the *regional dimension of VET*. The report clearly shows the high level of interdependence between countries in the region both in terms of economic and human resources exchanges. This is certainly the case of a small country like Jordan. This dependence will call for common approaches in the economic and education spheres. The exchanges of experiences between countries in the region has been stressed above, especially on those areas of common interest and where there is still room for development such as social dialogue, continuing training, VET system's architecture. Sectoral approaches could also be considered, such as tourism. There is, however, one field where a truly regional approach can be developed, that is the field of VET standards. A regional approach to VET standards could ensure mutual understanding on the necessary institutional requirements for *transparency and mutual recognition of qualifications*. The higher demands for quality on products and services in the market –also as a consequence of the establishment of a free trade area with the EU- will be translated in higher demands for skilful and high quality workforce. Jordan's own investments in occupational classification and occupational profiles would be an asset upon which to build. At the same time, the definition of a national qualification structure should be pursued further.

2. The changing context for vocational education and training

The context for vocational education and training in Jordan is formed by a complex, and dramatically changing, background of economic, social, cultural and political factors of which the interrelated national and international dimensions can only be briefly described in the following report. It is clear that Jordanian society is faced with tremendous challenges.

2.1. *Economic changes: from a rentier to an extractive economy*

Jordan is a developing country, which gained its independence from Britain only in 1946. Following the Arab-Israeli War of 1948, part of Palestine (the West Bank of Jordan) united with Jordan in 1950. The West Bank fell under military Israeli occupation following the 1967 Arab-Israel War and its fate still forms one of the main points of negotiation for the Middle-East Peace process. Jordan, in 1999, is a small country with an area of about 91,000 square km and about 4.8 million inhabitants of whom some 78% live in towns. More than 80% of the country constitutes desert and semi-desert land; only 4% is arable land. The north-western part with the Jordan valley is the most fertile and hosts the major cities, including the capital Amman. The capital is also the economic centre of the country. Almost half of all inhabitants live in the Greater Amman area.

Jordan is a small country with insufficient supplies of water and other natural resources such as oil and coal. It has developed based on what economists call a "rentier economy", that is to say heavily dependent on foreign aid and workers remittances from abroad. The state has for a long time been able to exempt itself largely from extracting resources, such as taxes, from society to finance the public budget. Jordan benefited from increased Arab aid during the oil boom of the late 1970s and early 1980s, when its annual real GDP growth averaged more than 10%. Arab aid provided to the state, however, although intended to assist in developing a sustainable economic base, in reality has rather contributed to developing the public (civil service) sector than the private sector. Workers remittances have contributed to increased consumer spending (especially in land, buildings and durable consumer goods) instead of having been used for productive investments in manufacturing. By the mid-1980s, the public sector employed almost 50% of the country's labour force and was responsible for half of all capital investments.

Continuing reliance on external rents resulted in a failure to develop the productive basis of the economy and made the country highly susceptible to the volatile Arab political and regional system. In the 1980s, reductions in both Arab aid and worker remittances slowed real economic growth to an average of roughly 2% per year. Imports - mainly oil, capital goods, consumer goods, and food - outstripped exports, with the difference covered by aid, remittances by Jordanians working abroad, and borrowing. As a result, Jordan had to rely on austerity programmes to make its national budget and debt obligations more responsive to international financial institutions such as the World Bank and the International Monetary Fund (IMF). In mid-1989, the Jordanian Government began debt-rescheduling negotiations and agreed to implement an IMF-supported programme designed to gradually reduce the budget deficit and implement badly needed structural reforms.

The Gulf crisis that began in August 1990, however, aggravated Jordan's already serious economic problems, forcing the government to put a halt to the IMF programme, stop most debt payments, and suspend rescheduling negotiations. Aid from Gulf Arab states, worker remittances, and trade all contracted, and refugees flooded the country, producing serious balance-of-payments problems, halting GDP growth, and straining government resources. The economy recovered in 1992, largely due to the influx of capital repatriated by workers returning from the Gulf, but recovery was uneven. Nevertheless, macro-economic achievements are impressive: from 1989-97, Jordan realised 6.4% economic growth (compared to 3.1 % from 1983-1988); the margin of deficit in the fiscal budget had been reduced to 3.6% in 1997 (compared to 21.6% in 1988); the deficit in the balance of payments had been reduced to 1.7% in 1997 (compared to 14.2% in 1988); and foreign debt had been reduced to JD 4.7 billion (down from JD 5,208 billion in 1991). A preliminary agreement with the IMF in early 1999 will provide new loans over the next three years. However, sluggish growth, along with debt, poverty, and unemployment remain fundamental ongoing economic problems.

The industrial base of the country has been created late and on the initiative of the state for both political and economic reasons. The result is a strong institutional connection between growing state bureaucracy and large private companies. International investment has been low due to the unstable political situation in the region but the Government has recently opened up the country to foreign investors. Foreign companies are no longer hampered by stringent foreign exchange control regulations; profits are freely transferable. The 1996 Investment Promotion Law allows foreign investment in virtually all sectors of the Jordanian economy. Only in the sectors of transport, banking, insurance, telecommunications, mining and construction is foreign investment restricted to 50%. Most recently, the Government has taken initiatives to attract foreign investors by creating industrial development zones, so far attracting mainly cheap, labour-intensive, mass production companies (i.e. the garment industry). Manufactured products with combined Jordanian and Israeli inputs from so called Qualifying Industrial Zones (QIZs), established with assistance from the US, will have privileged access to the US market. The government has also given priority to boost the tourism industry and to improve the technological levels of its industry. In addition, the EU initiative to develop a Euro-Mediterranean Free Trade Zone, the bilateral free trade agreements signed with several Arab states in the region and the

Government's intentions to comply with WTO regulations will expose Jordanian firms to the pressures of an open market. These initiatives have already indicated the existence of severe skill shortages in the sectors concerned.

Today, Jordan's economy is largely a service one, where most of the essential products have to be imported; where the State is still one of the main employers; and where the public sector has expanded at the expense of the private sector but is mainly financed from foreign aid. Consumption levels are relatively high but largely financed from workers remittances and not from income generated by local manufacturing.

The enterprise structure is characterised by a predominance of small and medium sized enterprises: about 95% of all firms employ less than 10 persons. They provide the large majority of private sector employment.

Jordan is traditionally both an importer and exporter of labour, which indicates the existence of a true regional labour market on the one hand, and a certain degree of inefficiency of the national labour market on the other. While in 1999, an estimated 350,000 Jordanians were working abroad (mainly in the Gulf countries), some 300,000 foreigners were working in Jordan (of whom about 60% Egyptians plus large numbers of Syrians and Iraqis), mainly in unskilled jobs in construction and services for which no Jordanian labour can be found. It is estimated, for example, that a large percentage of all jobs in bakeries and restaurants are occupied by Egyptians and that most semi-skilled and skilled jobs in small and medium sized clothing companies are occupied by workers from Egypt and Syria. The following statistics give an indication of the importance of workers remittances for the Jordanian economy: in 1998, foreign workers in Jordan created 240 million USD in remittance outflows while Jordanians working and living abroad sent home approximately 1.5 billion USD.

While traditionally, Jordanians have regarded the whole region (and preferably the Gulf States) as their potential labour market, political developments in the region, rising unemployment in neighbouring countries, the need to increase income generating productive capacities inside Jordan and high levels of domestic unemployment (especially among the better educated and women) led to a radical reorientation of the country's human resources policies at the end of the 1980s. The reorientation has put the development of national human resources as a top priority for developing a sustainable home economy.

Thus, the major economic challenge for the Jordanian Government remains the transformation of the economy from "rentier" into "extractive". The market reform policies that were to be introduced since the mid-1980s should allow the country to meet its international debt obligations, make more efficient use of limited budgetary resources, and improve the allocation of scarce, financial, material and human resources. The main problem for Jordan is that it cannot finance these reform policies from its own budget alone and that it therefore remains highly dependent on foreign aid to do so. In 1999, it had to conclude a new economic reform loan with the World Bank.

2.2. *Social changes: who will finance welfare for a growing population?*

In 1999, Jordan's population was estimated to amount to about 4,8 million people and to be rapidly rising due to growing numbers of women of reproductive age (in 1987 the population was only 2,914 million according to figures from the Jordanian Department of Statistics). The composition of the population is highly heterogeneous. There are no precise demographic data and different national and international organisations give widely different estimations. An important proportion of Jordanians are of Palestinian origin. A wide proportion are Bedouins and small communities of Armenians and "dsherkasians" exist. More than 40% of the population are under the age of 15; about 55% between 15 and 64 and less than 5% older than 65 years of age. These figures are similar for the Arab world as a whole and explain both the high numbers of youth for which education has to be provided and the relatively low size of the labour force (about 25%; women about 15%). The demographic figures also indicate Government constraints in terms of cutting public budget spending. Apart from demographic developments, other – and less foreseeable – factors have also played a role in determining Jordan's population.

Jordan's history and development have been directly influenced by the Arab-Israeli conflict and the wars that have resulted from this. Following the 1948 War, it is estimated that Jordan (at that time made up of the East and West Banks) became the host of some half a million Palestinian refugees, of whom some 400,000 on the West bank and more than 100,000 on the East bank. With the unification of the West Bank in 1950, all West Bankers were given full Jordanian citizenship and representation in Parliament. In 1967, Jordan lost the West Bank to Israel and received a new wave of Palestinian refugees and displaced persons. Many of the early refugees, among whom were large numbers of the middle class, craftsmen and farmers, successfully integrated into Jordanian society and can now be found among high level policy- and decision-makers in both public and private institutions, especially in education.

However, many also remained in poor living conditions and a special UN agency that was established to cater for Palestinian refugees (UNRWA) still provides education, health, relief and social services to about 1.6 million registered Palestinian refugees in Jordan (43% of all Palestinian refugees in the region). The Jordanian Government also receives Arab financial assistance to support refugees and, itself, spends some USD 330 million annually on the refugee camps. Following the Iraqi invasion of Kuwait in 1990, large numbers of work migrants were expelled from the Gulf States and returned home to Jordan. This meant the third large and unexpected influx of population into the country and has created additional burdens on the public budget (for housing, education and welfare payments).

Official unemployment figures stand at 14% (second semester 1999 survey by the Jordanian Department of Statistics) though independent estimates are as high as 27%, while one third of the population is estimated to live below the poverty line. Unemployment is especially high among young people (more than 75% are younger than 27) and women, and is also relatively high among the better educated. But

observers argue that underemployment and mis-employment are far greater problems than unemployment, indicating the existence of serious problems in the match between educational provision and labour market needs. Recently, the Government has introduced a minimum wage of JD 80, with the official poverty line set at JD 117 and JD 82 being given to needy families by the National Aid Fund. In contrast, companies in the North and around Amman normally hire unskilled and semi-skilled workers with a maximum of JD 60 a month. Due to low wage levels many such jobs can only be filled by foreign labour.

Until the mid-1980s, the rentier economy meant that the State was able to provide society with protective tariffs, consumer goods and public services (including education) without requiring too much in exchange through taxes. Society, both individual citizens and the private sector as such, has become accustomed to this situation and expects it to continue. All signals indicate however that this will be impossible and while rent incomes have drastically decreased, state budget expenditures are still increasing. It remains an open question whether the Jordanian Government will soon be able to change the attitude of the Jordanian society, and receive the support needed to achieve the transformation into an extractive economy.

2.3. Cultural changes: combining Islamic heritage with western influences?

Jordan is an Arab country with the great majority of Jordanians being Sunni Muslim. There is a small percentage of Greek Orthodox and Catholic Christians. The official language is Arabic but English is widely spoken and is taught as a second language in all schools.

Jordan is a traditional Muslim society, though in many respects liberal compared to neighbouring Arab countries. The intellectual elite has been educated abroad, mostly at American universities, and this contrasts sharply with the more traditional aspects of Jordanian society, such as the role of women, the dominant influence of leading families and the low esteem in which produce and service jobs are still held. All these aspects obviously have a direct impact on education and employment choices and opportunities.

As is the case in many countries of the Mediterranean basin, Jordan's population generally gives high value to education and to educational certificates. Most families will do everything they can to provide their children with the best possible education. An educational title is regarded as a value as such but also as an investment for the future. This has led to a rapid expansion of post-secondary and higher education and despite high unemployment rates among university graduates the pressure on higher education remains unchangeably high.

Lower levels of education are widely regarded (and organised) as steps towards a university education with the most crucial moment for students being the secondary education exam (Tawjeehi) taken after the 12th grade. The results of these exams

determine their educational (and hence occupational) future. Family and social life are paralysed in the months before the examinations as parents try all they can to prepare their children for sitting the exams. Obviously, against this background, vocational education and training is regarded as second class education. This situation is also supported by the fact that 'streaming' of basic school leavers for secondary education is largely based on success in academic subjects. School dropouts and those who fail to enter secondary comprehensive schools are automatically transferred to vocational education institutions that only prepare for entry to the labour market. Most employers consider apprentices as cheap labour.

2.4. Political changes: expanding society and the retreat of the State?

The Hashemite Kingdom of Jordan is a constitutional monarchy with the King being the head of the armed forces and entitled to appoint the Prime Minister and Cabinet. The National Assembly consists of the Senate (a 40-member body appointed by the Monarch from designated categories of public figures; members serve four-year terms) and the House of Representatives (80 seats; members elected by popular vote on the basis of proportional representation to serve four-year terms). The last elections for the House of Representatives were held 4 November 1997 (the next are to be held in November 2001).

The complex institutional relations between the state apparatus and civil society create an ambiguous situation in which the State is still expected to take initiatives and provide financial resources with the private sector being reluctant towards attempts to have them take a share in co-financing public services. An example of this situation can be found in the thus far aborted attempts to introduce a special training tax in private industry.

The late King Hussein was a respected key actor in the Middle East Peace process, a role which his son King Abdullah appears to continue. King Abdullah has also placed the economic development of the country high in his agenda, including the introduction of postponed market reforms, and the impact of this policy change is slowly being felt. He is also continuing to give high priority to human resources development, an area that was strongly promoted under King Hussein by Prince Hassan.

Observers argue that it remains difficult to predict whether these developments will lead to a withdrawal of the Jordanian State from the economy or merely to a redefinition of its role. It is safe to assume though that international assistance remains an important funding source both for maintaining a sufficient level of public spending and for financing the reforms needed to increase the contribution from society to the public budget. The case of vocational education and training provides a good illustration of this dilemma.

2.5. *A growing role for vocational education and training*

Although traditionally a strong mix of economic, social, cultural and political factors have contributed to giving vocational education and training a low profile in favour of secondary general and higher education, political, economic and social developments since the middle of the 1980s have caused a reorientation among educational policy makers.

While the late industrialisation of Jordan's economy can explain the late development of a distinct vocational education system as such, the dominant role of the State in promoting industrialisation also explains its role in developing a system of vocational education and training. This in turn, partly explains why society, including the private sector, generally looks at vocational education and training as a public service to be provided (and financed) by the State. Gradually, however, this situation is changing.

The Government has set the following policy priorities for the development of a competitive and sustainable economy:

- Development and diversification of the industrial sector (including the introduction of new technologies) and the tourist sector.
- Liberalisation of trade.
- Privatisation of large public enterprises (representing about 40% of the industrial sector).
- Adaptation of the labour force to the needs of the labour market.
- Fight against unemployment and poverty.
- Strengthening of the institutional capacities of public administration.

Against this background, vocational education and training has received a higher priority, and efforts are being undertaken to improve the Jordanian vocational education and training system substantially.

The qualification structure of the labour force has traditionally been characterised by large numbers of academically educated university graduates, on the one hand, and large numbers of un-skilled and semi-skilled workers, on the other, while the intermediate levels of skilled workers and technicians have always been underdeveloped. Although large numbers of women achieve high levels of education, the female share of the active working population is still low. With a view to changing this situation, and improving the labour market situation nationally, the Government has set about expanding vocational education capacities (especially in rural areas) and increasing the number of boys going into vocational and technical schools to 50%, and girls to 35%, by the year 2000. Qualitative improvements of the vocational education and training system have also been initiated both at secondary and tertiary level. In addition, pre-vocational education has been introduced in basic education as well.

At the same time, however, there is a clear recognition that Jordan will have to continue to rely on the Arab region as a whole for the employment opportunities available to its labour force. It is, however, also appreciated that employment opportunities abroad will increasingly depend on appropriate skills and qualifications and would therefore be an additional incentive to improve the vocational education and training system. The tension between national and regional labour markets and human resources policies will remain a strong characteristic in the near future, even more so as neighbouring Arab countries (Saudi Arabia, Iraq, Syria and Egypt) faced with similar problems and challenges in reforming their economies.

3. Analysis of the vocational education and training system

3.1. *The 1988 education reform programme*

In the past, Jordanian education expanded rapidly with the result that almost all young Jordanians currently complete basic education. Furthermore, 70% continue in secondary level education and the level of initial enrolment in post secondary education is over 30%. Illiteracy rates, reaching up to 60% in the early 1960s have been reduced to below 20% (for men even below 10%). Despite the quantitative achievements of educational expansion it became apparent in the mid-1980s that a major effort was needed to develop and improve the qualitative aspects of education. Initiatives were taken to carry out a thorough analysis of the education system. A national conference on education reform was held in 1987 and on the basis of the conference debates a ten-year reform programme was formulated. **The implementation of the education reform plan started in 1988** with a total budget of 438 million JD and included all components of the education system. It was financed jointly from a World Bank loan, assistance from the Japanese Government and Jordan's own Government budget. The Education Act of 1994 legalised the structure of the Jordanian education system that resulted from this reform initiative.

The 1987 Conference produced, amongst others, the following recommendations for vocational education and training which both illustrate the low status and reputation of vocational education and training at the time, and the serious intent to change that situation:

- **Social dimension:** vocational education philosophy that seeks the development of positive attitudes towards work in general and manual work in particular, through concepts and skills enabling that to happen. This is thought to result in appreciation of manual work and recognition of its participation in comprehensive development.
- **Economic dimension:** to spread vocational education institutes to all geographic areas to ensure equal opportunities for males and females and in different regions of the country; to ensure an even distribution of development benefits; to ensure the effectiveness of vocational education and its relevance for development needs. This is done through the development of curricula including books, training contents and study plans, along with the development of facilities including training equipment relevant to training needs and technological developments. It also includes development of the potential of educational staff such as teachers, instructors and administrators, to meet regional and international requirements.

One of the more concrete policy aims for vocational education and training was to increase the numbers of secondary education students going into vocational education and training programmes, either in comprehensive schools or in the applied apprenticeship stream. The desired levels were up to 50% for boys and 35% for girls by the year 2000. Critics now argue that although more students should be encouraged not to choose the traditional secondary general - academic university route (or as the Jordanians say: the education highway), it can be questioned whether the Jordanian labour market would need (or could absorb) so many school graduates at the qualification levels produced by secondary level vocational programmes. A second aim of the vocational education and training reform was the opening up of higher education to graduates of vocational education and training schools. Until this time the highest level that could be reached was Community College for graduates of secondary vocational schools. Apprentices found themselves at a dead end, as they had practically no opportunities to proceed to higher levels of education even though entrance was entirely dependent on achieving the Tawjeehi exam and on financial possibilities of families

While the Education Reform (or as it is usually called Development) Programme, which is backed up by a considerable budget, has provided a powerful framework for modernising and reforming the educational system, implementation of the reform plan has been slower than expected, due to insufficient implementation capacities at national and school level, and because of unexpected external factors such as the effects of the Gulf crisis. The following quote from one of the architects of the Education Reform Programme gives an idea of the importance and size of the reform: "In 1988, with a budget of 500 million US dollars we thought we could finish the reform in 5 years. Now, after almost 11 years we realise that we have only achieved perhaps 20%."

Moreover, a number of important issues that had been insufficiently emphasised by the original Programme had become more prominent during the 1990s. This was the case for issues related to the relevance of education to the external labour market. The reform has mainly focused on basic and general education. **In 1994, in collaboration with the World Bank, a strategy for investment, development and reform of the Technical and Vocational Education and Training system was formulated, aiming at enhanced market economy relevance, effective system management and quality improvement. The implementation of the strategy is financed from the second Human Resources Development Sector Loan and has received additional support of 6,5 million Canadian dollars from the Canadian Government.**

The Second Phase of the Education Development Plan (1996-2000) aims to achieve the following:

- Consolidation of educational reform through staff development, developing a national system of examinations and curricula, school-based innovations, technical-vocational education and training, expanding pre-school education, and enhancing non-formal education.

- Enhancement of institutional development through learning resource centres, textbook publishing and distribution, feedback systems to learn from the results of the General Secondary Education certificate Examination, educational management information systems, and a national assessment programme.
- Improvement of teaching facilities through expanding, rehabilitating and constructing schools, equipping and furnishing schools to accommodate more students, reducing the number of rented school buildings, and avoiding double shift scheduling.

The second phase of the Canadian supported vocational education and training Reform Programme will focus on vocational education and training policy planning, teacher training and programme development, building up a labour market information system and developing accreditation standards for Community Colleges. It will receive an additional 5 million Canadian Dollars and start in March 2000. The initially planned development of occupational standards and of an infrastructure for the environmental scanning of employment trends and developments had to be omitted from the programme due to lack of funds.

Based on the evaluation of achievements of the Education Reform Programme so far, the National Centre for Human Resources Development has prepared a – non-binding – Human Resources Development Strategy that broadens educational development towards human resources development in general and sets out objectives and proposed policies for all areas. This strategy document includes educational objectives that are common to those formulated in most EU countries and serves as an overall orientation for the Centre's work.

3.2. Structure of the Jordanian education system

The education system of Jordan consists of four stages: pre-school education, basic education, secondary education and tertiary education. Pre-school education in kindergartens is provided exclusively by privately run institutions under the supervision of the Ministry of Education and thus far only caters for some 25% of children. One of the policy aims is to expand pre-school education. Basic education, which is compulsory by law (1988 Education Law), is free in government schools and covers grades 1 to 10 for the 6-16 year age group. Secondary education is not compulsory but is free in government schools and covers grades 11 and 12 for the 16-18 year age group. Basic and secondary education is also provided by UNWRA, the private sector or other government institutions. At the tertiary level, post-secondary and university level education is provided (Community Colleges). Students pay nominal fees in public institutions (about 400 USD per year, covering about 15% of the budget) and full tutorial fees in private institutions. Until recently both public and private Community Colleges and Universities were supervised by a separate Ministry of Higher Education. Today they are autonomous, each with its own Board of Trustees and the ministry in question has been dissolved and replaced by a Higher Education Council chaired by the Prime Minister. Community Colleges have been organised under the auspices of the new Al Balqa' Applied University.

Basic schooling is divided into six years of primary education and four years of junior- or lower secondary education. There is a standard curriculum for all students and they are evaluated according to their academic achievements in the 8th, 9th and 10th grades. Before 1988, a National General Examination marked the end of compulsory education. Since 1998, students have had no formal barrier to enter secondary education and the type of education they enter is dependent on academic achievement, individual interest and availability of places in schools.

Streaming is done by the Ministry of Education, based primarily on study results in academic subjects during the last grades. Results of the 8th grade count for 20% of the total points per student, the 9th grade 30% and the 10th grade 50%. Minimum requirements for entering particular secondary school types are dependent on numbers of places and numbers of interested students but the higher the points the greater the chances of being admitted to a study place chosen by the student.

In 1997, 93.15% of the relative population was enrolled in basic education (92.80% boys and 93.53% girls). Drop out rates in the 8th, 9th and 10th grades are around 2% and the rate for boys is almost double that for girls. In absolute terms the dropouts constitute about 20,000 students for whom education is still compulsory. The Vocational Training Corporation organises short-term courses for school leavers before grade 10.

Secondary education. At the end of the 10th grade all students are classified in two streams: the Comprehensive Secondary stream (which covers general and vocational education) and the Applied Secondary Education stream. The comprehensive school replaced the separate general and vocational schools that existed until the mid-1990s and has been a major feature of the Education Reform Programme, allowing for the "liberalisation" of vocational education and the "vocationalisation" of general education. In 1999, almost all secondary schools are organised in combined school institutions while the introduction of the comprehensive curriculum is well under way.

The two-year comprehensive secondary education programme leads to examinations for the General Secondary Education Certificate in either the academic or vocational sub-streams. The academic sub-stream includes scientific, literary and religious specialisations; the vocational sub-stream includes industrial (32 specialisations), commercial (2), agricultural (2), nursing (1), hotel and catering (1) and home-economics (5) education. All together, secondary vocational education offers 43 specialisations. Students from either sub-stream may continue on to higher education if they pass the secondary exam. Normally, students from the vocational streams go on to Community Colleges and those from the academic stream continue at Universities, although entrance to one or another option depends exclusively on results of the Tawjeehi exam and the financial capabilities of the student's family.

In theory in secondary comprehensive schools, those who enter the general stream can transfer easily to the vocational one. The reverse is different, and only possible if the results of the 10th grade allow this. In practice, this hardly occurs.

Employers complain that Ministry of Education (MOE) school graduates are ill prepared for work, despite the ambitious standards demanded of them. They also argue that the MOE is not interested in training students for the labour market and that, even in the vocational stream where students are prepared for higher education, the curriculum is too theoretical. External observers argue that the competence standards expected of vocational stream students in comprehensive schools are far too ambitious and cannot realistically be achieved in a two-year programme. They argue that such vocational qualifications can be better achieved at the Community College level. In a way, the present vocational education and training reform initiatives tend to follow this logic, all be it more implicitly than explicitly.

In 1997, 27.74% of 16-18 year olds were enrolled in secondary education (29.32% boys and 22.08% girls). About 75% of the 16 year olds went into the academic sub-stream of secondary education and 25% into vocational education streams; that is to say 65% of boys and 74% of girls entered secondary general education and 35% of boys and 26% of girls entered vocational education. Of all those going into vocational education, 75% were boys and 25% were girls. Drop out rates in the 11th and 12th grades are around 2.5% and again almost twice as high for boys as girls (source: Ministry of Education).

The Applied Secondary stream provides vocational education and training for direct entry into the labour market. This form of education is provided in training centres, mainly run for basic school dropouts, and almost exclusively in the field of industrial and women's craft. It is also provided through formal Apprenticeship Schemes, consisting of two years vocational preparation in co-operation with employers and one year of supervised employment. The applied stream is held in low esteem by both young people and employers. Numbers are low and drop out rates high.

An apprenticeship training of a two-year duration is organised by the Vocational Training Corporation (VTC) and offers some 43 specialisations in 11 occupational groups (see Table 1.). Training centres are also run by UNWRA and a number of voluntary organisations.

Table 1. Apprenticeship programme options for vocational secondary applied students

Occupational group	Number of programme specialisations
Electric Power	8
Vehicle Repair and Maintenance	4
Electronics	2
Metal and Mechanical maintenance	11
Air conditioning and Plumbing	3
Printing and Binding	4
Hotel and Restaurant	2
Chemical Industries	1
Construction	2
Carpentry	2
Other	4

In 1998, the total number of students entering the apprenticeship scheme run by the VTC amounted to just 4,907, of whom 4,559 were boys and 348 girls. The scheme is made up of 3 days school education and 3 days practical work in a company. The school curriculum includes one day for general subjects, one day for vocational subjects and one day of practical training in a workshop. Instructors join the trainees during the 3 days in the company to specify the training needs. Nevertheless, apprentices are generally considered to be cheap labour rather than trainees.

Employers generally complain that the training programmes provided by the VTC do not respond to their needs for skilled workers: they are outdated in terms of technical skills and do not provide workers with the necessary social skills, work attitudes and behaviour. Quality standards in VTC training centres are low, partly due to the fact that trainers themselves lack practical work experience in productive environments as they tend to come directly from university. Many employers argue that they need substantial periods to integrate graduates into their companies after leaving school or the apprenticeship scheme. Studies show that companies find it difficult to recruit skilled labour and that most, currently employed, skilled workers have been trained on-the-job inside the enterprise without necessarily having passed an official examination and/or possessing recognised certificates.

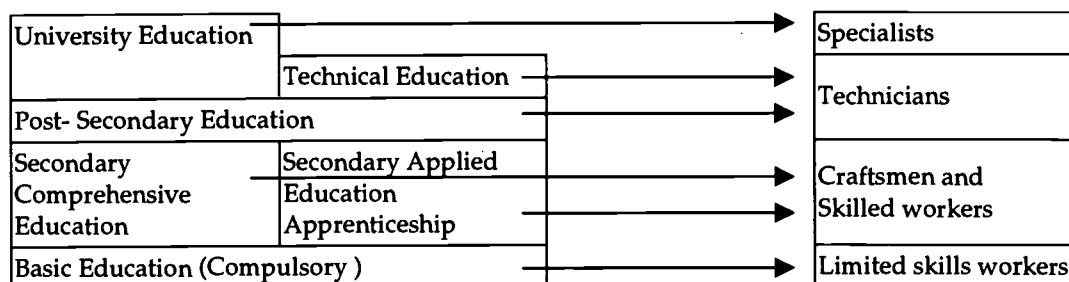
Tertiary education is given in two and three-year courses at Community Colleges (leading to the Community College Associate Certificate) or in four-year University level programmes leading to a bachelor degree. University graduates can continue for their Master and Ph. D. degrees (only in a limited number of disciplines). About half of the 60 Community Colleges are private. They have all been placed under the Al Balqa' Applied University, established in 1996, which will also provide university level applied academic education for both secondary school leavers and college graduates. It is also responsible for the accreditation of private colleges. There are 20 universities of which 8 are public. Annually, some 20,000 students enter Community Colleges and about 15,000 enter Universities, of whom almost 75% enter public universities. An additional 20,000 Jordanian students study abroad.

Non-formal and adult education, is generally considered to be a less well developed part of the Jordanian education system. It covers literacy programmes, offered mainly by Ministry of Education schools and held after working hours, and - to a lesser extent - by voluntary organisations. Most of these programmes are attended by women. The VTC offers a variety of training, further training and retraining programmes for adult workers, including schemes for job seekers and secondary school leavers. Some Community Colleges and Universities do the same through their extension and continuous education programmes, which are, however, still underdeveloped. There are also commercial private training providers (estimated at 2,000 although little structured information is available) and a few NGOs are active on the training market; employers and their organisations organise several on-the-job and off-the-job training programmes for their workforce and members. The Company Law obliges companies to spend 1% of annual net profits on training and development. There is, however, no concrete information available about what is happening in reality. Discussions on transferring this money into a National Training Fund have so far been rejected by the employers.

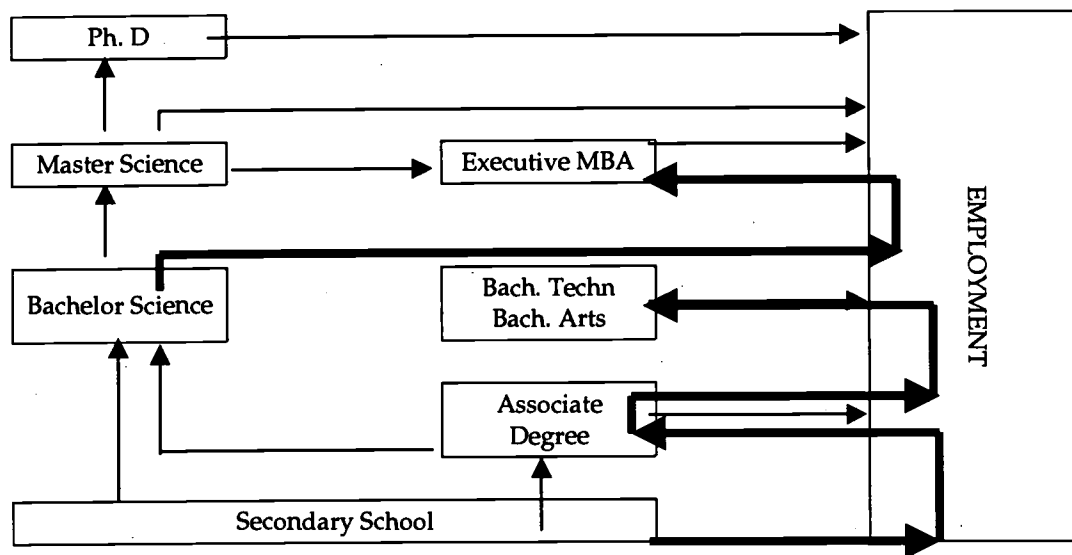
With the assistance of a World Bank loan, the Ministry of Labour is currently engaged in a Training and Employment Support project aimed at the unemployed and the poor, and which, through an experimental Training Fund, provides financial support to companies willing to employ and train new staff. During the course of this project, which fundamentally deviates from the normal practice of funding training providers, an attempt is made to make the private training market more demand-driven, more transparent and of higher quality. Other projects, following a similar logic, financed by UNDP, amongst others, focus on special employment-oriented training programmes for women.

Management training is provided in the public and private sector by the Jordan Institute of Management and the Jordan Institute of Public Administration. The Chamber also organises management courses. While these institutions tend to focus largely on the management of big organisations, a recent UNDP sponsored programme has initiated entrepreneurship and management training for small and medium sized enterprises. The Vocational Training Corporation, which was in charge of implementing the project, has recently established its own small institute for consultancy, advice and the training of SMEs. However, at present there are no major initiatives being taken by the institute.

The linkage between the education system and qualification levels in Jordan is presented in the following scheme:



With the establishment of the Al Balqa' Applied University a parallel pathway into higher education has been established for Community College graduates (with an associate degree), allowing for their re-entry from the labour market, as the following scheme illustrates:



3.3. *The main stakeholders in the Jordanian vocational education and training system*

The main stakeholders in vocational education and training are at present

- The Ministry of Education and its Comprehensive Schools;
- The Ministry of Labour with its Training and Employment Support Project funded from a World Bank loan;
- The Vocational Training Corporation, in charge of the Apprenticeship System and the provision of short- and medium term courses;
- The Community Colleges, now called the Al-Balqa' Applied University Community College System;
- UNRWA as the vocational education and training provider for Palestine refugees;
- The National Centre for Human Resources Development as the main co-ordinating and monitoring institution for the vocational education and training reform programme.

Private providers of vocational education and training are several but, as mentioned before, there is practically no information available on the scope and quality of training provision. Private training providers are licensed by the Ministry of Education using various input criteria, such as infrastructure, qualifications of teaching staff etc. As part of the Training and Employment Support project of the Ministry of Labour a survey is

being undertaken to assess the situation of the private training market and to make it more transparent.

Law No 27 introduced in 1999 and named the Occupational Organisation Law intends to formally define qualification standards for both the owners of companies and workshops and for their employees and workers. These standards will be developed by the Vocational Training Corporation and their implementation controlled by inspectors. The Law states that the Ministry of Labour will have the right to close down companies and workshops that do not comply with qualification standards; to impose fines on owners found to be breaking the law; and even impose prison sentences of up to six months for those who obstruct the closing of their companies. A fine or a prison sentence or a combination of both can be imposed on anybody who exercises an occupation without the necessary qualification.

While this Law has been under discussion for many years, fuelled by the need for improving the quality and safety of production and services (such as in car maintenance), the implications of its final version are not yet completely clear. The full implementation of the Law will certainly take another couple of years, especially in view of the fact that the VTC is not yet fully ready and equipped to fulfil the tasks set by the Law. The existing CVT infrastructure will need to cater for the tremendous need for training, assessment and certification that the introduction of the Law requires. Because of this situation, and despite its original intentions, the Law may also increase bureaucracy in terms of enterprise and employment creation.

Ministry of Education

The Directorate of Vocational Education of the Ministry of Education is responsible for the design and delivery of the vocational sub-stream of secondary comprehensive schools. It is headed by a Director General who reports to the General Secretary of the Ministry. The Directorate is further subdivided into three Sub-Directorates (for Vocational Education, Vocational Training and Vocational Production), headed by Directors, and these in turn are subdivided in sections (respectively 4, 3 and 6) run by Section Heads. Within the 12 "Governorates" there are 25 Directorates of Education that supervise the Vocational Education sites (separate schools for boys and girls).

The aim of the vocational comprehensive and applied vocational programmes is to prepare a qualified labour force in the basic occupational levels *and* to prepare students who have the appropriate interest and abilities to pursue higher applied or professional education. Clear (and for some too ambitious) objectives have been defined for each of the vocational sub-streams, including levels of competence to be achieved by graduates of applied and comprehensive vocational education. The latter are broader than the former.

The study plan for comprehensive vocational education includes 12 hours per week of core subjects, 6 hours basic sciences, 8 hours vocational sciences and 16 hours of practical training. Students who pass the first year undergo summer practical training in school and/or in companies. An evaluation study undertaken in 1996, showed that

more than 70% of all students intended to continue their studies at either university level (40% of all boys and 30% of all girls), Community College (20% boys and 30% girls), or to continue in a different specialisation (11 % of boys and girls). Less than 30% intended to start working, either as employees (20% boys and 22.5% girls), or to start a small business (9 % boys and 5.5% girls). These figures illustrate the value attached to higher education in Jordan.

Secondary Vocational schools offer programmes in six areas for some 25,000 students: Industrial, Agricultural, Business, Nursing, Hotel and Home Economics. About 65% of students are male and 35% female. An overview of students, teachers and sites in 1996 is given in Table 2.

Table 2. Number of vocational education students in the various vocational branches - Number of teachers (male and female) - Number of vocational education sites in 1996

Branch	1 st sec.	2 nd sec.	Total students	Teachers male	Teachers female	Total teachers	No. of vocational education sites
Industrial	4,040	3,808	7,848	523		523	29
Agricultural	413	434	847	80	2	82	12
Commercial	5,105	4,693	4,693	169	241	410	76
Hotel	440	330	330	40	1	41	9
Nursing	936	1,012	1,012	28	145	173	40
Home Economics	2,248	1,688	1,688		274	274	48
Total	13,182	11,965	25,147	840	663	1,503	214

Source MOE

The Ministry of Education is facing at least six major problems at present:

- The transformation from specialised general and vocational schools to comprehensive schools has been more difficult than expected. The case of the industrial vocational schools (40% of all vocational schools) is especially difficult, given their specialised equipment. However, so far important results have been achieved with half of all industrial education and all other types of vocational education being provided at comprehensive schools.
- Capacities to modernise the modular based curricula are insufficient for their task. There are currently 120 modules prepared but 800 are needed. The logic of curriculum organisation based on modules provides potential for flexibility but in reality the human capacities to adapt modules on a continuous basis do not exist.
- While a decentralisation of responsibilities to schools will be necessary to make them responsive to local labour market needs, the system has a strong centralised tradition, which is difficult to break, both nationally, at Ministry level and locally at school level.

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- **The employment and nomination of teachers.** Teachers are appointed by a National Civil Service Commission which recruits civil servants based on selection criteria provided by the Ministry. The MOE is the biggest civil service employer (with 60.000 teachers all over the country). This creates problems of quality and the motivation of teaching staff and results in schools having a limited influence on their teaching staff. Teachers in vocational schools and training centres normally come straight from university or community colleges without practical industry-based work experience.
- **Education budget constraints.** Vocational education and training schools are expensive and the present attempt to let vocational education and training schools earn part of their own budget through productive work by students (e.g., carpentry students who have furnished the Parliament building and the Ministry of Education) may have serious negative effects on the teaching profiles of vocational schools and training centres.
- **The involvement of social partners** both to improve the governance and labour market relevance of vocational education and to secure its financial sustainability through employers contributions.

Plans for the future include the expansion of vocational branches to meet labour market demands; the development of the administrative and technical competencies of staff; the promotion of vocational guidance; the carrying out of monitoring and evaluation studies on vocational education and training programmes and outcomes; and the modernisation of study plans and curricula. These plans are partly supported by external assistance.

Vocational Training Corporation

The Vocational Training Corporation (VTC) was established in 1976, with ILO assistance, following an experimental period with a National Vocational Training Scheme set up by the Ministry of Education in 1973. The VTC took over responsibility for the Apprenticeship Scheme in 1977.

The VTC is a semi-autonomous organisation, almost fully financed by the Government, and supervised by a tripartite Board of Directors appointed by the Cabinet and representing different ministries and social partners. The Minister of Labour chairs the Board. The organisation is managed by an executive body, led by a Director General and four Assistant Directors General for Training Centres, Institutes, Technical Affairs, and Administration and Financial Affairs respectively. It is divided in 10 Directorates which centrally manage the whole organisation. In 1998, the total number of staff was 1029 of whom 548 technical staff, 291 administrative and 190 auxiliary staff (genitors, drivers etc.). The budget amounted to about 6,5 million JD with self-revenues reaching about 700,000 JD.

The VTC's mandate presently covers three main areas of work:

- **Vocational training and manpower preparation**

Training responsibilities include the following:

- Running the Apprenticeship Scheme, combining school-based education and practical training in workshops and/or companies. Trainees are selected upon completing basic education (10 years) and achieving skilled worker status. In 1998, 4907 trainees (348 women) enrolled in the first year in 43 different training programmes with the co-operation of about 3800 enterprises (mainly from car maintenance, 958; electrical power, 732; metal and general mechanics, 647; Air conditioning and plumbing, 446; and carpentry, 443).
- Providing further training of one-years' duration leading to the status of craftsman. This programme is open to unskilled and skilled workers as well as to secondary school graduates. In 1998, 2960 persons (1907 men and 1053 women) were trained in 34 different programmes, involving 764 companies.
- Training workers to the limited skills worker level, through the provision of short-term and medium-term programmes of 3-9 months duration. This training is meant for young people and adults who have not finished basic education. In 1998, 2477 (1349 men and 1128 women) individuals were trained in 35 different programmes, of whom 735 as hairdressers (395 women and 17 men)/barbers (only men) and 422 as dressmakers. An additional 252 were trained in special employment training programmes in the hotel and catering (95 men) and the garment/leather industry (51 women and 108 men).
- Skills upgrading for employed workers. In 1998, 828 (571 men and 257 women) were trained in 11 courses of 150-200 hours (of whom 260 men followed school bus driver courses, 110 women cosmetics and 101 women knitting courses)
- Instructor and supervisory training. In 1998, a total of 107 courses were organised for 1.239 persons, mainly VTC staff but also participants from other Arab countries.
- Training in health and safety matters. In 1998, 41 courses were held for 554 persons.

- **Development of National Standards of Occupational Classification**

This includes the development of occupational classification, job descriptions, national performance tests, testing and certification. Before 1998, a total of 10 occupational classification guides had been published and job descriptions for 10 occupational families had been prepared. Classification follows the Arab Standard Occupational Classification system, which in turn is based on the ILO ISCO 1988. Some 40 standardised tests for apprentice examinations have been developed.

- **Small and Medium sized Enterprise Development**

From 1992, the VTC has been involved in extension services for SMEs, as part of a UNDP sponsored project. The services included consultancy and advisory services in quality control, management, production techniques, marketing, safety and health, and skills upgrading. In 1998, the VTC established its own Small and Medium Sized Development Institute for the provision of such services. However, as mentioned before, there are no major initiatives currently undertaken by the Institute.

The VTC presently runs 41 Training Centres across the country which co-operate with some 4700 enterprises. Many Training Centres have been established with international and /or bi-lateral foreign assistance but find it difficult to keep their equipment and staff qualifications up to date. The VTC also assists private and public enterprises in establishing their own training centres, some of which then closely co-operate with the VTC. In addition to these centres, the organisation also runs a number of specialised institutes, such as

- The Testing and Training Institute (TTI, established in 1994), which provides vocational training and implements skills assessment and performance tests. This institute also trains and certifies students from secondary schools, including drop outs and students who did not successfully pass the exams. The name of institute has been chosen to make it more appealing to these students.
- The Training and Development Institute (TDI, established in 1982), which provides training for instructors and staff from the VTC and other institutions and companies, basic and middle management courses for VTC staff and other companies, supervisory courses for instructors, and develops module based training materials. Before 1998, a total of 411 modular training units had been developed, mainly with the assistance of a bi-lateral Canadian programme.
- The Occupational Safety and Health Institute (OSHI, established in 1983 with ILO assistance), promotes awareness of the importance of the application of safety and health standards through consultancy, advice, research and training activities.
- The Specialised Training Institute (STI, established in 1998) aims to assist metal industries to improve their productivity.

The Corporation has signed several co-operation agreements with Arab countries and provides training and consultancy services for several neighbouring countries. Its pioneering work in the field of occupational classification and the definition of job profiles is receiving especially high interest.

The VTCs future plans are focused on the expansion of its training capacities through the establishment of new training centres and new training programmes. The VTC also envisages the improvement of labour market relevance and the quality of its training programmes, through the modernisation of curriculum materials, the upgrading of teacher and trainer skills and training equipment.

Community Colleges

As of 1997, all 11 public Community Colleges previously supervised by the Ministry of Higher Education (which ceased to exist from that date) have been placed under the umbrella of the Al Balqa' Applied University Community College System (BAUCCS). Another 9 public colleges operated by other ministries will also be transferred to Al Balqa' and the Applied University will also become responsible for the general academic standards of all private colleges in Jordan. The institution also includes a university campus with a traditional degree education based in the town of Salt, North of Amman.

Based on the Law, the university shall serve the Jordanian community in particular and the Arab community in general by

- Providing national standards and learning programmes at the applied university and college levels in vocational, technical and applied academic fields to meet the nation's economic needs while maintaining a balance of general education to meet social and cultural needs.
- Supporting research and the application of technology as a service to the community.
- Developing the inquisitive nature of learners along with developing their group skills and a respect for manual work.
- Strengthening Islamic values, developing a sense of national identity and creating links with partner institutions throughout the world.

The Community Colleges are currently undergoing a radical reform with the aim of making their educational programmes of equal and higher quality and more relevant to the local labour market. Colleges used to offer some 100 specialisations of different quality and these programmes are now under review with the aim of streamlining them and improving their quality and community relevancy. While their status and reputation was not very high and there were always sufficient places to cater for interested students, more recently Jordanian students have shown increasing interest in entering the Colleges. In 1999, 24,000 applicants competed for a total of 6,000 places. The Government is promoting the Community Colleges by reserving a number of vacancies in the public sector for Community College graduates and this has undoubtedly contributed to the increased popularity of the institutions.

The reform of the Colleges is part of a joint Canadian assistance project implemented by the Canadian Association of Community Colleges and focuses on developing individual colleges as well as the Applied University as a whole. Japan is also providing financial support to individual colleges, mainly through the provision of technical equipment.

UNRWA

The United Nations Relief and Works Agency operates two vocational education and training Centres in Jordan, both located in the Amman area. The Wadi Seer Training Centre was established in 1960 and, with a capacity of 820 training places, is the biggest UNRWA training centre of all 8 that are running in the region. The Centre offers 20 different courses: 15 trade (automotive, electrical power, building and woodwork, sanitation, electronics and metalwork) and 5 semi-professional (architectural engineering, mechanical draughtsman, civil engineering, land surveying and industrial electronics).

The Amman Training Centre was established in 1971 and has a capacity of 404 places; it offers 8 different programmes: 1 trade (hairdressing and beauty culture) and 7 semi-professional (in commerce and para-medical specialisations).

In 1998, both centres catered for 808 (711 male and 97 female) and 447 (42 male and 405 female) people respectively. As with all UNRWA centres, funding comes from international donors, either through the UNRWA general fund, the Peace Implementation Programme that was launched in 1993, or as separate extra-budget contributions. Japan and the US have contributed to modernising the two centres in Jordan. The Agency's financial situation is precarious.

Trade courses of a two-year duration are offered at post-preparatory level for those who have successfully completed basic education. They lead to skilled worker level qualifications. Semi-professional courses of a 2-year duration are offered at post-secondary level to those who have finished secondary education (12 years of schooling). The semi-professional courses are at Community College level and follow the prescribed curricula and syllabi with the vocational and technical parts enhanced during additional hours. At the end of the second year, trainees sit a comprehensive examination held by the local authorities concerned. The final diploma is awarded by the Al Balqa' Applied University.

Trade courses take 40 weeks per year consisting of 42 class periods (10 for general subjects, 4 for vocational theory and 28 for practical exercises). The semi-professional courses take 32-36 weeks per year and an average of 30-35 of the 42 periods are dedicated to technical subjects. All trainees follow on the job training of at least two weeks before graduation. All courses are open for male and female students.

The improvement of training provision (curricula, trainers and equipment) as well as the expansion of training courses are dependent on the availability of donor funds. Given the current financial situation of the agency, new courses can only be started to replace old ones.

National Centre for Human Resources Development

The Centre was established in 1990, initially under the name of National Centre for Educational Research and Development (NCERD), as a technical assistance and research institution to produce background information and monitoring and evaluation reports on the Education Reform Programme. The Centre is now a national institutions co-ordination agency and is involved in the coordination of foreign donors' assistance. The Centre still plays an important role as research institution. With the involvement of social partners in its operations, the Centre has also provided a platform for discussions about the progress of the reform process. Since 1995 the Centre changed its name to National Centre for Human Resources Development (NCHRD).

Originally, the Centre operated as the technical arm of the so-called Intermediary Council, which was appointed by the Government and had the task of following the Education Reform Programme. All programmes need the formal approval of the Intermediary Council before implementation. The Centre appraises the sub-projects (more than 50 since 1990) and prepares them for decision-making: it identifies the necessary inputs, prepares the justification and costing and proposes an implementation strategy. It also takes responsibility for financial monitoring, drafting of progress reports and supervises the missions of foreign donors. Its research tasks include policy and evaluation studies (such as financing and performance and effectiveness of vocational education and training institutions).

In the course of time, the Centre has received three additional responsibilities:

- The internal co-ordination of education reform activities. This includes the monitoring of project implementation and adaptation of project plans.
- The external co-ordination of implementation agencies and donors. In close co-operation with the Ministry of Planning (which signs co-operation agreements), the Centre undertakes the day-to-day and strategic communication with the implementing agencies and donors.
- The acquisition and co-ordination of additional donor funding for the education reform programme. This includes the presentation and marketing of the Educational Reform Programme and the identification of external funding needs and opportunities.

The Centre maintains its function of organising background, monitoring and evaluation studies that provide input for strategic policy development. So far, it has published more than 60 studies on the Jordanian education system and has recently also produced a comprehensive and future-oriented human resources development strategy covering all the sub sectors of the education system, including the vocational education and training system. This document has been discussed during a 4-day workshop with more than 100 participants and has been accepted by the Cabinet as a major reference for education policy making.

The Centre has a small staff of about 30 people (technicians, researchers and support staff all included) and intends to remain small in size. The Centre is currently headed by Dr. Munther Masri, (that has previously been Director General of VTC, General Secretary of the Ministry of Education and Minister of Education). Dr. Masri also sits in the Royal Committee of the Al Balqa' Applied University and has recently been appointed as Secretary General of the Higher Council for Science and Technology. Although no educational reform depends on one single person only, it is obvious that this accumulation of positions and experience provides a certain guarantee for continuity and comprehensiveness of the education reform process in Jordan.

The Centre avails of a small number of foreign policy advisers provided by donor institutions involved in the Educational Reform Programme. The salaries of the staff are paid for by the Government. All operational costs are funded from project budgets. The research work is mostly contracted out to local or foreign experts and co-ordinated by the centre's staff. Increasingly staff of the Centre are requested for consultancy work in the region.

One of the major gaps in Jordan's vocational education and training system is the absence of structured communication between social partners and vocational education and training providers. It would be desirable that the Centre develops into that direction moving from a technical co-ordination institution for education reform activities to a platform for policy making in vocational education and training. That platform does not currently exist for vocational education and training. While National Councils exist for Basic Education and also for Higher Education (the Prime Minister is now chairing the Higher Education Council) no such council has so far been established for vocational education and training.

3.4. *The problem of governance: developing the industry-education interface*

One of the major problems of the Jordanian vocational education and training system is the absence of structured information and communication between the vocational education and training sector and industry. This does not mean that employers and trade unions are not involved. On the contrary, they are represented on the boards of the main vocational education and training institutions, both at national level (such as in the Intermediary Council and the board of the NCHRD and the recently established Al Balqa' Applied University) and at the local level, such as in the boards of secondary schools and Vocational Training Centres.

The problem is more complex as illustrated by the existence of several contradictions.

- Although employer representatives are appointed on the board of most vocational education and training institutions they complain that vocational education and training programmes provided by those institutes are not relevant to their needs and that school graduates need several months to a year to

integrate in the workplace. Moreover, they argue that besides low technical skills, graduates show weaknesses in work attitudes, behaviour and in social skills.

- While the VTC is proud of having established a network of over 3000 companies for its apprenticeship scheme, it openly complains that companies consider apprentices as cheap labour rather than as trainees.
- Vocational education and training institutions, including the Ministry of Education and the NCHRD, while accepting the need to make vocational education and training more relevant to labour market needs, argue that employers are unable to inform them about their particular needs.
- Finally, while members of industry are present at most policy discussions they appear to be absent as far as the technical implementation of policies in schools and training sectors is concerned. At the same time, as a recent study on industry demands for skilled labour has shown, many employers find it difficult to recruit skilled labour on the labour market and more than half of skilled workers employed in industry have been trained on the job.

In other words, although both sides are interested in a good vocational education and training system, there is no articulation mechanism to collect and transmit basic information between vocational education and training providers and employers. An industry-education interface does not exist. In reality there are two aspects to this problem. One is the need to establish a labour market information system that would include data on school graduates, tracing their destinies and careers in and out of the labour market, as well as data regarding employment trends and developments in sub-sectors of the economy. The second is to have a tri-partite platform in place, where this information can be discussed and be used as a basis for policy-decisions. The structure of Jordanian industry, which is characterised by a very large number of small enterprises of which more than 90% have less than 10 workers and 60% even less than 5 complicates things. This structure makes representation difficult.

The issue of developing the industry-education interface has been widely recognised, however, and will be addressed during the second phase of the Canadian supported vocational education and training Reform Programme, which has appropriately been named EDLINK. The gradual development of the NCHRD into a policy-making platform where representatives from the vocational education and training sector and social partners meet can therefore be considered as an attempt to fill up the existing vacuum.

3.5. Donor involvement in the reform of the Jordanian vocational education and training system

It is clear that foreign donors, international financial institutions such as the World Bank, United Nations agencies (UNDP, ILO, UNESCO and UNRWA), the European Union and also individual countries have played and still play an important role in financing education and education reform in Jordan.

Some of the most relevant assistance projects within the context of VET reform have been mentioned above, e.g. the first and second phases of the Canadian project, the two World Bank loans, etc. A list of main projects funded by external donors is provided in annex A

As is often the case in countries with important contributions from international donors, a clear strategy for donor involvement is not clearly defined. There is often a natural preference for institution-based projects rather than policies. This situation is often translated in a lack of coordination of donor involvement and in a certain difficulty from the donors' side in recognising the exact contribution of their projects to the national education system. It must also be recognised that often donors are themselves also seeking visibility. This was the situation in Jordan until the beginning of the 1990s with a multitude of bi-lateral and multi-lateral donors in place, co-ordinated by the Ministry of Planning. Coordination was done on the basis of financial contributions rather than on the basis of quality improvements of vocational education and training provision. This obviously had a negative impact on donor involvement in the country.

This situation has dramatically changed in the education sector with the formulation of the Education Reform Programme and the establishment - and further development - of the National Centre for Human Resources Development. The Education Reform Programme now provides a strong policy framework for international donors. The Centre functions as a professional reform policy promoter and as co-ordinator of national implementing agencies and international donors. It could be a model for other countries with important donor involvement. The Centre is now moving away from its purely technical role towards becoming the principal policy-making body for vocational education and training already involving all the major stakeholders in its operations.

Involvement of bilateral donors in education reform does not only facilitate the financing but also has an impact on the contents of activities and on the general course of policies. On the other hand, Governments welcome technical assistance providers who are closer to their stated policy objectives. In the case of Jordan, that match between policy priority and donors has resulted in a strong involvement of the Canadian Government and its Community College Association. Other donors intervene at single project level rather than policy level.

The development and reform of non-formal education, including continuing vocational education and training of adults, has received little attention from the international donor community so far, except for relatively small projects funded by the World Bank in the area of social development and poverty alleviation. This area remains the least developed part of the Jordanian human resources development system but may prove to be a key factor in achieving the overall economic and social policy objectives set by the Government. However, some of the unsolved issues concerning the formal and initial vocational education and training sector may also prove to be even more difficult to handle in the CVT sector. This especially concerns the need for information and communication of training needs; flexible and high quality delivery, assessment and certification; financial sustainability and hence the even bigger need for employer

contribution; and, finally, - as part of the lifelong learning conception – the full integration of the (formal) vocational education and training and (informal) CVT sectors into a true human resources development system.

4. Summary and conclusions

There is a high commitment in Jordan, both within the Government and among the main vocational education and training stakeholders, for a reform of the vocational education and training system as part of the overhaul of the overall human resources development system. Given the extreme scarcity of natural resources and the increasingly competitive environment in the region, it has been recognised that a well qualified workforce, characterised by a balanced distribution of qualifications (from semi-skilled workers up to professionals), will be a *sine qua non* for the successful achievement of both the necessary diversification of national industry in Jordan and the continuing competition for jobs on the regional Arab labour market.

The reform of the vocational education and training system has already become an integral part of the Education Reform Programme that started in 1988. While the policy objectives are basically sound and fully in line with vocational education and training policy conceptions from EU countries - including the concept of lifelong learning - implementation has been facing a series of obstacles. These include:

- difficulties in overcoming traditional values of gender, education and work among the population;
- budget constraints that have been aggravated due to a very fast growing population and to the pressure put by the common assumption of citizens that education is a public good to be provided by the State;
- reluctance among the private sector to transfer financial means to the state budget without having control over its spending;
- a vocational education and training provision still largely supply-driven with limited labour market relevance;
- deficiencies in the teacher training and employment system;
- the absence of a well-structured information and communication system between vocational training institutions and the labour market;
- the lack of involvement of social partners in the governance and provision of training.

In the field of vocational education and training, and with additional support from the Canadian Government, problematic aspects of the current vocational education and training system have been effectively identified, a clear reform policy has been formulated and agreed upon and important steps towards implementation and realisation have been made. The concept is very much based on the North-American model of education with comprehensive secondary schools (allowing for "liberalisation" of vocational education and "vocationalisation" of general education) followed by Community Colleges at the post-secondary level, preparing for middle level qualifications relevant for local labour markets and for higher education in an

applied stream. The framework for the Al-Balqa' Applied University has been worked out and attention has now shifted to improving individual colleges.

The reform of secondary comprehensive schools and Community Colleges is well under way (though by no means finalised). In theory, the foundations of an education system are in place. This system is open and allows for horizontal and vertical flexibility, at least within the formal system, for young people, and in the upper parts of the system. However, the reform of the Vocational Training Corporation (supplying the labour market with semi-skilled and skilled workers through an Apprenticeship Scheme) has only just been initiated and the development of a continuing vocational training system (including the retraining of the unemployed and unskilled) has hardly begun. The little public attention towards SMEs is also reflected in the almost complete absence, both in the formal and the informal system, of dedicated vocational education and training provision.

5. Recommendations for further assistance in restructuring the vocational education and training system

The Jordanian authorities have clearly made a decision regarding the choice of their vocational education and training system and there is no need to question that policy at all, especially since the concept appears to match current educational aspirations of Jordanian families well.

However, and despite the good policy intentions, the question of whether the reformed Comprehensive Schools and Community Colleges will be able to take the pressure from higher education and direct larger numbers of young people with intermediate skills to the labour market remains. Instead, as experiences from other countries show, they may simply develop into alternative – and less academically demanding - routes into higher education. It may therefore prove necessary to pay far greater attention to improving the quality and reputation of lower segments of the education system (catering for the less academically interested and/or successful) than so far if the goal of filling the gap in the qualification structure has to be achieved. This, in turn, may imply more attention to recent European experiences with vocational education and training reforms as opposed to the current focus given to North American models oriented to higher level qualifications.

The experience from several European countries has shown that it is possible to develop alternative routes of education and training for different target groups to reach similar qualification levels: one characterised largely by a school-based route (including short practical experience periods) and another characterised by the integration of work and learning, such as in modern apprenticeship schemes. The latter has proven to be attractive for the less academically inclined (and consequently less successful) but not necessarily less competent students. The pre-condition, however, is the existence of a national qualification structure.

What could be recommended at the policy level therefore, is the intensification of exchanges of experience with European and other MEDA partner countries' policy makers, vocational education and training experts and practitioners with a view of developing policies to improve the lower and middle segments of the qualification structure through both the strengthening of an apprenticeship type of vocational education for young people, on the one hand, and continuing vocational education and training for adults, on the other.

By necessity, this will also touch upon other remaining issues such as:

- improving the quality and competency-based nature of delivery;
- the *involvement of social partners* in governance, organisation and financing; and
- the need for the development of a national qualification structure.

Concretely, the integration of a European vocational education and training approach - that could complement the existing Jordanian approach- could be undertaken through an experimental training scheme for developing *the hotel and tourism industry* aimed at training semi-skilled and skilled workers based on the occupational profiles developed in EU countries. Training capacities in this sector are quantitatively and qualitatively insufficient. Other MEDA countries, with developed hotel and tourism training facilities, could become involved as part of a regional project.

A third recommendation concerns the *potential role of Jordan, its vocational education and training system and qualified workforce in the region*. While the present regional Arab labour market is largely rooted in a classical pattern of skill shortages and wage differences, the existence of a common language and culture are powerful factors that would facilitate a regional free movement of labour also to continue under other national labour market conditions. Again, Jordan (and indeed other countries from the region) could profit from recent EU experience in this area, and especially in terms of the institutional requirements of transparency and mutual recognition of qualifications that have to be fulfilled to make free movement work in practice. Jordan's own investments in occupational classification and occupational profiles would be an asset to build on.

Annexes

A. Summary table of main projects in the field of VET funded by bilateral and international donors in Jordan

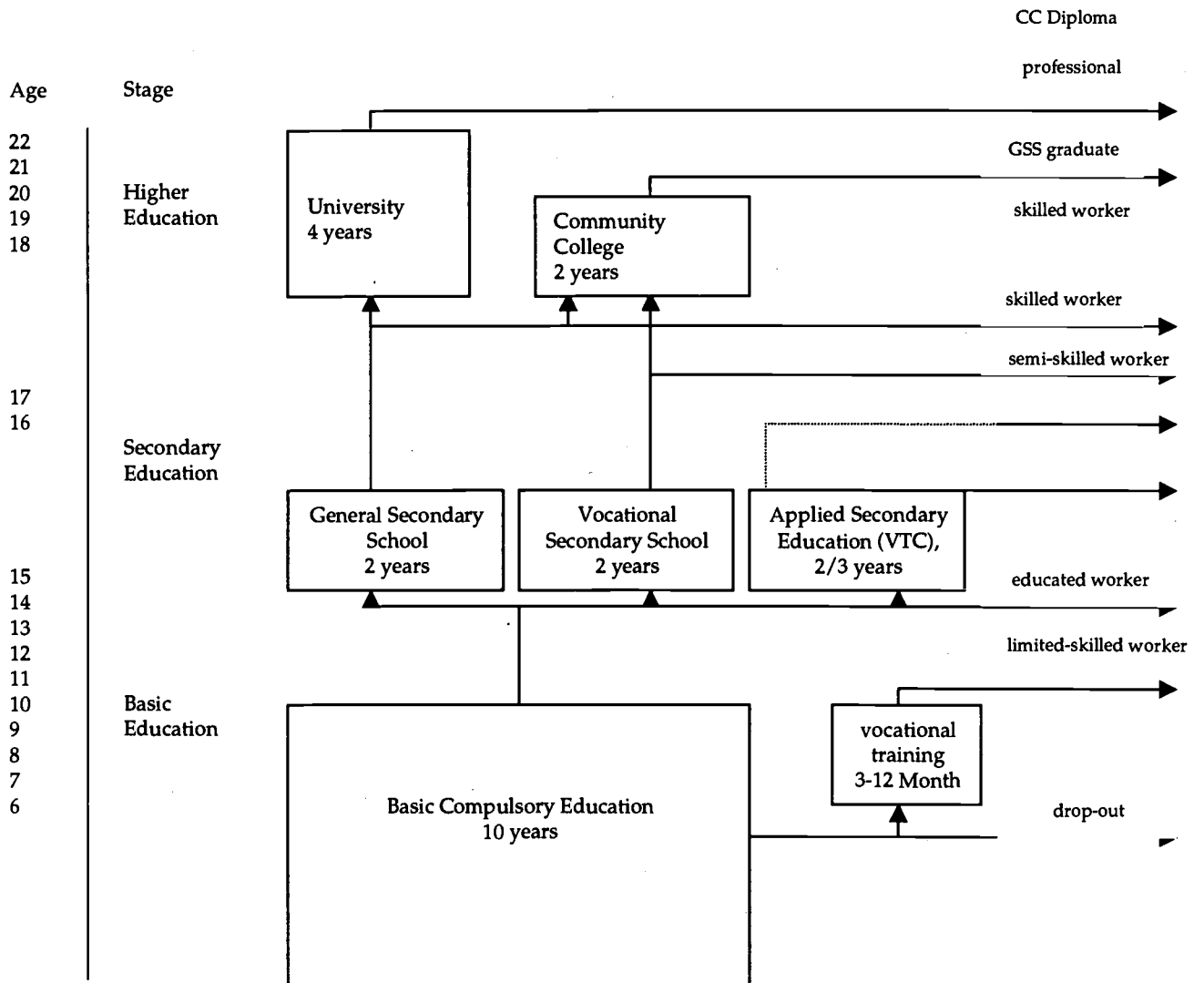
Donor	Amount	Field of intervention	Remarks
European Union	5.4 Million € (1.5 from Jordanian Government)	Improvement of teacher training at university level	Project started in April 1996 and will end in June 2002
European Union	40 Million €	Industrial Modernisation Programme. The programme includes a component of continuing training for relevant economic sectors	Project starting in 2000
World Bank	40 MUS\$	Seventh Education Project. The project concentrated on the development of new modernised curricula within the framework of the new Education Law	The European Union granted 2,5 Million € The project is already finished (1988-1995)
World Bank and JIBC (previously OCEF of Japan)	436 MUS\$ (266 from WB and Japan and the rest from Jordanian Government)	Human Resource Development Sector Investment Loan (1989-97): support the education reform of the country. The project aimed at the construction of new facilities to replace rented and double-shift schools, as well as textbooks, teaching materials and teacher training and information technology in education.	Project closing date is June 2001. British DFID and USAID also contributed with small grants.
World Bank ¹	6 MUS\$ (Of which 1 MUS\$ by UNDP and Jordanian Government)	Training and employment support project. Within the overall Government's Social Productivity Program, the project aims at creating a Fund that subsidises directly enterprises that will provide or purchase training and related services necessary for the recruitment of unemployed people. The project is targeted to poor job seekers.	Project is still running 1998-2001
Canada	6.5 Million CAD	First phase: production of a strategic plan for technical vocational education; improvement of vocational training curricula; improvement of quality of training	Project is already finished

¹ The World Bank country assistance strategy for 2000-2002 foresees a possible project in Higher education for an indicative amount of 35 MUS \$. The project would aim to improve the quality and relevance of higher education by designing a new information system and evaluation programme to assess learning achievements. The project is expected to start in June 2000. Jordanian Government's contribution would be 40 MUS \$.

Donor	Amount	Field of intervention	Remarks
Canada	5 Million CAD	Second phase: EDLINK: support to the development of an information system of labour market; development of a database; development of analysis on evolution of demand.	Project foreseen to start in Sept. 2000
UNDP/USAID	550,000 US\$	Support to Business Training for Micro and small enterprises. The project aims at developing the capacity in the private commercial and non-profit sector to deliver business training and counselling to existing micro and small enterprises.	The project is still running 1999-2001
UNDP	295,000 US\$	Enhancing Technical Training and Employment Opportunities for Jordanian Women . This is a pilot project to support women employment through the implementation of innovative training that combines occupational, general and entrepreneurship skills.	Co-financed by JWIF The project is still running (1999-2002) and is implemented by the Al Balqa Applied University
UNDP	326,000 US\$	Entrepreneurship training; development of a consulting and training centre for medium size enterprises at the VTC	Project finished in 1997
Several EU Member States (Italy, France, United Kingdom)		Support to vocational training centres by the provision of training for trainers; provision of new equipment and exchanges of staff and students	

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B. Synoptic outline of the vocational education and training system structure



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C. *Main economic indicators*

GDP:	purchasing power parity, \$15.5 billion (1998 estimates)
GDP—real growth rate:	1.7% (1998 estimates)
GDP—per capita:	purchasing power parity, \$3,500 (1998 estimates)
GDP—composition by sector:	
• agriculture:	6%
• industry:	26.5% (mining, manufacturing, electricity & construction)
• services:	64% (1995 estimates)
Exports:	\$1.8 billion (f.o.b., 1998 estimates)
Exports—commodities:	<ul style="list-style-type: none"> • phosphates • fertilizers • potash • agricultural products • manufactures
Exports—partners:	<ul style="list-style-type: none"> • Iraq • India • Saudi Arabia • EU • Indonesia • UAE • Syria • Ethiopia
Imports:	\$3.8 billion (c.i.f., 1998 estimates)
Imports—commodities:	<ul style="list-style-type: none"> • crude oil • machinery • transport equipment • food • live animals • manufactured goods
Imports—partners:	<ul style="list-style-type: none"> • EU • Iraq • US • Japan • Turkey • Malaysia • Syria • China
Debt—external:	\$8.2 billion (1998)
Economic aid—recipient:	\$1.097 billion (1995)

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Total population by main age groups and by sex

Population by age and sex, Jordan, 1998

Age	Male	Female	Total
0-4	375,510	353,955	729,465
5-9	345,665	324,460	670,125
10-14	308,365	294,965	603,330
15-19	283,495	263,200	546,695
20-24	281,010	235,970	516,980
25-29	233,760	195,130	428,890
30-34	159,155	138,405	297,560
35-39	119,365	106,640	226,005
40-44	84,550	81,680	166,230
45-49	69,630	68,070	137,700
50-54	69,630	61,260	130,890
55-59	57,195	49,920	107,115
60-64	39,790	34,035	73,825
65+	59,680	61,260	120,940
Total	2,486,800	2,268,950	4,755,750

Active population rates by age groups and by sex

Activity rates for Jordanian population aged 15+ years by age and sex, Jordan, 1999

Age	Activity rate		
	Male	Female	Total
15-17	13.95	0.44	7.35
18-19	40.49	3.12	23.15
20-24	72.7	17.13	46.36
25-29	92.7	21.13	57.28
30-34	94.12	19.63	55.51
35-39	93.65	21.18	55.51
40-44	90.53	15.12	51.77
45-49	85.2	11.12	46.66
50-54	77.22	5.84	38.54
55-59	68.85	3.42	37.81
60-64	41.71	2.49	23.72
65-69	29.83	0.81	16.7
70-74	20.33	0.63	11.11
75+	13.32	0.26	6.82
Total	66.55	12.12	39.72

	Total
Jordanian Labour Force	1,129,000
Employed Jordanian Population	1,013,840
Percentage of Employed Jordanian Population	89.8%

Distribution of the employed population by sectors

Sector of work	Percentage
Governmental	35.10%
Private	63.70%
Other	1.20%

Labour force by occupation

Occupation	Percentage (1992)
Industry	11.4%
Commerce, restaurants, and hotels	10.5%
Construction	10%
Transport and communications	8.7%
Agriculture	7.4%
Other services	52%

Distribution of the active population employed by status

Employment status	Percentage
Employee	79.2
Employer	6.73
Self-employed	10.83
Unpaid Family Worker	2.49
Unpaid Worker	0.74
Total	100

Distribution of Jordanian population by educational level and sex (15+ Years)

Distribution of Jordanian population (15+ Years) by sex and educational level			
Educational Level	Male	Female	Total
Illiterate	7.46	18.83	13.06
Read and Write	5.80	4.75	5.29
Elementary	17.50	14.16	15.85
Preparatory	20.31	17.78	19.06
Basic	15.13	13.98	14.56
Vocational	1.19	0.47	0.84
Secondary	15.53	15.03	15.29
Intermediate Diploma	6.54	9.57	8.03
B.A.	8.71	5.00	6.88
Higher Diploma & above	1.83	0.43	1.14
Total	100	100	100

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Trends in the employment demand and provision

Employment rates for Jordanian workforce aged 15+ years by age and sex, Jordan, 1999

Age	Male	Female	Total
15-19	75.8	74	75.7
20-24	84.1	64	81
25-29	92.2	77	89.5
30-34	95.3	89	94.1
35-39	96.4	94	95.9
40-44	95.7	96	95.7
45-49	94.9	100	95.5
50-54	97.3	99	97.4
55-59	95.8	97	95.8
60-64	93.6	100	93.9
65+	96.7	100	96.8

Indicators on participation in education and training

Enrolment ratios by cycle, age group and sex, 1997

Type enrolment ratio	Sex	Cycle and age group		
		Kindergarten 4-5	Basic 6-15	Secondary 16-18
Gross	Total	71.07	93.15	27.74
	Male	68.43	92.80	29.32
	Female	73.88	93.53	12.08
Net	Total	53.83	88.32	24.76
	Male	51.40	87.92	26.30
	Female	56.43	88.74	23.13

Percentage distribution of Jordanian

Population aged 15+ by enrolment - status and age

Age	Ever enrolled	Never enrolled
15	98.86	1.14
16	99.2	0.8
17	98.94	1.06
18	98.67	1.33
19	98.64	1.36
20	98.38	1.62
21	98.68	1.32
22	98.19	1.81
23	98.34	1.66
24	98.23	1.77
25	98.07	1.93
26	97.91	2.09
27	97.85	2.15
28	98.33	1.67
29	97.38	2.62
30-34	95.84	4.16
35-39	93.94	6.06
40-44	88.62	11.38
45-49	81.14	18.86
50-54	71.14	28.86
55-59	62.63	37.37
60-64	48.32	51.68
65+	35.01	64.99
Total	88.24	11.76

Distribution of vocational students by stream and sex for the year 1996/1997

Stream	Sex				Total	Total %
	Male	%	Female	%		
Commercial	4,535	45.4	5,433	54.5	9,968	28
Agricultural	783	93.1	58	6.9	841	2.3
Industrial	7,531	99.9	4	0.01	7,535	21.1
Nursing	466	22.6	1,588	77.4	2,054	5.7
Hotel	1,304	100	0	0	1,304	3.6
Vocational Centres	8,647	86.7	1,315	13.2	9,962	27.9
Home Economics	0	0	3,915	100	3,915	11
Vocational Secondary	23,266	65.3	12,313	34.7	35,579	100.0

Repetition and drop-out ratios by grade and gender

Grade	Repetition			Drop-out		
	Total	Male	Female	Total	Male	Female
Grand Total	1.35	1.42	1.29	0.98	1.24	0.72
Basic Cycle	1.22	1.22	1.22	0.73	0.91	0.54
1st Grade	0.50	0.58	0.42	0.20	0.21	0.18
2nd Grade	0.36	0.40	0.32	0.13	0.14	0.12
3rd Grade	0.30	0.32	0.29	0.14	0.16	0.12
4th Grade	0.89	0.80	0.99	0.24	0.29	0.19
5th Grade	1.98	1.85	2.12	0.46	0.57	0.34
6th Grade	2.15	2.08	2.21	0.75	1.01	0.49
7th Grade	2.18	2.16	2.20	1.13	1.41	0.83
8th Grade	2.01	2.00	2.01	1.44	1.87	1.00
9th Grade	1.60	1.77	1.42	1.73	2.19	1.26
10th Grade	0.15	0.16	0.14	1.51	1.82	1.19
Secondary Cycle	1.02	1.56	0.48	1.95	2.57	1.33
11th Grade	0.20	0.37	0.03	1.82	2.44	1.22
12th Grade	1.93	2.88	0.98	2.09	2.73	1.45

Expenditure on education:

Public expenditure on education in % of GDP

Public expenditure on education as percentage of GDP	17.3%
GDP(1997)	4.945.8 Million JDs

Public expenditure on vocational training in % of GDP

Public expenditure on vocational training as percentage of GDP	0.1%
Total expenditure on vocational training in 1997	4.6 Million JDs

Educational level of the population (25-59 age group):

Percentage of Population aged 25-59 who Completed only Compulsory Education of Total Population Aged 15+ Years	22.6%
Percentage of Population who Completed Secondary Education	15.29%
Percentage of Population who Completed Higher Education	16.85%

Unemployment rates in the population:

Unemployment rate by sex(1999)

Male	8.80%
Female	18.45%
Both Sexes	10.25%

Unemployment rate among young population aged less than 20 years	24.3 %
Unemployment rate for population aged 25-59 years who completed low education	6.2 %
Unemployment rate for population aged 25-59 years who completed secondary educ.	6.0 %
Unemployment rate for population aged 25-59 years who completed higher educat.	4.7 %

Sources: Statistical Department of Jordan

National Centre for Human Resources Development

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