



**TECHNICAL AND VOCATIONAL
EDUCATION AND TRAINING
IN JORDAN**
AREAS FOR DEVELOPMENT COOPERATION

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*Report prepared by Gérard Mayen (editor), Richard Johanson, Mohamed Chemingui and Ahmad Mustafa, for the Delegation of the European Commission in Amman
European Training Foundation
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PREFACE

This report was finalised during the first quarter of 2006 and as such represents a snap-shot of the technical and vocational education and training (TVET) sector in Jordan at that time. It includes a number of comments from stakeholders in Jordanian TVET, who received the draft version in February 2006. The authors would like to express their appreciation and thanks in particular to His Excellency Dr Munther Masri, President of the National Centre for Human Resources Development (NCHRD), His Excellency Dr Tayseer Al Nahar, Secretary General of the Ministry of Education, Mr Mohammad Ammar, Director General of the Amman Chamber of Commerce, Engineer Ziad Matarneh, former Director General of the Vocational Training Corporation (VTC), and Mr Mohamad Al-Adwan, Director of Vocational Services at the Ministry of Education, for their very effective written advice and recommendations.

Special thanks are due to the EC Delegation team in Jordan, and in particular to Ms Angelina Heichhorst, Ms Penelope Andre-Eklund and Mr Peter Balacs for their constant support and availability.

Finally, the ETF team would like to express their appreciation and thanks to all those who attended the meetings and provided advice, assistance and relevant documentation.

It is worth noting that things have changed since the report was drafted. Employment and TVET are high on the agenda of the Jordanian government. Under the leadership of the Ministry of Labour, several initiatives have been undertaken with the involvement of a wide range of public and private stakeholders.

A Training and Employment Promotion programme has been launched by the

Ministry of Labour, which aims to contribute to poverty reduction and promote the employability of the Jordanian workforce. This programme will work closely (under conditions still to be adopted) with the Employment and Training Fund.

The VTC is currently initiating a number of reforms to comply with the recommendations of the National Agenda.

Several working groups have been set up to follow-up on the recommendations of the National Agenda. This work will lead to the drafting of an employment and TVET sector strategy and the necessary laws and regulations.

The ETF, on behalf of the EC Delegation in Jordan, facilitated three workshops involving private and public stakeholders in April, June and September 2006. The Ministry of Labour hosted the meetings, which took account of the analysis in the present report, and led to a set of recommendations intended to boost the reform process and the drafting of an action plan based on an overall strategy for the employment and TVET sector. This will be continued during the fourth trimester of 2006.

During the same timeframe, the World Bank initiated a series of activities to prepare for a Project Preparation Technical Assistance Grant, and the Japanese International Cooperation Agency (JICA) is likely to start its support to the VTC.

We hope that the current ETF contribution, in the form of this report and forthcoming activities, will contribute to the success of the overall reform of the TVET sector in Jordan.

Gérard Mayen
ETF Country Desk Officer for Jordan
Team Leader

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EXECUTIVE SUMMARY

INTRODUCTION

The purpose of this report is to assess the system of technical and vocational education and training (TVET) in Jordan, identify the main challenges, and suggest priorities for external cooperation. More specifically, the report seeks to assess the status of current readiness for undertaking a Sector Policy Support Programme (SPSP) in TVET using a sector-wide approach (SWAP). The scope of the report encompasses TVET below degree level in higher education managed by the Ministry of Education (MoE), mainly vocational secondary schools, the activities of the Vocational Training Corporation (VTC) and community colleges under Al-Balqa Applied University (BAU). The chapters of the report are based on EC guidelines for the main areas of assessment for SPSP.

At present there is no single TVET sector within government, and no single body leading TVET. The TVET Council has had limited impact on the development of a sector strategy. Nevertheless, it has taken a series of decisions that have contributed to the establishment of the TVET Support Fund and the National Teacher Training Institute (NTTI), and to the approval of the occupational analyses and job descriptions for a dozen occupational families. It is expected that the Employment and Technical and Vocational Education and Training (ETVET) Council, once it has been created as proposed in the National Agenda, will have an effective impact on the implementation of a sector strategy and policy. The National Agenda represents a clear impetus for government leadership and reflects a deep appreciation within the country of the need for change in TVET governance and linkages with the private sector. No government-led donor

coordination exists for TVET, although the Ministry of Labour (MoL) is initiating some action in the field. There is no sector programme, and by definition, no medium-term expenditure framework (MTEF) and no procedures for reviewing progress in its implementation, and no memorandum of understanding. In short, most of the essential conditions for moving to an SPSP are not yet in place. However, the momentum of the National Agenda could push the key stakeholders and interested donors in the direction of an SPSP.

CHAPTER 1: SOCIOECONOMIC BACKGROUND AND THE JORDANIAN LABOUR MARKET

The structure of the economy is characterised by almost 75% of all workers being in the service sector, 22% being in industry and only 3% being in agriculture. The overwhelming majority of enterprises are small: 94% have four workers or fewer and account for around half the total workforce. Little support has been provided to micro and small enterprises (MSEs) in order to assist them to develop their competitiveness. Public sector productivity and flexibility is low. The public sector still attracts educated workers mainly for job security reasons. Unemployment decreased from 14.5% in 2003 to 12.5% in 2004, but is especially high for young people aged 14-35, and more specifically for educated young women. Disparities exist between urban and rural areas. Migration has two significant features: (1) out-migration of educated people temporarily in search of opportunities and higher incomes, mainly in the Gulf (this benefits the economy in terms of substantial remittances); and (2)

in-migration of people to take low-skilled jobs that Jordanians do not want. Jordan faces twin challenges: it must generate sufficient new jobs at appropriate levels for the burgeoning number of new entrants to the labour market, projected to grow at 4% per annum; and it must increase the skills of the labour force to support greater competitiveness of Jordanian enterprises, as required by economic integration.

CHAPTER 2: ANALYSIS OF THE TVET SYSTEM IN JORDAN

The report concludes that the immediate strategic priorities for TVET in Jordan are as follows. First, there is a need to forge strong labour market linkages, including the continued development of labour market and human resource information through Al Manar; to deepen employer involvement upstream in the training process; and to make the training supply more flexible and responsive to market changes, particularly at local level. Second, there is a need to reform the organisation and management of TVET by establishing strong leadership, reorganising existing structures and devolving more authority to training institutions. Third, the steady deterioration in the quality of skills formation must be reversed by introducing clear occupational standards validated by employers, by improving instructor qualifications particularly in related work experience, by providing proper equipment for training and, above all, by introducing incentives and accountability for performance for instructors and trainees, and employer testing and certification of results. Fourth, financial mechanisms should be used to raise system performance, as elaborated in Chapter 3.

CHAPTER 3: TVET FINANCING

Jordan allocates around 5% of its public spending on education and training to TVET. The share of TVET spending as a percentage of GDP has increased over the past three years from 0.5% to 0.6%. The government finances the bulk of expenditure on TVET. However, non-public

sources have become more important for the VTC and BAU. The VTC has more than doubled the non-government sources of its budget, from 6.2% of the total in 2000 to 14.6% in 2004, owing to increased testing fees attributable to the Occupational Work Regulation Law. The BAU has also increased the non-government share of its total budget, from 41% in 2000 to 65% in 2004, owing mainly to decreases in government subventions to higher education. Considerable distortions exist within the allocations. The VTC recurrent budget allocates 88% of the total to staffing costs, leaving only 10% for operating expenses. The BAU capital budget has decreased dramatically as government support has been cut. In addition, available facilities are not used intensively: the VTC's premises were used to only 65% of their capacity and the BAU's to only 64%. Most importantly, budget transfers are made without regard to performance or results, providing little incentive for improving system outputs. Options for reform include placing a ceiling on staffing costs and allocating increased funds for quality inputs; moving to normative financing; and introducing competition for funds. The current TVET Support Fund, financed through a 1% tax on company profits, needs to be strengthened greatly through better governance, more and better personnel, procedures and technical criteria, and especially a redefinition of eligible programmes.

CHAPTER 4: TVET PLANS AND PROGRAMMES

Each of the three public parts of the TVET system has developed its own individual strategy, but while an HRD strategy was approved by the cabinet in 1999, no comprehensive national strategy exists for TVET. The implementation of each strategy has suffered from underfunding. The current system is fragmented. Programmes are designed and implemented in the absence of an overall national strategy closely linked to employers. A recent consultation mechanism, the National Agenda, goes a long way towards establishing a sector policy for TVET, mainly in terms of governance and

management. It recommends the establishment of an umbrella Higher Council on Human Resource Development, an Employment and TVET Council (ETVET), an Employment and Training Fund, an independent Quality Assurance Agency, and the remodelling of the VTC as an autonomous body. These reforms are far-reaching and provide an excellent basis for the reform of TVET. However, they do not yet constitute a comprehensive sector policy embracing all training providers, with clear leadership. More needs to be done to pull the various elements into a coherent national plan.

CHAPTER 5: TOWARDS A MEDIUM-TERM EXPENDITURE FRAMEWORK FOR TVET IN JORDAN

There is no MTEF for the TVET sector in Jordan. Chapter 5 provides a checklist of steps and time estimates for establishing a full MTEF for TVET. However, the full value of a sectoral MTEF only becomes apparent if it is part of a comprehensive plan for a shift to a programme budgeting system for the government as a whole. MTEF is a system of budget development and execution organised around achieving results of public benefit. An MTEF brings together all the expenditure required to execute all programmes for the same sector. An MTEF framework is designed to ensure that budgets are developed and executed in line with government objectives. Thus, it enables decision-makers to set targets for the achievement of results and to hold civil servants accountable for achieving them. The single most important feature of an MTEF is that it shifts the focus of both budget decision-making and control of execution from inputs to results. This requires reconsideration not only of the budget structure, but also of how the government makes decisions about its budget and the system of managing budget execution.

The steps required for developing an MTEF for the TVET sector are as follows:

1. classifying the sector's expenditure by programme;
2. specifying the results required for each programme and how they will be measured;
3. developing the financial and information systems required to record actual expenses against budget and actual results against target results;
4. linking programme objectives and costs to measured results.

In order to be fully effective as a tool of budgeting, an MTEF requires the development of a number of interrelated disciplines: an overall budget decision-making cycle, a specification of programme objectives and the relationship between outputs and outcomes, reliable reporting of results in terms of outputs and outcomes, effective forecasting and reporting of programme costs, and a clear definition of accountability for implementation of programmes.

CHAPTER 6: STATUS OF DONOR COORDINATION

Several externally assisted projects have supported TVET. The Canadian International Development Agency (CIDA) has been the de facto lead donor in the TVET sector, but the completion of the major CIDA project Sustaining and extending TVET (SETVET) has led to a leadership vacuum. Donor coordination is limited, while initial analysis of the situation was initiated in 2005 under the auspices of the UNDP. In terms of future plans, JICA intends to support the development of specific training institutions. The World Bank has expressed interest in supporting the preparation and implementation of the recommendations of the National Agenda pertaining to TVET.

The European Neighbourhood Policy¹ (ENP) action plan for Jordan includes the following actions:

1. to 'develop and implement a vocational training programme';

¹ The ENP Action Plan for Jordan was adopted on 9 December 2004. The Action Plan is an agenda for work with the EU over the next three to five years. The plan builds on the existing Association Agreement. It makes it possible to define priorities more clearly, and to link financial assistance more closely to the achievement of mutually agreed goals. It proposes a list of activities, but does not include a financing agreement.

2. to 'work towards enhancing the quality and capacity of institutions and organisations involved in the quality assurance of education and training provision; address accreditation and licensing procedures';
3. 'taking steps to increase the involvement of civil society stakeholders and social partners in higher education and VET reform'.

The momentum of the National Agenda could push the key stakeholders and interested donors in the direction of an SPSP. Considerable preparatory work would be needed, as outlined in Chapter 7.

CHAPTER 7: POSSIBLE EXTERNAL ASSISTANCE FOR TVET

Development partners could be instrumental in helping to design and support initial implementation of the National Agenda in TVET. Technical assistance over the next two years could prepare the new legal and regulatory framework and support the development of a national TVET sector policy in Jordan, work out organisational, staffing and financing implications, and support staff development and capacity-building. In particular, immediate assistance is needed for the Employment and Training Fund (financed by a 1% tax on enterprise profits) to define priority eligible programmes and to prepare sound criteria and procedures

for the allocation of funds. This fund could then become the conduit for external assistance to finance priority training programmes.

A strategy for TVET development with three main objectives is outlined in Chapter 7. The top priority would be assigned to institutional development. This would include the establishment of the Higher Council for HRD and the ETVET Council and attached secretariat, the strengthening of employers' organisations, further development of human resource information systems, the preparation of a comprehensive TVET policy and programme, steps towards making the VTC autonomous and devolution of authority to training institutions. The second objective is to establish proper management and financial incentives. Activities include remodelling the TVET Support Fund through the design of criteria, procedures, priority programmes and staff development, and financing of priority programmes through the Fund. In addition, budgetary reforms would be put in place with a view to establishing an MTEF for TVET based on the overall sector programme. The third objective is to improve the quality and relevance of TVET through support for the establishment of the Quality Assurance Agency, instructor training and re-equipping TVET institutions. This programme of cooperation could yield significant outputs in the short term as a basis for entering into a large-scale SPSP for TVET.

INTRODUCTION

Negotiations between the Jordanian authorities for programming under the European Neighbouring Policy (ENP) have pointed to TVET as one of the priority sectors in which support could be envisaged. In that context, the EC Delegation in Jordan has requested that the ETF carry out an analysis of TVET in Jordan to support the programming process and suggest possible future interventions.

The purpose of this report is to assess the TVET system, identify the main challenges, and identify priorities for assistance. More specifically, the report seeks to assess the status of current readiness for undertaking an SPSP in TVET using a sector-wide approach (SWAP).

The ETF organised a two-week mission to Jordan in November 2005 to carry out the work. The ETF team consisted of Mr Gérard Mayen, team leader, Dr Richard Johanson, consultant on TVET, Mr Mohamed Chemingui, consultant on

training finance, and Mr Ahmad Mustafa, local consultant on TVET.

The scope of the report encompasses TVET below degree level in higher education. In the Jordanian context this means that the primary focus was on the activities of the Ministry of Education (MoE) in vocational secondary schools, the Vocational Training Corporation (VTC), and community colleges, as coordinated by the Al-Balqa University (BAU). The methodology for the review included a review of available documents², interviews with key stakeholders and authorities, and visits to a number of training institutions. The analytical framework for review of TVET is explained in the introduction to Chapter 3.

Given the focus on preparation for possible support to an SPSP, the report covers six of the seven main areas of assessment of sector programmes indicated in the EC guidelines³ for SPSP, i.e. assessment of sector policy, the sector medium-term

² This included updating the information included in the comprehensive ETF/World Bank review of TVET in Jordan in 2003.

³ European Commission, 'The Seven Key Areas of Assessment', *Guidelines for European Commission Support to Sector Programmes*, Version 1.0, Chapter 6, February 2003.

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expenditure framework (MTEF), public expenditure management, the status of donor coordination, performance monitoring and client consultation mechanisms, and institutional and capacity assessments. At the suggestion of the EC Delegation, the

report excludes a macroeconomic assessment, as this was carried out recently for another EC report for the Poverty Reduction programme. The report concludes with suggestions for areas of cooperation and steps for building an SPSP.

1. SOCIOECONOMIC BACKGROUND AND THE JORDANIAN LABOUR MARKET

1

1.1 OVERVIEW

- The structure of the economy is characterised by having almost 75% of all workers in the service sector, 21.7% in industry and only 3.5% in agriculture.
- The overwhelming majority of enterprises are small: 94% have four workers or fewer and account for around half the total workforce. Little support has been provided to micro and small enterprises (MSEs) to develop their competitiveness.
- Public sector productivity and flexibility is low. The public sector still attracts educated workers mainly for job security reasons.
- Migration has two significant features: (1) out-migration of educated people temporarily in search of opportunities and higher incomes, mainly in the Gulf (this benefits the economy in terms of substantial remittances); and (2) in-migration of people to take low-skilled jobs that Jordanians do not want.
- Unemployment decreased from 14.7% in 2003 to 12.6% in 2004, but is especially high for young people aged 14-35, and more specifically for educated young women. Disparities exist between urban and rural areas.
- Absorbing new entrants to the labour market, around 50 000 people annually in the past according to the MoL, represents a major challenge. The workforce is projected to grow even faster in the future – around 4% per year within 10 years.
- The structure of the Jordanian labour market does not function well in terms of allocating human resources to their best use and maximising productivity of human capital through proper incentives.

1.2 BACKGROUND

The Hashemite Kingdom of Jordan is a constitutional monarchy whose constitution was adopted in 1952. Jordan is a member

of the United Nations, the Arab League, the Organisation of the Islamic Conference and the World Trade Organisation. It signed free-trade agreements with the European Free Trade Association (EFTA) in 2001 and with the EU and the USA in 2002. Jordan's geostrategic position in the Middle East enables it to be a prominent actor active in mediating and supporting regional efforts for peace.

Demographic trends

Jordan's population increased from 4.3 million in 1996 to 5.35 million in 2004, a growth rate of 2.8 %⁴. The population structure is weighted towards the very young, with those under 15 years of age representing 38% of the population, and the age group 15-24 comprising 21%. By 2025 it is projected that the population will be 8.1 million, with a doubling of the active population from the 2000 level (UN World Population Prospects).

The 1994 census indicated that 76% of families lived in urban areas (the full results of the 2004 census are not yet available), and that there was an on-going trend towards further urbanisation. The populations of three of the twelve governorates (Amman, Irbid and Zarqa) accounted for 71% of the total Jordanian population. This regional concentration has a direct impact on the employment and living conditions of populations who live far from the economically attractive centres and those with low levels of education and training. The growing movement of population towards the capital city (Amman) distorts the distribution of employment in the country. Employment is especially concentrated in the greater Amman area, which accounts for more than half of total employment and more than a third of the country's active population, both employed and unemployed.

Economic performance

Jordan's economic performance has been impressive. Real GDP growth averaged around 4.9% in 2001 and 2002, dipped to 3.3% in 2003 and accelerated to 6% in

2004⁵. Factors responsible include a favourable investor climate, the emergence of Jordan as a hub for activities in Iraq, continued penetration of foreign markets, significant international financial support, acceleration of workers' remittances, careful economic management, including fiscal restraint, and low levels of inflation. Value added in industry increased by 13.5% in fixed prices, stimulated in part by an increase in production of 20% in the Qualifying Industrial Zones (QIZs). Only in mining and agriculture did production decline. The shares of GDP for different sectors were 71.8% for services, 25.3% for industry and only 2.2 % for agriculture. Trade liberalisation and increased market access have set the stage for strong export-led growth over the medium term. Economic growth is projected to continue to grow at 6% through to 2008 (EC, Poverty Appraisal Report, p. 22). The official strategy aims at sustained reductions in fiscal deficits supported by structural reforms to stimulate private sector investments, including FDI and judicious privatisation under market-based prices. Still, the medium-term outlook remains vulnerable to adverse shocks, including oil price developments. At present exports amount to only half the level of imports. Competitiveness is hampered by a limited capacity to export high-quality products. Economic growth has to remain high simply in order to absorb new entrants into the labour market.

Policies and reforms

Economic and social reforms in Jordan began in the early 1990s. These accelerated visibly with the accession to the throne in 1999 of King Abdullah II, who has promoted the idea of making Jordan an investment-driven, knowledge-based economy. In order to enhance the welfare and standard of living of the Jordanian population, especially poor people in rural and remote areas, new strategies and initiatives have been implemented. Launched in 2001, the Social and Economic Transformation Programme (SETP) was the flagship initiative aimed at developing human resources, improving

⁴ Department of Statistics.

⁵ Ibid.

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the equity, quality and efficiency of public services, providing support for rural areas, and enhancing the institutional and structural framework in order to improve the decision-making capabilities of the public sector. However, as a result of the unstable geopolitical situation of the region over the years, the reluctance of private international investors and the high level of dependency on external support for implementation of the programme, the impact of the SETP has not been as great as was anticipated.

A new set of reforms for the three years 2004-06 was launched through the National Social and Economic Plan (NSEP) to contribute to poverty alleviation and achieve sustainable socioeconomic progress to address regional and governorate disparities. It focuses on development strategies for 25 sectors or sub-sectors of the economy, including education and training, water, tourism and health. Efforts are concentrated on strengthening public sector capacity to deliver adequate services to the population, encouraging private investment and completing the privatisation process, particularly in the water, transport, energy, electricity and media sectors. This plan is currently translated through the National Agenda for Jordan, which has given priority to socioeconomic development and its citizens' basic needs. An agreement between the EC and the Jordanian government finalised through a National Indicative Programme (NIP 2006) addresses poverty reduction, the development of human resources, social stability through comprehensive social development policies and the quality of public services as key priorities for further support.

In addition to the new challenges faced by Jordan, mainly on its traditional international markets, Jordan is involved in regional integration agreements. These regional trade agreements (RTAs) consist of establishing free trade areas between Jordan and its trading partners. These agreements cover the free trade agreement (FTA) under the Euro-Med Partnership signed with the EU, the FTA signed with the USA, the Agadir process

(FTAs between Tunisia, Jordan, Egypt and Morocco), the FTA with EFTA, and the Greater Arab Free Trade Area (GAFTA) agreement. Other agreements are under negotiation and will be signed very shortly, the main one being the FTA with Turkey. All these agreements will allow foreign products to enter the Jordanian market without restrictions, either from tariff or non-tariff barriers. Such competition will certainly impact on the Jordanian economy in many ways. Those sectors that are more oriented to the local market will suffer from this liberalisation of trade, while others in which Jordan has a competitive advantage, such as tourism, textiles, manufacturing and chemicals, are likely to prosper.

The establishment of QIZs and the Aqaba Special Economic Zone (ASEZ) have boosted Jordan's exports, primarily as a result of the privileged access to the US market (which accounts for 28% of total domestic exports). However, this rise may be limited by the increasing competition with EU companies in the context of the Euro-Mediterranean Free Trade Zone. Furthermore, the QIZs are not attracting Jordanian workers, who represent around half of the workforce. Contrary to the ambitions of the government, one of the main visible effects of the QIZs has been to attract new migrant groups, mainly from South Asian countries.

1.3 LABOUR MARKET FEATURES

Structure

In 2003⁶ the share of employment in the labour market was 74.8% for services, 21.7% for industry and 3.5% for agriculture, with a total of 1 022 600 registered employees aged 15-64. The public sector remains one of the largest employment providers (39% of total employment), and its appeal remains high because of the benefits offered. Government jobs cannot absorb the growth in the labour market. In only one area of activity – education – is a significant proportion of the workforce female (41%); this contrasts with the dominance of male employees across

⁶ Department of Statistics and World Bank.

other sectors. The service sector includes the growing tourism sector, which accounts for 12.3 % of those employed. Construction represents 23.8% of the labour force, followed by manufacturing (12.6%) and agriculture (4.1%). Agriculture and construction declined by almost 50% between 1987 and 2003. Because of the unattractive salaries and working conditions, the majority of those currently employed in these sectors are non-Jordanian workers⁷.

The individual and micro enterprise (IME) sector constitutes 98% of all firms in Jordan. Companies with four or fewer workers make up more than 94% of all firms. Few of these enterprises have access to continuing training activities. It is estimated that the individuals employed in these micro enterprises account for 46% of total private sector employment outside agriculture, and that those employed in firms with 5-19 workers account for another 19%. In other words, micro enterprises are responsible for almost two-thirds of total private sector employment in the country, mainly in trade and services, but also in productive activities such as manufacturing and repair services that make an important contribution to the economy (Haan and Mryyan, 2003). It is estimated that 12% of the employment in micro enterprises involves foreign workers. The atomisation of the enterprise sector sharply limits the capacity to modernise the labour market in response to competitive pressures.

Jordan is one of the few countries in the world in which relatively high levels of human capital have not been translated into significant progress in GDP per working-age adult (OECD, 2002). One of the reasons is the limited capacity of the labour market to absorb the increasing proportion of young people in the population (with more than 50 000 new entrants into the labour market each year, according to MoL). Another may be the low level of labour force participation among educated females, which represents a serious waste of potential. The number of working females is still very low: while the labour force participation rate for men stands at 64%, that of women (older than 15 years) is only 13.7%.

Legislative framework

The labour law in Jordan addresses, in 142 articles and 12 sections, the rights and the responsibilities of both employers and workers, and sets out their relationships. Although the law is considered comprehensive and well enforced in the formal sector (except in terms of work permits for foreign workers), it still suffers from major rigidities and inflexibilities regarding hiring and firing procedures and the distribution of working hours within the working day and working week (ETF, 2005).

The large public sector operates in a rigid framework which does not allow for the measuring of effectiveness and the stimulation of productivity through a reward system. The public sector endures a low level of performance and productivity, and the loss of its better staff, attracted by the private sector. The need for a public sector reform process is obvious, and requires a comprehensive and clear vision. Recently the Public Sector Development Ministry has produced a policy paper assessing the current HRD practices in the public sector and recommending a set of policies for better HRD delivery in the country (ETF, 2005).

Labour force participation

Jordan has a working age population (aged 15-64) of around 2.97 million (55% of the total population of 5.4 million). The labour force participation rate in 2004 was less than 39.5% of the population aged 15-64 (1.2 million active persons). In effect, one economically active Jordanian supports four non-active individuals. The labour force is characterised by:

1. an age structure in which 38% are under the age of 15;
2. a marked gender imbalance: 67% of men participate in the labour force, while the figure for women is only 11%;
3. an early retirement age in the public sector.

In 2004 82% of all those employed were wage employees (Department of Statistics, 2004). The economic activity rate has

⁷ Department of Statistics.

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declined from 41.8% to 37.4% since 1979 for the population aged 15 and above. It has declined for men but has almost doubled for women, mainly because of the appeal of public sector jobs (46% of females in the Jordanian workforce are employed in state institutions). The highest activity rates are among females aged 24-30 years (44%), and among males aged 15-19 years (37%)⁸.

Educational attainment

Two-thirds of those employed have secondary education or less. There are striking gender differences in employment patterns according to education. Almost two-thirds of employed women have post-secondary education, compared with only a quarter of men. Among employed Jordanians, the largest group of men are those with less than secondary education (55%), while the largest group of female workers are those with a higher diploma (37% have a Bachelor's degree or above, and 31% have a college diploma). This may be as a result of the lack of opportunities on the labour market (both formal and informal) for women with low levels of education, and social factors linked with the traditional view that women cannot work outside the family sphere.

Unskilled occupations and machine operator jobs constitute more than a quarter of all employment. However, the occupational distribution according to gender reveals that women are overrepresented in certain occupations, namely professional and technical posts, and underrepresented in other occupations traditionally occupied by men, including crafts and manufacturing.

Public sector

With a share of 39% of the labour force employment (public administration, defence, education, health and social services), the public sector plays an important role in employing a significant proportion of the Jordanian workforce. In recent years cuts in public spending have reduced the proportion of total employment in the public sector. Nevertheless, the

appeal of the public sector tends to contribute to limits on the capacity of the labour market to evolve and make a greater contribution to employment in the country.

Growth and projections

Jordan's labour force is growing at 4% a year. In view of the fact that 25% of Jordanian citizens (1 300 000) will reach working age within 10 years and that 50 000 newcomers enter the labour market every year, creating additional new jobs for young job seekers is vital, not only for economic growth but also for social stability. The decreasing role of the public sector in supporting employment may negatively impact on the access of women to the formal labour market.

Migration

No official information on emigration and immigration is available. The MoL collects information only on registered foreign workers through the labour offices, while the DoS no longer provides statistics on this population. Only rough estimations are available on emigration and immigration.

Many educated and skilled Jordanians are employed in other countries in the region, mainly in the Gulf. Estimates vary from 350 000 to 1 500 000, and this does not help in understanding the reality of the situation. In these cases emigration is usually temporary and contributes remittances to the economy, as those employed abroad send money home to Jordan for family support and investments. In turn, Jordan employs between 250 000 and 350 000 non-Jordanian workers (mainly from Syria, Egypt and Iraq) in low-skilled occupations (e.g. agriculture and construction), as well as women in domestic work from Sri Lanka, Indonesia and the Philippines. Jordanians generally lack interest in working in these fields. However, the information on non-Jordanian workers, which is based on work permit statistics, is not accurate and can be misleading: non-Jordanian workers do not necessarily work in the occupations for which their permits are registered, and the

⁸ Department of Statistics.

figures do not cover those who are working without work permits or illegally.

Furthermore, the geographical and political situation of Jordan makes it well placed to host a growing number of refugees from surrounding countries in which there have been local conflicts for the past 50 years. Successive waves of refugees and migrants, mainly from Palestine and more recently from Iraq, and the need for a low-skilled workforce in several industry and service sectors, have made Jordan a country with a large migrant population.

Role of the informal sector

The informal sector constitutes an important feature of the Jordanian labour force. Information is hard to come by, but it is estimated that the IME sector provides employment to some 190 000 persons (Haan and Mryyan, 2003). This represents 41% of total private employment outside agriculture and 25% of total non-agricultural employment in Jordan. Around 90% of workers in IME are men. In addition, there is a high incidence of multi-employment in Jordan: many of those working in the public sector have another part-time job in the private sector and many of those who hold a wage job being are also involved in some form of self-employment.

In spite of the Jordanian government's increasing interest in small-scale economic activities, no clear policy framework for their promotion yet exists. Some programmes, such as the regional Enhanced Productivity Centres (EPCs), have been developed to support small business, but have hardly affected IMEs. Through the programme for Direct Employment Generation-Promotion (DEP) of SMEs the MoL intends to allocate and monitor micro-financed projects.

Unemployment

The unemployment rate in Jordan for the population aged 15-64 was 12.5% in 2004, lower than in previous years (15.5% in 2002, 14.7% in 2003). Officially there were 148 000 people unemployed in 2004. The rate was markedly higher for women

(16.5%) than for men (12%).

Unemployment is a particular problem among young people in urban areas.

Unofficial figures for unemployment range from 20% to 25%. The official unemployment rate could reach 20% by 2020 (500 000 people unemployed) if concerted efforts are not made to increase job creation⁹.

According to the ETF/NCHRD report on unemployment (2004), the most critical issues regarding employment and unemployment are:

1. the low level of education of many unemployed people (over half of unemployed Jordanians have less than secondary education);
2. (the high number of young people aged 15-24 who are unemployed (26% in 2004);
3. the low female activity rate, which is one of the lowest in the world (11% in 2004 compared with 40.2% in developed countries for the age group 15-64);
4. the disparities that exist between governorates, and especially between rural and urban areas.

Institutional capacity

The formulation and implementation of employment policy in Jordan is undertaken by different institutions, which are mostly public. These institutions can be classified into three levels:

- high-level advisory boards for policy orientation;
- regulatory ministries at national level;
- autonomous execution agencies mostly working at local levels.

So far they appear to have been unable to deliver independent expertise capable of introducing changes in government policy in terms of the management of human resources.

Labour market management is fragmented at both policy and operational levels, mainly between the MoL and public employment offices. The MoL is the main institution regulating the labour market, but

⁹ Department of Statistics.

1. SOCIOECONOMIC BACKGROUND AND THE JORDANIAN LABOUR MARKET

it lacks a clear definition of tasks and responsibilities for employment policy. Furthermore, it has little control or coordination of economic and sectoral policies which affect the labour market. Even where it has been given clear tasks in employment policy, its institutional capacity to implement policy is weak. The institutions suffer from a lack of staff, poor-quality human resources, a lack of infrastructure and information systems, and limited financial resources to invest in or improve services. Public employment services exist in Jordan, and are affiliated to the MoL; however, old-fashioned and passive labour exchange services dominate these labour offices. The MoL has a network of 22 labour offices, which fail to offer any of the much-needed employment services. The offices are sparsely located and inadequately equipped, and they operate using outdated procedures. They are mainly responsible for the collection and tabulation of data and the issuing of work permits to foreign workers. Frequently their work procedures are not integrated through even the most rudimentary ICT support systems, and they have low-qualified staff (ETF, 2006).

The Civil Service Bureau (CSB) in Jordan is a central department responsible for organising personnel matters in all public offices. It is directly attached to the prime minister's office. The primary goal of the CSB is to improve the capabilities and performance of public sector employees based on the principles of justice, equality and transparency. The Civil Service Council (CSC) is in charge of organising and developing civil service committees, proposing legislation and training programmes related to the civil service, and giving recommendations on salaries, wages, promotions and bonuses for the public servants. Over the past ten years the CSB has experienced an increase of more than 50% in job applications. The number of applicants to CSB totalled 77 625 in 1992, while it rose to 168 133 in 2003. This tendency is likely to be a result of the stability, security and shorter working hours associated with government positions.

1.4 CURRENT EMPLOYMENT POLICIES

Both passive and active employment policies are considered to be weak in Jordan. Despite the need that is recognised by all actors, there is no existing employment strategy. Jordan lacks a policy framework that would strike a balance between economic efficiency and labour protection. MoL employment policies are ad hoc, fragmented, mostly temporary in nature, and not deeply rooted in the ministry's bureaucratic apparatus (ETF, 2005). Jordan has a legislative framework that includes provisions for a minimum wage, labour contracts and retirement schemes, but passive support measures, such as unemployment insurance and income assistance, have not been developed.

Several active measures to support employment are being implemented, but with limited success. A programme for Direct Employment Generation-Promotion (DEP) of SMEs has been in place since 1989. The DEP provides direct and indirect lending to project promoters. Despite a number of criticisms from the donor community concerning weak management, the inappropriate use of loans and the limited impact on unemployment and poverty, the government has decided to maintain the programme. A second measure concerns labour exchange and counselling. In addition to 25 accredited private providers, a network of 22 labour offices (MoL) spread across the country provides services to those seeking employment. However, a recent survey revealed that 94% of job seekers look for a job without visiting public and private job brokers.

A National Training Programme (NTP) was established in 2002 by the MoL in cooperation with the VTC, the Jordanian armed forces and the private sector. Its main objective was to support young unemployed persons with limited education and training. It attempted to develop skills and attitudes as a means of increasing job insertion and, in part, to replace foreign

workers. The programme failed to achieve its objectives and it was terminated in 2005.

1.5 CHALLENGES

Jordan faces twin challenges: it must generate sufficient new jobs at appropriate levels for the burgeoning number of new entrants to the labour market, projected to grow at 4% per annum; and it must increase the skills of the labour force to support greater competitiveness of Jordanian enterprises as required by economic integration. This second challenge in turn requires more flexibility in the labour market, a reduced share of the public sector, stimulation of SMEs and support for self-employment.

1.6 CONCLUSIONS

Overall, the Jordanian economy must improve its competitiveness in order to be able to maintain its market share, at both national and international level. One key for success is the quality of the workforce, which will require new skills and capacities. However, no comprehensive employment and labour market strategy has been developed to provide Jordan with a framework that would help to increase the employability of the workforce. As seen in Chapter 2, Jordan needs to restructure the institutional framework for vocational training and employment with a view to increasing the number of Jordanians directly placed into jobs; the number of newly employed individuals; and the percentage of employers whose needs are fulfilled by the skills of training-provider-certified employees.

2. ANALYSIS OF THE TVET SYSTEM IN JORDAN

2

2.1 DISTINGUISHING CHARACTERISTICS

Technical and vocational education and training (TVET) in Jordan consists of three main public segments that deal mainly with initial training:

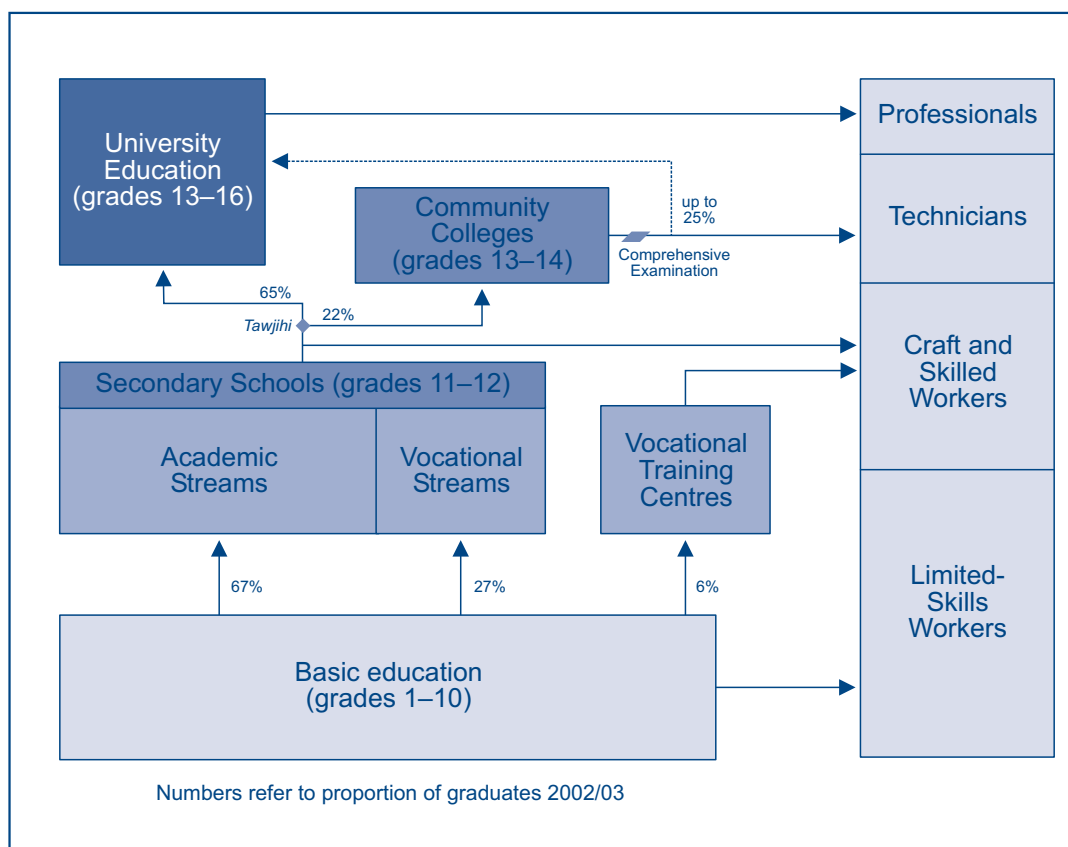
1. technical education and training as offered by community colleges (grades 13-14) under the aegis of Al-Balqa Applied University (BAU);
2. secondary vocational education (grades 11-12) as part of upper secondary education under the MoE;
3. non-formal and formal vocational training as delivered by the VTC.

TVET in Jordan also has two non-public aspects:

1. private, or non-government, training provision consisting mainly of private community colleges, for-profit non-formal training and some training sponsored by NGOs;
2. enterprise-based training.

Relatively little consolidated information exists about the latter two categories. Figure 1 shows the structure of the TVET system.

The three main segments of the TVET system, vocational secondary education under the MoE, the vocational training centres, and the community colleges under the BAU are described and analysed in Annexes 1 to 3.

Figure 1: Structure of the Jordanian TVET system


Jordan performs well in terms of responding to social demand for places both in general education and in TVET. Enrolment ratios are high. Around 100 000 young people complete grade 10 each year, and virtually all go on to some form of additional education and training. This means that students complete 10 years of general education that has a prevocational element before entering vocational courses. The TVET system is extensive in Jordan compared with other countries in the region and elsewhere. Around a third of all graduates of grade 10 enter some form of skills training, as do most of those entering community colleges. An extensive training infrastructure network exists, including 190 secondary schools offering vocational streams, 50 existing vocational training centres distributed throughout the country, and 45 community colleges. In addition, private training provision – as far as can be ascertained – includes almost 800 institutions and covers 23 000 participants in short courses. Jordanian society has traditionally undervalued vocational skills, but the very fact that vocational streams are provided within formal secondary education has helped to

make vocational studies more acceptable to young people and parents. Another characteristic of the Jordanian system is its openness: some students from vocational streams can gain access to post-secondary education. Around 25% of the graduates of MoE vocational streams enrol in community colleges, and around 20–25% of diploma graduates from community colleges can advance to degree programmes.

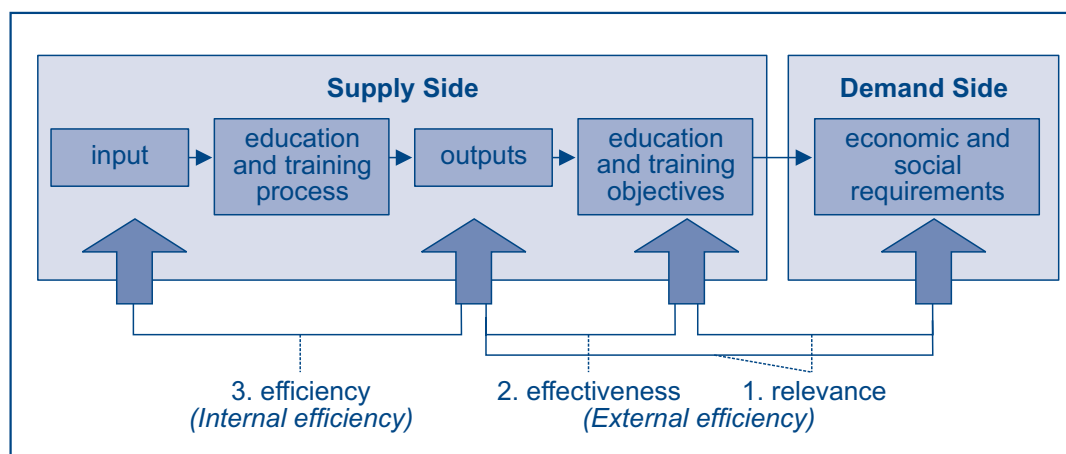
2.2 ANALYTICAL FRAMEWORK

This report analyses the TVET system in terms of three main criteria:

- relevance: the relationship of outputs and objectives to economic and social requirements;
- effectiveness: the relationship between outputs and objectives;
- internal efficiency: the relationship between inputs and outputs.

The following diagram illustrates this analytical framework.

Figure 2: Analytical framework



Each of the three main criteria has two elements.

Relevance includes:

- economic relevance, or linkages of TVET with the labour market;
- social relevance, or equity.

Effectiveness includes:

- management effectiveness;
- quality of instruction.

Internal efficiency includes:

- economical use of resources;
- sustainability (resource mobilisation).

Based on the findings, this analysis concludes that the immediate strategic priorities for TVET in Jordan are to: (1) forge strong labour market linkages; (2) reform the organisation and management of TVET; (3) reverse the steady deterioration of quality in skills formation; and (4) use financial mechanisms to improve system performance. Each of these points is presented in sequence below (Sections 2.3-2.6).

2.3 PRIORITY 1: FORGE STRONG LABOUR MARKET LINKAGES

A properly oriented, demand-responsive system of TVET requires:

- up-to-date labour market information;
- pervasive employer participation;

- flexible training supply.

Labour market information

Jordan has made a positive start in providing guidance to the TVET system through the Al Manar project dealing with human resource information system (HRIS) that covers both labour market information and information on training supply, and that is being implemented within the NCHRD. This information system integrates data from various sources for the purpose of tracking trends and identifying occupations that are in surplus or short supply. In addition, several *ex post* studies have been carried out on the outcomes of training in the labour market. These studies provide valuable pointers on the utilisation of training products in the market. Additional work will be needed in order to identify the needs of the economic sectors.

However, more needs to be done to make labour market information effective. First, the HRIS needs to be made fully operational, integrating information on labour demands and training supply. Second, it is not enough to collect and analyse the information. It must primarily be used by those in charge of directing TVET developments. For that purpose, the links between the policy decision-making level and the HRIS require further strengthening. The recent survey of community colleges found that managers of the system did not use available information in planning the growth and adaptation of the system. Moreover, the practice of tracer studies needs to be institutionalised and made routine, rather

than ad hoc. In addition, periodic diagnostic surveys by sector are needed in order to detect trends in labour demand.

Employer participation

There are positive links in Jordan between training and industry downstream in the training process. The most salient manifestation of training-industry links is the practice of 'apprentice dual training' by the VTC, in which trainees are exposed to workplace experience in addition to centre-based skills training. Few countries outside Europe can boast the same level of employer involvement in providing apprenticeship places, currently around 5 000 enterprises. This emphasis on practical work experience as part of the training process helps graduates to develop practical skills. But the virtual nonexistence of monitoring of the system by the VTC and the social partners does not allow measurement of its effectiveness and efficiency to be carried out.

Despite these strengths, the TVET system has not yet achieved close employer involvement in directing and assessing TVET. Employer involvement is strong downstream in the training process of the VTC, as noted above, but little effective participation exists for the social partners upstream. Jordan has so far had limited success in achieving employer involvement upstream in the training process – in planning, setting standards, designing content, and testing the competencies acquired. This has not been for lack of trying. Numerous sector-specific training committees and curriculum groups have been formed over the years, at least initially with employer participation. However, it has proved difficult to sustain employer interest, given the time involved and the deferred results. Several technical sectoral committees were established by the VTC in 1996 to enhance the content of teaching programmes, but these are not functioning as well as expected because of lack of employer interest¹⁰. As noted by external

observers, advisory committees have tended to be nominal, and many have not met for years (Pearson, 1998, p. 63). In relatively few cases have employers influenced the curriculum in any significant way (Evans, 2002, p. 122).

Employers interviewed for this report complained that their counsel was often ignored in past work on the definition of new curricula, or, in their minority presence on boards, that they were outvoted by bureaucrats. Employers are often viewed as 'guests' in the groups in which they participate. This discourages employer participation. Lack of employer participation reflects a growing level of frustration with inadequate control and bureaucratisation of the training process. None of the three employer representatives were present at a recent meeting of the VTC governing board. As well as suggesting discouragement over lack of influence, the non-participation by employers also reflects severe constraints on their time. Moreover, employers are not in a position to play an effective role in providing guidance and advice on training matters. More than 90% of all enterprises are small or medium in scale, and such enterprises often do not have time for or interest in training matters. The Chambers of Industry and Commerce have both indicated a willingness to expand their participation. They cite the fact that employers lose money in training new staff. However, in order to make their participation effective the chambers need to create human resource departments to tap into the views of members, increase their awareness of the importance of training for productivity growth, and provide services.

In short, the TVET system is not based on employer-determined standards, and therefore tends to be supply-oriented and mainly focusing on initial training. 'Programmes currently in use are not designed around industry-defined performance objectives and expectations' (Pearson, 1998, p. 40).

¹⁰ Interestingly, in the VTC's recent tracer study on the limited skills level, 74% said they were not interested in participating in training programme development and 69% said they were not interested in developing new training specialisations (Appendix 4, p. 35).

Flexible training supply

Demand-responsive training systems have the capacity to shift gear quickly, to reduce output in areas of oversupply and to ratchet up production in areas of unsatisfied demand. All parts of the formal system have shown some adaptation to the requirements of the labour market. The BAU engineered a major reorientation of community colleges in the late 1990s away from predominantly academic courses and towards those involving practical skills, and reduced the number of specialist offerings to 96 fields. MoE vocational streams and VTC programmes have both attempted to introduce 'employability skills' such as IT skills and English. The MoE changed its commercial stream programme into an IT programme on the basis of evidence that the graduates had difficulty competing with people training in similar subjects at higher levels of the system. The VTC has recently given more emphasis to implementing ad hoc programmes in response to the need for particular categories of workers, for example for export zones. The VTC has undertaken surveys in potential areas before the establishment of new vocational training centres in order to identify the target population and the skills that are likely to be in demand. All these changes show some current dynamism in the TVET system.

However, for the most part the training supply in Jordan tends not to be demand responsive. 'Most TVET programmes are developed based on a "supply-driven" model as opposed to being developed on a labour market driven basis that takes into account the immediate, short-term training needs of employers as well as nationally identified training priorities' (Evans, 2002, p. 123). Current supply tends to perpetuate itself in all three training sub-systems. Procedures for adding new programmes or changing curricula are cumbersome in the MoE and VTC. The BAU has encouraged the establishment of Programme Advisory Committees at each public community college, but the process for proposing new training programmes dilutes the effectiveness. The committees must propose a new programme to the dean, who then proposes to the Deans' Council, which then refers the matter to a

Programme Design Committee at the BAU. Academic staff from the BAU, plus college academic staff, propose the specific course designs, in part to ensure they are appropriate in terms of bridging to university. This process tends to overemphasise the academic content of curricula at the expense of practical orientation and market requirements.

Priority must be given to the development of a common framework for programme development across all three segments of the public training system. This could reduce by a third the amount of time required from employers (i.e. participation in one rather than three working groups) while ensuring that the content of programmes directly relates to employment requirements.

Rigidity also manifests itself in overspecialisation. Research in other countries suggests that many, if not most, graduate trainees find work in occupations other than those in which they were trained. In competitive, dynamic economies workers often change jobs several times in their working careers. The integration of functions, for example the integration of mechanical and electrical components in maintenance, is becoming more common. This also applies to the small enterprise sector, where integration of functions has always been a requirement. For example, a welder who also has carpentry skills has always been in demand from small construction and renovation companies. These aspects of a dynamic labour market, one that is responsive to technological change and the challenges of globalisation, suggest that a broad preparation is what is needed, rather than the acquisition of specialised skills. What is important is the mastery of problem-solving skills, team-working, the ability to compute and learn on the job, and information management that can be applied across broad occupational groupings. 'The subject matter of training may continue to be occupationally oriented but the intended outcome is not the mastery of a hierarchy of skills in a narrow occupation, but rather the mastery of competencies required to gain entry to a broad sector of economic activity and then to be able to move easily from job to job in and around that sector or

occupational family' (Pearson, 1998, p. 131-133). The use of multi-skilling makes sense in terms of emerging market demands. Trends in the ways in which jobs will be organised suggest that training programmes should be restructured around the generic skills required by sectors of business and industry, or clusters of occupations.

In contrast with this need for broad occupational preparation, the Jordanian training systems in the MoE and VTC seem narrowly focused. The current programme offerings by the major training providers in Jordan are very specialised and provide skills development in narrow bands of each occupation (Pearson, 1998, p. 131). The MoE industrial streams are divided into 33 specialisations. The VTC has 54 specialisations for its skilled worker programmes. Employers recently criticised the training programmes in community colleges as being too narrowly focused. Overspecialisation is a problem not only in view of likely job mobility for graduates, but also in view of the lack of labour market information. Both MoE and VTC officials are confronted with a lack of clarity in the job market. Overall training supply exceeds demand and Jordanian enterprises tend to be small, making it difficult to discern market trends and identify the skills that are in demand.

These factors have resulted in significant gaps in coverage to which the TVET system has not responded adequately. These gaps are summarised in the following paragraphs.

1. Technician training in the industrial and engineering fields appears underdeveloped in Jordan. As countries develop into knowledge-based economies, the demand for technicians typically soars, even than does the demand for skilled workers (Johanson

and Al Nahar, 2003). The most important consequence of the introduction of technology is the growth of highly skilled knowledge-based jobs. Jordanian employers, when asked about their human resource needs, have said that they can find professional workers such as engineers or accountants, or low-skilled workers such as labourers. They report the greatest need at the technician level. This trend is likely to accelerate as companies acquire new technologies (Pearson, 1998, p. 129). The community colleges are well positioned to respond to the increased demands. However, an examination of the current training profile of community colleges reveals several imbalances. Overall outputs of graduates at degree level outnumber those in community colleges by about three or four to one. Moreover, enrolments in community colleges in engineering and computer science total only 2 600 students, and applied sciences enrol a limited number of students. Together these subjects comprise only around 10% of total enrolments. It is not clear how the demands for technicians in these fields will be met in the future.

2. TVET has not served target groups much, other than young people who are in, or who are just finishing, the school system. Some programmes cater to the needs of enterprise zones and to unemployed individuals. In addition, the VTC provides upgrading programmes for those already in employment. The numbers are substantial, 3 042 trainees in 2004 (Annex 2, Table 10). However, closer examination shows that around 40% of the upgrading is for driver training, another 22% for occupational safety and health, and 23% for upgrading the staff of the VTC itself. Most of the attention has been directed towards training unemployed people¹¹

¹¹ The MoL is currently starting a new programme for training unemployed workers through the VTC and enterprises. The VTC is training tractor-trailer drivers in collaboration with enterprises. Five contracts have been signed with enterprises, mainly in textiles, for training unemployed persons through on-the-job training, and another 10 contracts are planned. The government subsidises social security, transportation and wages for the trainees, while enterprises pay the training costs. In exchange, the enterprises agree to employ suitable trainees after they have trained for a specified period. The target is to train 3 500 people through this on-the-job method. The challenge is to screen the applicants to ensure that those who participate are genuinely seeking employment and have the necessary abilities, rather than opportunists who merely seek the income during training.

2. ANALYSIS OF THE TVET SYSTEM IN JORDAN

(e.g. the National Training Programme that recently closed at a cost of JOD 17 million), and little towards upgrading workers. Relatively little training is provided for upgrading employees in enterprises: there were only 238 trainees in supervisory training, 182 in technical upgrading and 105 in chemical and metal institutes. Given that most unemployed people are school leavers aged 19-29 and that many private sector companies are beginning to realise that investment in HRD is the only way to expand their operations and maintain their long-term competitiveness, the potential for more adult education and training appears substantial (Evans, 2002, p. 112). Continuing education and training will be highly important for future growth in an increasingly competitive environment at both skilled worker and technician levels. The potential of training centres to become research and development resources for their economic environment should be further envisaged. This has hardly begun.

3. Training as offered by the VTC is mainly concentrated in traditional trades. Large occupational groups (clerical, administrative support, health care, communications, hospitality, transportation and agriculture) are either underrepresented or not represented at all in VTC programmes (Pearson, 1998, p. 29).

Furthermore, TVET in Jordan tends to be gender-stereotyped. Female enrolment made up a relatively high proportion of total enrolments in one of the three public segments of the system. Females make up more than 60% of total enrolments in community colleges compared with 34.5% in vocational secondary education (2004/05), and just 22% in VTC institutions. To a large extent these proportions reflect what has traditionally been considered socially acceptable. Female enrolment in schools has been preferred by parents to entering apprenticeship training programmes. Substantial efforts have recently been made to increase female enrolment in vocational training centres, in part by building more female training centres. Nevertheless in specific sectors

(e.g. tourism), the participation of females in training courses may be nil (MoE), despite the fact that the sector is active and in need of a well-trained workforce. However, the pattern of enrolment reflects a concentration of females in occupational categories that may have limited employment prospects. In secondary vocational education, girls are concentrated in two fields: home economics, with limited employment opportunities (79% of the total), and nursing (18%). At community colleges, enrolments in engineering and hotel management are overwhelmingly male, with females accounting for only 19% and 7% of total enrolment, respectively. Four programmes are predominately female: education (99%), languages (92%), applied sciences (96%) and social work (91%).

In summary, the first challenge for TVET in Jordan is to forge stronger links with the labour market by continuing the development of up-to-date, relevant information systems; deepening the participation of employers in determining the direction of the system; and making the training supply more flexible and responsive to market changes.

2.4 PRIORITY 2: REFORM THE ORGANISATION AND MANAGEMENT OF TVET

Several innovations during the past few years show promise in terms of the governance and management of the Jordanian TVET system. First, Jordan has long been famous for its innovative, semi-autonomous VTC. The VTC has flexibility in changing the type and content of training programmes without going through an extensive bureaucracy in order to implement the changes. It is also able to administer its own budget following approval by the Council of Ministers. Second, the BAU, another innovation in the region, is strategically placed to coordinate the activities of both public and private community colleges. Third, the creation of the TVET Council was intended to address one of the main weaknesses in the governance and management of the TVET system – inadequate coordination of its

various parts. Each of the three parts of the public TVET system previously had its own planning system. There was no organisation looking at the system as a whole. It is difficult to overemphasise the importance of the work of the TVET Council and its potential to counter fragmentation in the system, set overall national priorities, and root out duplication of effort that has crept into the system among major TVET providers.

However, the potential of these various organisations has not been realised. The autonomy of the VTC was curtailed in the late 1990s as part of a government-wide effort to rein in autonomous government agencies. The VTC became part of the Civil Service instead of setting its own salary levels. It must now recruit its staff through the Civil Service Commission, and its salaries follow standard government regulations. Approvals must be sought from government in many areas, such as sending staff abroad for training. More importantly, employers make up a small minority of the board members of the VTC – only 3 of 11 positions. The board does not hire the Director General. Experience elsewhere suggests that strong employer representation is essential for success in TVET. The management of the BAU has tended to place more emphasis on its degree-level programmes and is predominantly academic in its orientation. The TVET Council has only once had the chance to hold a meeting chaired by the Prime Minister and has held a very limited number of working sessions (three or four). Moreover, the VTC was chosen to provide secretariat services, but was unable to provide adequate technical support. It did not represent the full spectrum of the TVET sector. A new administrative secretariat was subsequently created. As a result of the inaction of the Council, fragmentation persists among the three main public training providers. The TVET Council needs to be re-established with majority employer representation and a proper technical secretariat.

One weakness in the governance and management of TVET is the absence of strong, continuous leadership for the sector. The Minister of Labour heads the

VTC Board and serves as Deputy Chairperson of the TVET Council.

One of the main weaknesses of the current management structure is the excessive centralisation of authority, and lack of delegation to training institutions and intermediate layers of the management structure. The following points are relevant.

- Principals of vocational and comprehensive secondary schools have little authority over the affairs of their schools. They receive students assigned by the ministry. They receive teachers recruited through the Civil Service and assigned to the school by the ministry. They must apply curricula and teaching programmes designed by the ministry. They have little discretionary authority over financial resources to buy necessary equipment, and the only direct funds available are those collected from the nominal fees of students. As stated by MoE officials, rules and regulations are binding. The staff of training institutions do not have the freedom to purchase equipment or change curricula as necessary. They cannot take the initiative to respond to opportunities. There is little or no relationship with local social partners which would address the needs of the labour market and allow schools to adapt curricula accordingly. More flexibility is needed in rules and regulations.
- Similarly, heads of VTC training centres receive assigned students and teachers. They apply standardised curricula designed by VTC headquarters. They have no separate budget for their own training centre. Teachers are recruited and paid through the Civil Service. Operating costs must be applied for from a common training centre budget. Equipment must be applied for separately. The authority of training centre heads to approve spending is sharply restricted, usually less than JOD 50 (Rostron et al., 1999b, p. 29). The Area Directorates, midway between the training centre and VTC headquarters, have little authority to approve anything, and exist mainly to provide guidance on instruction.

- Public community colleges have somewhat more freedom to act. They are able to review student applicants and propose them for acceptance, though the BAU has the final decision. They are able to participate in the selection of teachers who are not members of the Civil Service. However, despite their autonomy, public community colleges cannot dismiss anyone except in extreme cases. Public colleges each have separate budgets, and greater authority over tuition funds. However, even public community college administrators complain that their freedom to act is sharply circumscribed. The BAU keeps 25% of the line item budget funds at the university, and deans must apply for it individually.

The lack of authority over inputs by training institutions sharply limits their ability to solve problems quickly, to mobilise financial resources, and to respond flexibly to local market requirements and changes in demand. The degree of centralisation in administration makes it difficult to make necessary adjustments and take the initiative at school level. Vertical reporting structures hinder the contributions that TVET could make to local development. 'The pervasive administrative structure, with its command and control features, common to most major TVET providers in Jordan, threatens to severely restrict the capacity of TVET institutions to respond to local and national training priorities and to address adequately the learning needs of trainees' (Evans, 2002, p. 123).

It will not be easy to change the tendency to overcentralisation, which delays decision-making and destroys initiative among instructors, centre managers and supervisors. Decentralisation of responsibilities to schools will be necessary to make them responsive to local labour market needs, but the system has a strong centralised tradition that is difficult to break, both nationally at ministry level and locally at school level (ETF, 2000, p. 19).

In short, a lack of proper incentives and of results-oriented management pervades the sector. Major restructuring is required,

together with better implementation of organisational change, if the sector is to become effective in delivering the necessary skills for economic growth and diversification.

2.5 PRIORITY 3: REVERSE THE STEADY DETERIORATION OF QUALITY IN SKILLS DEVELOPMENT

Quality of training is defined as the extent to which the training system meets its objectives, for example learning and skill achievements. Overall, quality problems appear to be serious in the Jordanian TVET system, as evidenced by low levels of performance in the workplace.

The views of employers – those who require skills for use in the workplace – may be the best indicator of levels of quality. The difficulty is that there is no easy mechanism for a systematic, comprehensive sampling of employer views. Tracer studies have given some indications, and the results are mixed. In the survey of limited skills training by the VTC the employers were split roughly in half over whether the VTC training programmes totally or partially met the needs of employers. Significantly, in the VTC survey of craft-level training, 70% of the employers said the training programme was only able to meet their requirements in part. The Training and Employment Support Project (TESP) found that employers who used public training institutions were not satisfied with the quality of training provided (compared with on-the-job training). One recent study of MoL programmes canvassed several focus groups of employers and reported the following findings on VTC training: 'The deficiencies of the once pre-eminent and vital vocational training centres in utilising outmoded curriculum; woefully ill-prepared instructors; and old and decrepit training laboratories and equipment were mentioned by respondent after respondent. With few exceptions, in the basic trades (carpentry, simple electrical work and the like), employers felt that the graduates of VTC programmes, as a group, were singularly unequipped either technically or

behaviourally for entrance into the private sector workforce except at the most elementary levels. They wondered whether the government's (and taxpayers') money was well spent in continuing these VTC training efforts, within the government' (USAID, 2003)¹².

On the other hand, the VTC considers that the quality of delivery in the apprenticeship scheme, in which 50% of the training is conducted in enterprises, is the responsibility of the enterprises themselves: 'workplaces bear the responsibility regarding the quality of trainees'. This opposite view suggests that more has to be done to clarify the role of the parties involved in the delivery of vocational training through the VTC.

Another good indicator of the quality of training is quality on exit, i.e. performance of trainees in exit tests that examine both their theoretical knowledge and their practical skills. The Jordanian TVET system features national exit examinations for each of the three main parts of the public system. Students in the MoE vocational streams are subject to the examination for the general secondary certificate, the *Tawjihi*. Trainees in VTC programmes must pass terminal examinations. Students in community colleges, both public and private, must pass a comprehensive examination in order to obtain the diploma. These national examinations provide a basis for evaluating how well the training is achieving its objectives. According to these tests, little more than half of the MoE academic-stream students pass the General Secondary Education Certificate Examination (GSECE) examination for access to tertiary education, and only a small minority (4%)¹³ of vocational students pass the *Tawjihi* for access to university. VTC trainees achieve an overall pass rate of 79%. Around 60% of the students in community colleges who take the comprehensive diploma examination pass it the first time, with public institutions

generally performing better than private ones.

The existence of national examinations for the graduates of training programmes is a decided strength of the Jordanian system, but at the same time there are weaknesses related to the purpose of the examinations and built-in subjectivity. First, performance in the MoE examinations cannot be considered as a true index of learning achievement. The purpose of the examinations is really to regulate access to post-secondary education and may not reliably evaluate the students' knowledge and competencies. As one official said, in Jordan the exams are designed to test what the students do not know, rather than what they do know. Second, the examinations are conceived and administered by each agency itself, without employer involvement. It would be preferable to have third-party examinations, particularly examinations overseen by employers, to ensure that the standards and requirements of end users are being met. The same could be said for tracer studies that evaluate, *inter alia*, employment rates for graduates. A case exists for third-party design and implementation of tracer studies. The National Training Programme started its fifth cycle of training without having conducted an acceptable tracer study on the employment impact of its programmes.

The NCHRD conducted independent pilot testing of MoE and VTC graduates in 2003. The test covered five fields. Graduate trainees were proposed by each agency for the testing. Representatives from industry specified the content. Surprisingly, only around a third of the graduates passed the examination. The VTC graduates were somewhat ahead on the practical aspects and the MoE graduates were ahead on theory, but overall pass rates were startlingly low. The MoE and VTC criticised the testing methodology and sampling after the results were known, and the formal results have not been published. However,

¹² To a certain extent employers all over the world tend to be critical of the graduates they receive from training institutions. Some of this is the fault of the training institution, but much of it relates to unrealistic expectations on the part of employers: they want immediately productive workers, but training institutions cannot typically provide industry-specific skills. Additional on-the-job training is usually required.

¹³ Source: Ministry of Education.

2. ANALYSIS OF THE TVET SYSTEM IN JORDAN

the trial demonstrated the need for third-party, independent testing based on employer specifications. Industry representatives would like the test to be repeated regularly.

Problems of low quality can be attributed to inadequate inputs. The first requirements are (a) clear occupational standards validated by employers, and (b) a qualifications framework that accords with labour market needs. For the most part, these are currently lacking in Jordan. On the positive side, the MoE and VTC have developed hundreds (500) of training modules for various training programmes.

The low quality of student and trainee intake is frequently mentioned as a problem, particularly in the vocational training centres, but also to a lesser degree in secondary vocational and community colleges. Trainees allocated to the VTC skilled worker programmes are the weakest students academically at the end of tenth grade. It is reported that some are barely literate and numerate. This low level of quality in student intake contributes to the learning problems of trainees and even to dropping out among those who cannot cope with the modest theory requirements of the curriculum. Even community college administrators complain that many students are not adequately prepared academically and are unable to handle the content of some teaching programmes.

Teachers and instructors are generally well qualified academically. Around half the teachers in MoE vocational institutions have a degree and 40% have a diploma. In community colleges around 55% of the teachers have advanced degrees. However, there are exceptions. In the VTC in particular more than 45% of the instructors have only secondary education qualifications or less. More importantly, academic qualifications do not necessarily correspond with technical qualifications. In a few training specialisations where there is a shortage of trainers from the Civil Service who have the required qualifications, the VTC recruits trainers with practical experience and the necessary skills for technical training, even if they lack formal qualifications in the field.

The MoE and VTC must recruit staff through the Civil Service, which does not recognise technical qualifications in its recruitment policies. They mostly receive fresh graduates with inadequate industrial work experience. This is a particular problem in respect of MoE vocational streams. Civil Service pay levels tend to be unattractive for trainers in high-salary occupations. Staff members, once hired, have little incentive to improve their qualifications. The MoE directorate in charge of in-service training of teachers and instructors within the ministry accords a relatively low priority to training vocational teachers. The situation in private community colleges is little better. Public community colleges cannot easily hire staff from enterprises on a part-time basis. The private community colleges face declining enrolments and therefore less income. This limits their ability to hire high-quality teachers. The TVET system needs freedom to hire the most qualified instructors – from either within or outside the Civil Service structure – and pay them according to market rates.

The recent creation of the National Teacher Training Institute (NTTI) should go a long way towards improving the pedagogical skills of teachers at all levels of TVET. The NTTI has commenced its operations, though it has not yet been legally established. It currently offers foundation courses of around 250 hours of instruction in pedagogical techniques. It is intended that no teacher or instructor will conduct training without certification. In addition, the NTTI has plans for providing supervisory training. There are currently no data on the number of trainers, but it is estimated that there are 6 000 teachers and instructors in the three segments of the TVET system. The location of the NTTI has not been formally decided, but it is likely to come under the BAU, with its own separate board of governors. The NTTI currently has six trainers and plans to increase this soon to 15 trainers. However, rather than hire entirely new training staff, the NTTI will be able to make use of the facilities and staff of the BAU. The plan is to train 1 900 teachers/instructors per year. It is not clear how the NTTI will relate to the existing Training and Development Institute of the

VTC; the latter will continue to give training in technical (rather than pedagogical) subjects.

Another issue relates to training through VTC work placements and apprenticeships. Most enterprises are small, and only perhaps a third of them have the facilities, equipment and trained staff to be able to provide effective apprenticeship. The problems are compounded by patchy supervision by vocational training centres of trainees in apprenticeships. The 'dual system' employed by the VTC involves alternating training within training centres with on-the-job training. Originally the VTC instructors went to the workplace to conduct the supervision of trainees. This was recently changed. Now most training centres have special supervisory units that carry out the supervision of apprenticeship training. This has reduced the feedback from the workplace to the instructors who carry out the centre-based training. Communication from supervisors to instructors is tenuous. This decision is nevertheless subject to change by the VTC.

Insufficiently equipped training centres and inadequate maintenance are also problems. The available budget sometimes does not cover the purchase, repair and updating of equipment as technology changes in the marketplace. Much of the equipment now used in training facilities, such as training for air conditioning maintenance, is completely outdated. This is undoubtedly a contributing factor in the mismatch between skills provision and market requirements. One survey found that 'because of limitations of work stations, hand tools and other equipment, students spend a great deal of time "observing" rather than practising a skill' (Pearson, 1998, p. 37). Another review found that 'students in the automotive repair programmes are being graduated at present without a sound knowledge or practical experience in the repair and

maintenance of the newer model automobiles presently on the market' (Evans, 2002, p. 37). Conversely, but with the same results, some centres are equipped with up-to-date equipment (mainly provided by donors), but are not in a position to make full use of it because of a lack of trained teachers, a lack of continuing training activities and no capacity to support their local communities, who may become regular users of equipment in which they are not able to invest. Budget constraints account for many of the deficiencies in equipment. Budgets are insufficient and, as a result, salaries are crowding out expenditure on essential training inputs such as training equipment and supplies.

Quality problems may be a reflection of less tangible factors than deficiencies in inputs. Low quality may reflect low expectations¹⁴. 'Quality standards and expectations from students are set at unacceptably low levels' (Pearson, 1998, p. 40). Some observers have found that both expectations and performance standards for practical work undertaken by trainees are low, particularly in carpentry, metalworking and construction trades. This contrasts with the high expectations and standards in clerical training, hotel services, dress making, some machine shop work and printing trades. This underscores the importance of having measurable performance criteria stated in curricula (Evans, 2002, p. 37).

In the final analysis, low quality and underperformance of the TVET system may be the result of inadequate incentives. Funds are transferred to public institutions based on previous budgets, regardless of performance. Budgets are not adjusted upwards for good results or downwards for poor outcomes. Teachers and instructors are paid the same regardless of how many students or trainees they teach or the competencies they acquire. Criteria for allocating recurrent and development budgets are not based on programme

¹⁴ Students in vocational secondary education were previously subjected to the opposite extreme – excessive expectations in terms of workload. Students in vocational subjects take on too heavy a load: this was decreased recently from 44 hours per week to 30-36 hours per week. This compares with 27-30 hours required in the academic stream. It was unrealistic to expect students to do all the necessary theoretical and practical work in just two years. This was on top of the fact that the vocational stream receives the students with lower levels of achievement compared with the academic stream.

costs (Rostron et al., 1999b, p. 29). The lack of an effective system of annual staff performance reviews supports the continuation of mediocrity (Evans, 2002, p. 121). The TVET system does not hold training institutions and instructors accountable for their results.

2.6 PRIORITY 4: USE FINANCIAL MECHANISMS TO STIMULATE IMPROVED PERFORMANCE

There has been strong public interest in and financing of TVET over the past few decades in Jordan. The establishment of the Employment and Training Fund in 2001, financed by a 1% tax on company profits, may prove to be the most interesting innovation of all. This fund could potentially counter the inadequate financing of training by the private sector, and could lead to demand-oriented training, since employers are in the majority on the board.

Many observers question the productivity of the TVET system. The Minister of Labour has complained that the VTC enrolls only 4 500 full-time equivalent trainees, making the VTC a high-cost system with relatively low outcomes. High attrition rates and low completion rates also characterise TVET as a whole. The first point to make is that there does not appear to be much cost consciousness in the TVET system. The prevailing incentives are to spend allocated budgets in full and to obtain more financing. Lack of available data on costs is one cause of the lack of cost consciousness. 'Data on costs according to the criteria required for conducting cost analysis and cost comparisons between similar programmes and institutions are not readily available' (Rostron et al., 1999b, p. 29). To this must be added the previously mentioned lack of accountability and of incentives to use resources efficiently.

Low-use factors also indicate inefficient use of resources. One survey found that the utilisation of full capacity of training facilities was 60% in the vocational training centres, 64% in BAU and 86% in MoE

vocational secondary institutions (Rostron et al., 1999b, p. 24). Substantial scope exists for economies in the use of resources. Most training facilities are used only until the early afternoon. They lay idle thereafter and in the evenings. This is a sizeable resource that could be put to use for adult and continuing training.

Furthermore, the extreme variation in cost per trainee in vocational training centres, even among institutions of the same type, cannot be explained by the composition of different programmes. The smaller institutions, especially the specialised institutes, fail to realise economies of scale. Moreover, overhead costs appear to be exceptionally high for the VTC (25% as compared with 4-6% for the other two public providers) (Pearson, 1998, p. 103). VTC overhead costs include legitimate centralised functions such as trade testing, curriculum development and in-service instructor training. However, the proportion of total costs seems excessive and should be analysed further to determine the scope for economies or devolution.

Completion rates – the proportion of students initially entering a programme who successfully complete it – also point to low internal efficiency. Completion rates take into account both annual student attrition and pass rates of the exit examination. According to this criterion Jordan has had low productivity (input-output ratios) and high levels of wastage in its TVET system. Completion rates were extraordinarily low from 1995 to 1998, ranging from just 32% for vocational training centres and 44% for vocational education to 58% for community colleges (Rostron et al., 1999b, p. 26). The number of trainees initially entering that are required to produce one graduate ranges from 3.1 for the VTC and 2.3 for vocational schools to 1.7 for community colleges.

The completion rates of the VTC have increased with the reduction in length of the skills training programme from three to two years, and the adoption of a differentiated programme length that varies by between two and four months. Moreover, many trainees leave VTC training to take up jobs, and this cannot be

considered as wastage. However, the drop-out rate was still substantial for the first two quarters of 2003, averaging 10% per quarter for the skilled worker programme.

Completion rates, combined with recurrent cost per student per year, give the following costs per graduate by type of institution over the same period: JOD 1 800 for VTC, JOD 3 500 for vocational education and JOD 4 200 for community colleges. The VTC graduate cost and comprehensive graduate cost are somewhat comparable. The high costs per graduate are a reflection of the high attrition rates. These data should be updated and collected continuously by the various agencies.

The TVET system is excessively dependent on government financing. The VTC has increased self-generated income from around 6% of the total in 2000 to almost 15% in 2004, largely through increases in fees collected for testing and certifying workers under the Occupational Work Law. Tuition rates in VTC courses remain minimal: JOD 40 for the skilled level and JOD 240 for crafts training, compared with an average recurrent cost per trainee of JOD 700 (or just 5.7% and 34.3% of actual costs, respectively). The community colleges have substantially increased the share of their total income that they derive from fees and other self-generated income, from around 41% in 2000 to 66% in 2004. This has been achieved mainly as a result

of sharp cuts across the board in government subsidies to public universities. However, in general 'there is not a culture or attitude that is conducive to the systematic search for external funds in an effort to become more self-reliant. There is not sufficient appreciation that income from other sources is vital to a movement towards greater effectiveness' (Rostron et al., 1999b, p. 29).

Most importantly, the government transfers funds to public institutions regardless of performance. The way funds are transferred can have a powerful influence on the relevance, effectiveness and efficiency of outputs. Some types of incentive should be provided in the budgets, such as normative financing or competition for funds. Financial mechanisms should be used to stimulate better performance. This topic is explored in greater detail in Chapter 3.

2.7 OVERALL CONCLUSIONS

There is a lack of incentives to perform within the system. The main strategic priorities are:

- to forge strong labour market linkages;
- to reform TVET organisation and management;
- to raise the quality of skills provision;
- to use financial mechanisms to raise system performance.

3. TVET FINANCING

3

3.1 OVERVIEW OF THE CURRENT TVET FINANCING SOURCES AND MODALITIES

In the following sections the financial performance of the three major agencies providing TVET services, namely the Directorate of Vocational Education at the MoE, the VTC, and the Al-Balqa University, will be reviewed. The accent will be put on problems relating to financing and operational strategy, which are directly linked to the sector's lack of a well-defined medium-term expenditure strategy. An analysis of the TVET Support Fund is presented. The overall conclusions will provide ideas for a reorganisation of the financing of TVET sector including a better use of existing resources.

Ministry of Education's Directorate of Vocational Education

The funding for vocational schools comes from three main sources.

- The public budget: This ensures the financing of the quasi-totality of the annual budget that is necessary for the functioning of vocational schools.

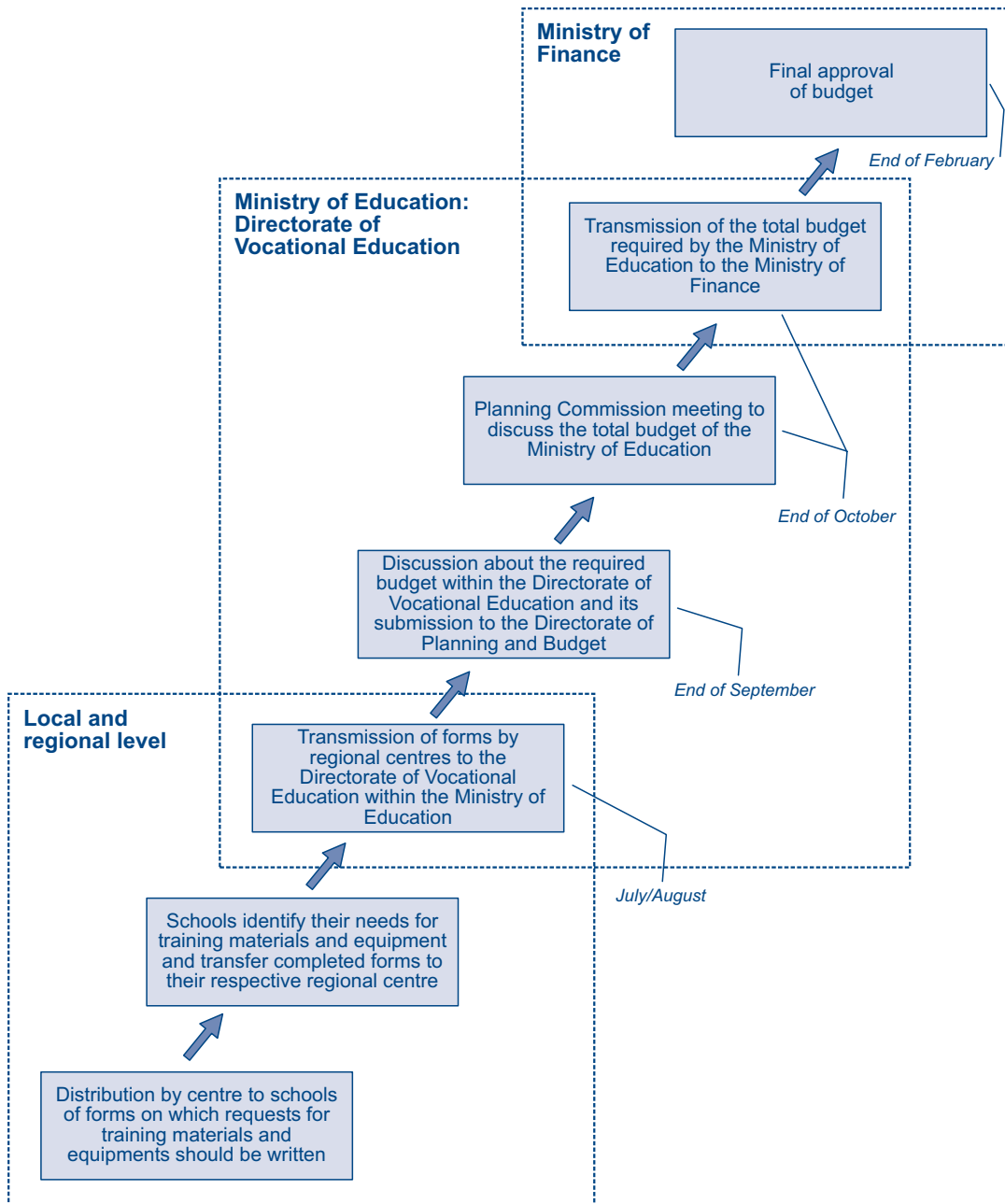
- International donations and loans: These are operated and allocated to the different beneficiary establishments (including the MoE) through an intermediary, the Ministry of Planning (MoP).
- Contributions from trainees: The trainees play a symbolic part in financing the annual budget of vocational and comprehensive schools, through an annual contribution equal to JOD 6 per trainee. A substantial proportion of trainees have already been exempted from this type of contribution, mainly those from very disadvantaged families.

The sale of the establishments' own products also provides income.

Figure 3 below presents the different steps of budget approval for the Directorate of Vocational Education.

Figure 3 suggests that the preparation and approval process of the budget is carried out in a way that takes into account the effective and real financing needs of the country's different training centres. The various regional head offices of the

Figure 3: Secondary vocational schools – Budget approval process



Directorate of Vocational Education distribute forms to the schools in their areas. The schools indicate their needs in terms of training equipment and material. These forms are then returned to the different regional head offices of vocational education, which, in turn, transmit them to the Directorate of Vocational Education at the MoE. In general, this first identification phase of financing needs, undertaken at the level of the Directorate of Vocational Education and its regional institutions, ends in July or August of the year preceding the new budget. Some revisions and

discussions of the budgets of the different training schools take place at the Directorate of Vocational Education itself, which submits its final provisional report on the next budget to the Directorate of Planning and Budget of the MoE. This stage is completed by the end of September.

On completion of this stage, the provisional budget is transmitted to the Planning Commission of the MoE, which discusses and amends the total budget of the ministry, including that of vocational

education. This commission, which is mainly made up of the heads of MoE directorates, is presided over by the minister. At the end of October the Planning Commission submits to the Ministry of Finance (MoF) its revised budget report on the financing needs of the MoE. At the end of February the total MoE budget is prepared within the framework of the total state budget and approved by the MoF, which submits it to parliament and subsequently to the King.

Once again it is important to note that the agents responsible for the different training centres of the Directorate of Vocational Education have very limited room for manoeuvre with regard to the finalisation of their budgets. In fact, the arbitration and conciliation process within the MoF is most often decisive in terms of approving the final financial envelope for these institutions.

As indicated in Figure 3, the budget must normally be approved every year in February. However, if the budget has not been thus approved, and in order to avoid paralysis in the functioning of vocational

establishments, the establishments submit their expenses using the system for delayed invoices, which will be paid in time for the definitive final approval of the budget by the King. The table below presents the recent trends in the budgets for the MoE vocational schools for 2001, 2002 and 2003.

According to this table, salaries consume a large share of the current expenditure (61% in 2003), and these in turn account for the highest share of the annual budget allocated to vocational education (48% in 2003).

Furthermore, expenditure on capital assets, which plays a major role in any restructuring operation aimed at the development of an efficient sector, is very low for the Jordanian vocational training sector. The lack of necessary funds for the development of this sector also manifests itself, in an implicit way, in the rigid, severe and highly centralised procedures for the financial management of the allocated budget at the level of schools and even at the level of regional administrations. Very often the concern of school managers is to

Table 1: Vocational education budget associated with the Ministry of Education (JOD thousand)

	2001*	2002**	2003***
Salaries	2 016.7	1 857	2 131
Operational expenses	585.7	652	708
Transactional	85.0	100	115
Materials and consumables	379.5	425	475
Building maintenance	29.3	50	60
Sub total Current expenditure	3 096.2	3 084	3 489
Equipment	389.7	468	590
Transport	150.0	150	60
Extensions to buildings	197.0	50	200
Furniture	87.1	110	98
Sub total Capital expenditure	823.8	778	948
Total	3 920.0	3 862	4 437

Source: ETF and World Bank, 2006

Notes: *Actual, **Revised estimate, ***Estimate

ensure the day-to-day functioning of their schools, rather than to develop them through more appropriate training programmes or more adequate equipment.

Indeed, following the approval phase the annual budgets allocated to vocational schools are not directly disbursed to the managers of training establishments. These budgets are endorsed by each of the regional administrations in relation to the schools in their respective areas. In each budget these regional administrations put at the disposal of the managers of establishments the sum of JOD 1 000. The managers have total freedom for amounts that do not exceed JOD 150, and can apply when necessary (i.e. if the expense exceeds JOD 150) to the regional administration to access partially or totally the JOD 1 000 put at their disposal. If the amount of an expense is between JOD 1 000 and 20 000, the Public Procurement Division of the MoE deals with this expenditure. If an expense exceeds JOD 20 000 the Public Procurement Division of the MoF must authorise the transaction according its proper rules and regulations.

It should be noted that at the planning stage of the budget, managers of establishments are allowed to ask for an increase in their establishment's budget of up to 10% in relation to the budget of the preceding year, without justifying this increase in expenditure. In order to benefit from a greater increase in the budget than the authorised level, managers must present supporting documents, although such requests are almost never granted.

Here again, in the management of the TVET sector, the inadequacies of the Jordanian system are apparent. In fact, expenses for investment, which often require substantial amounts of finance, are not the main focus of budget preparation, as they are often refused, unless other financial resources exist. Indeed, doubts about receiving foreign finance mean that schools and ministries are no longer motivated to develop coherent and efficient investment plans.

Vocational Training Corporation

The VTC budget is financed from three main sources. There are two external sources, namely the government budget and foreign loans, and one internal source, namely the income generated by the establishment's own activities. Table 2 below shows the budget and expenses of the VTC from 2000 to 2004. This indicates that the proportion of the total budget that came from revenues generated by VTC activities (mostly in the form of fees paid by trainees) increase substantially from 9% in 2002 and 2003 to around 15% in 2004. In spite of this low level of trainee contributions, trainees consider that the fees they pay to attend training sessions (between JOD 40 and 80 per semester) are already high in a country where a large proportion of the population still has a very modest income.

Thus, any future policy aimed at increasing VTC resources cannot be achieved through an increase of trainees' fees. A significant proportion of trainees are already exempt from paying these fees. Indeed, it would be preferable to grant scholarships to disadvantaged trainees in order to help them provide for their day-to-day fees and to allow them to continue their training. Very often, even the exempt trainees do not finish their training and enter the labour market at a very young age because they are unable to meet their basic living costs.

The increase in self-generated revenue for the VTC, from 6.2% in 2000 to 14.6% in 2004, is explained by the significant increase in the number of student. This is much greater than the increase observed in the income from other sources. Moreover, little income comes from the selling of continuing training services.

It is important to state that while the VTC is operating with limited financial resources for the development of its activities, the organisation has achieved a relative surplus in its budget in previous years. In fact, the VTC often provides its staff with

3. TVET FINANCING

limited short-term loans that have to be repaid before the end of the fiscal year. The funds distributed in the form of loans are mainly taken from resources reserved for investment operations. Once repaid at the end of the year, these funds cannot then be used within the VTC and must be paid to the MoF.

Furthermore, the centralised management of VTC resources explains in part the surpluses that have occurred in some years. In fact, any requests for funds submitted by the training centres during the final month of the fiscal year have no chance of being granted, given the time needed for any financial operation approval.

Table 2: Evolution of the budget of the Vocational Training Corporation (JOD thousand)

	2004		2003		2002		2001		2000	
	Actual	Expected	Actual	Expected	Actual	Expected	Actual	Expected	Actual	Expected
Revenue										
<i>Section I: Self-revenue</i>	1 869.61	2 300	1 342.40	1 800	868.83	1 000	691.56	650	554.86	700
<i>Section II: Government budget contribution</i>	5 162.60	5 500	5 500.00	5 500	5 800.00	5 800	4 879.06	6 000	6 334.20	7 024
Current	4 762.60	5 000	5 000.00	5 000	5 000.00	5 000	4 375.00	5 000	Not available	Not available
Capital	400.00	500	500.00	500	800.00	800	504.06	1 000	Not available	Not available
<i>Section III: MoP contribution</i>	4 247.63	8 661	4 543.50	14 636	1 418.57	9 270	1 013.24	1 520	1 047.52	1 480
<i>Section IV: Others</i>	1 525.22	0	3 964.20	1 000	1 316.03	0	1 144.92	100	971.07	0
Total revenue	12 805.06	16 461	15 350.10	22 936	9 403.44	16 070	7 728.79	8 270	8 907.67	9 204
Expenditure										
<i>Section I: Current expenditure</i>	6 048.02	6 384	5 630.68	6 779	5 579.15	6 000	5 189.25	5 750	4 962.21	5 700
<i>Section II: Capital expenditure</i>	5 217.16	9 781	5 904.24	16 157	2 223.04	10 700	1 241.94	2 520	2 531.98	3 504
Budget contribution (MoF)	952.78	1 120	1 378.87	1 521	800.00	800	513.75	1 000	Not available	Not available
MoP	4 264.38	8 661	4 525.36	14 636	1 423.04	9 900	728.18	1 520	Not available	Not available
<i>Section III: Others (deposit on banks and loans provided)</i>	1 539.88	0	0	0	1 601.25	0	1 297.59	0	1 413.48	0
Total expenditure	12 805.06	16 165	16 060.28	22 936	9 403.44	16 700	7 728.79	8 270	8 907.67	9 204
Surplus/deficit	0	296	-710.18	0	0	-630	0	0	0	0

Source: Vocational Training Corporation

Figure 4: Vocational Training Corporation – Budget approval process

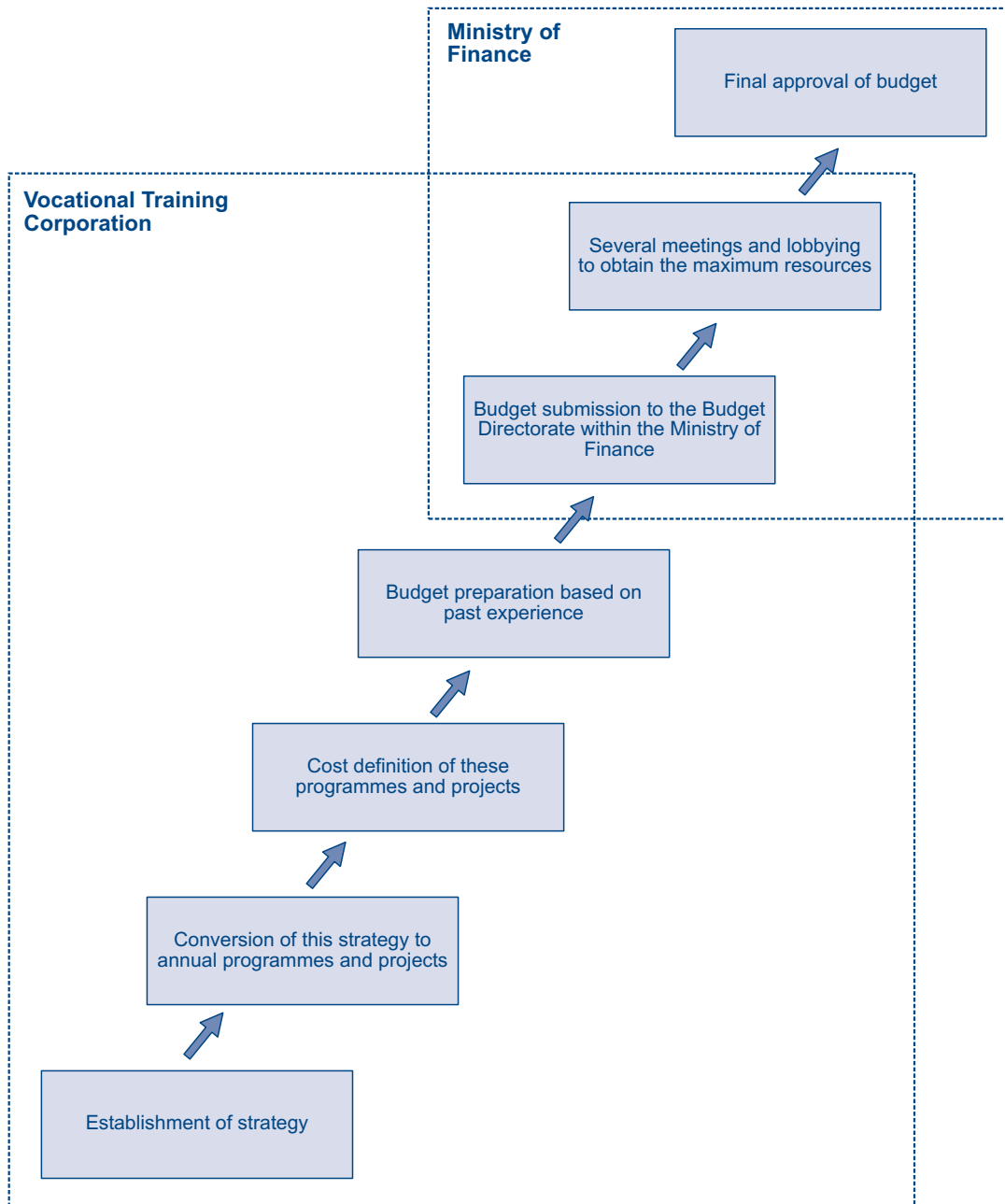


Figure 4 has been produced according to the description supplied by the Jordanian authorities. The word ‘strategy’ does not represent the true strategy of the sector. It is actually the provisional annual budget for the VTC.

The approval process of the VTC budget appears different from that of the Directorate of Vocational Education, though it is actually subject to the same arbitration constraints at the level of the MoF.

The process starts with the definition of an annual strategy, which is later converted to

specific training programmes and projects. The next stage consists of estimating the costs of the different programmes and projects for the following year; this helps the total budget of the VTC and its different training centres to be estimated. This provisional budget is then submitted to the budget administration at the MoF. Numerous meetings are organised between the VTC administration and the Budget Directorate at the MoF; at these meetings, discussions are held to set the final budget of the VTC. This budget is then submitted to parliament and subsequently to the King for final approval.

Although the process of fixing and approving the budget appears to be adequate, its actual application is nonetheless biased. In fact, the VTC budget is often set on an annual basis, which does not help in the financing of strategies that require a funding plan covering many years. Furthermore, the government contribution to the VTC budget is closely correlated to variations in the total state budget, thus ignoring the specific needs of the sector and the necessity of ensuring the appropriate means for its development.

In order to facilitate the functioning of the VTC if the approval of the budget is delayed, a sum equal to a twelfth of the stipulated budget can be allocated in advance. This allows the various centres of the VTC to cover their most necessary fees until final approval of the budget has been granted. In parallel, there is a relatively high level of freedom for substitutions between the different expenditure posts, so that activities can be run before budget approval. Sometimes the small budget that is allocated for investment is reoriented towards covering current running costs. At this stage it should be noted that the law governing the functioning of the VTC gives the organisation a certain administrative and financial autonomy at central level, allowing it to spend its budget on its various centres without authorisation from elsewhere. Nevertheless, as indicated in the common report of the World Bank and the ETF, the VTC centres suffer as a result

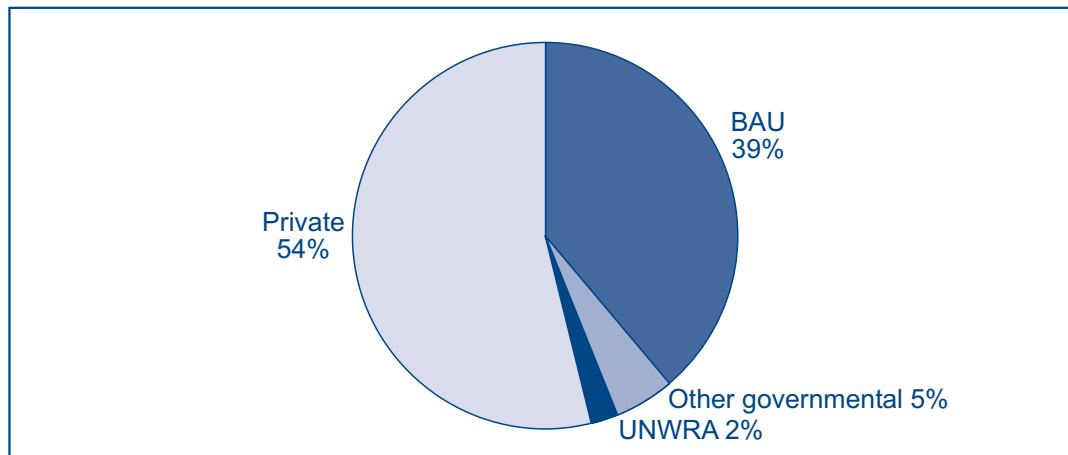
of this administrative and financial centralisation, which hampers their functioning: 'Lack of authority of administration of training centres: Heads of training centres do not have their own budget' (ETF/World Bank, 2006). However, the relative freedom of management enjoyed by the VTC at the central level does not extend to the foreign donations that are intended for this organisation, which are often in the form of software. In fact the VTC does not have the necessary flexibility to manage these donations according to its specific needs.

Al-Balqa University

Al-Balqa University (BAU) was created in 1996. It offers technical and professional training through the public and private community colleges under its tutelage. The university currently runs 12 public community colleges and has control over 38 other private community colleges, especially at programme level. The principal objective of the university is to 'produce graduates who meet international standards in their ability to apply learning in the workplace and to continue learning as that workplace responds to a changing technological and regulatory environment'.

The activities of the BAU are financed from the government budget, fees paid by the students, and foreign loans and donations administered by the MoP. In fact the university absorbs almost 11% of the total budget allocated by the government to

Figure 5: Total community college enrolment by ownership, 2002/03



Source: Ministry of Higher Education

Jordanian universities. However, following the progressive disengagement of the state from the higher education sector, government support for the BAU fell from JOD 8.4 million in 2000 to only JOD 2.5 million in 2004. Moreover, in 2005 the university was requested to reduce its current non-salary expenses by 20%. This was inscribed within the framework of a general policy adopted by the government, the aim of which was to reduce public expenditure because of the country's particular circumstances. It is important to point out that up until that date the Jordanian state had not paid the deficits of public universities; many of them suffered from structural deficits and thus lacked the means for development. Indeed, these universities were unable to cover current functioning costs. The government considers that universities must be financially autonomous and must master their own expenses to ensure their budget equilibrium. Informally it forbids them even to have recourse to bank loans to cover their deficits.

This raises the question of the real desire of the Jordanian public authorities to ensure the development of the sector.

This situation, and the fact that public universities appeared to be unable to cover even their current expenses, supports the establishment of a medium-term expenditure strategy in order to improve the TVET sector in Jordan (see the following chapter).

Finally, the allocation of the budget to each community college is essentially based on historical trends, the number of students and the staffing level. The allocated budgets are received by the BAU, to which the deans of the different community colleges must apply each time they need money for their operating costs. The only sources of money directly available to community colleges are the study fees paid by students. Table 3 shows the recent trends in revenue and expenditure of the BAU.

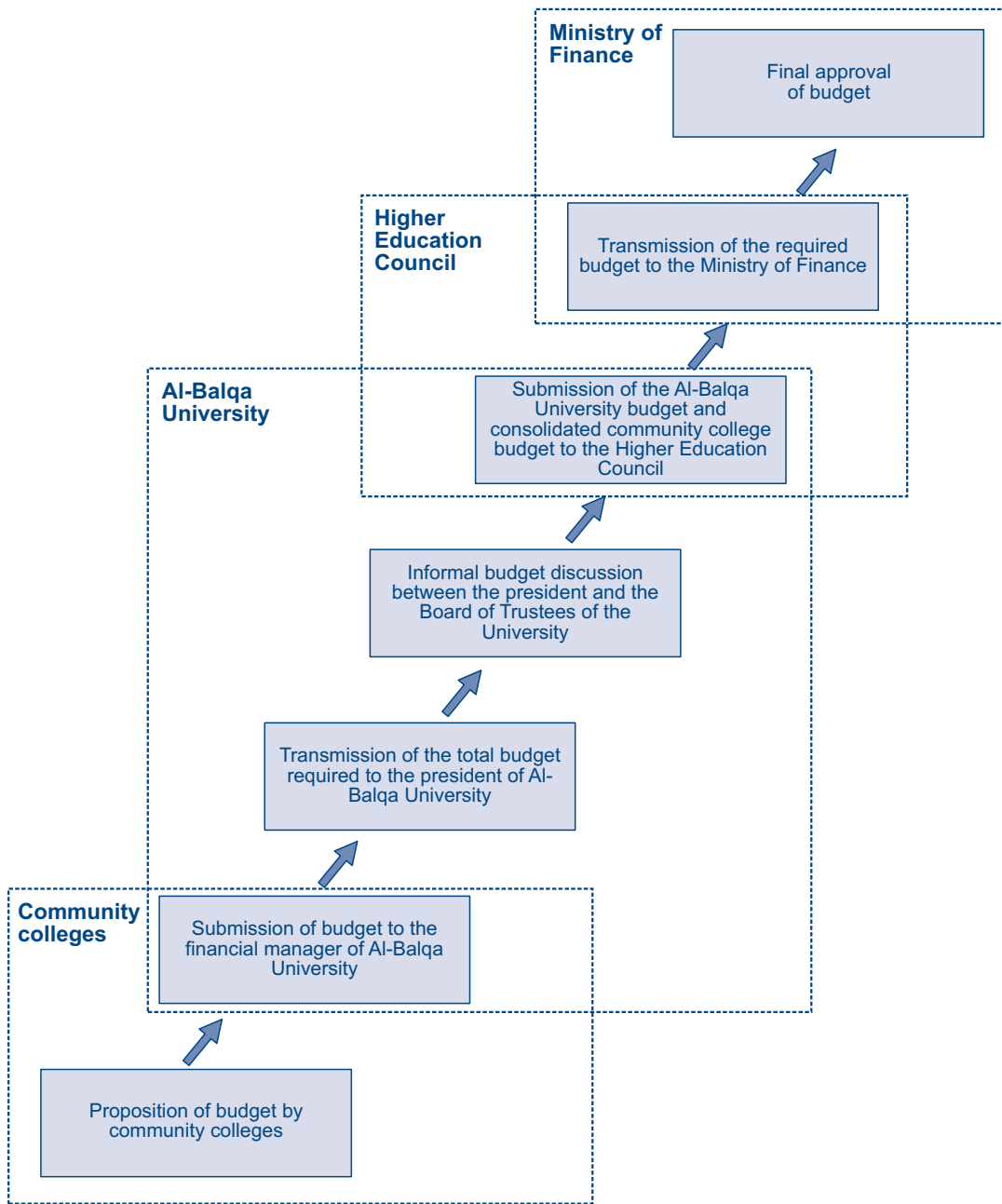
Table 3: Recent trends in the budget of the BAU (JOD)

	2000	2001	2002	2003	2004	2005*
Revenue						
<i>Section I: Self revenue</i>	7 752 289	11 179 190	12 774 079	14 399 000	18 470 303	24 415 000
University fees	6 268 174	8 868 204	11 033 340	13 193 574	17 101 843	23 500 000
Other	1 484 115	2 310 986	1 740 739	1 205 426	1 368 460	915 000
<i>Section II: Other fees and government support</i>	2 725 341	2 458 436	2 749 208	2 534 252	5 083 180	5 000 000
Additional fees	1 327 175	1 324 886	1 375 958	1 377 248	5 083 180	5 000 000
Government support	1 350 000	1 133 550	1 373 250	1 157 004	0	0
Support from MoP (projects)	48 166	0	0	0	0	0
<i>Section III: Support for civil universities (government budget)</i>	8 399 948	7 918 750	7 131 250	6 000 000	2 449 320	4 000 000
<i>Section IV: Income from previous years</i>	105 000	120 847	0	424 379	631 599	2 500 000
<i>Section V: Government support due</i>	0	0	0	0	1 402 754	0
Total revenue	18 982 578	21 677 223	22 654 537	23 357 631	28 037 156	35 915 000
Surplus or deficit	0	0	4 999 576	0	25 749	7 411 700
Total budget before foreign support	18 982 578	21 677 223	27 654 113	23 357 631	28 062 905	43 326 700
<i>Section VI: Foreign support (loans and donations for capital expenses, new projects)</i>	2 281 714	3 034 191	3 432 910	5 165 072	1 672 944	11 469 000
Total budget including foreign support	21 264 292	24 711 414	31 087 023	28 522 703	29 735 849	54 795 700
Expenditure						
<i>Section I: Current expenditure, excluding scientific research</i>	14 530 575	16 933 177	19 131 437	21 712 923	26 116 228	33 657 100
Central administration	13 104 424	15 505 278	17 932 926	20 051 936	24 839 835	31 665 000
Technical centres (or faculties)	1 426 151	1 427 899	1 198 511	1 660 987	1 276 393	1 992 100
<i>Section II: Scientific research, missions abroad, conferences, scientific journals</i>	148 724	314 442	479 496	568 186	872 005	1 149 500
<i>Section III: Capital expenditure</i>	4 303 279	4 429 605	3 043 605	2 846 502	549 634	6 826 500
<i>Section IV: Construction and equipment subject to foreign support (directly paid since 2003)</i>	0	0	0	0	525 038	1 693 600
Total budget before foreign support	18 982 579	21 677 223	22 654 537	25 127 612	28 062 905	43 326 700
<i>Section V: Foreign support (external payment)</i>	2 281 714	3 034 191	3 432 910	3 395 092	1 672 944	11 469 000
Total budget including foreign support	21 264 293	24 711 414	26 087 447	28 522 704	29 735 849	54 795 700

Source: Al-Balqa University

*Expected

Figure 6: Al-Balqa University – Budget approval process



The approval process for the BAU budget is very similar to those for the Directorate of Vocational Education and the VTC. The community colleges submit their financing needs for the following year to the finance department of the BAU. Meetings are organised between the president of the university and members of the university’s administration board to discuss the different elements of the budget. Following these meetings, the total budget of the BAU, comprising the budget for all the community colleges, is submitted to the Directorate of Budgets of the MoF. New negotiations are carried out at the level of the MoF before finalisation of the provisional budget, which

is submitted to the parliament and the King for final approval.

However, as with the other institutions the contribution of the government budget to the financing of the activities of the university is almost known even before the budget is prepared. Thus, the budget formulation process is much more of a distribution process of the government contribution than a financing request. The budget contribution very often does not take into account the specific needs of the sector, which vary according to the economic context of the country. For this reason the contribution of the budget is often examined in real terms.

TVET Support Fund

The law that instituted the TVET Council also stipulated the creation of a support fund for TVET called the Technical and Vocational Education and Training Support Fund. This fund is given civil personality as well as administrative and financial autonomy. According to the law that specifies the objectives and functioning of this fund¹⁵, 'the aim of the fund is to subsidise TVET activities, develop different training operations in the institutions of the public and private sectors, enhance the contribution of these two sectors to the education and training process and provide for its requirements using the financial resources it receives'.

As at December 2005 the fund functioned with 12 staff. Recruitment of a further 25 was expected in order to improve the functioning of this fund, especially at the level of the selection of projects in relation to the vocational education and training to be financed.

The fund is financed by a contribution that is collected with the taxes on company profits, after payment of any other allowances and reserves. According to the fund's terms of establishment, it could also be financed by contributions from the public budget and private donations, or foreign aid approved by the Council of Ministers. However, up to now the resources of this fund have only been obtained through the compulsory contributions from would-be distributed profits.

According to the joint report of the World Bank and ETF, Jordan is the only country in the world that imposes a tax on company profits in order to finance the development of the competencies of its human resources¹⁶. This choice is explained by the fact that, during the discussions with the government of the possible ways of financing this fund, companies preferred to deduct a contribution at the level of their profits rather than at the level of their wage bills. Thus, they would not pay this

contribution if they did not make profits. This method seems more appropriate for enterprises, but it may well cause sharp irregularities in the revenues of the fund. The enterprises that are subject to this form of taxation are:

- public-participation companies
- limited-liability companies
- private-participation companies
- foreign companies or their subsidiaries, which operate in a continuous way in the country with authorisation from the competent public authorities.

Nevertheless, many other types of enterprise do not pay this contribution, such as the companies operating under the law to encourage investment, and those operating in the Aqaba Special Economic Zone. Furthermore, companies operating in the zones ruled by the QIZ agreement signed between Jordan, Israel and the USA also appear to be exempt from this contribution. The current payment plan of the contribution to TVET Support Fund by enterprises is shown in Figure 7.

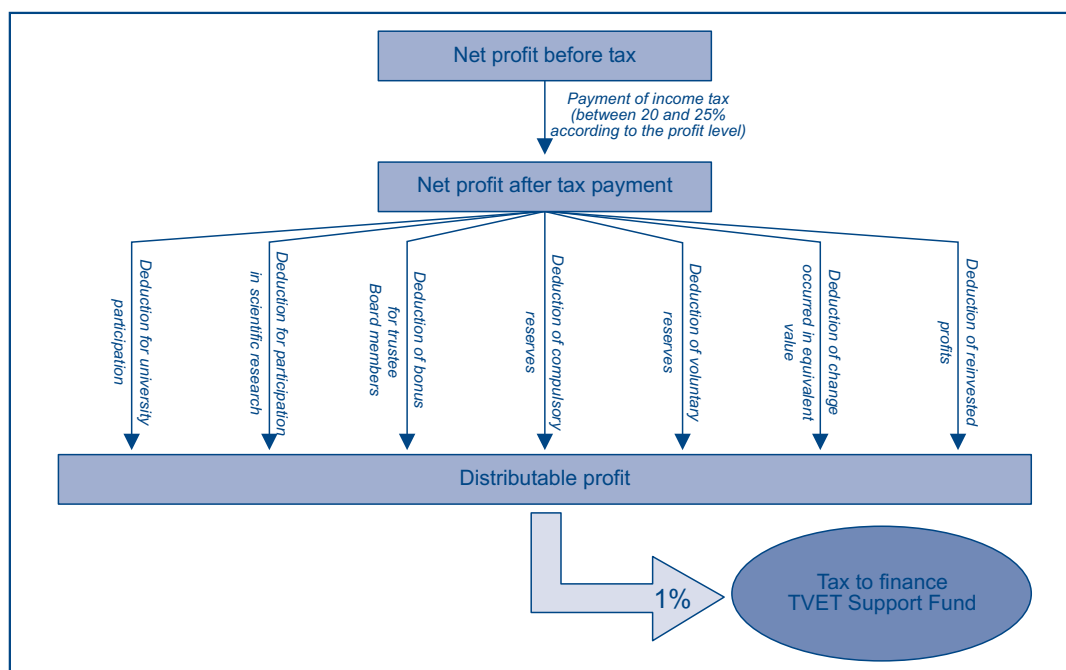
The Tax Collection Department of the MoF collects company contributions simultaneously with the tax on profits and distributes them to the account of the fund. So far the resources collected have been accessible mainly to the VTC, the MoL and private sector training providers. A lack of transparency in the distribution process has been identified.

The principal mission of the team that directs the fund is to choose between the projects submitted by public and private institutions that specialise in technical and vocational training. The aim is to finance the most efficacious, efficient and relevant projects. However, for projects with a budget exceeding JOD 250 000, the decision goes back to the TVET Council. In 2003 the resources of the fund rose to JOD 2.4 million. A year later, they reached around JOD 3.5 million. After the deduction of the fund's current and capital expenses, these resources served in part to finance the projects shown in Table 4.

¹⁵ Law No 95 for 2002.

¹⁶ The traditional source of financing around the world is a tax on wages paid.

Figure 7: Payment plan of tax for financing the TVET Support Fund



The process of acceptance of a project takes an average of one month, broken down as follows: 10 days for the preparation of the file, 10 days for approval by the Board of Directors and 10 days for the preparation of the agreement for the granting of funding. However, the real time between the receipt of a training proposal and the awarding of the subsidy is much longer. This is demonstrated by the fact that more than a year after the fund began

its activities, it has been able to finance only seven projects. In fact, the fund started its activities only in August 2004, although the collection of the tax intended to finance the fund had begun well before this. In other words, the committee did not have to wait for resources to be collected. On the contrary, it started selecting and financing the projects that it deemed efficient as soon as it was founded.

Table 4: Projects financed by the TVET Support Fund

Beneficiaries	Project's content	Total cost (JOD thousand)
German-Jordanian University		1 000
Association of private companies in information technology		23
MoL in association with the private sector	Employment of Jordanian workers	600
VTC in association with the private sector	Training in the hotel services sector	100
VTC in association with the private sector	Training of drivers for heavy-weight vehicles	120
VTC	Financing students from disadvantaged social groups	60
VTC	Acquisition of new equipment for training purposes	40
Total		1 943

Nevertheless, it should be pointed out that the functioning costs of the fund already absorbed a significant share of its resources even before the new recruitment intended for 2005 or 2006 was undertaken (see Table 5).

Between the date of its creation in 2002 and August 2005 the expenditure of the TVET Support Fund, both for its own functioning and for the financing of projects already approved, was JOD 2 524 million. During the same period, the resources collected in 2003 and 2004 amounted to around JOD 6 million. Thus, close to JOD 3.5 million still remains available in the fund's account, despite the urgent needs of the technical and vocational training institutions, mainly at the level of capital investment.

Urgent action must be taken in order to release these resources and finance the necessary investment for the development of the sector. If a sectoral strategy of development is adopted, the fund seems the most appropriate financing instrument to establish investment programmes for the sector.

Despite the existence of financial resources that have remained unused for more than two years, the main problem raised by the responsible agents of the TVET Support Fund is the lack of financial resources. According to these agents, the best solution would be to increase the amount of money that is raised through tax imposition for financing the TVET Support Fund. The proposed solutions mainly

consist of modifying the existing imposition basis for this to be done on the net profit of enterprises, or even on the profit after payment of tax, instead of its present imposition on would-be distributed profit. The other option, and one that is already used in many other countries, is to set a tax on the wage bill at the level of all the economic activities of the country. As indicated in the joint report of the World Bank and the ETF, it is difficult to identify with certainty the profits of enterprises, especially in developing countries, while the wage bill is generally known.

As well as its limited resources, the fund is also hampered by other constraints. Essentially, these relate to the weakness of its capacity to assess the different projects presented for funding. In fact, a single person at the fund looks after all the technical aspects of projects of different types. Furthermore, the same person prepares the financing files and recommends the approval or the rejection of finances for every project. This weak capacity on the part of the fund in terms of technical assessment considerably reduces its ability to manage its resources adequately. In this respect, the financing of the German-Jordanian University by the TVET Support Fund is the most costly example of inefficiency in resource allocation since the fund's creation. The presence of only one of the three main TVET providers (VTC) on the board of the fund makes its functioning problematic and suggests that transparency and fairness in the selection of projects is questionable.

Table 5: Expenditure of the TVET Support Fund (JOD thousand)

	2004	2005		2006
	Actual (only four months)	Actual (until August)	Expected	Expected
Current expenditure	370	85	260	290
Capital expenditure	90	36	200	200
Total	460	121	460	490

Source: TVET Support Fund

3.2 FINANCIAL ASSESSMENT OF THE TVET SECTOR

Two main ratios could define the performance of the TVET sector. The first is the ratio of outputs to inputs: a measure of the operational efficiency of the organisation. Typical measures for TVET are the cost per trainee of a year of training or the cost per graduate from a particular programme of TVET. The second is the ratio of outcomes to outputs, or the effectiveness of output delivery. A typical effectiveness ratio for TVET might be the number of trainees achieving an acceptable pass rate in an external examination compared with the total number of students who have completed the curriculum for the examination. Another indicator could be the employment rate of graduates from training centres. The BAU is the only institution in the Jordanian TVET sector that has carried out performance analysis for a number of its centres.

In the context of this report, and given the data limitations, the financial assessment is limited to the following indicators:

- the proportion of current expenditure in the total budget;
- the sources of financing of the TVET institutions;
- the importance of TVET in the Jordanian economy;
- the cost per trainee.

Many other performance indicators should be estimated for the establishment of an MTEF for the sector.

Importance of the TVET sector in the Jordanian economy

The role of the TVET sector in Jordan remains globally underdeveloped compared to the TVET sectors of other countries with similar economic and social profiles. This is apparent at the level of the amount of public expenditure allocated to this sector in relation to GDP or in relation to public expenditure as a whole. However, as shown in Table 6 the amount given to this sector has risen over the past three years. This increasing trend in the amounts of public expenditure allocated to the vocational and technical training sector is confirmed by the recent report of the World Bank: 'In 2003, spending on basic education constituted 62% of public spending on education and training, followed by higher education (22%), secondary education (11%) and vocational education and training (5%). The vocational education and training sector witnessed the largest increases in recent years particularly due to large capital spending for the establishment of new vocational training centres financed by the SETP' (World Bank, 2004).

Importance of current expenditure in the total budget for public TVET institutions

Table 7 presents current and capital expenditure as a percentage of the total budget of the three public TVET organisations during 2001-03. Our analysis is limited to this period because of the lack of data concerning the MoE budget for 2004-05 and the VTC budget for 2005.

Table 6: Importance of the TVET sector in the Jordanian economy (JOD million)

	2001	2002	2003
Total expenditure of the three main providers of TVET services	36.4	39.4	44.5
GDP at market prices	6 363.3	6 778.5	7 203.6
Total expenditure on TVET as a proportion of GDP (%)	0.57	0.58	0.62

Source: Authors' calculations

Table 7: Current and capital expenditure as a proportion of total expenditure (%)

	2001	2002	2003
MoE			
Current expenditure	79	80	79
Capital expenditure	21	20	21
VTC			
Current expenditure	67	59	49
Capital expenditure	16	24	51
BAU			
Current expenditure	69	73	76
Capital expenditure	18	12	10

The table above shows that the shares of current and capital expenditure in relation to total expenditure are stable in the case of the vocational training administration of the MoE. They are around 80% and 21% respectively for the three years covered. In an economic environment that is in a continuous state of change, this situation in Jordan explains the mediocre results for vocational training recorded at the level of vocational schools (40% pass marks for entrance to community college and 4% for entrance to universities (Nasrallah, 2003)).

The share of resources allocated for the development of infrastructure and for purchasing equipment is too small and can in no way contribute to the improvement of the performance of vocational schools. Furthermore, almost 62% of current expenditure is accounted for by salaries; this explains the low ratio of trainer to trainee that varies between 1:15 and 1:18. Reducing the share of current expenditure in the total budget by increasing the share allocated to investments is an urgent task.

With regard to the VTC, it is quite clear that this institution has improved its capital expenditure as a proportion of the total budget expenditure. However, the VTC is still unable to invest in accordance with its

Table 8: Distribution of current expenditure by major category for the Directorate of Vocational Education in 2003 (%)

Salaries	61
Materials and consumables	14
Transactional	3
Operational expenses	20
Building maintenance	2

Source: Directorate of Vocational Education

forecasts on the one hand, and with the requirements of training to satisfy the new needs of the labour market on the other. In fact, the increase in investment expenditure is mainly explained by the construction of 13 new centres belonging to the VTC during the period 2002-04. These were financed by SETP. It is evident that when the VTC has resources, it invests in the creation of new centres, instead of in the development of those that already exist.

It appears that the main concern of the VTC is to absorb a large number of trainees, rather than to improve the training offered to them. These are two contradictory objectives that need to be reconciled, in a country with limited resources.

Thus, with a view to establishing a development strategy for the sector, some resources must be oriented towards reinforcing the capacity of training centres to receive students, as well as towards improving the quality of the proposed training by more targeted investments. Moreover, although current expenditure as a proportion of total expenditure slumped between 2002 and 2003, its absolute level continued to increase. In 2003 these expenses were dominated by wages, which represented almost 81% of total expenditure.

Table 9: Distribution of current expenditure at the VTC in 2003 by major category (%)

Wages, salaries and allowances	81
Social security	7
Other operational costs	12

Source: Vocational Training Corporation

In contrast to the situation at the VTC, the situation at the BAU is continuing to decline. In the three years 2001, 2002 and 2003 there was an increasing trend in current expenditure as a proportion of total expenditure. The increase in current expenditure was evident at both the relative and the absolute level, as a result of the continuous increase in the wage bill. The latter is the result of both the continued increase in wage levels for public sector workers and the recruitment of new employees into the public sector.

The excessive abundance of trainers at the BAU is reflected in the low ratio of trainer to trainee ratio of 1:17 during 2002/03. In the private community colleges, this same ratio for the same university year rose to around 1:29. This observation is confirmed by the World Bank in its most recent report: 'An important source of inefficiency in the public higher education sector is the very low ratio of teaching to non-teaching staff (1 to 3). The private universities are somewhat better at 1 to 1, but even this

ratio is at the upper end of the spectrum. In community colleges, the student-teacher ratio is low and has been dropping. In 2003, it stood at 17:1 compared to 20:1 in 1998 which is also far below Jordan's accreditation guidelines for community colleges' (World Bank, 2004).

In contrast to current expenditure, the importance of capital expenditure plummeted between 2002 and 2003 at both the relative and the absolute level. This slump, justified by the financial difficulties of the university, which sought to cover its running costs to the detriment of investment expenditure, has certainly affected the quality of training.

In fact, the BAU is the only public university not in deficit, which shows the strict financial management of the university. Ensuring budget equilibrium has become the main objective, even at the expense of training quality.

Financing sources: comparative analysis for the three TVET institutions

From the two figures below it is clear that the process of evolution in relation to the financing of the activities of the TVET sector is on the right track. In fact, for the VTC and the BAU, the share of the government contribution relative to the finances of these two institutions is in continuous regression. Henceforth, the VTC and the BAU will rely increasingly on their own incomes, as well as on foreign donations and loans, to finance their expenditure. This progressive orientation towards alternative sources of finance allows both institutions, in the medium and long term, to avoid the shocks associated with budgetary restrictions that are periodically decided by the government, and to have more autonomy in the management of their resources. In fact, the resources that come from the public budget are the most difficult to master, because of the multitude of administrative procedures and the complexity of the necessary approval process for any spending.

Figure 8: BAU financing sources

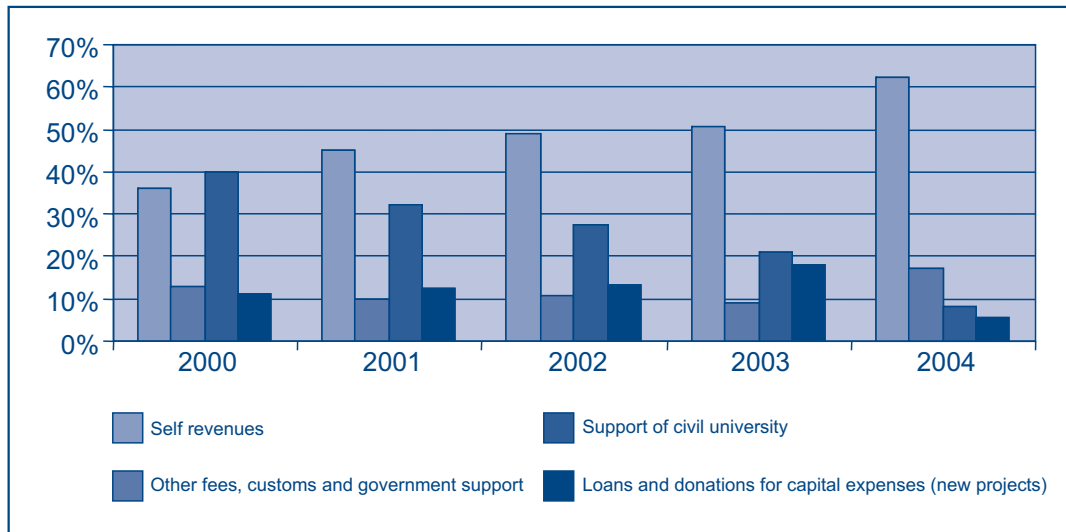
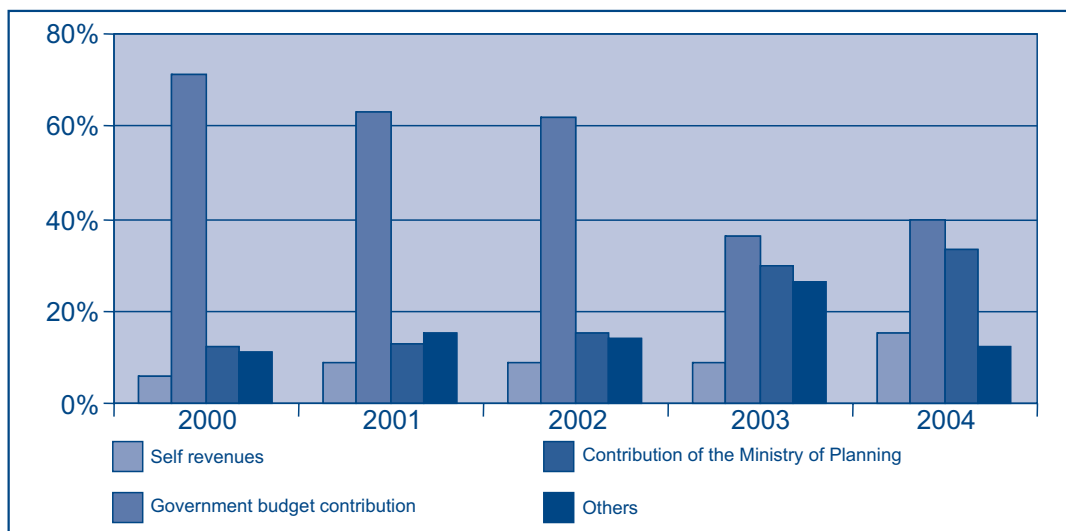


Figure 9: VTC financing sources



Costs per trainee in the three public TVET institutions

The methodology adopted for determining the cost per trainee in the three establishments consists of simply dividing the total expenses of the institution for one year (x) by the number of trainees enrolled at this establishment for the year (x+1). This method has been dictated by the fact that the fiscal and school years do not correspond. Although this method does not allow the costs per trainee at the different establishments to be calculated exactly, it does produce figures that are close to the actual numbers, since there is generally no great change in the number of students enrolled at one establishment from one year to the next.

The costs per trainee for the BAU must be viewed with caution since the calculation includes the total budget of the university, divided by the number of students enrolled in the community colleges that are under the tutelage of this university. However, as mentioned previously, this university offers two-year technical courses and four-year academic courses. Thus, in order to reach the exact figure of the cost per trainee, the estimate must only consider the share of the total budget allocated to community colleges rather than the total budget on one hand, and the number of students following the technical curriculum rather than the total number of students at the university on the other.

Table 10: Costs per trainee in MoE, VTC and BAU

	2001	2002	2003
MoE			
Total expenditure (JOD)	3 920 000	3 862 000	4 437 000
Total number of students enrolled	33 406	35 263	34 057
Cost per trainee (JOD)	117.34	109.52	130.28
VTC			
Total expenditure (JOD)	7 728 792	9 403 447	11 534 919
Total number of students enrolled	11 188	13 245	Not available
Cost per trainee (JOD)	690.81	709.96	Not available
BAU			
Total expenditure (JOD)	24 711 414	26 087 447	28 522 704
Total number of students enrolled*	13 199	17 788	28 787
Cost per trainee (JOD)	1 872.22	1 466.58	990.82

* We have assumed that the total number of students at the BAU is equal to the total number of students enrolled in its community colleges plus the total number of students pursuing academic courses multiplied by two, since they generally stay at the university for twice as long as the students stay at the community colleges.

Table 10 shows that the cost per trainee is much greater for the BAU and the VTC than for the MoE. These high costs for the first two institutions may be explained on the one hand by their substantial need for sophisticated material and equipment compared with the MoE, and on the other by an underuse of their available training capacities. Table 11 confirms this explanation.

Table 11: Percentage of use of full capacity by the three main providers of TVET services

	% use of full capacity
MoE	86
VTC	60
BAU	64

3.3 CONCLUSIONS

Creating and sustaining an effective system of accountability is an urgent task for the Jordanian authorities in order that they can improve the efficiency of public expenditure. In this respect the financial

options for improving the current system and implementing an MTEF can be summarised as follows.

- Direct action could be taken to increase the efficiency of spending on TVET, including freezing the current level of spending on salaries by means of a cash limit on the total salary bill of all institutions involved in the sector (not by freezing trainer salaries or salary scales), and allocating all future increases in spending to quality inputs.
- Using formula funding: If costs are to be controlled and linked more directly to outcomes, it is recommended that Jordan move away from its current input-based system of budgeting to one that defines the trainee as the essential unit. One way to do this is through the introduction of programme budgeting as an MTEF for the TVET sector. Another complementary step is to move towards a system of formula funding in TVET, rather than the present system of funding public TVET organisations according to their costs. Formula funding is a system of funding according to programmes and outputs.
- Utilising private as well as public resources: As Jordan needs to

rationalise and improve the quality of public expenditure, as recommended by the IMF and the World Bank and their respective public expenditure assessments, it could consider encouraging private individuals to fund their own training, while considering carefully the low level of income of most Jordanian households. More specifically, this involves improving much more the development of private TVET provision which may require students to pay the full costs of their training.

- Introducing competition among schools and centres: Competition can contribute to increased quality, reduced costs, and increased efficiency. A competitive system requires the availability of information on school types that cater for different learning needs and preferences, and on school performance. School principals and managers should have some autonomy, and funding across schools should be distributed through equitable procedures.

Other financing options to improve efficiency and quality could be suggested based on the experiences of other countries. As noted, Jordan has problems with resources, expenditure and quality. Various measures can be used to address these problems separately.

For example, certain direct measures can be used immediately to control the growth of current expenditure and to limit unit costs without necessarily improving skills; these include controlling spending on salaries. Other measures can probably improve quality, but will not have an impact on cost; these could include, for instance, the introduction of a common system of assessment at national level to measure training outcomes.

Given the severity of Jordan's problems, however, it is likely that the only steps that will both control current costs and improve quality are ones that increase competition and choice within the TVET system, in

particular through competition between the public and private sectors, but also within the public sector. Within this framework, the options available are:

1. immediate public expenditure measures;
2. the utilisation of private as well as public resources;
3. the introduction of competition into the system.

As stated earlier, the TVET Support Fund should be used more efficiently to improve the sector. Some specific recommendations for improving both the revenues of the fund and its efficiency are presented below.

- The board membership should be revised, to include adequate representation from all training providers, while maintaining the private sector majority.
- Development of TVET Support Fund: First, the number and competence of the fund's technical staff need to be increased in order to ensure better project evaluation, and proper technical criteria need to be adopted for the evaluation of proposals from both private and public institutions. Second, the fund's resources need to be diversified by one of the three options suggested earlier.
- The three TVET sub-sectors could be financed through the fund's resources on the basis of their performance. Many indicators could be used to evaluate the performance of TVET institutions. This may include the percentage of graduates who find a job, the extent to which the job occupied and the technical skills gained during the training period match up, and the type of employment contract (fixed-term or of indeterminate duration).
- A real partnership must be established between training providers and the private sector for projects supported by the fund.
- There is a need to raise awareness and develop capacities of project promoters.

4. TVET PLANS AND PROGRAMMES

4

4.1 OVERVIEW

Each of the three public elements of the TVET system has developed its own individual strategy, but while an HRD strategy was approved by the cabinet in 1999, no comprehensive national strategy exists for TVET. Implementation of each strategy has suffered from underfunding. The current system is fragmented. Programmes are designed and implemented in the absence of an overall national strategy closely linked with employers. The section below first reviews the individual strategies, then examines the proposals on TVET included in the draft National Agenda. The National Agenda, a recent consultation mechanism that is currently being finalised, goes a long way towards establishing a sector policy for TVET, mainly in terms of governance and management. It recommends the establishment of an umbrella Higher Council on Human Resource Development, an Employment and TVET Council (ETVET), an Employment and Training Fund and an independent Quality

Assurance Agency, and the remodelling of the VTC as an autonomous body. These reforms are far-reaching and provide an excellent basis for the reform of TVET, but they do not constitute a comprehensive sector policy embracing all training providers. The National Agenda moves in the right direction and provides many elements of a comprehensive national strategy, but more needs to be done to pull the various elements into a coherent national plan.

Ministry of Education's vocational education

The MoE has formulated a 'Vocational Education Framework: Recommended Action for Reform' (June 2005) with expert assistance provided through the Educational Reform for a Knowledge Economy (ERfKE) project. The objectives of the framework are to build and maintain a knowledge economy and learning culture develop a skilled and flexible workforce and increase students' options and opportunities for choice.

The main recommendations of the report include the following.

1. Pre-vocational: Pre-vocational education should be renamed 'career education and provision', and should be expanded to include an exploration of various vocational options, and provision of career guidance counsellors.
2. Labour market linkages and information: There is a need to strengthen linkages with the private sector regarding policies, strategies, curricula, implementation and evaluation; institute systematic partnerships with the private sector at national and local levels by establishing Council Committees in the Directorate and in schools; conduct annual graduate follow-up (tracer) studies for each vocational specialisation; and develop sector needs analysis.
3. Decentralisation: Authority should be delegated to educational directorates for administration, technical aspects, funding and finance. In turn, field directorates should delegate authority to school principals for programme matters.
4. Student choice: First, it should be made possible for more vocational students to gain a place on their first-choice course (only 18-30% of vocational students are currently studying in their first-choice specialisations). Second, there is a need to achieve a comprehensive school with open channels between academic and vocational courses.
5. Specialisation: First, vocational areas should be restructured with a major focus on transferable employability skills. For example, the industrial area could be consolidated from 32 specialisations into 9 industrial families. Second, all vocational areas need to encompass ICT and basic competencies (employability skills) that are generic to any career, e.g. communication, teamwork, safety and accountability.
6. Certification: Requirements for the General Secondary Certificate (GSC) should be reviewed, to include assessment of the practical component of vocational courses and to provide for recognition of alternative certification for entrance to community colleges.
7. Quality of instruction: The quality of instruction should be improved through higher standards for teacher certification, with an emphasis on technical and vocational expertise. There is a need to establish an incentive formula for professional development.
8. Gender equity: Gender equity must be increased in general, and in particular in hotel and tourism services: the tourism component in girls' schools should be expanded, and new curricula developed, for example in entrepreneurship.

The framework is clearly a step forward. It proposes actions in several areas that are designed to make vocational education more relevant and effective. It emphasises the role of employers in defining skill requirements through sectoral bodies and local partnerships. It proposes the devolution of some administrative responsibilities to the school level. Perhaps the most far-reaching recommendations deal with curricula, including more choice for students, competency-based delivery, a focus on basic and transferable skills, a shift from job-specific preparation to preparation in an occupational area, and the introduction of essential skills and project-based learning. This move, in the direction of increased training in generic, transferable skills in occupational clusters, and of less narrow job training, should be supported. Such broader preparation takes into account the fact that little information is available on exact employment requirements, the likelihood that many graduates will not be able to find work in a narrow field of specialisation, and the need for trainability to learn new occupations during their working life. The recommendations also propose incentive funding for those schools that are able to exceed expectations.

However, the framework does not give details of the resource implications of the recommendations, in terms of either the human resources required to develop and implement the recommendations, or the finances required. No priorities are established among the 28 recommendations. Some of the required steps and outcomes for each of the

recommendations are mentioned, but the constraints that must be overcome are not identified (for example to 'attract and retain quality teachers'), nor is an action plan for implementation of the proposals provided. Suggestions on establishing Council Committees in the directorate and in the schools to involve employers in vocational education have been tried, in Jordan and elsewhere, but have had little success. Instead of developing employer committees for each of the three public elements of the TVET system, it would be better to integrate these. Such integration would economise on employer time and increase the chances of their effective participation. Further work is needed on resource implications, priority setting, constraint identification and implementation planning. Still, the direction of the framework should be enthusiastically supported.

Vocational Training Corporation

The VTC has adopted a 'Strategic and Implementation Plan, 2005-07'. According to the Plan the mission of the VTC is as follows: 'The VTC seeks to excel in providing training, qualifying, rehabilitating and upgrading Jordanian workforce efficiency in accordance with the highest international standards to match the labour market needs internally and externally; also, to offer the services of the vocational work organisation and to promote small and medium enterprises' (p. 2). It presents a set of eight objectives and related actions, as follows.

- *Strategy 1:* Provide comprehensive services in line with the needs of the growing population to graduate a well-trained workforce.
- *Strategy 2:* Sustainable progress for vocational training curricula and programmes in accordance with labour market needs and technical advances.
- *Strategy 3:* Partnerships with the private sector and communities.
- *Strategy 4:* Training for all.
- *Strategy 5:* High occupational performance standards that correspond to labour market needs.

- *Strategy 6:* Integration with national bodies that are related to human resource development.
- *Strategy 7:* Gain beneficial feedback from Arab and international experiences regarding the vocational training fields.
- *Strategy 8:* Efficient legislation system in line with the nature of the corporation's work.

The plan contains important elements, including the revision of curricula, the upgrading of staff and more equitable provision of training services. However, it lacks substance, detail and credibility. The plan lacks a vision to transform the VTC into a relevant, highly effective organisation. It excludes any reforms in the governance structure of the VTC. It says little about how improvements could be made to the orientation and management of the currently complicated structure of the VTC. It says little about how to build incentives into the system to encourage better performance by instructors and managers. It does not deal with how resources can be better mobilised within the VTC system. Moreover, the plan does not identify the necessary actions by level of priority or sequence, nor does it spell out the main concrete steps necessary to achieve the objectives. Finally, the plan provides no analysis of the resources (financial and human) required in order to implement the plan. In short, the plan does not yet provide a credible reform programme for the VTC. In the current situation the plan will need further revision in order to comply fully with the National Agenda recommendations.

Al-Balqa University

The BAU prepared its own strategic plan in 2002 with Canadian assistance. This plan starts with the following mission statement: 'The mission of the BAU is to prepare graduates capable of making a productive contribution to the economic and social development of the nation. This is to be achieved through strong collaborative initiatives with employers resulting in the design and delivery of diploma, degree and continuing education programmes, characterised by excellence and relevance to the work of work' (BAU Strategic

Planning Committee, 2002). The main goals from its ambitious operational plan, 2002-05, are as follows.

1. The BAU will have an effective management framework in place to achieve its vision. This includes leadership and organisational development, planning, and human and financial resource development.
2. Its education profile should be responsive to the social and economic development requirements of the country and region, and its graduates should have skills consistent with international standards. This includes:
 - the development of a policy framework;
 - the development and use of labour market information;
 - the development of a programme development unit;
 - the formulation and measurement of graduate competencies;
 - the establishment of active continuing education and contract training for its constituencies and of mechanisms for approval and maintenance of national standards for private colleges;
 - the establishment of pilot colleges and centres of excellence;
 - the introduction of applied degree programmes;
 - the establishment of programme advisory committees at colleges;
 - the introduction of one-year post degree applied programmes.
3. The BAU should establish itself as a source of expertise on applied research relevant to individual enterprises and society at large.
4. High-speed broadband Internet access should be available, and ICT exploited for both learning effectiveness and management efficiency.
5. Student services should operate to support the student learning environment, for example through guidance and counselling.

However, the BAU has not been pursuing vigorously or monitoring the achievement of the various elements of the strategic plan. It has developed yet another technical plan, entitled 'Technical

education vision of Al-Balqa Applied University'. The prime objective of the university is to 'produce graduates who meet international standards in their ability to apply learning in the workplace and to continue learning as that workplace responds to a changing technological and regulatory environment'. According to the same document, in order to accomplish its mission the BAU has set itself a strategy articulated around six main axes:

- a central planning and implementation process for new learning programmes; curriculum and staff development;
- a governance, management and administrative structure that will support the achievement of the university's mission; a management information system will be a significant component of this structure, as will an academic accreditation process;
- a comprehensive human resource development strategy;
- a plan to ensure that facilities, staffing support services and equipment are matched to academic requirements as outlined in the strategic plan;
- performance evaluation standards: total quality management;
- learning programme development priorities.

As with the two other strategic plans, no detailed action plan has been prepared with investment requirements and identification of recurrent cost implications.

4.2 THE NATIONAL AGENDA

Overview

In 2005 His Majesty King Abdullah commissioned a national plan to address key issues in Jordanian development. The overall commission was chaired by the deputy prime minister. The result is the National Agenda for development in Jordan, issued in draft in late 2005. 'The National Agenda aims to improve the well being of all Jordanians through raising living standards, providing social welfare and security, creating new job opportunities, and guaranteeing basic freedoms and rights.' The first three

national objectives of the Agenda are as follows.

1. Jordan will develop a thriving economy that is open to other regional and world markets.
2. Jordanians will be well prepared for lifelong learning and will work in progressively higher-value-added occupations.
3. The economy will absorb the growing inflow of Jordanian workers into the active population.

The phases of Jordan’s socioeconomic transition call for a focus on productive employment for all in the period 2007-12, upgrading and strengthening the industrial base between 2013 and 2018, and world-class competition in the world-wide knowledge economy from 2018 onwards. First-phase priorities are to:

- ‘promote labour-intensive and export-oriented industries;
- eradicate structural unemployment;
- expand significantly vocational training and employment support’.

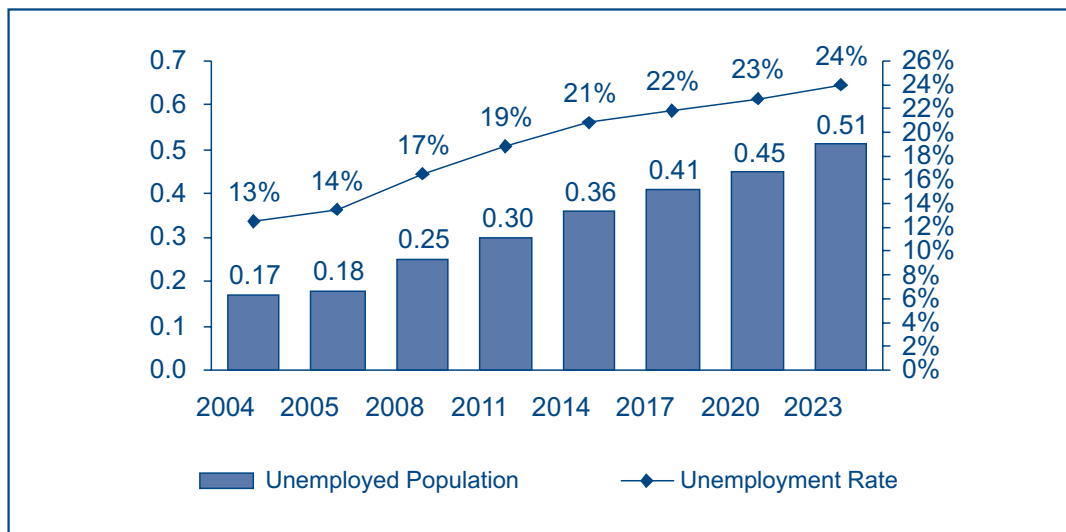
Development challenges and issues are divided into eight main themes, each with a task force that worked for around six

months (a total of 200 task force members involved). Theme 5 was ‘Employment Support and Vocational Training’. The Agenda states that ‘unless employment support is aligned with investment development strategies, unemployment will continue to grow, and could well exceed 20% by 2015’. Employment challenges are noted as follows.

- ‘23% of the population will reach working age in the coming 10 years (around 1.3 million Jordanians);
- Jordan’s economy has not been developing fast enough to absorb the annual inflow of job seekers;
- this situation is worsened by the fragmentation and inefficiency of job placement agencies; [...] and
- the poor performance of the vocational training sector, which lacks private sector participation and exhibits weak linkages with the employment market;
- government efforts to address unemployment challenges have so far yielded modest results, due to an uncoordinated and piecemeal execution approach’.

The current picture of unemployment is projected as follows, based on the status quo.

Figure 10: Projections for unemployment, 2004-23



Source: National Agenda, Summary, November 2005

The National Agenda 2006-15 asserts: 'This unemployment challenge can be drastically reversed by restructuring the vocational training and employment institutional framework and launching targeted employment programmes.' A major objective is to reduce unemployment to 6.9% by 2017 from its current rate of over 12%, and to create 530 000 new jobs.

The National Agenda was presented to His Majesty King Abdullah in November 2005¹⁷. An office has been established in the prime ministry to oversee its implementation.

Overall the Agenda recommends a two-pronged approach: (1) launching an institutional framework, and (2) creating support programmes and targeting key industries. In terms of restructuring the institutional framework, the Agenda recommends the following actions.

- An overarching Council covering employment and technical and vocational education and training (ETVET) should be created.
- The ETVET Council will be responsible for:
 - setting employment support strategies and overseeing their implementation;
 - matching unemployed people with jobs through a network of Employment Support Agencies;
 - tracking labour market statistics;
 - supporting the administration of unemployment insurance benefits.
- A regulator should be established for vocational training, independent of the government, for:
 - licensing of private sector training providers, in addition to the current public sector VTC;
 - accrediting instructors and enforcing quality control mechanisms among all providers.

In terms of launching employment support programmes targeting key industries, the

Agenda recommends that the following actions are taken:

- 'promote alignment of vocational training programmes with the skills requirements of priority industries;
- provide incentives to encourage the registration of informal workers in Employment Support Agencies;
- promote the employment of disabled people, starting with trial programmes with public and private employers;
- implement measures to increase female participation in the workforce;
- carefully encourage foreign labour substitution, while assessing the impact on industrial competitiveness, in order to free up employment opportunities'.

Three of the proposals relate directly to TVET¹⁸. The recommendations stress the importance of placing employment at the centre of the training agenda, as well as the need to reorganise TVET governance and structures. The central proposals are to establish an Employment and TVET Council and an Accreditation and Licensing Agency, reform the Training and Employment Fund and remodel the VTC by making it autonomous. The proposals give substantial weight to private sector participation in governance and management of the system, including a two-thirds majority for employers on the ETVET Council.

It should be noted that the government is currently in the process of identifying who will be in charge of TVET during the implementation phase of the National Agenda.

For the most part, the proposals on TVET point in the right direction. If properly designed and implemented, they will have a far-reaching impact on skills development and economic productivity. However, the proposals mainly present concepts that have not yet been prepared in detail, and a few of them seem inappropriate. Further consideration and detailed design are needed.

¹⁷ 'National Agenda 2006-15', Preliminary Summary, Amman, October 2005.

¹⁸ The other proposals deal with recommendations on employment, including the establishment of an overseas employment department; the establishment of an unemployment security programme; encouraging the replacement of non-Jordanian workers; a reduction of unemployment among disabled people; increasing the participation of the non-formal sector; increasing the participation of females; and national programmes to promote awareness.

The following section explains each proposal for TVET in the National Agenda, and provides some assessment. Chapter 5 identifies the kind of assistance that could be provided to support, *inter alia*, the implementation of the National Agenda.

The Higher Council for Human Resource Development

The Agenda calls for the establishment of an umbrella organisation, the Higher Council for HRD. The Higher Council would coordinate the three sub-sectoral councils (Higher Education, Board of Education and Employment, and TVET Council). It would be responsible for the supervision and coordination of the various sectors in terms of policies, strategies for HRD, monitoring and evaluation (Figure 11). Its establishment would require the revision of the role and laws governing the current three sub-sectoral councils. The NCHRD would support the Higher Council by carrying out specialised research for HRD, providing information and statistics for HRD and administering promotion and guidance programmes.

The creation of the Higher Council would integrate all stakeholders and could potentially address cross-cutting issues and matters of coordination in the supply chain. Little is said in the draft about the level and type of representation on the Council. It would need to avoid representation from too high a level, at which officials are not available for regular participation (one of the reasons that the current TVET Council has not functioned is because its chairperson, the prime minister, could rarely attend). The effectiveness of the Higher Council would also depend on a strong secretariat. The draft Agenda says little about how the secretariat function should be organised. One possibility not mentioned in the Agenda is that the NCHRD should be strengthened to enable it to perform this function.

Restructuring the TVET Council

The Agenda expands the scope of the current TVET Council by adding

employment, thus creating the Employment and TVET Council (Figure 12). The main responsibilities of the ETVET Council would be to develop policies and strategies for all major training providers (vocational training, technical education and community colleges), as well as employment support. Employment support includes cross-matching between job seekers and internal and external job opportunities, support for the unemployment security plan and follow-up of labour market statistics. The functions of the Council include management of the Employment and Training Fund (see below).

The ETVET Council would be chaired by the Minister of Labour and, significantly, two-thirds of the Council members would drawn be from the private sector. A secretariat would be appointed, to consist of a secretary general and executive staff members. The secretariat would concentrate on the following functions:

- establishing a network of agencies for employment support;
- renewing and restructuring labour offices including the National Employment Centre;
- rebranding the new employment support network;
- recruiting and training employment support staff;
- building a labour market information database through the NCHRD;
- developing, in cooperation with the SSC, the criteria for receipt of unemployment benefits;
- developing criteria for receipt of funding from the Employment and Training Fund.

‘Employment’ is a welcome addition to the scope of the TVET Council. As pointed out elsewhere in the draft Agenda, employment of graduates is the key indicator for success in training. Perhaps the most positive change is placing the majority (two-thirds) control of the council in the hands of representatives of the private sector¹⁹. This could ensure a practical orientation to the council’s work. However, employer organisations, and

¹⁹ Although it is not explicitly stated, presumably the other one-third of representatives would include the major stakeholders in training, the BAU, MoE and VTC.

more widely, social partners, need capacity-building to enable them to carry out effectively the functions that are required of them as partners in linking training and employment. Another positive feature of the proposals is setting the role of chair of the council at ministerial level rather than higher. However, one disturbing feature of the proposal is the recommendation that the council be filled with executive functions, such as on employment promotion and unemployment support. Apparently several executive departments or divisions would be established within the council to carry out these functions. These functions would seem more properly to belong in the MoL. If the council were to concentrate on its main functions of developing policies and strategies, rather than executing programmes, the NCHRD, with suitable strengthening, could perhaps assume the secretariat functions.

Organisation and management of TVET

Establishing a Quality Assurance Agency

A central proposal of the draft Agenda is to separate training provision from testing and evaluation by establishing a Licensing and Accreditation Agency. This agency would license private training providers, evaluate the performance of vocational training centres and private training, ensure the quality of teachers and ensure fair competition between training providers. More specifically, its functions would be to:

- make use of information and direct training to meet labour market demands;
- ensure the fair geographical distribution of training centres;
- regulate training in vocational training centres and the private sector to ensure quality;
- set the minimum criteria for curricula development;
- follow up on graduates' work and employer satisfaction.

The separation of training provision from quality control would be an excellent move. At present the various providers both carry out the training and assess the results. One specific implication is that the testing and certification functions now performed within the VTC would move to the new agency. It is vital that employers become part and parcel of the assessment process, as happens in other countries with leading TVET systems²⁰. However, employer participation is not currently stressed in the draft Agenda. Moreover, some of the functions assigned to the Quality Assurance Agency in the draft Agenda would seem to be beyond its scope. Examples include directing training to meet market demands, ensuring fair geographical distribution of training centres and good resource management (avoiding overlapping)²¹, and ensuring fair competition between training providers. Finally, the governance structure is unclear in the proposals.

Making the VTC independent

The draft Agenda states that 'the VTC should be made financially and administratively independent from the government'. Nothing more is stated about how this should be done.

As stated above, the VTC will become exclusively focused on training provision when it transfers its testing and accreditation functions to the new Quality Assurance Agency. Making the VTC independent and running it on business principles would eliminate some of the root causes of its current ineffectiveness. For example, the fact that it is embedded in the Civil Service structure prevents it from recruiting and retaining the best-qualified instructors. Financial autonomy could also provide incentives for the VTC to raise a much greater proportion of its income from outside the public budget. One essential requirement for success would be to restructure the current board of the VTC, which currently includes only 2 out of its

²⁰ For example, the German Chambers of Industry are deeply involved in the testing of graduates from the dual apprenticeship system.

²¹ The concept of fair geographical distribution of training centres is misdirected. An even geographical distribution is appropriate for educational institutions, but not training centres. Training centres should be located near enterprises, not evenly distributed geographically. Instead, the criterion should be whether there is fair access to training programmes.

14 representatives from the private sector. Representatives from the private sector should be in a strong majority in any new board. Such a major reform would need to be accompanied by financial incentives, severance pay, for example, in order to persuade current staff to leave. Most importantly, the reforms would probably be resisted by those with vested and entrenched interests. Strong and sustained political will would be required from the highest levels to implement the reforms.

Enabling the private sector to own or manage some VTC training centres

The draft Agenda states that the design of the vocational training framework should: 'facilitate the possibilities for the private sector to manage or own partially or fully some VTC training centres'. No further explanation is given.

The transfer by the government of the management of a tourism training centre to an industry group provides a precedent. A separate management company was formed to run the training centre, reportedly with positive results. Such alternatives deserve to be explored. If training centres are run by employers, the better the results are likely to be in terms of relevance of content to employment requirements, effectiveness of the training and efficiency in the use of resources. It would also be important to ensure that any increases in fees are off-set by scholarships to ensure access for poorer trainees.

Establishment of the Employment and Training Fund

The draft National Agenda includes reference to an Employment and Training Fund (presumably an expansion of the current TVET Support Fund that is financed by a 1% tax on company profits). The new fund would support training in all licensed centres, fund employment programmes and support trainees who are financially unable to pay for their training. The fund would be under the jurisdiction of the ETJET Council, and administratively would be under the Secretary General of the council. The secretariat of the council is supposed to develop criteria for allocation of the money.

The fund is potentially a major instrument for improving the performance of the training system. It could do so by allocating funds to priority programmes using strict technical standards and criteria that provide incentives, such as competition, and including public-private partnerships as part of proposals. The new fund would presumably be based on the existing TVET Support Fund, although the current fund is not functioning properly. It has training providers who hope to benefit from the fund on its board – a clear conflict of interest. Proposals are being approved without any clear criteria. The technical evaluation unit has not been activated. Some of the programmes that are supported do not appear to be appropriate, such as financing trainee scholarships. Technical assistance is urgently needed to redefine eligible programmes, to develop criteria and procedures for approval, monitoring and evaluation procedures, to institute proper financial controls and to provide capacity-building for staff.

Reforms not explicitly included in the draft National Agenda

Devolution

What seems to be missing in the National Agenda is the devolution of authority to training institutions to enable them to manage their own affairs. This could be one of the most important reforms for improving the performance of the TVET system. Greater autonomy is needed at institutional level in all three elements of the training system – community colleges, MoE vocational secondary schools and VTC training centres. Devolution is not a panacea, and must be properly phased in. The first phase should concentrate on the development of new systems and on staff training, which may lead to local training centres acting as research and development resources at local level. The second phase would be the gradual devolution of authority to training institutions.

Reform of budgetary procedures

The draft Agenda does not mention the potential to make better use of existing resources by reforming the basis on which

public funds are transferred within the TVET system and/or the setting up of an MTEF. Competition for funds, payment for results and normative financing are examples of financial transfer mechanisms that can stimulate better performance. This reform is important, not only for effective system management, but also in preparation for a Sector Policy Support Programme in Phase 2.

decade, mainly for the BAU but also for other elements in the system. However, its assistance terminated in mid 2005. JICA is planning to provide assistance to three model institutions. The World Bank has in the past assisted an enterprise-based training project (TESP) for unemployed workers. This project ended in 2002. No other assistance is currently provided, although the World Bank has expressed an interest in assisting the implementation of the recommendations of the National Agenda. A vacuum currently exists in terms of system-wide assistance for TVET (see also Chapter 6).

4.3 DONOR INVOLVEMENT

CIDA has been a major donor to TVET, providing assistance for more than a

Figure 11: Governance of Jordan human resource (National Agenda)

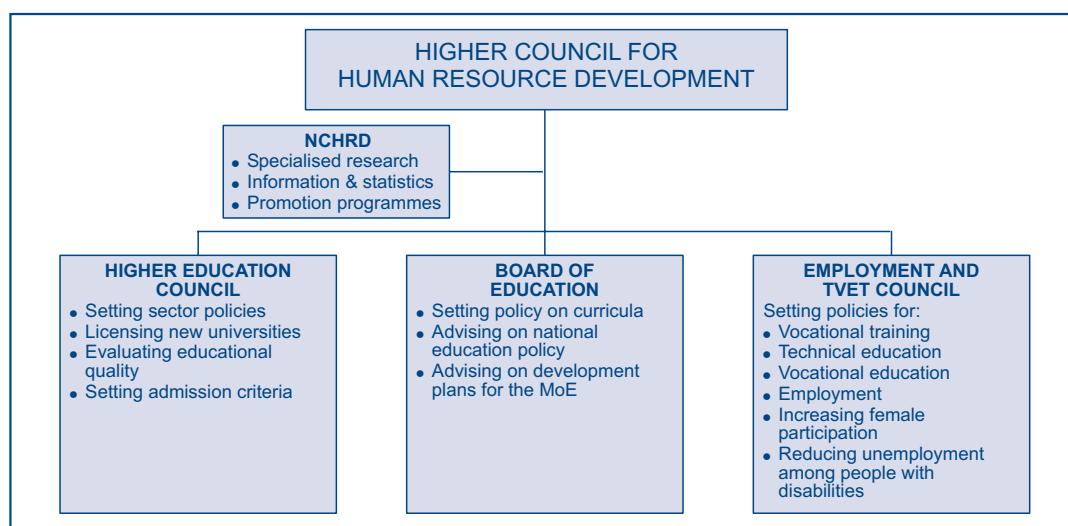
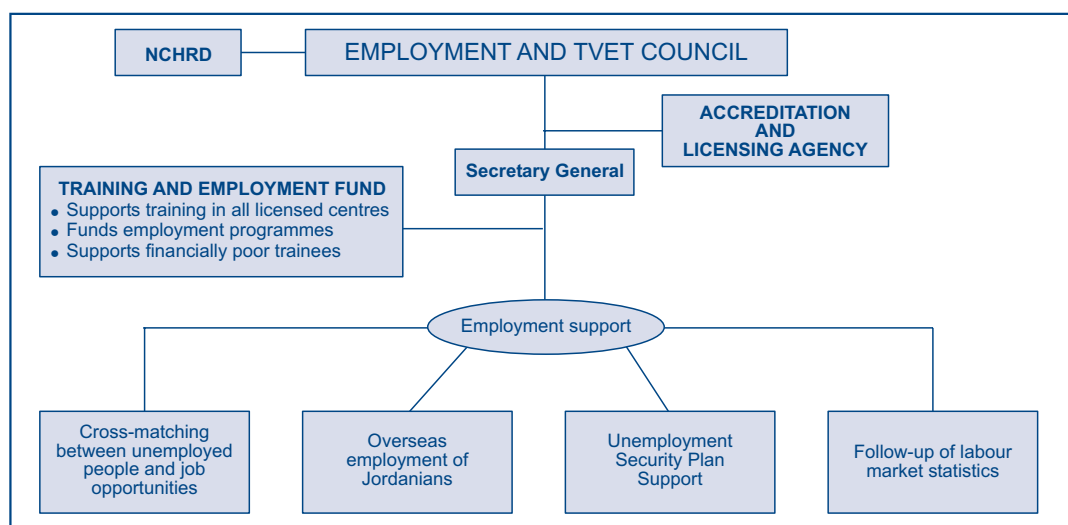


Figure 12: Governance of employment and TVET (National Agenda)



5. TOWARDS A MEDIUM-TERM EXPENDITURE FRAMEWORK FOR TVET IN JORDAN²²

5

5.1 OVERVIEW

It is well established that a sectoral medium-term expenditure framework (MTEF) requires all costs of delivering any programme to be allocated to that programme in the budget. In the TVET sector, several problems may need to be solved if this objective is to be achieved. However, an MTEF for the sector should integrate performance information with costs. This may include modalities and rules for budget development and execution. As far as budget development is concerned, accounting data that provides details of costs are required. This may help in assessing the effects on the budget of varying demand assumptions or performance objectives. Baseline changes, such as forecasts of trainee numbers, targets for trainee-staff ratios in TVET institutions, new programme initiatives such as the implementation of a new curriculum in training centres, or a new training programme, require modelling of

the relationship between output measures and costs. Furthermore, budget development provides a basis for funding TVET institutions on the basis of demand or performance. Chapter 3 of this report recommends a system of formula funding based on trainee numbers, socioeconomic or special needs and training centre location. This could be considered as the basis for relating these indicators to costs, which is necessary for developing the funding formulas. Moreover, budget development could allow choices to be made between alternative modes of provision. For example, government outputs could be costed for comparison with alternative private sector provision. Decisions could also be made on whether to extend or remodel existing centres, or build new ones.

With regard to budget execution, accounting data establish compliance with the rules for budget execution and enable trends in expenditure to be monitored in

²² This section draws extensively on past studies on implementing MTEFs for education and TVET in a number of developing countries (Tunisia: World Bank, 2000; and Kuwait: World Bank and KISR, 2002).

relation to the budget. This data can also provide information to enable managers to make decisions within budget provisions on the efficient and economical use of resources. For such decisions, accounting data need to be reliable and timely, but also in a useful form.

The main problems with the existing accounting information system in Jordan are that the categories are not consistent with the international economic classification, and that expenditure related to the same programme is incurred by several entities and not accumulated and reported under one heading. In fact, consistent economic classifications are an important first step towards a full and proper accounting of resources – both capital and current – used in the delivery of TVET services. In this respect it is always recommended that the government implements an expenditure classification system that properly identifies the economic costs of government programmes.

In addition, the TVET institutions and the MoF should introduce a system of reporting for TVET expenditure that reflects the programme and economic classifications of TVET budgets by introducing a new chart of accounts for TVET and redesigning reports so that they better reflect programme and input cost definition. Lastly, the government should enable reporting on financial transactions that properly reflects the overall objectives and costs of government budgets.

Beyond that there is the question of the appropriate accounting convention. Here the main issue is between cash and accrual accounting. Cash accounting records only cash flows and cash balances. With a proper classification system it can provide useful information for budget decision-making and accounting for control and compliance in execution. The accounting system currently used in Jordan is not fully consistent with economic classification and commercial standards. It does not enable incentives to be put in place for more efficient use of resources, particularly in terms of capital. It does not facilitate the development of a

quasi-market system in which the government purchases services from providers at prices that properly reflect the full costs (current and capital) of production. It will be a significant change from cash accounting and will require accounting staff with knowledge of how to install and operate accrual accounting systems, as well as managers who know how to make use of the available information. The priority for Jordan currently appears to be to improve the reliability of the present cash accounting system.

Furthermore, the way the budget is prepared in Jordan means that it does not easily fit within spending limits, either overall or by sector. The operating budget is prepared on the basis of a 'bottom-up' approach. Each institution submits its bids for staff and other operational expenses to their finance departments. The bids are subject to some screening centrally and then assembled and submitted to the MoF.

Bids for both staff and expenses in the TVET sector's budgets are supported by estimated current wages and benefits, expected increase in salaries, additional recruitment, and some expected increases in other operational expenses. The existing staffing provisions, which dominate the overall operating budget, cannot be touched. It is also apparently assumed that current provision for fee exemptions are largely predetermined by fixing a budget limit.

Requirements for building construction and maintenance are not related to any development plan for the country. However, the consequence of these predetermined amounts is that probably well over 90% of the operating budget is allocated before analysis begins in the MoF. Thus the MoF's strategy for dealing with bids is defensive: at a line-item level, it can question the underutilisation of the previous year's budget and any request for an increase over last year's actual expenditure. Furthermore, while there is a forecast of capital requirements as part of the development budget, there is no previously determined multi-year target for total (current plus capital) TVET spending

5. TOWARDS A MEDIUM-TERM EXPENDITURE FRAMEWORK FOR TVET IN JORDAN

as part of a government-wide expenditure strategy. As a result of all these factors, the current system is not particularly good at aligning actual spending with requirements, with some significant overspending and underspending in annual actual expenditure compared with the budget.

With regard to the efficiency of resource allocation, a number of features of the Jordanian budget process make it difficult for high officials (ministers and general directors) to make decisions that reflect their relative spending priorities. Furthermore, the budget system could be considered rigid and non-transparent.

It is rigid in the sense that it is difficult to control it in terms of altering training priorities by reallocation rather than by simply spending more. It is non-transparent in that it is very difficult to see what the country is getting in return for the money that the government spends on vocational and technical training.

The development of an MTEF for the TVET sector is divided amongst four ministries (MoE, MoHE, MoF and MoP) and three TVET providers (MoE, VTC, and BAU), which makes it difficult to develop a coherent overall expenditure strategy. The three public training providers do not appear to communicate effectively on strategy development, budget execution or evaluation of system performance. The MoF and the MoP, who support the sector in terms of both current and capital expenses, do not cooperate over the management of the sector in the country. Information systems between the various agencies involved in the sector are disjointed. Decision-making appears uncoordinated in all respects.

A further difficulty with making budget decisions solely on training grounds is that there are conflicting objectives for training expenditure. As well as serving training needs, the budget appears to be used as a tool of public employment policy and not as a support for the development of the sector. This is not consistent with efficient TVET spending. It is mainly through the additional funds provided by the MoP, financed through foreign donations and

loans, that the government is supporting capital expenses. Coordination between the MoF and the MoP is almost non-existent, and budgets for the three public training providers are prepared on the basis of the MoP's expectations of foreign aid and loans. Almost the whole of the capital expenses are financed through the MoP.

This policy is not suitable for a coherent strategy of sector development, as public resources are not consistently oriented to the sector. In many years, effective expenditure is much below expectations, as funds from the MoP are not forthcoming. Other problems are related to the relatively high proportion of the TVET operating budget that is committed to staffing. It appears that overstaffing is endemic in the TVET sector in Jordan, in terms of both administration and training staff. Moreover, a large number of the training staff are considered to be no longer suitable for the new needs of training in the country, given the new economic challenges faced by the Jordanian economy.

Government employment policy in Jordan seems to be the most significant obstacle for the future implementation of a development strategy for the sector. In fact, the job security enjoyed by public employees does not allow the recruitment of more skilled trainers. In addition, wage increase policy in the public sector is not linked to any productivity or performance targets.

The functional classification of expenditure in training institution budgets and the lack of good quality supporting detail makes it difficult to make any assessment of the outcomes of the current TVET system and of how new spending might be related to improved performance.

There is a high-level and functional classification of expenditure in the budget, but it is of little interest for either budget preparation or budget execution because it is too aggregated to allow decision-making. The government always decides on the expenditure to be allocated to organisational units, chapters and line items, rather than to programmes. It is

doubtful whether it could make useful decisions on programmes because there is no information that would explain in detail what it was buying for its money in terms of specified results and associated performance measures.

Finally, the total budget is not closely analysed in terms of the country's three-year plan for social and economic development. There are some broad priorities for training in this plan, though there is no detailed programme for medium-term development of the sector. However, the MoP has no role in analysing total training expenditure in relation to these objectives. The ministry can only support training providers with additional funds from foreign donations in order to achieve some investment, but there is no coordination with the MoF. Each of these two institutions is financing training providers according to its specific regulations and budget constraints.

With regard to the operational efficiency of the sector, budget execution by TVET providers in Jordan leaves no room for innovation or flexibility by individual training centre managers. There is virtually no delegation of expenditure authority. In the public training sector, ministry officials and centre principals have very little authority to commit public funds. It is apparently out of the question that institutions might make any of their own personnel decisions, and school principals have very little discretion to spend from their budgets. They have a very small fund for major maintenance and operational expenses, but any significant expenditure is subject to central decision and/or procurement. This situation partly reflects the fact that in the TVET system as a whole, there is no concept of autonomy for training centres. Public training centres are simply at the bottom of their respective ministries or central organisation hierarchies and have no element of parent or community governance. The solution to these problems lies not only in the TVET sector but also in the wider budget system.

The implementation of a sectoral MTEF seems to be the most practical way of ensuring the continued development of the TVET sector in Jordan.

5.2 ESTABLISHMENT OF AN MTEF FOR THE TVET SECTOR IN JORDAN: STEPS AND ACTIONS

This section discusses system improvements that will be needed in order for effective change to be introduced and maintained in Jordan's TVET system, and in particular the institutional and budgetary framework within which resources are spent on the TVET sector. In this respect, the rationale of implementing an MTEF may cover the organisational structure of this sector as well as its financial planning and budgetary procedures.

The basic question is whether this framework will assist the government of Jordan in providing the best possible TVET system for the country at a reasonable cost. The framework can be analysed using three main criteria.

- Fiscal sustainability: Can the government balance the share of resources allocated to the TVET sector with other demands on public resources, within an overall limit on public spending?
- Allocative efficiency: Can the government allocate money to the TVET budget in a way that best meets its objectives?
- Operational efficiency: Can the MTEF be implemented in a way that ensures that objectives for TVET sector will be achieved efficiently and at minimum cost?

Requirements for an MTEF for the TVET sector

This section of the report defines what would be required in order to develop and implement an MTEF for the TVET sector in Jordan. It draws on experiences from other countries, mainly the Kuwaiti and Tunisian cases and some past study proposals for implementing sectoral programme budgeting in these two countries. The discussion concerns both developing an MTEF and using it as an aid to decision-making and management in the public sector.

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An MTEF is a system of budget development and execution organised around achieving results for public benefit. A wide variety of different terms is used to indicate that budgets define results. They include programme budgeting, performance budgeting and output budgeting. A development strategy for any sector is composed of multiple programmes. Each programme is defined as a group of related activities, all under the control of the same manager and organisational unit, contributing to a specific objective of public policy, with specified and measurable results.

An MTEF groups together all the expenditure required to execute all programmes for the same sector. The steps necessary for the development of an MTEF for the TVET sector can be defined as follows:

- classifying the sector's expenditure by programme;
- specifying the results required for each programme and how they will be measured;
- developing the financial and information systems required to record actual expenses against budget and actual results against target results;
- developing a statement for each programme that links programme objectives and costs to measured results.

Developing a programme classification

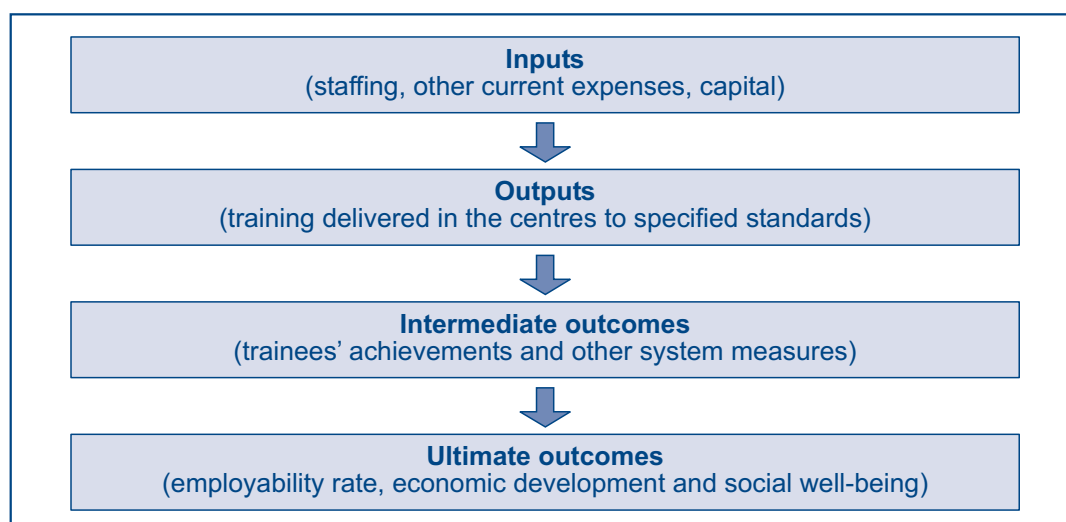
An MTEF for the TVET sector should classify budgeted expenditure and revenue by the purpose that they serve, which can be defined in one of the two ways:

- outputs: the services that the government expects will be provided;
- outcomes: the benefits that the government expects for individuals.

When a decision to implement an MTEF is taken, someone must be responsible for implementing it. The MTEF also needs to be monitored to ensure that its policy objectives are being achieved. Outcomes are a measure of the value of these services in terms of the objectives of the TVET sector. Figure 13 shows the basic relationship between inputs, outputs and outcomes.

Outputs should be defined so that they clarify the responsibility of a particular organisation involved in the TVET sector. They can form the basis of agreements or contracts between the government and TVET service providers. Outcomes are chosen in the expectation that government outputs will influence them, though they may not necessarily be the sole responsibility of any single organisation. For example, training achievement at university may depend not only on the quality of instruction at university but also partly on the quality of the trainees' previous schools and the personal motivation and learning ability of the trainees.

Figure 13: The sequence from inputs to final outcomes



Conversely, one output may contribute to several outcomes: training centres can offer trainees the opportunity to equip themselves with new skills at centre level, and also to become an input into further training beyond centres. The relationship between outputs and outcomes is therefore not necessarily simple. When dividing up an overall budget into programmes, the basic principles are as follows:

- group together closely related outputs that contribute to the same outcome, and that will therefore be affected by the same decision on outcome objectives;
- define outcomes in a way that allows them to be linked clearly to specific outputs; in most cases this will mean defining intermediate outcomes, such as examination performance, that can be measured and related to particular outputs, rather than high-level outcomes, such as economic or social well-being, that depend on many factors.

It is very important to analyse the existing programme classification and to reclassify each TVET service provider expenditure in programme terms that provide a more meaningful allocation of costs and a basis for developing an MTEF for the sector. It is therefore recommended that the government develop a classification of TVET programmes that properly reflects the activities and the government's policy objectives for this sector.

Specifying required results

Effective decision-making on an MTEF for the TVET sector requires that the results expected for each programme under the MTEF are clearly specified. Thus, where possible there should be quantitative measures of achievement related to these results. Results should be specified and measured for both outcomes and contributing outputs. Some principles of measurement are listed below.

- *Specifying outputs:* Output should describe the nature of services provided by the TVET providers. Furthermore, outputs should be effective in terms of their contribution to the specified

outcomes, and should be within the control of the organisation, whether through direct delivery or contractual arrangements with third parties. The outputs should also identify what the government is paying for (including being measurable in terms of price, quantity and quality), should be amenable to comparison between actual or potential suppliers (especially through price analysis), and should be organised so that the organisation's structure and management systems can be mapped to its outputs.

- *Specifying outcomes:* In order that outcomes are useful for an MTEF, they must meet certain requirements. They must accurately reflect the policy objectives of the government, be achievable, be linked to outputs so that the cause and effect relationship between outputs and outcomes is apparent; and they should be measurable, so that progress towards achieving them can be assessed. This is why it is important to provide some measures of outcomes as indicators for the government of the success of its policies. Typically, measures are chosen as indicators of the impact of the TVET sector.

Developing a programme statement

The programme statement draws together all the information about each programme into a single document. The statement can form the basis both of government decision-making on the budget and of the legislature's scrutiny of the budget and review of programme performance. The programme statement should contain:

- the name and a general description of the programme;
- the ministers and organisations responsible for programme delivery;
- the objectives of the programme, identifying any priority, special projects or sub-programmes of importance;
- output specification and measures (quantity, quality and timeliness);
- efficiency measures: cost per unit of output;
- outcomes contributed to, measures and sources of data;

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- effectiveness measures: ratio of outcome measures to outputs;
- the budget provision for the programme.

Programme statements would form the basis of government decisions on programme budgets. Initially these statements would need to be based on estimates of expenditure in terms of outputs until outcome measures can be developed as discussed above. It is therefore recommended that the MoP, the MoF, the MoE, the MoHE and the MoL collaborate on the development of programme statements of the ministries and organisations involved in TVET. In the first instance interim programme statements could be based on estimated one-year programme costs and measures of outputs, and in the longer term they could be further developed to incorporate outcome objectives.

Overall, the budget provision should be compared with the previous year's actual expenditure and the corresponding figures for output and outcome objectives. The budget figure should separately identify the provision for priority objectives. Expenses can be shown by the main categories of personnel (e.g. professional, administrative), operating expenses, capital expenses and any 'administrative payments' made under the programme. For budget decision-making, the statement can also include forecasts of revenue and expenditure and output for the second and third years of the forecast period.

Decision-making and budget execution using programme budgets

Programme budgeting has two main functions. The first is to ensure that budgets are developed in line with government objectives. In fact, it enables decision-makers to make choices about where to allocate the available funds for the budget, based on information about the results that the budget allocation is expected to achieve.

The second objective is to ensure that budgets are executed to achieve their objectives. This enables decision-makers to set targets for the achievement of results

and to hold civil servants accountable for achieving them.

The single most important feature of an MTEF is that it shifts the focus of both budget decision-making and control of execution from inputs to results. This requires reconsideration not only of the budget structure, but also of how the government makes decisions about its budget and the system of management of budgets during the execution phase. If a government decides to adopt an MTEF it should therefore do so as part of a review of the overall process for development and execution of the budget.

Budget development – The requirements for disciplined budgeting

Decision-making on an MTEF will be most effective if the other conditions for successful expenditure planning and budgeting are met. The greatest risks to budget discipline are the absence of prior expenditure constraint, significant off-budget expenditure and multiple channels of decision-making. Therefore, as well as an efficient budget classification system and supporting information, disciplined budgeting is required in the form of three main tasks. These tasks should include:

- an MTEF with three-year rolling targets for public revenue and expenditure, the first year of which becomes the budget ceiling within which detailed budgets are prepared;
- a comprehensive budget covering all public expenditure and sources of risk to government revenues, such as enterprise losses or decreases in consumption;
- a single integrated budgeting process so that decisions on all these aspects are made in the light of a consistent set of programme objectives, rather than large chunks of the budget, such as personnel expenses and public works, being effectively fenced off from consideration within the overall target expenditure ceiling.

It is then strongly recommended that the Jordanian government introduce an MTEF

for the TVET sector as soon as possible, possibly in time for the preparation of the 2007 budget and coordinated with the introduction of a new expenditure classification system. However, some preconditions for implementing an MTEF are required in the form of including effective macro-forecasts, a proper classification of expenditure and appropriate detailed supporting systems for forecasting, and coordination with budget decision-making and implementation.

The essential quality of an MTEF is that it sets a ceiling on public expenditure for a period of years in the future. This is a necessary fiscal precondition for making decisions on public spending. Because TVET is becoming an important spending sector of total public spending in most developed countries, a programme budget for TVET needs to be decided within these overall limits. The introduction of programme-based decision-making in the TVET sector before this precondition can be met is not recommended as a staged progress. It is therefore recommended that:

- the government of Jordan implements a system of budget decision-making that fully integrates decisions on personnel, other operating expenses and capital by, in the first instance, improving coordination between the MoF and MoP and, in the longer term, consolidates all budgeting functions into the MoF;
- the MoE, MoF, MoHE, MoP and MoL collaborate on the development of three-year targets for TVET spending as part of overall government fiscal plan;
- the MoE, MoF, MoHE, MoP and MoL collaborate on the design and implementation of a system for developing and approving programme budgets and translating them into specific staffing and budget authorities.

MTEF execution and budget approval and control

Programme budgeting in the execution phase requires the government to assign accountability for results to specific organisations and then hold them accountable for achieving those results, within the budget provided.

The basic problem is that it is not efficient to hold a department responsible both for achieving results and for keeping expenditure within budget on a number of different inputs. If managers are to be made accountable for results, then they should be given the freedom to decide how to spend their budget to best achieve the results. Giving its civil servants this authority requires the government to be confident that they can exercise it responsibly. Most governments will in fact put some limits on this spending power, for example on Civil Service pay and conditions of employment, or rules for procurement processes, or limits to spending on assets. In addition, civil servants should not have this freedom unless there are internal control checks inside a department – and effective external audit – to ensure that the authority is exercised lawfully, responsibly and efficiently.

It is possible for a government to organise its budget development on a programme basis and to report results on a programme basis, but not to assign responsibility for achieving programme results. However, a significant proportion of the benefits of programme budgeting will be lost if no one is accountable for achieving them. If the expected results of the MTEF for a given sector are accountable for compliance with rules for budget inputs, as is currently the case, then they cannot at the same time be accountable for achieving the results that ministers want.

In terms of processes, in the execution phase an MTEF requires timely and regular reporting of expenditure on each programme, adequate central monitoring and surveillance against each programme, objectives, an effective internal control system for agencies, and confidence in the management ability of both central ministries and the provider organisation. It is therefore recommended that the MoE, MoHE, MoL, MoF and MoP collaborate on the development of a system for directing and controlling agencies and organisations by programmes, including decisions on authority to be delegated to ministries and training centres for approval of operating expenditure, staffing decisions and budget transfers.

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In terms of the government budget, the Jordanian constitution fixes the steps of budget approval and control. In fact, according to Articles 112 and 113 of the Jordanian constitution, the general budget and each of its items is to be approved by parliament and should be submitted to parliament one month before the start of the financial year. If the budget is not approved before the start of the following year, funds are allocated at a twelfth of the previous year's budget, on a monthly basis, until a new budget is promulgated. The constitution, by virtue of Article 119, stipulates that a law should be enacted to establish an Audit Bureau for monitoring and auditing the revenue and expenditure of the state and the manner in which spending takes place, and that this bureau should regularly report its findings to the House of Deputies.

According to the Audit Bureau Law No 28 of 1952, the bureau is charged with monitoring and auditing public finance accounts in ministerial departments, public enterprises, local authorities and rural councils. The Audit Bureau of Jordan presents an annual audit report to the House of Representatives at the start of each ordinary session, or at any time requested by parliament. This report includes the bureau's findings and comments, as well as any violations disclosed by its audits and the liabilities imposed. The president of the Audit Bureau may at any time also present to the House of Deputies any special reports that need to be addressed urgently by the parliament.

The MoF also submits a financial accounting report for each fiscal year, in a period not exceeding six months after the ending of the fiscal year. The annual report and the recommendations of the Audit Bureau are subject to review and discussion by the financial committee of the House of Representatives and the ministries concerned, in the presence of the president of the Audit Bureau.

The system appears to be very well established in terms of the monitoring and auditing of public finances, but the outcomes of this system depend mainly on the quality of governance in the country.

Governance issues

The changes in ministry and training centre governance discussed here would also require a fundamental change in the policy of the government on such matters as trainer employment, and are therefore only a longer-term prospect.

Nevertheless, there are advantages to an increased level of local governance in centres and a clearer separation of the teaching and inspection functions in the schools sector. It is therefore recommended that the government carry out a review of training centre governance with a view to deciding on the establishment of centres as semi-autonomous entities with their own boards.

5.3 IMPLEMENTING AN MTEF: A MULTI-STAGE APPROACH

The main message from the discussion of the implementation of an MTEF for the TVET sector is that in order to be fully effective as a tool of budgeting it requires the development of a number of interrelated disciplines:

- an overall budget decision-making cycle;
- specification of programme objectives and the relationship between outputs and outcomes;
- reliable reporting of results in terms of outputs and outcomes;
- good forecasting and reporting of programme costs;
- a clear definition of accountability for the implantation of programmes.

The introduction of an MTEF for the TVET sector in Jordan will require the following main actions to be taken. Some are specific to the TVET sector, while others are more general system requirements. Table 12 is a checklist of the steps required for the development of a sectoral MTEF together with the authors' comments on the main tasks and constraints for the Jordanian authorities.

Table 12: An MTEF for the TVET sector in Jordan – Checklist

Step	Comment	Timing (approximate)
Develop TVET sector programme definitions which bring together objectives for all TVET programmes	There is a need to restructure present programme classification to clarify the relationship of programmes to objectives.	10–12 months under the leadership of the ETVET Council
Classify all revenues and expenses of the public TVET providers by TVET sector programme category	Full implementation would require re-specifying expenditure items in the chart of accounts to conform to the international government financial statistics standards and a new chart of accounts for ministries.	Interim solution: 6–12 months Long-term solution: three–four years (based on IMF estimates, 2002)
Develop specifications for TVET sector programme outputs	Some indicators of process outputs are available. Little statistical information available on quality of delivery; substantial changes may be required to inspection function and schools and centre reporting.	Two–three years
Develop specifications for TVET sector programme outcomes	Some information available on progression rates and attainment at end of technical education and vocational training; no assessment or testing at other important transition phases.	Five years on average (experiences from other countries: Tunisia and Kuwait)
Prepare three-year forecasts of TVET expenses for each sub-sector programme activities, based on the information above ²³	The minimum requirement is for adequate expense classification, basic demand measures (trainee numbers, progression rates) and three-year forecasts of demand.	Two–three years Cooperation with Al Manar and main TVET providers required
Agree on a three-year 'sector envelope' to set expenditure ceiling for TVET, to be rolled forward one year each year	This needs to be related to the TVET sector fiscal plan and the overall fiscal plan for the public sector in Jordan.	Three–four years (based on IMF estimates)
Prepare a TVET sector programme statement and detailed budget for each sub-sector programme	This requires the identification of specific programme objectives in terms of output and outcomes (with measures of achievement), with details of the expenditure required to achieve the objectives, within the expenditure ceiling for the first year of the three-year sector envelope.	Programme statements based on outputs feasible in three–four years (based on IMF estimates and the experiences of other countries)
Agree on what authorities will be delegated to the MoL, the MoE and the MoHE for implementation in terms of approval of operating expenditure, staffing decisions and budget transfers within and between budget chapters	This requires a major rethink of government expenditure and staffing control policies.	Totally dependent on the capacities of the ETVET Council to establish a sector strategy
Agree on the process for reporting on achievement of TVET sector programme objectives and costs in the course of the budget year	This requires the development of a management information system for output measures and integration with the financial management information system.	A database of non-financial indicators could be developed in two–three years; substantial changes in the MoF information system should be implemented; cooperation with Al Manar required
Consider and approve the TVET sector programme budget and translate the decisions into specific staffing and budget authorisations for the TVET providers for the forthcoming budget year	This is an interim solution based on process demand measures and a reclassification of existing TVET providers' expenses, but with no change to the basic staffing and expenditure control system.	Two–three years

²³ Three years is a generally accepted period for forecasting. Forecasts of operating expenses for any longer period than this tend to become increasingly unrealistic. The MTEF advocated by international agencies like the IMF and World Bank usually assumes a three-year planning horizon.

5.4 CONCLUSIONS

Implementing an MTEF for the TVET sector is not an easy task in Jordan. As has been explained in this chapter, many reforms need to be introduced in the financial and budgetary system in the country. The checklist above indicates that there are several significant financial and budgeting changes required before an MTEF for the TVET sector can be introduced in Jordan. A number of steps that take substantial time are needed before the government can meet these requirements. However, the government should start designing a programme classification with the objective of full introduction by the 2007/08 budget. The classification should incorporate a review

of the operational and functional objectives of the government's entities; and design of a programme structure, performance indicators and performance evaluation methodology and programme profile forms. As already emphasised, leading the process is the MoF, which is expected to put in place the conditions for cooperation among all the ministries involved: the MoE, the MoHE, the MoP and the MoL.

Programmes should be developed on a pilot basis in the 2006/07 budget for the MoE, the MoL, the VTC and the MoHE. It is always considered that the full value of a sectoral MTEF would only make sense if it were part of a comprehensive plan for a shift to a programme budgeting system for the government as a whole.

6. STATUS OF DONOR COORDINATION

6

Only a preliminary assessment can be made, as most of the required mechanisms are not yet in place.

6.1 CURRENT DONOR ACTIVITIES IN TVET

In addition to ETF research projects, there have been several major donor projects in the past.

- Economic Development through Technical Skills Development Project (EDTSP) 1995-2000 was a CIDA-funded project that worked mainly with the VTC and college system.
- Sustaining and Extending Technical and Vocational Education and Training (SETVET) 2001-05 was also financed by CIDA. SETVET was a comprehensive TVET reform project working with all three public delivery systems, the NCHRD and the TVET Council²⁴.
- Human Resources Development II (Al Manar) 2004-07 is funded by CIDA and the EU (through the ETF). Al Manar aims to ensure better labour market decisions by institutions, employers and prospective employees by providing comprehensive, timely and up-to-date gender-sensitive information supported by Internet-based services.
- Euro-Jordanian Action for the Development of Enterprise (EJADA) (to 2006) is funded by the EU. EJADA aims to facilitate the integration of Jordan into the Euro-Mediterranean free trade area by improving the competitiveness of SMEs. In terms of TVET, EJADA provides capacity-building inputs to key education and training providers to enable them to deliver more demand-driven, quality services to Jordanian SMEs²⁵.
- Regional Cooperation of Selected Arab States in Vocational Education and Training (initial phase 2003-07) is funded by GTZ. Its purpose is to

²⁴ See <http://setvet.nchrd.gov.jo>

²⁵ See <http://www.ejada.jo>

strengthen regional cooperation in TVET and the sharing of development work in TVET²⁶.

- JICA has provided assistance to the Specialised Training Institute for Metal Industries (STIMI) of the VTC (1997-2002), including the provision of equipment and instructor development.

In addition, two other reform initiatives are worthy of note. The ILO is supporting the MoL in establishing a Social Dialogue Project that provides technical support to the ministry to improve social dialogue procedures, enhance group negotiations at national, sectoral and national levels, and build the capacities of the MoE and employers' and workers' associations, in order to activate tripartite consultations and discussions.

The Education Reform for a Knowledge Economy (ERfKE) project (2003-08) warrants special mention. ERfKE is a major project costing USD 380 million that is supported by 10 development partners²⁷. The programme has four main components:

- governance and administrative reform to reorient education policy objectives and strategies;
- development of education programmes for the knowledge economy;
- provision of computers and other aspects of the learning environment;
- promotion of early childhood education.

The programme covers vocational secondary education, including assistance for strategy development and provision of computer facilities. Of particular interest are its experiments with devolution of authority from the central to regional level.

Donor coordination in TVET takes place under the auspices of the UNDP in Jordan (UNDP Donor Group, Subcommittee on Education). As part of the background work for the National Agenda, a donor group²⁸ prepared a position paper for the Technical

Committee on TVET. CIDA has been the lead donor in the TVET sector, but at present there is a leadership vacuum following the completion of the major CIDA SETVET project and the departure of its long-term TVET specialists.

6.2 DONOR PLANS

Within this context the ENP Action Plan proposes support to 'reform and upgrade education and training systems and work, within the framework of the Jordanian national programme, towards convergence with EU standards and practice'.

Specifically, this includes:

- 'developing and implementing a vocational training programme';
- 'working towards enhancing the quality and capacity of institutions and organisations involved in the quality assurance of education and training provision; addressing accreditation and licensing procedures';
- 'taking steps to increase the involvement of civil society stakeholders and social partners in higher education and VET reform'²⁹.

The World Bank Country Assistance Strategy for Jordan is currently in preparation. It includes in draft form the possibility of assistance to the TVET sector, specifically to help implement the various recommendations of the National Agenda (see Chapter 4). It foresees the following challenges:

- 'ensuring an appropriate design of the new system including the new laws/decrees/regulations that need to be drafted and "getting the incentives right";
- bringing all the stakeholders on board including the vocational training centres themselves, employers, Ministry of Labour, students, among others;
- sound implementation of the new system'.

²⁶ See <http://www.arab-tvet.net>

²⁷ Including the World Bank (USD 120 million loan), the EC (EUR 42 million grant), the Arab Fund for Economic and Social Development, CIDA, DFID, KFW, EIB, IDB, JICA and USAID.

²⁸ Consisting of GTZ, CIDA, SETVET, EC, UNDP, JICA, UNRWA and the Spanish Embassy.

²⁹ European Neighbourhood Policy, 'Draft EU/Jordan Action Plan', pp. 21-22.

The government has reportedly requested the World Bank's technical assistance in designing the new training system in all its new aspects, including:

- the role and function of the new ETVET Council;
- the design of the new accreditation agency;
- the appropriate incentive structures to encourage the private sector to assist in training provision or to conduct on-the-job training;
- the design of the Employment and Training Fund with transparent rules and regulations on the allocation of funds;
- the restructuring of the vocational training centres as necessary;
- the setting up of a monitoring and evaluation system for the new training system³⁰.

JICA currently envisages supporting TVET in Jordan through two projects:

- continued support for the VTC's STIMI (three-year project of JOD 5 million), which aims to support the VTC in upgrading a number of curricula from craft to technician level;
- support for three model training centres (three-year project) with the main focus on building the capacities of staff in planning, management, evaluation and technical issues; the selected centres will be in Jerash (North), Amman (centre) and Aqaba, and as well as equipment, the assistance envisaged includes technical assistance, study visits and training in Japan.

6.3 GOVERNMENT PARTNERSHIP RELATIONSHIPS

1. *Sector definition and leadership:* There is no single TVET sector within government, and no single leader up to now. Instead, there are three TVET elements of the system (MOE, VTC and BAU), and three heads corresponding to those elements. The TVET Council, which could provide sectoral integration

and leadership, has not so far functioned properly to put in place the conditions for a reform of the sector. This could change if an effective ETVET Council could be created, as proposed in the National Agenda. In that case the council, chaired by the Minister of Labour, could take the lead, and following consultation with the Board of Education and the Higher Education Council could speak for the TVET sector as a whole and report to the HRD Council.

2. *Leadership of the sector by the government:* The National Agenda clearly indicates a deep appreciation within the country of the need for change in TVET governance and linkages with the private sector.
3. *Government-led donor coordination:* None has existed up to now in TVET, but the ERfKE project could provide a model and some useful lessons.
4. There have been no consultative group meetings up to now in TVET.
5. There is no sector programme, and by definition, no procedures for reviewing the progress of its implementation, and no memorandum of understanding.

6.4 CONDITIONS FOR A SECTOR-WIDE APPROACH

1. An overall sector programme needs to be developed, based on the recommendations of the National Agenda, and updating, improving and revising the three specific strategies that exist for the MoE, VTC and BAU.
2. An MTEF needs to be formulated based on the overall sector programme.
3. Multiple partners need to be interested in supporting the sector: at present only the EC and the World Bank have indicated major interest in supporting TVET. JICA has plans to support specific institutions, but reportedly has no interest in participating in a sector-wide approach (SWAP). Other donors could undoubtedly be attracted based on the development of an overall sector programme and an MTEF.
4. Strong government leadership is required in the sector, and in donor

³⁰ 'Jordan – Draft Country Assistance Strategy', World Bank, 2005.

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coordination. No overall leadership of the sector, in fact, no integrated TVET sector, currently exists. However, if properly constituted and established, the proposed ETVET Council could provide this leadership. The ERfKE project provides a useful precedent on donor coordination.

5. The partner organisations must be willing to harmonise procedures (common performance indicators,

reporting and supervision procedures and procurement procedures). The ERfKE project provides a useful precedent.

6. The use of normal (or strengthened) government procurement and disbursement procedures needs to be evaluated.
7. The scope and feasibility of pooled funds, leading eventually to direct budget support, need to be evaluated.

7. POSSIBLE EXTERNAL ASSISTANCE FOR TVET

7

Development partners could be instrumental in helping to design and support initial implementation of the National Agenda in TVET. Technical assistance over the next two years could prepare the new legal and regulatory framework, work out organisational, staffing and financing implications, and contribute to staff development and capacity-building. Three major objectives have been identified and detailed below:

1. develop key institutions in TVET;
2. introduce incentives for the financing and management of TVET;
3. enhance the relevance and quality of TVET.

Immediate assistance should be given to the Employment and Training Fund (financed by a 1% tax on enterprise profits) to define priority eligible programmes and to prepare sound criteria and procedures for the allocation of funds. The fund could then become the conduit for external assistance to finance priority training programmes. During this period priority

should also be given to supporting the development of the Higher Council for HRD and the TVET Council, and particularly the capacities of the NCHRD to act as an efficient secretariat.

A more detailed indicative timeframe for actions is presented below.

If the first-phase assistance is successful, after two years the foundations could be in place for larger-scale assistance through a TVET Sector Policy Support Programme.

7.1 OBJECTIVE 1: DEVELOP KEY INSTITUTIONS IN TVET

Component 1: Governance – The Higher Council for HRD

Possible external assistance: Technical assistance to build organisational structure, draft laws and by-laws and define the secretariat function (NCHRD), plus seed money to create new positions at the NCHRD.

Component 2: Restructuring the TVET Council to become the ETJET Council

Possible external assistance: The ETJET Council is to be the key agency in the training arena. Assistance in its design and establishment could be instrumental in making it an effective organisation that focuses on policies and strategies.

Technical assistance will be needed:

- to build the organisational structure of the council, draft laws by-laws, rules and procedures, and build capacity of ETJET council members (study tours and in-country seminars);
- to define and activate the secretariat of the NCHRD (establish the positions, staff training and office equipment that are needed).

Component 3: Development of employers' organisations

Possible external assistance: Technical assistance plus seed money is required to create new human resource units in the Chambers of Commerce and Industry, SMEs and trade unions. This would enable the employers and other social partners better to perform their functions on the council, and on other committees of stakeholders. The requirements are for staff training, study visits and funds for research on training needs among the membership of the chambers (along sectoral lines – to prepare branch profiles).

Component 4: Continued development of the Human Resource Information System

Possible external assistance: Assistance is needed in order to continue and strengthen the Human Resource Information System (Al Manar programme and TVET providers), with a focus on labour market information system development, conducting sectoral and tracer studies, and developing guidance and counselling models with assistance to labour offices. A survey of private training provision should be undertaken.

Component 5: TVET policy development

Possible external assistance: Technical assistance is required to help articulate a

comprehensive TVET policy and strategy, along with an MTEF. It is important that the ETJET Council makes such strategy development its top priority from the start. The former TVET Council never fully took up the task and, as a result, no comprehensive policy and strategy was created for TVET. Most of the elements of the National Agenda could fit within such a comprehensive policy. In addition, technical assistance should be provided to support the development of an MTEF for TVET.

Component 6: VTC autonomy – Making the VTC independent

Possible external assistance: If strong political will exists to push through this reform, external assistance could provide the following help:

- technical assistance for an institutional audit of the VTC;
- technical assistance to design a new governance structure, regulatory framework, systems and procedures, and to formulate the functions, organisational structure, legal basis for regulatory framework and staffing and budget implications;
- technical assistance to plan the disengagement from the Civil Service and to make the VTC more autonomous;
- capacity-building and staff training in new roles and responsibilities;
- at a later stage, funds for severance pay for employees released by the VTC.

Component 7: Devolution of authority to public training institutions

Possible external assistance:

- in the first phase, technical assistance to design the new regulatory framework, responsibilities, rules and procedures, and job descriptions;
- also in the first phase, technical assistance to design new reporting and accounting procedures and systems;
- considerable training of new administrative and managerial staff at training institutions (capacity-building) and technical assistance to help in implementing devolution;
- in a later phase, devolution on a pilot basis in a few institutions.

7.2 OBJECTIVE 2: INTRODUCTION OF INCENTIVES FOR FINANCING AND MANAGEMENT OF TVET

Component 1: Reinvention of the TVET Support Fund as the Employment and Training Fund

Possible external assistance: Technical assistance is required to develop procedures and by-laws that will reinforce private sector and donor participation in governance and avoid conflicts of interest. Immediate assistance should be provided for defining eligible programmes, and designing the criteria for allocation of funds, evaluation, and approval criteria for projects. The evaluation unit should be activated. Technical assistance is also needed for developing procedures and guidelines for project developers, and for capacity-building. Recommended condition: The Fund must adopt these objectives, technical criteria and procedures for allocation of all money in the Fund, not just external financing.

Component 2: Financing of priority programmes through the Fund

Possible external assistance: Once the above criteria are in place, the external partners could finance priority sub-projects on 50/50 basis. The assistance channelled through the fund could be substantial. Priority programmes could be pilot institutions that would try out administrative and management reforms, assistance to training in high-priority sectors, such as those defined in the National Agenda (textiles, leather, pharmaceuticals), or an expansion of centres of excellence. Training programmes for unemployed people would also be important, provided they are designed according to lessons gained from international experience³¹. Another priority would be to organise training for the informal sector (Haan, 2003).

Primary consideration would be given to financing pilot institutions.

Component 3: TVET budgetary reform

Possible external assistance: Technical assistance is required:

- to define the criteria for budget allocations, including normative financing and payment for performance;
- to support the preparation of an MTEF.

Component 4: Enabling the private sector to own or manage some VTC training centres

Possible external assistance: Technical assistance is needed to evaluate the precedent that has been set by the tourism training institution and develop rules and procedures for private sector management of VTC training centres.

7.3 OBJECTIVE 3: ENHANCE THE RELEVANCE AND QUALITY OF TVET

Component 1: Establish the Quality Assurance Agency

Possible external assistance: The Licensing and Accreditation Agency will be an important organisation for raising the quality of training and directing it towards the requirements of employers. Its functions may include the overall implementation and management of a national qualification framework. It will need to develop or have access to technical expertise in testing and assessment. The role, functions, structure, organisation and staffing of the agency have not been specified in the draft report. This affords an opportunity for the external partners to have a major impact on the design of the agency.

³¹ Training programmes for unemployed young people and adults generally do not, by themselves, generate employment. Such programmes will not solve the unemployment problem. There is no substitute for economic growth. International experience suggests that training programmes for unemployed people: (1) start with labour market information about skills that are in demand and surplus; (2) focus on on-the-job training and work experience sponsored by employers; (3) carefully target participants and operate on a limited, manageable scale; (4) deliver training through efficient providers selected competitively; and (5) package training together with employment services, guidance and job search skills. Source: 'Review of Active Labour Market Policies', World Bank, 2004.

The types of assistance that could be provided include:

- providing technical assistance to work out the role functions, organisational structure, legal and regulatory framework, staffing and budget implications;
- capacity-building for new staff (in-country and external training);
- equipping the new agency;
- providing seed money to launch its activities and carry out evaluations.

Component 2: Instructor training

Possible external assistance: Assistance is required to:

- revise the regulatory framework, allowing instructors to be hired on a part-time basis and at market rates (rather than exclusively through the Civil Service);
- improve the technical qualifications of instructional staff and trainers by developing and delivering training programmes, possibly through the NTTI.

Component 3: Re-equipping TVET institutions

Possible external assistance: This includes the financing of equipment and supplies in priority institutions and programmes on a competitive basis.

7.4 SUMMARY OF KEY OUTPUTS FOR PHASE 1

The following list shows the principal outputs expected from Phase 1 of external assistance:

1. establishment and operation of the Higher Council on HRD;
2. establishment and effective operation of the ETVET Council;
3. establishment of HRD units in the two main employer organisations (Chambers of Industry and of Commerce) and greater participation by SMEs;
4. development and adoption of a comprehensive TVET sector policy linked with employers;
5. establishment and initial operation of the Quality Assurance Agency;
6. decision on, and preparation of, autonomy for the VTC;
7. private sector management agreements in place for several vocational institutions;
8. the Employment and Training support Fund:
 - priority eligible programmes defined;
 - sound criteria and procedures applied for allocation of funds;
 - high-priority programmes financed.
9. devolution of authority planned and prepared for management of training institutions;
10. new performance-based criteria applied for allocation of regular budget funds to TVET.

7. POSSIBLE EXTERNAL ASSISTANCE FOR TVET

Table 13: Indicative timeframe for action

Phase 1 components	Year 1				Year 2			
	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4
Objective 1: Institutional development								
1. Higher Council for HRD and its secretariat	X	X	X	X	X	X	X	X
2. Employment and TVET Council and its secretariat (NCHRD)	X	X	X	X	X	X	X	X
3. Employers' organisations			X	X	X	X	X	X
4. Development of information systems	X	X	X	X	X	X	X	X
5. TVET policy development			X	X	X	X	X	X
6. VTC autonomy					X	X	X	X
7. Devolution					X	X	X	X
Objective 2: Financial and management incentives								
1. Employment and Training Fund – Design of criteria and procedures and programme financing	X	X	X	X	X	X	X	X
2. Financing of priority programmes through the Fund					X	X	X	X
3. TVET budgetary reform			X	X	X	X	X	X
4. Enabling the private sector to own or manage some VTC training centres				X	X	X	X	X
Objective 3: Relevance and quality improvement								
1. Quality Assurance Agency					X	X	X	X
2. Instructor training			X	X	X	X	X	X
3. Re-equipping VET institutions				X	X	X	X	X

Table 14: Cost elements for the first phase of assistance

Phase 1 components	Experts: external	Experts: local	Studies	Training: local	Training: external	Staffing	Equipment: supplies
Objective 1: Institutional development							
1. Higher Council for HRD and its secretariat	X					X	
2. Employment and TVET Council and its secretariat (NCHRD)	X		X	X	X	X	*
3. Employers' organisations	X			X	X	X	
4. Development of information systems	X	X					
5. TVET policy development	X		X				
6. VTC autonomy	X	X	X	X			
7. Devolution	X	X		X			
Objective 2: Financial and management incentives							
1. Employment and Training Fund – Design of criteria and procedures and programme financing	X			X			*
2. Financing of priority programmes through the Fund	X			X			X
3. TVET budgetary reform	X	X		X			
4. Enabling the private sector to own or manage some VTC training centres							
Objective 3: Relevance and quality improvement							
1. Quality Assurance Agency	X	X		X	X	X	*
2. Instructor training		X	X	X			
3. Re-equipping VET institutions	X	X					X

*Office equipment

7.5 PHASE 2

Under the auspices of the Jordanian authorities in charge of the implementation of the sector reform, Phase 2 could include large-scale assistance for the Sector Policy Support Programme, possibly on the basis of budgetary support with other donors through a SWAP.

More specifically, the second phase could use the Employment and Training Fund to channel large-scale assistance to the sector. Other elements of Phase 2 would include implementing autonomy for the VTC, devolution of authority to training institutions, and large-scale re-equipping of training institutions.

ANNEXES

ANNEX 1: VOCATIONAL EDUCATION UNDER THE MINISTRY OF EDUCATION³²

Structure

The MoE provides vocational education as part of its 'comprehensive' secondary schools in grades 11-12. 'Comprehensive secondary schools' in Jordan is somewhat of a misnomer. It means that the accommodation of both academic and vocational streams is under the same roof. Vastly different proportions of students follow each stream from school to school depending, *inter alia*, on vocational capacity. Some schools house mainly academic studies; others may have a majority of vocational students. The rationale for including both streams in secondary schools is both economic and social. It is not feasible to build vocational schools for small numbers of students; it is less costly per student to attach vocational education to academic schools, which are ubiquitous. Administrative overheads and some common courses can be shared. In addition, offering both academic and vocational streams within the same structure is designed to reduce the barriers between the two and to increase the willingness of students to enter vocational streams. Overall, around 80% of secondary enrolment is in the academic stream.

Objectives

Vocational education serves two objectives: to prepare students for employment in the labour market and to prepare them for higher education. 'The general policy objective for the comprehensive and applied streams of vocational education in Jordan is to prepare a qualified and trained labour force in the basic occupational levels and to prepare students who have appropriate interests and abilities to pursue higher applied or professional level education' (Pearson, 1998, p. 105). Competency objectives have been established for each vocational sub-stream.

³² This annex updates Appendix 3 of the World Bank/ETF review of TVET in Jordan, 2003.

TECHNICAL AND VOCATIONAL EDUCATION AND TRAINING IN JORDAN

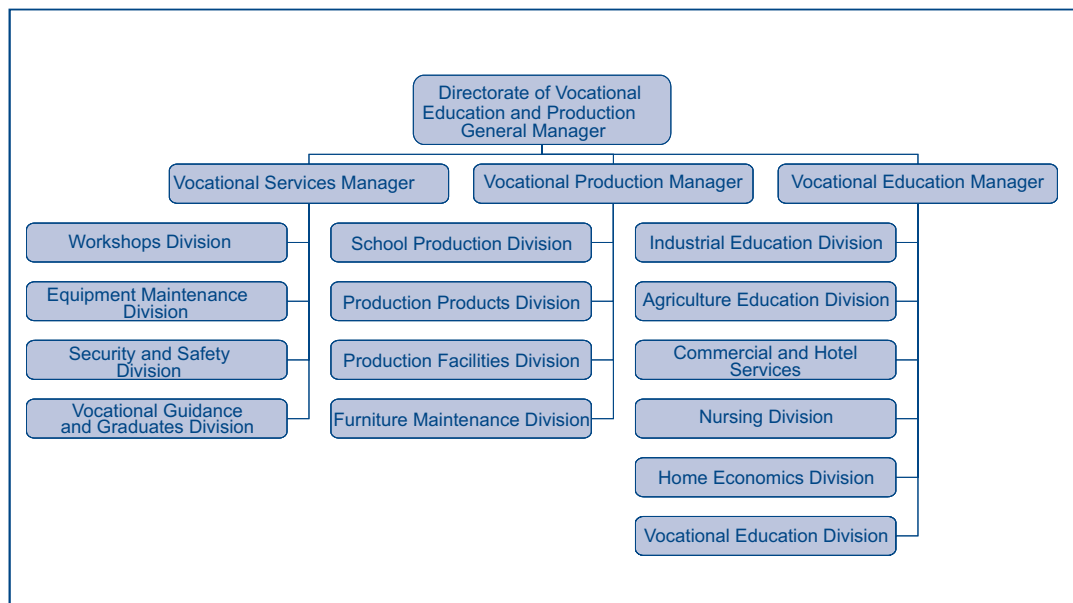
The aim of the MoE over the past decade has been to increase the proportion of students selecting vocational options, with an eventual target of enrolling (together with the VTC) 50% of male and 35% of female grade 10 graduates. Its strategic objective is to ‘keep pace with the developments and requirements of the labour market, and to train skilled, knowledgeable human cadres for life in general and work in particular’ (Ministry of Education, 2002). Mechanisms for realising the objective include:

- building institutional capacity for the management of vocational education;
- developing curricula and programmes in accordance with the requirements of the ‘knowledge economy’;
- updating workshops in line with ICT requirements;
- developing vocational counselling and guidance programmes;
- building partnerships with all stakeholders in vocational education.

Governance and organisation

The ministry has an extensive set of offices overseeing secondary vocational education. The Directorate of Vocational Education and Production is headed by a managing director who reports to the General Secretary for Instructional and Technical Affairs of the MoE. The directorate comprises three main branches: vocational services, vocational production and vocational education (Figure 1). The vocational education branch includes divisions for five specialisations offered in secondary schools, plus a prevocational education division. It provides guidelines and policies on the supervision of the vocational streams in the schools. The schools are supervised by officers in a vocational education section located in the area offices. The area offices do not have specialists in all vocational subjects, but can call on specialists for assistance from other area offices. In addition, the Directorate of Curriculum and Textbooks handles the preparation of teaching programmes for vocational as well as other streams and levels. The Directorate of Examinations supervises the final examinations of secondary school (*Tawjihi*) for vocational subjects.

Figure 1: Organisational chart – Management of vocational education in the MoE, 2003



Source: Ministry of Education

Institutions and institutional management

Secondary schools are gender-specific. Vocational education is offered in 190 of Jordan's 1 150 public secondary schools. Table 1 shows the main vocational options and the number of sites at which they are offered. The number of sites offering the various vocational options has grown. Sites with industrial specialisations increased sharply from 34 (boys) to 45 (boys) between 2001/02 and 2002/03, largely because of a Japanese loan of USD 45 million for vocational education. Over the same period hotel and tourism services increased from 18 to 23 sites and home economics from 101 to 120 sites.

Table 1: MoE options offered in vocational education by site

Specialisation	1998/99		1999/00		2000/01		2001/02		2002/03		2004/05	
	M	F	M	F	M	F	M	F	M	F	M	F
Industrial	33	1	33	1	34	1	34	1	45	2	46	3
Nursing	12	34	13	34	14	34	14	34	14	34	15	33
Agriculture	17	4	18	5	20	5	20	5	21	5	18	5
Hotel services	18	0	18	0	18	0	18	0	23	0	23	0
Commerce	38	48	40	49	39	51	47	52	49	54	*	*
Home economics	0	88	1	97	1	99	1	101	2	120	7	116

**Transferred to academic secondary education in 2003/04, and converted to Management Information Systems.
Source: Ministry of Education*

The management of secondary education, as is the case with other levels, is highly centralised in Jordan. School principals have little or no authority over curricula, the hiring of teachers, the selection of students, the budget and choice of textbooks. They are authorised to handle day-to-day management and to make some limited purchases. The school must apply to the area office for most finances. Salaries and other teachers' allowances are handled centrally.

Quality assurance is primarily put into practise through the school administration, which is responsible for monitoring performance in vocational education within the schools. Visits by area supervisors and headquarters staff look at, among other things, the exercises produced by students, their achievement in examinations at the end of grade 10 and their performance in the grade 12 practical and general examinations. Little is done by the ministry to follow up on graduates, despite the fact that two studies have been completed during the past two years. However, a tracer study was recently completed for the nursing specialisation. The results are shown under the penultimate section. Plans are being made to conduct tracer studies in other specialisations.

Teaching programmes

Programme development – Involvement of employers

Between 1988 and 1998 committees were working in the Curriculum Directorate to produce new teaching programmes in the vocational area. It was intended that half the members of each committee would be employers, but it was difficult to gain employers' interest. Each school, however, does have an advisory committee, including private sector representatives (though there is no authority to adjust programmes to local needs). Training modules were developed within the MoE early in the 1990s, though these were for use by the VTC (reportedly some 480 modules were prepared). Instead of these modules, the MoE uses training manuals in which the syllabus is divided into competencies and exercises, including the results expected. The aim is to provide basic skills that do not

change as often as specialised skills. The directorate allows schools to establish local advisory committees, though not all schools have done so. As part of the ERfKE, which was financed in part by the World Bank, curricula are again being revised to take into account global developments.

Prevocational education

Students in basic education have some form of prevocational education, ranging from one to four periods per week. They can select two areas from industrial subjects, health, business, agriculture and home economics. This takes up four hours per week. The purpose is to acquaint them with and interest them in pursuing vocational studies following basic education, and to impart some basic skills, such as how to make repairs around the house.

Study plan

The study plan for vocational education has been substantially revised. Previously, the study plan called for 40-42 hours of class or workshop instruction per year, substantially more time than was required in academic secondary education. This has been reduced to a total of 30-36 hours per week. Table 2 shows the allocation of time by subject.

Table 2: MoE study plan for vocational education (hours per week) prior to 2004

Courses	First year	Second year
General studies	11	11
Basic science	3	3
Vocational theory	8	8
Total theory	22	22
Practical workshop	12-14	12-14
Additional	6	6
Total	40-42	40-42

Source: Evans, 2002, p. 34; also Pearson, 1998, pp. 107-108

Table 3: Current study plan by vocational field

Field	Hours/week			
	First semester	Second semester	Third semester	Fourth semester
Industrial education	36	33	35	34
Agriculture	31	31	31	34
Home economics	31	31	34	34
Hospitality and tourism	32	33	35	34
Nursing	30	31	34	34

Source: Ministry of Education

Some of the students who pass the examination at the end of the first year undertake practical training in the school or workplace assignments in companies during the summer for a total of 120 hours. However, the MoE does not have workplace training as a

mandatory part of its training programmes, and there is no such requirement for graduation (Evans, 2002, p. 109).

In effect, the competencies required of students are equivalent to all those in the applied stream plus additional competencies, particularly in theory. As stated by an earlier observer, it is not possible for MoE graduates to acquire the equivalent level of applied vocational competencies as VTC graduates, who have considerably more practical work. However, MoE vocational graduates should be distinctly superior academically speaking, with 60% more vocational theory than VTC graduates (Pearson, 1998, p. 118).

MoE graduates tend to be equipped to enter the labour market only at a semi-skilled level. Few mechanisms exist to facilitate their acquisition of advanced occupational skills.

Specialisations

The vocational stream at secondary level includes 42 specialisations: 33 industrial, two agricultural and five home economics specialisations, plus nursing and hotel services. Commerce had been a popular option, but was transferred to the academic stream in 2003/04 and transformed into management information systems. This change was prompted by the poor competitive advantage of graduates in commerce compared with graduates of community colleges and universities. According to the MoE, specialisations are loosely structured so as to allow instructors the freedom to adapt to new requirements. Specialisations to be offered at individual schools are decided centrally, based on the recommendations of the Area Director of Education, whose vocational supervisors base their recommendation on requests from the schools and sometimes on survey studies.

Enrolment by specialisation

Table 4 shows enrolment by vocational specialisation and gender. Males account for the majority of vocational students (56% of current total enrolment against 44% for females (down from 47% in 1997/98, largely because of the transfer of commercial studies in which females predominated)). Over the period 1998/99-2004/05 overall enrolment in the five main subjects (excluding commerce) increased by 26% (from 19 200 to 24 140 students). Enrolment in the five-year programmes increased in all specialisations for males, and in all applicable categories for females except commerce. Male enrolment predominates in industrial and agricultural specialisations as well as hotel services (females were not enrolled in the hotel services specialisation for cultural reasons). Female enrolment predominates in nursing and home economics.

Table 4: MoE vocational education enrolment by specialisation and gender

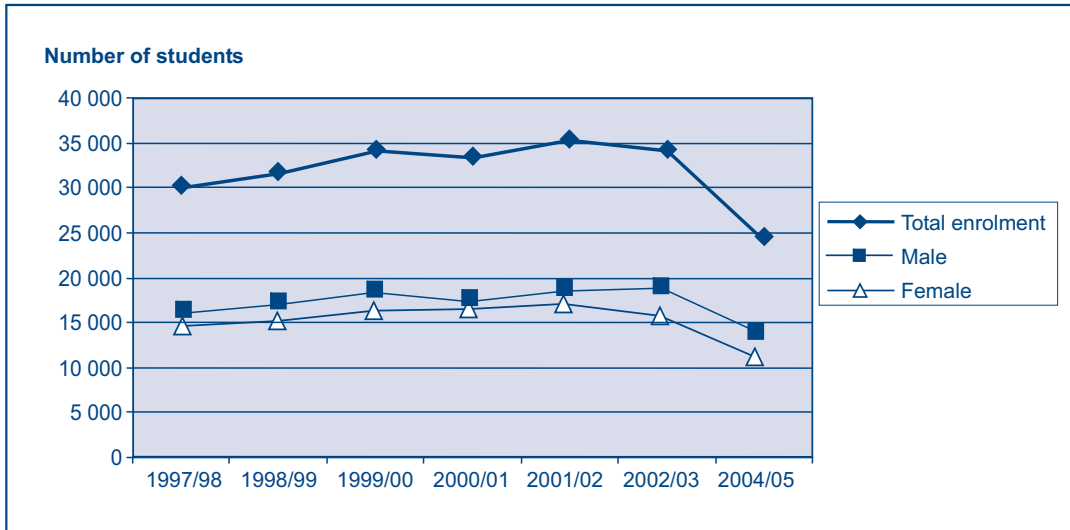
Specialisation	1998/99		1999/00		2000/01		2001/02		2002/03		2004/05	
	M	F	M	F	M	F	M	F	M	F	M	F
Industrial	8 780	16	9 735	19	8 074	9	8 809	15	9 217	50	9 500	100
Nursing	615	1 919	645	1 804	714	1 724	734	1 734	754	1 798	873	1 926
Agriculture	1 110	121	1 072	154	1 217	194	1 296	255	1 347	217	1 350	215
Hotel services	1 703	0	1 953	0	1 936	0	2 208	0	1 769	0	1 765	0
Home economics	0	6 329	0	7 523	23	7 387	22	7 616	26	8 163	70	8 348
Commerce	10 921		11 241		12 310		12 630		10 420		0	
Total	31 514		34 146		33 588		35 319		33 761		24 147	

Note: The fall in total enrolment between 2002/03 and 2004/05 is explained by the transfer of commercial studies to the academic stream.

Source: Ministry of Education

Figure 2 shows the trend in total enrolment by gender since 1997/98.

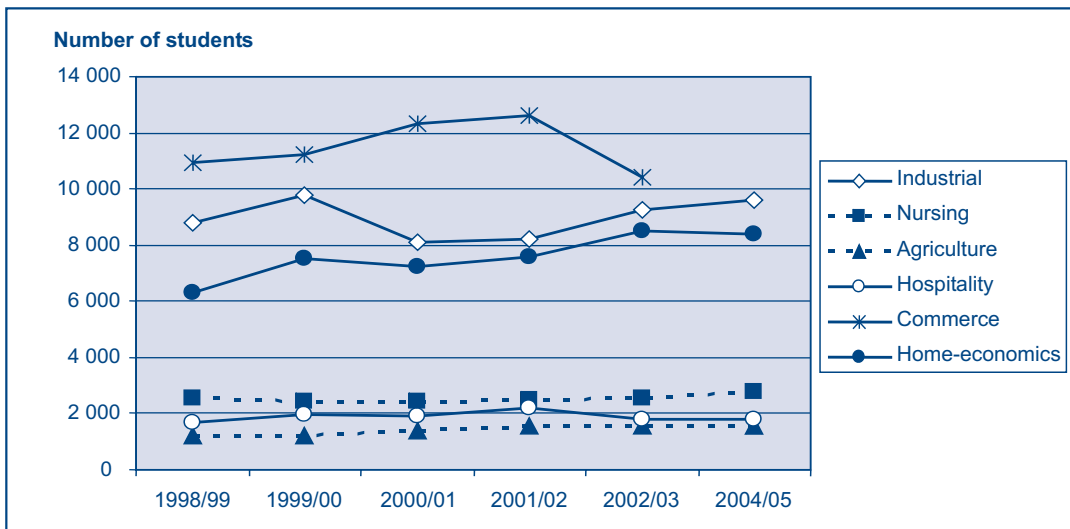
Figure 2: Enrolment in MoE vocational streams – Total and by gender 1997/98 to 2004/05



Source: Ministry of Education

Figure 3 shows the composition of enrolments by vocational fields over time.

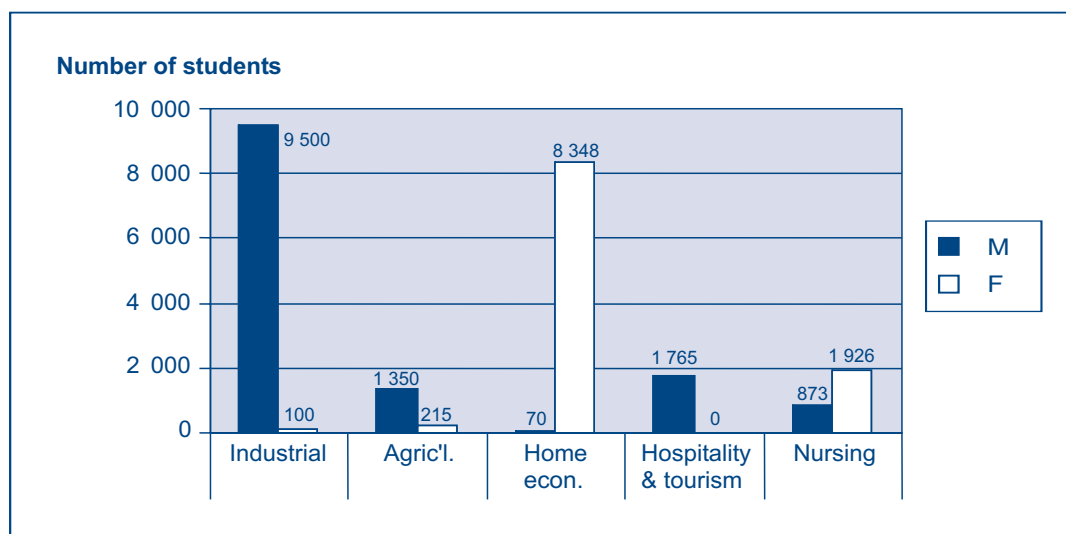
Figure 3: Enrolment in vocational streams, 1998/99-2004/05



Source: Ministry of Education

Figure 4 shows enrolment by gender and field in 2004/05.

Figure 4: Enrolment in secondary vocational MoE sites, 2004/05, by gender

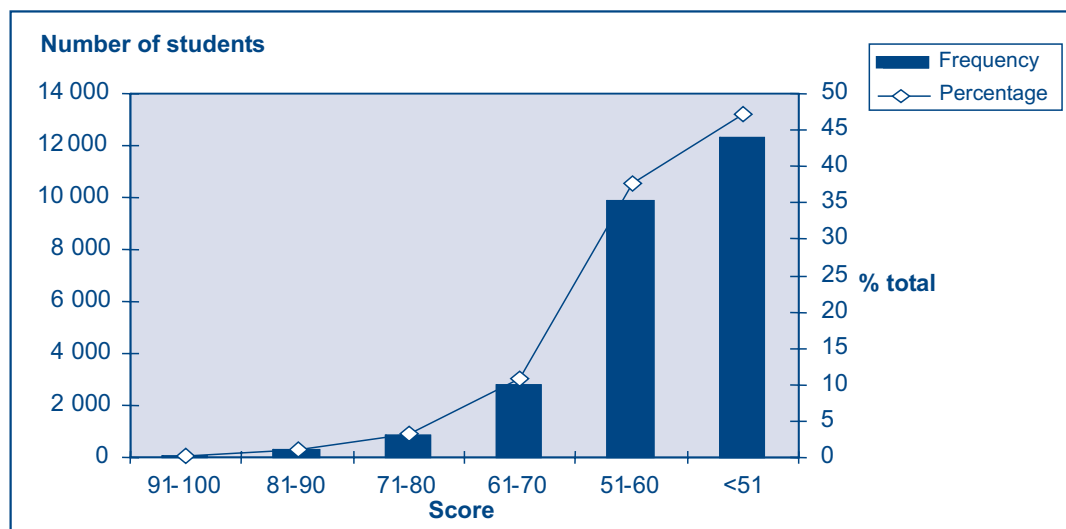


Students

Selection methods

Students are graded on their performance in the final three years of basic education. Performance in grade 8 counts for 20%, grade 9 for 30% and grade 10 for 50%. Students are given a choice of options depending on their performance ranking. The top students usually choose academic streams (and the best within those, the sciences). Once the academic places have been filled, those with the next highest scores are allocated to vocational streams (Figure 5). Students can indicate their preferences for vocational specialisations. On average around two-thirds of the students entering the vocational stream have chosen this stream (and, by implication, a third of the students have been directed to it). Reportedly, around 90% of the students in nursing and 80% in hotel services have chosen these specialisations. Those not allocated to comprehensive vocational streams are sent to applied secondary education in vocational training centres (apprenticeships).

Figure 5: Achievement levels of students entering vocational education, 2004/05



Source: Ministry of Education

Socioeconomic background

The 1998 Jordanian Living Conditions Survey provided information from which a profile of the background of girls enrolled in vocational education could be drawn. The head of the household for most of the students (69%) had vocational secondary, basic education or less. Only 9% of parents had higher education. Around a quarter of the students came from low income families (<JOD 1 450 yearly); only 10% came from families with higher income (>JOD 2 900 yearly) (Evans, 2002, p. 32). Overall, the majority of the students in secondary vocational education programmes came from the lower income strata of society. In contrast, 95% of students enrolled in the academic secondary stream came from families classified as having middle to upper income levels. One of the reasons for this disparity is that job-related training is seen as attractive for students who are expected to find a job at an early age and assist with family income (Evans, 2002, p. 30).

Attrition rates

Student retention rates are relatively high between the first and second year. On average, drop-out rates for vocational students are reported to be less than 5% per year. However, the rate varies considerably among vocational sub-streams (Evans, 2002, p. 30). This contrasts with data collected in 1999 at four vocational schools (those without any academic streams). The attrition rates between years 1 and 2 ranged from 3.1% to 22.5% per school, and attrition rates between year 2 and graduation were even higher (because of pass rates for the GSC averaging only 32-45%), ranging from 58% to 82%. Thus, the overall completion rates (percentage of initial intake who passed the final examination) for 1996/97 were only between 17% and a high of 36% (Rostron et al., 1999a, p. 39). The same study found somewhat better completion rates for four comprehensive schools (those with students following academic streams as well as vocational streams). Attrition between years 1 and 2 was around 3-4%, and between year 2 and graduation ranged from 33% to 70%. The overall completion rates, therefore, ranged from 30% to 74% (Rostron et al., 1999a, p. 42).

Teachers

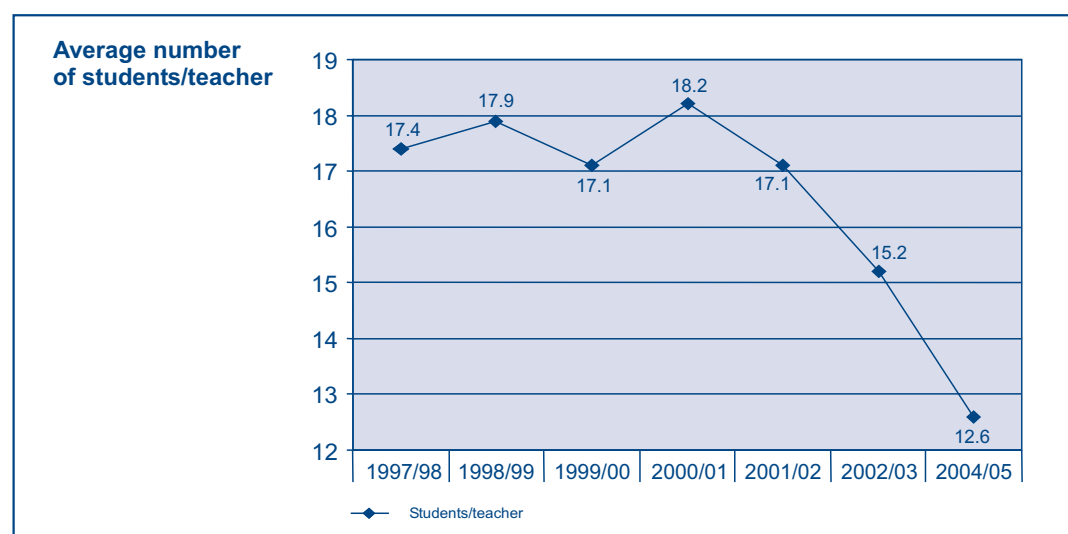
Teachers are appointed centrally by the National Civil Service Bureau. New teachers and instructors are required to have Bachelor's degrees for academic subjects and diplomas to give practical instruction. Teachers are allocated to comprehensive schools by the centre, and most are fresh graduates without industrial work experience. Almost all teachers and instructors teach on a full-time basis. In 2004/05, 43% of teachers had a basic degree or higher, 50% had a diploma and only 8% had only secondary education, almost all of these in home economics education. The proportion of degree holders was highest in nursing education (92%), agriculture (74%) and industrial education (53%) (Table 5). Annual instructor/teacher evaluations are performed. However, follow-up on these evaluations is very limited. Financial assistance or incentives are not readily available to assist staff in professional development (Evans, 2002, p. 37).

Table 5: Teacher qualifications in vocational education by field

Stream	Bachelor's and above	Diploma	High school and below	Total	Students/teacher
Industrial	411	362	18	791	13.3
Agricultural	126	44	0	170	9.2
Hotel and tourism services	4	88	1	93	19.0
Nursing	173	12	0	185	14.9
Home economics	104	448	132	684	12.3
Total/average	820	954	151	1 925	12.5

Source: Ministry of Education

Overall, the number of students per teacher remained relatively constant at 17:1 or 18:1 throughout the period 1997-2002. These averages are reasonable by international standards. The average is achieved by allocating students to specialisations in groups of 40. However, the overall ratio dropped to 12.5:1 in 2004/05. The number of students from each teacher ranges from 9.2 for agriculture and 19.0 for hotel and tourism services (Table 5 and Figure 6).

Figure 6: Students per teacher in MoE vocational education

Source: Ministry of Education

Budget and financing (and costs per student)

Sources of financing

The government provides all the expenses for secondary education. Vocational education, as part of secondary education, is free for students. The only direct charges are for textbooks, which for vocational subjects cost JOD 24-30 for the complete set for a school year.

TECHNICAL AND VOCATIONAL EDUCATION AND TRAINING IN JORDAN

Budget processes

Before the start of the financial year, schools receive forms from the centre on which requests are made for training materials and equipment. The Budget Division of the MoE allocates a total budget for vocational education. The Directorate of Vocational Education apportions the budget to schools, generally based on the actual budget of the previous year plus an increase (currently 4%). Special needs (e.g. the establishment of new schools or vocational branches within schools) are taken into account.

Budgets

The recurrent budget of JOD 3.5 million has increased by 11.5% in two years (note: this excludes vocational streams in comprehensive schools as they are not budgeted separately). Around 61% of the recurrent budget is devoted to salaries, 23% to operating expenses, 14% to consumables and 2% to building maintenance. No amounts have been apportioned for central and area administration of vocational education. With 12 300 students enrolled in vocational schools, the overall budget allocation worked out at JOD 309 per student in 2003.

Costs per student

The Rostron study (Rostron at al., 1999b, p. 22) calculated the recurrent cost per full-time equivalent (FTE) student in 1998 at JOD 577 for vocational schools and JOD 344 for comprehensive schools; there was an additional JOD 27 per FTE student for administrative overheads, making a total of JOD 603 for vocational schools and JOD 371 for comprehensive schools. The difference in cost structure was explained by the fact that 80% of the students in comprehensive schools were following academic studies, which are less costly. The cost per graduate (taking into account completion rates) between 1996 and 1998 were JOD 3 510 for vocational schools and JOD 1,273 for comprehensive schools. (Rostron at al., 1999b, p. 23). Thus, the cost per graduate for vocational schools was almost three times that for comprehensive schools.

Production

The policy of the MoE is to encourage practical work by the students. One means of accomplishing this is to produce and sell goods and services within the schools' workshops. Examples include production of furniture (often for other schools, the MoE itself or parliament), repair of furniture, and maintenance of office machines and vehicles. The production activities are planned by the Directorate of Vocational Education and Production of the MoE. Quotas are given to each school, and it becomes a requirement to achieve the targets. The main point of the work is not to earn money but to give students experience in producing for the market, to market standards. In the current year around JOD 50 000 profit (sales less costs of production) has been earned, half of which goes to the MoF and half to the MoE.

Testing, outcomes and destinations of students

General performance

Table 6 shows the results of the examination for the General Secondary Certificate (GSC) for vocational education by stream. Passing the examination is a necessary (but not sufficient) condition for entry to community colleges. Only 44% of the vocational applicants passed the examination in 2000, compared with 55% for science and 49% for literature. In only one subject, nursing at 54%, did the average exceed 50%. The lowest was agriculture at 39%. In general, females do substantially better in the examination than males in almost all categories. This is particularly pronounced in the academic streams, but is also the

case in the commercial stream (49% of females passed, compared with 39% of males). In general the pass rates for vocational education subjects increased steadily over the four-year period from 1996 to 2000, while the average for science declined. According to one official, the examination results reflect the practice in Jordan of testing rote learning rather than higher mental processes. Nevertheless, more students in the vocational streams fail the final examination than pass it.

Table 6: Vocational education students passing the GCE examination

Stream	1995/06 (%)	1996/07 (%)	1997/08 (%)	1998/09 (%)	1999/00 (%)	Number of applicants	Number of passes
Agriculture	38.6	29.4	34.8	40.5	39.6	856	339
Commercial	41.7	32.2	38.7	45.3	44.2	6 022	2 664
Industrial	49.3	24.4	35.2	39.8	39.3	4 291	1 688
Nursing	60.9	49.8	55.7	55.7	54.4	1 708	930
Hotel services	60.2	41.3	44.6	47.4	47.1	1 012	477
Home economics		31.2	38.2	43.6	43.8	3 345	1 466
Total						17 234	7 564
Pass rate							43.9
Sciences	63.7	56.6	57.8	56.2	55.3		
Arts	38.0	38.8	47.2	49.0	49.2		

Source: Ministry of Education

Table 7: Vocational education students passing the *Tawjihi* examination

Stream	Applicants		Passes		Pass rate (%)	
	Total	Female	Total	Female	Total	Female
Literature	55 907	30 988	28 038	18 489	50.2	59.7
Sciences	28 467	11 814	15 948	7 688	56.0	65.1
Religion	976	498	440	255	45.1	51.2
Sub-total (arts and sciences)	85 350	43 300	44 426	26 432	52.1	61.0
Vocational education						
Commerce	6 104	3 185	374	201	6.1	6.3
Agriculture	1 100	158	49	4	4.5	2.5
Industrial	4 486	7	36	0	0.8	0.0
Nursing	1 732	1 169	283	177	16.3	15.1
Hotel services	1 058	4	2	1	0.2	25.0
Home economics	3 665	3 657	17	17	0.5	0.5
Sub-total (vocational streams)	18 145	8 180	761	400	4.2	4.9

Source: Ministry of Education

Students in the vocational stream may opt to take the academic *Tawjihi* examination that is required for entrance to university. Additional classes of four hours per week are available to students who take this option. For the industrial stream, the additional subjects include physics and mathematics. However, few vocational students succeed in passing the *Tawjihi* test. In 2001 only 4% of vocational education students who chose to take additional subjects to be eligible for higher education passed (5% for females), compared with 52% in arts and sciences (61% for females) (Table 7). This contrasts with the results of a survey in 1996 of vocational student aspirations, which found that 72% of the students wanted to proceed to higher education (community college or university) (Pearson, 1998, p. 112).

Thus, around 40% of the grade 12 students in vocational streams qualified for entrance to community colleges and 4% for entrance to universities. According to the BAU, 10% of the students entering public community colleges come from vocational streams in secondary schools. In total around 25-30% of vocational stream graduates go on to community colleges (Evans, 2002).

Strengths of the vocational education system

Vocational education at upper secondary level has several clear strengths. First, it caters for more students than either of the other two elements of the TVET system – around 34 000 students compared with 13 000 in the vocational training centres and 10 500 in community colleges. Thus, it is the largest provider of TVET in Jordan. Second, the network of vocational sites is distributed widely across the country. This geographical dispersion helps to give equitable access to vocational education for the population. Third, the female enrolment rate is relatively high, accounting for around 45% of the total. This contrasts with less than 20% of total VTC enrolments. Fourth, the teaching force in vocational education is reasonably well qualified in academic terms, with over 40% of teachers having a degree or higher, and half having a diploma.

Problems and issues

1. The MoE lacks a formalised arrangement with the private sector for assessing the training needs of the labour market (Evans, 2002, p. 38). Ministry officials cite a lack of information about labour market requirements as one of the main problems in gearing course offerings to the market. The market situation is not very clear and information about demand is lacking.
2. In addition, the ministry finds employers somewhat reluctant to become involved in planning and evaluating vocational education, perhaps because there will be a pay-off only in the medium to long term.
3. The degree of centralisation in administration makes it difficult to make necessary adjustments and take initiatives at the school level. Rules and regulations are binding. For example, students are allocated centrally to schools. Teachers are appointed centrally and the school administrator cannot veto these appointments. School heads can only spend JOD 150 without central approval. Any funds raised by the school have to be shared 50:50 with the MoF. School administrators do not have the freedom to purchase equipment or change the content of teaching programmes as required. More flexibility is needed. '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, nationally, at ministry level and locally at school level.' (ETF, 2000, p. 19).
4. The budget available does not cover the required improvements in equipment. This is undoubtedly a contributing factor in the mismatch between skills provision and market requirements. 'Students in the automotive repair programmes are being graduated at present without a sound knowledge or practical experience in the repair and maintenance of the newer model automobiles presently on the market' (Evans, 2002, p. 37).

5. Some observers have questioned the degree of specialisation in secondary education, particularly in the industrial field (33 specialisations). Overspecialisation is a problem, especially in view of:
 - the lack of labour market information;
 - the probability that many graduates will not be able to find work in their fields of specialisation;
 - the need for workers to change occupations during their working life.
 The same observers argue for a more broad-based preparation. Ministry officials respond that the curriculum is not overspecialised, and that the number of specialisations cannot be further reduced without becoming overly general and hence not useful. The ministry also points out that the number of specialisations nationally (not all are offered in each school) allows the ministry to meet the needs of different regions. However, it is not clear how the stated goal of providing 'basic skills' can be reconciled with the practice of dividing industrial occupations into 33 specialisations.
6. The directorate in charge of in-service training of teachers and instructors within the MoE accords a relatively low priority to training vocational teachers.
7. Some observers have found that both expectations and performance standards for practical work undertaken by trainees are low, particularly in carpentry, metalworking and construction trades. This contrasts with high expectations and standards in clerical training, hotel services, dress making, some machine shop work and printing trades. This underscores the importance of having measurable performance criteria stated in curricula (Evans, 2002, p. 37).
8. The internal efficiency of vocational education seems to be deteriorating, at least in terms of ratios of teaching staff to students. The removal of commercial subjects from the vocational system actually worsened the trend, as seen in the acceleration of the decline in the average number of students per teacher.
9. Pass rates in the final examinations are less than 50% for the school certificate and extremely low for the *Tawjihi*. It can be said that the vocational system is failing at least half, or even the majority, of the students it trains.

Plans and strategies

The Directorate of Vocational Education of the MoE presented the following list of problems and options to the ETF team in November 2005.

Problem 1

Many trainers lack the competencies, skills and specific knowledge to meet the requirements of high-quality training. Recommendations:

1. Undertake scientific and technical rehabilitation of teachers in each specialisation.
2. Conduct training courses for teachers in IT, English, and their major specialisation.
3. Cooperate with the private sector to train teachers on sophisticated technology and modern equipment.
4. Revise criteria for selecting vocational teachers, training of new graduates and provision of on-going professional development.

Problem 2

The low prior achievement level of students and the unwillingness of some to undertake vocational education. Recommendations:

1. Place students according to their interests and abilities, and labour market opportunities.
2. Establish a vocational guidance section in every directorate.

Problem 3

Shortage of funds, especially for running costs. Recommendations:

1. Increase the budget for vocational education.
2. Standardise and update the supplies required for each specialisation.
3. Simplify coordination between schools and the private sector.
4. Seek external resources to fulfil needs.

Problem 4

Inadequate information and statistics on labour market needs, and inadequate information on the level of graduates and their performance in the labour market. Recommendations:

1. Form committees to study existing specialisations and suggest new fields based on market needs.
2. Cooperate with chambers and the NCHRD to study market needs.

Problem 5

Participation of the private sector is very weak. Recommendations:

1. Institute systematic partnerships with the private sector regarding policies and strategies, curriculum development, implementation and evaluation.

In addition, in terms of occupational standards, testing and certification, the ministry recommends the establishment of an effective external accreditation system and the replacement of academic models of training with a flexible competency-based system related to industrial requirements.

Vocational education is to be made more practical and self-sufficient by the development of vocational education workshops. Three development projects were proposed:

- upgrading the productive capacity of existing schools (JOD 2 million for 2005/06);
- establishment of three production centres for furniture maintenance and production (JOD 2 million for 2005/06);
- updating current workshop equipment according to changes in the market and in production technology – including 91 industrial workshops, 7 agricultural locations, 35 home economics workshops, 43 nursing locations and 14 hotel services locations (JOD 6 million for 2005/06).

The dual objectives of vocational education (to prepare graduates for either work or higher education) would be supported by introducing two programmes – one for higher studies and one for self-employment and the labour market (with 75% practical content).

Another issue deals with overspecialisation, especially in industry (33 specialisations). The solution would be to reduce the number of specialisations by adopting around seven or eight occupational families.

Finally, the way to deal with overcentralisation is gradually to transfer authority and responsibility to field managers, first to regional directorates and then to schools.

The MoE has formulated a Vocational Education Framework: Recommended Action for Reform (April-June 2005), with expert assistance provided through ERfKE. The framework was developed through a Vocational Education Reform Committee, including 22 representatives from the MoE, VTC, NCHRD, NTTI, Small Business Development Centre,

EJADA and BAU. The objectives of the framework are to 'help the MoE, Directorates of Education, schools and communities to:

- build and maintain a knowledge economy and learning culture;
- develop a skilled and flexible workforce, and
- increase students' options and opportunities for choice'.

The proposed initiatives are intended to create vocational education that meets eight criteria. It must be:

- relevant to students' needs and evolving career goals;
- accessible to students of both genders and from all economic backgrounds and geographic locations;
- integrated vertically and horizontally, helping students make a smooth transition into the workplace or on to further learning experiences;
- responsive to national and community economic and social challenges and changing economic conditions;
- efficient and effective in using local and national resources to meet the learning needs of students;
- credible and respected among students, parents, the community and potential employers;
- accountable;
- nationally coordinated.

The **actions for reform** are organised around the following themes.

Theme 1: Structure

1. Administration: Establish an on-going monitoring system to review and evaluate programme outputs and success indicators.
2. Administration: Establish sector councils to increase the involvement of business/industry in curriculum development and programme delivery.
3. Administration: Establish a national system for review and revision of learning outcomes.
4. Administration: Modify the decision-making roles of the education system, with decisions that impact on individual students and communities handled at local level and decisions with national impact handled by the MoE (e.g. setting standards, developing curricula, monitoring and evaluation).
5. Administration: Consider allowing students more choice in programme selection, including vocational guidance.
6. Administration: Establish systems that increase students' opportunity to make smooth transitions either to the labour market or to further education.
7. Curricula: Make the time required for vocational programmes equivalent to that required for academic programmes.
8. Curricula: Consider developing applied academic courses in mathematics and science.

Theme 2: Infrastructure

9. Administration: Establish minimum specifications and basic funding for equipment and facilities. Provide in-service training for teachers, and support technicians to use and maintain equipment effectively.

Theme 3: Culture

10. Administration: Review credentials in recognition of the practical competencies of students completing vocational education, and provide certification and recognition for schools and communities that meet and exceed delivery standards.

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11. Administration: Consider changing the name of the programme to reflect technological developments.
12. School-based initiative: Schools should deliver those programmes that are most relevant to their students and community. This will involve increased local decision-making in relation to course selection, staffing, scheduling, equipment and facilities.
13. School-based initiative: Provide effective career counselling on an on-going basis to help students investigate career options and obtain workplace placements.

Theme 4: Standards

14. Curriculum: Design vocational programmes in a competency-based format.
15. Curriculum: Establish guidelines for curriculum revision, linking theory and practice and ensuring clearly stated, measurable learning outcomes.
16. Curriculum: Consider revising curricula in a competency-based structure that defines basic and transferable skills/competencies and that applies these in broad occupational contexts, shifting from job-specific training to preparation for work within an occupational area.
17. Curriculum: Consider integrating essential skills within the curriculum (reading text, document use, numeracy, writing, oral communication, working with others, thinking skills, computer use and continuous learning).
18. Delivery: Integrate project-based learning to increase students' problem-solving and teamwork skills.
19. Delivery: Review and modify learning and teaching resources including those used in other countries.
20. Delivery: Consider establishing a distance delivery system involving computer-based and community-based learning for rural and urban communities that cannot be serviced by the local school system.
21. Curriculum: Realign and consolidate vocational streams to better meet current and future labour market needs.
22. Enhance quality off-campus learning opportunities to expand students' learning options and increase their knowledge of the workplace.

Theme 5: Training

23. School-based initiative: Build local community partnerships involving business/industry and community groups to help identify programme priorities and assist in delivery.
24. Administration: Improve the quality of instruction through higher standards for teacher certification, including technical and pedagogical expertise.
25. Delivery: Establish incentives to attract and retain quality teachers who can connect technical and academic learning.
26. Delivery: Establish on-going professional development.

Theme 6: Funding

27. Administration: Provide schools with basic funding based on programme needs, along with incentive funding.
28. Administration: Establish monitoring systems to link planning with efficient expenditure of resources.

Assessment

The Recommended Action for Reform is clearly a step forward. It proposes actions in several areas that are designed to make vocational education more relevant and effective. It emphasises the role of employers in defining skill requirements through sectoral bodies and local partnerships. It proposes devolution of some administrative responsibilities to

school level. Perhaps the most far-reaching recommendations deal with curricula, including more choice for students, competency-based formats, a focus on basic and transferable competencies/skills, shifting from job-specific preparation to preparation in an occupational area, introduction of 'essential skills' and project-based learning. Such moves in the direction of more training in generic, transferable skills in occupational clusters and less narrow job training should be supported. Such broader preparation takes into account the fact that little information is available on exact employment requirements, the likelihood that many graduates will not be able to find work in a narrow field specialisation, and the need for trainability to change occupations during their working life. The recommendations also propose incentive funding for schools that are able to exceed expectations.

However, the Vocational Education Framework does not calculate the resource implications of the recommendations, in terms of either the human resources required to develop and implement the recommendations, or the finances required. No priorities are established among the 28 recommendations. It mentions some of the steps required and outcomes for each of the recommendations, but does not identify the constraints that must be overcome (e.g. to attract and retain quality teachers), nor does it provide an action plan for implementation of the proposals. Further work is needed on resource implications, priority setting, constraint identification and implementation planning.

ANNEX 2: VOCATIONAL TRAINING CORPORATION

Structure

The Vocational Training Corporation (VTC) was established in 1976 by a temporary law as a semi-autonomous agency under the MoL. It is currently governed by two laws: Law No 11 (VTC) of 1985, which made it permanent, and its revised Law No 50 of 2001. (The revision of 2001 expanded the VTC's mandate for assistance to SMEs and occupational safety and health). The VTC law gives the VTC financial and administrative autonomy, and the right to an independent budget and self-management.

Functions

The main roles of the VTC are to:

1. provide workforce training (pre-service and upgrading) at different occupational levels;
2. provide assistance to SMEs;
3. regulate the labour force by classifying workplaces and workers.

Governance and organisation

The Board of Directors consists of 11 members, and is chaired by the Minister of Labour. The Director General of the VTC is the deputy chairperson. Representatives of government ministries include Labour, Education, Public Works and Planning. Unions are represented by the Public Union for Workers Association. There are two representatives from the private sector and one from the Amman Industrial Chamber. The Engineering Association is represented. In total five of the eleven members are non-government representatives, including up to three from employers (2001 Law, Article 6).

The board has the authority to:

- establish basic policies of the VTC;
- approve plans and training programmes;
- study training needs;
- decide common bases for occupational training levels;

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- prepare project systems;
- agree on an annual budget for submission to cabinet for endorsement (Article 7).

The VTC is, in effect, a semi-autonomous agency. It has the freedom to spend its budget as approved by the cabinet. Before 1998 the corporation had a free hand in hiring its own staff and setting salary levels. In 1998 a government-wide effort to control semi-autonomous government agencies integrated the VTC into the Civil Service. It must now recruit its staff through the Civil Service Commission, and its salaries follow standard government regulations. Approvals must be sought from the government in many areas, such as sending staff abroad for training.

The Director General is responsible for implementing the policies of the board, supervising VTC employees, preparing annual budget proposals for consideration by the board, and any other duties assigned by the board (Article 8). Under the Director General the work of the VTC secretariat is organised through the three main Assistant Directors General – Institutes, Technical Affairs, and Centres and Training (Appendix 1). The Directorate for Institutes includes the following specialised institutes:

- Training and Development Institute (TDI) for in-service training, especially of instructors and for supervisors in industry;
- Occupational Safety and Health Institute (OSHI);
- Training and Testing Institute (TTI);
- specialist training institutes (STIs);
- Instructional Resources and Curriculum Development Centre (IRCDC).

The Administration for Technical Affairs, in turn, is divided into the Building Projects Directorate, Programmes and Testing, and Planning Directorate (Appendix 2). The management of training centres is the direct responsibility of three area directorates, for the north, the middle and the south of the country. The area directorates' mandate is the coordination of training centres in terms of technical programmes. The area offices administer personnel, budgets, supplies and guidance services for the training centres and also offer industrial extension services (Appendix 3). Training coordinators in specialised fields from the headquarters visit centres around once a month to check on programme implementation.

Occupational Work Regulation Law

With regard to classifying workplaces and workers, the VTC board is responsible for implementing the Occupational Work Regulation Law No 27 (1999). This law covers:

1. the classification of workers according to a skills ladder (limited skills, skilled, craft level, technician, professional);
2. the classification of workshops (occupational places) according to size, equipment and tools against standards, occupational safety and health requirements, worker numbers and skill levels, and technical level of the administration.

The objectives of this law are to improve and sustain the quality of the products and services offered by Jordanian enterprises in relation to national standards. This will lead to 'well-organised occupational work in Jordan' and will 'influence an improvement of the national economy'. The classification of workers requires testing, certifying and licensing. The VTC employs occupational inspectors to conduct inspections of workplaces in order to ensure adherence to the law. Fees are collected for the issuance of a Place (Workshop) Classification Certificate and an Occupational Practice Licence. The licences are valid for five years. According to the law, 'No person is allowed to practise any occupation unless he obtains an Occupational Practice Licence, which states the person's occupation and his occupational classification level' (Article 8).

The law has been introduced gradually. The following occupations are being covered in the first phase:

- vehicle maintenance
- carpentry and ornamental decoration
- beauty and hairdressing
- metal fabrication
- general mechanical maintenance.

Firms have three years from the date in which the occupation is included in decrees to comply with the conditions of the law (with the possibility of a two-year extension). The law provides for stiff penalties for its violation. The owner of an enterprise who practises without the proper certificate, or who is more than 60 days late in renewing it, may be fined between JOD 100 and JOD 1 000, and the courts may decide to close the workplace until classification procedures are completed (Article 12). Opening a business which the court has closed will result in imprisonment for between one and six months. Moreover, fines are imposed for employing unclassified occupational workers (Article 13). An individual may be liable for fines of between JOD 20 and JOD 100 for practising any occupation without obtaining an Occupational Practice Licence or for failing to renew it within 60 days of its expiry (Article 14). A tracer study on VTC graduates from the limited skills training programme in 2003 found that three-quarters of the employers surveyed do not require Occupation Practice Licence before employment.

The anticipated benefits of the law need to be balanced against its costs. If fully implemented, the law could possibly have an adverse impact on business establishment and generation of employment. Compliance will certainly raise the cost of doing business in Jordan. Administering the law, including inspection of premises and testing of current workers, could have enormous cost implications. The implementation of this far-reaching and pervasive law might collapse under the weight of the bureaucracy it spawns. Employers are already complaining about the cost of testing and retesting for the certification of workers. It would seem that the law could be justified for occupations that impinge on public health and safety (e.g. electricians or elevator maintenance workers). If implemented as it stands now, it could be regarded as overregulation of the labour market. It runs counter to other efforts by the government to increase employment and generate new jobs.

Institutions and institutional management

The VTC currently owns and operates around 50 training centres. Some 12 of these have been established recently at a cost of JOD 19 million; these were financed by the government. Nine of the twelve new institutions were vocational training centres for new geographical areas; three were specialised institutes, including one each for construction, electronics and hotel services.

The function of heads of training centres is mainly to conduct the day-to-day management of the centres. The head of the centre reports to the Director of the Area Regional Centres Directorate. Training centres do not have their own individual budgets, but must apply to the area office for financing. They have little control over the hiring of staff.

Programmes

The VTC organises its training offerings according to the following categories (Table 8).

Table 8: VTC training programmes

	Entrance requirements	Duration
Vocational preparation		
1. Training for semi-skilled* level	Literacy, 16 years old	150–700 hours
2. Training for skilled level	Grade 10 graduate, 16 years old	2–4 terms; 1 400–2 800 hours
3. Training for craft level	SSC (grade 12 graduate)	2–4 terms; 1 400–2 800 hours
4. Applied Secondary Education Programme	Grade 10 graduate, 16 years old	2 years
5. Safety supervisor programme	SSC (grade 12 graduate)	2 terms
Upgrading programmes		
1. Technical upgrading		Short term
2. Instructor training		
3. Supervisory training		
4. Occupational safety and health training		

* Now termed 'limited skill'.

Source: Vocational Training Corporation, 2002, pp. 4-5

As well as regular programmes, the VTC has introduced several other training programmes (or projects), including one established in 1999 for the Qualified Industrial Zones (QIZs) and the National Training Programme.

Enrolment by programme is shown in Table 9 for 2002 and Table 10 for 2004.

Table 9: VTC enrolments by gender and programme, 2002

Programme	New intake			Continuing			Graduates		
	M	F	Total	M	F	Total	M	F	Total
Craft	433	266	699	96	136	232	507	178	685
Skilled	4 984	1 266	6 250	3 385	126	3 511	2 543	395	2 938
Semi-skilled	1 935	1 190	3 125				239	280	519
Applied secondary	73		73	86	81	167	524	19	543
Upgrading	2 897	201	3 098				2 897	201	3 098
Total	10 322	2 923	13 245	3 567	343	3 910	6 710	1 073	7 783

Source: VTC Annual Report, 2002, p. 10

Table 10: VTC enrolments by gender and programme, 2004

Programme	New intake			Continuing			Graduates		
	M	F	Total	M	F	Total	M	F	Total
Craft	581	454	1 035	585	661	1 246	865	808	1 673
Skilled	5 016	846	5 862	2 960	953	3 913	3 179	1 356	4 535
Semi-skilled	2 583	2 331	4 914				1 620	2 083	3 703
Applied secondary	58	0	58	309	83	392	62	1	63
Upgrading	2 036	268	2 304				2 673	369	3 042
Total	10 274	3 899	14 173	3 854	1 697	5 551	8 399	4 617	13 043

Source: VTC Annual Report, 2004, p. 10

Limited skills programmes

Limited skills training (700 hours of training or less) is provided to people with or without school qualifications (with a minimum requirement of the ability to read and write) in 34 specialisations. Since programmes last less than a year, annual intake is for all practical purposes equal to annual outputs. Limited skills programmes include barber training, machine sewing, food production, carpentry, house maintenance, metal working, PC applications, PC typing, auto electrical and painting.

Skilled worker programmes

Skilled worker training has the largest enrolment of any VTC programme (9 775 in 2004, including both the new intake and those continuing their training) and encompasses the greatest number of specialisations (54). This is the main training programme for the VTC, and is a direct descendent of the famous 'dual apprenticeship training' system that was operated initially by the VTC. It has undergone significant changes recently to make it more flexible. Initially the apprenticeship programme involved three years of training, made up of two years of institutional training and one year of training on the job. The institutional training included three days in the centre and three days in the workplace, supervised by instructors. The programme was shortened to two years by dropping the third year of work experience in 1999, making it equal to the length of secondary education (two years). In 2000, with the adoption of skill levels in the Occupational Work Organisation Law of 1999, the VTC changed the terminology from 'apprenticeship' to 'skilled worker level'. It also changed the length of training from years to semesters and added flexibility according to the requirements of the occupation. Occupations at the skilled worker level now take from two to four semesters, usually three or four. Training in the workplace remains an important part of the programme, but is organised in a different way. Instead of three days in the centre and three days in the workplace, the dominant pattern is now one week in the centre and one week in the workplace. If the length of the programme is two semesters, the first one and a half semesters involve dual training (half in the centre and half in the workplace) and the remaining half semester entails training on the job. If the programme is three or four semesters, the final semester is reserved for training in the workplace and the preceding semesters will be dual training.

Some programmes provide large blocks of centre-based training followed by substantial periods of in-company training. Some occupations at the skilled level for females – such as sewing, secretarial work and hairdressing – involve seven months of training at the centre followed by three or four months in the workplace. The changes not only reflect the different requirements of occupations, but also improve the throughput of the programmes. Shorter programmes tend to reduce trainee drop-out rates.

Applied secondary

Applied secondary was the generic term given to students graduating from basic education (grade 10) who were allocated to practical training. Those with the highest qualifications generally went into academic secondary, while the next highest went into vocational streams of secondary education (see Annex 1 on MoE). Those who were weakest academically were channelled into practical courses of the VTC; this was originally called applied secondary. In 1999 or 2000, with the change of terminology and structure for skilled worker level (instead of two years, it was converted to a semester system, the duration of which varied by specialisation), applied secondary was converted mainly to skilled worker level. It no longer matched the duration of secondary education (two years), so the majority of trainees were converted into skilled worker level instead of applied secondary. However, some students with aspirations to continue to post-secondary education could still take additional academic courses in order to qualify later for the *Tawjihi* examination. Recruitment and throughput into the applied secondary stream has declined rapidly and will soon be phased out entirely. Table 11 shows the intake, continuing trainees and graduates for 2000-04.

Table 11: VTC enrolments in applied secondary education, 2000-04

Level	2000	2001	2002	2003	2004
Intake	777	218	73	76	58
Continuing	7 048	587	167	58	392
Graduates	2 626	4 904	543	184	63

Source: VTC Annual Reports, 2001, 2002, 2003 and 2004

Craft programmes

Craft programmes are a relatively recent addition for the VTC, starting only in 1999. The programmes were developed in response to a demand for the skills of more highly educated Jordanians, those with at least a secondary education (grade 12). Twenty-four specialisations are offered nationwide. The craft programmes are organised on the same type of semester system as skilled worker programmes (above), according to demands of the occupation. Trades taught at craft level include light mechanic, auto mechanic, metal worker, pipe fitter, cosmetology, plastics production, water treatment, CNC, website design and network PC support (see p. 121, results of tracer study on craft graduates).

Upgrading programmes

Various types of upgrading programme are offered, though there are relatively few in technical fields. Table 12 summarises the types of upgrading training on offer.

Table 12: VTC upgrading courses by type, 2002

Course	Male	Female	Total
Technical upgrading	182		182
Chemical and metal institute upgrading	102	3	105
Training of trainers – for VTC	407	90	497
Supervisory training	223	15	238
In-service training – VTC employees	141	16	157
Occupational safety and health – VTC employees	44	6	50
Occupational safety and health – others	669	15	684
Drivers' courses	1 145	56	1 201
Total	2 913	201	3 114
% of total	93.5	6.5	100.0

Source: VTC Annual Report, 2002

Supervision of apprentices

Supervision of apprentices in the workplace is a key ingredient in ensuring quality training. Training centres have different arrangements for handling this supervision. Some of the larger training centres have established special units for field service. The job of staff in this unit is to monitor and report on trainee performance in the workplace, including a minimum of one visit per month. One centre visited had 16 staff for trainee supervision and an enrolment of 1 500-1 600 trainees, or a ratio of one supervisor to 100 trainees. In hotel services two staff were available to follow up on 225 trainees in the workplace. Other centres use the instructors to follow trainees on work practice, usually on the one day of the week when trainees are studying employability skills in the centre and thus when the instructors are free. Trainees are required to keep job logs at the workplace, and supervisors fill out reports on trainee progress and problems. However, apprentice supervision may be the weak link in the Jordanian system of dual training. Employers have observed that trainees are in fact visited only infrequently, and they have suggested greater contact as a means of improving the quality of practical training.

Ad hoc training programmes

In addition to its regular programmes, the VTC sponsors various ad hoc training programmes, often on a project basis. In 1999 it started a programme for the QIZs, mainly in machine sewing. In 2002 the QIZ trained 75 people for the zones. In 2003, in response to industry complaints about the shortage of workers for textile jobs, the VTC launched an ambitious programme to train 1 000 unemployed workers in industrial sewing. In response to industry criticism about the quality of Jordanian instructors in this field, the VTC launched an open international competition to provide the training. Eight bids were received and a Tunisian firm was selected to deliver the training and also to train Jordanian instructors in the process.

A major National Training Programme was launched in Jordan in 2002 with the purpose of training unemployed people for available jobs and replacing foreign workers. The target group was unemployed people between the ages of 17 and 30. The VTC managed the programme through a separate office. The programme was organised as follows:

1. three months of basic training in citizenship and physical training delivered by the armed forces (males only);
2. vocational training from 6 to 12 months, depending on the specialisation.

Trainees were paid JOD 50 per month as an incentive for the basic training and JOD 80 for participation in the vocational training, and there was the possibility of assistance with transport to and from the training site. Recruitment of trainees was carried out through advertisements in newspapers and TV, market centres and VTC registration centres. Each applicant had to undergo health tests and a security clearance. Each training programme had its own prior educational requirements. The National Training Programme used various training providers, including the vocational training centres, MoE comprehensive schools, armed forces training facilities and non-governmental providers, such as charitable organisations. The original target was to train 12 000 unemployed people, including 2 000 females. The actual uptake of training places exceeded targets in terms of females and fell below the targets for males. The enrolment under the first three (of five) phases financed by the government is shown in Table 13.

Table 13: Enrolment and output from the National Training Programme by gender as of 31 July 2003

	Male	Female	Total	Female % of total
Enrolled	2 618	3 196	5 814	55.0
Graduates	1 256	1 795	3 051	58.8

Source: Vocational Training Corporation, National Training Programme office

Attrition rates of 15-18% occurred through trainees finding other work or joining the army. Reasons for the under enrolment of males in relation to original expectations had to do with their unwillingness to undergo the basic training. The total budget for the programme was JOD 19 million (up to 31 July 2003), of which 57% (JOD 9.12 million) had been spent by that date. Dividing this by the total number of trainees enrolled in the programme would give JOD 1 570 per trainee. However, the administration of the programme calculated the cost per month at between JOD 170 and JOD 190, including subsidies. For an average training length of nine months, that would give a cost per trainee of JOD 1 620 (9 months x JOD 180 average/month/trainee) including allowances, training material and other expenses.

The National Training Programme was not based on lessons gained from international experience. In some cases the lavishly equipped workshops were at far too high a level for the abilities of the trainees. The programme's results (employment of graduates) are believed to be exceedingly low, but no evaluation has ever been made of the outcomes. The NCHRD proposed such an evaluation, but none has been undertaken. Most of the trainees reportedly participated in order to receive the stipends during training.

Programme development – Involvement of employers

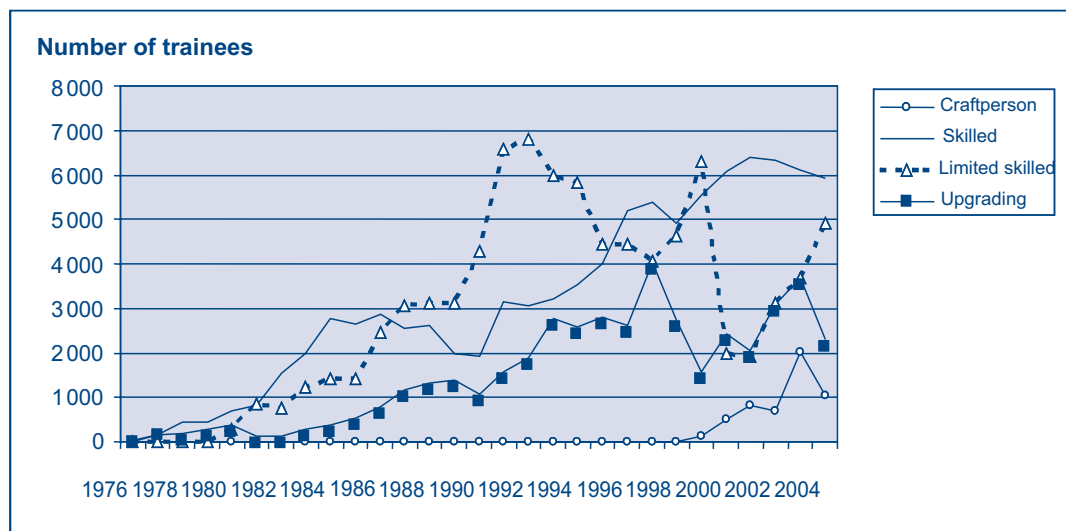
The VTC has tried to involve employers in the development of occupational standards and training programmes. Its curriculum development wing has established multiple committees with industry representatives to help to define programme content. Sector-specific committees were first established in 1996. An accreditation committee was established in 2000. The sectoral committees review training materials and examinations and also propose new training programmes. However, employer participation has been nominal. According to the Chamber of Commerce, employer representatives, when they attended, were often overruled by the majority of training representatives.

Enrolment

Overall

Figure 7 shows the evolution of VTC enrolments over time by major programme.

Figure 7: VTC trainee intake by programme, 1976-2004



Source: Prepared from VTC data

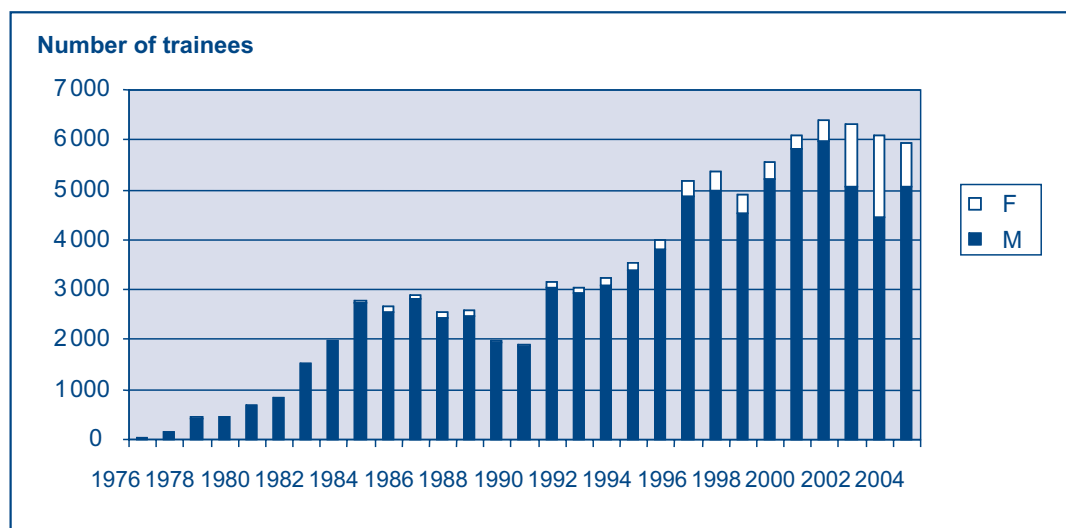
Enrolment by specialisation

The VTC does not consolidate its data on enrolment by specialisations into fewer, broader categories so as to present data on enrolment and graduates by level and specialisation.

Enrolment by gender

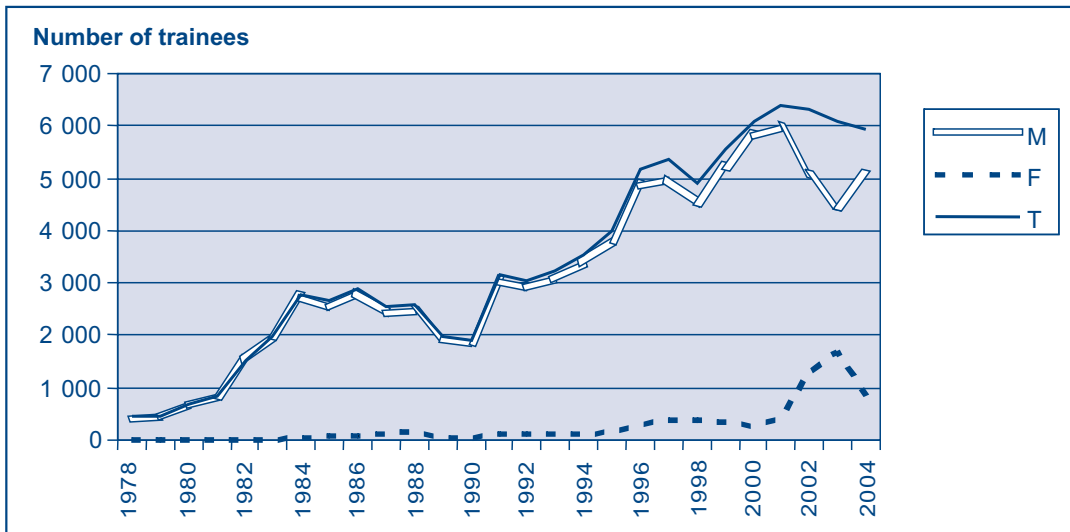
The VTC has catered mainly for male trainees in its flagship skilled worker training, but has recently had some success in enrolling females. Figures 8 to 13 show enrolments by gender in various programmes, and overall.

Figure 8: VTC enrolment at skilled level by gender, 1976-2004



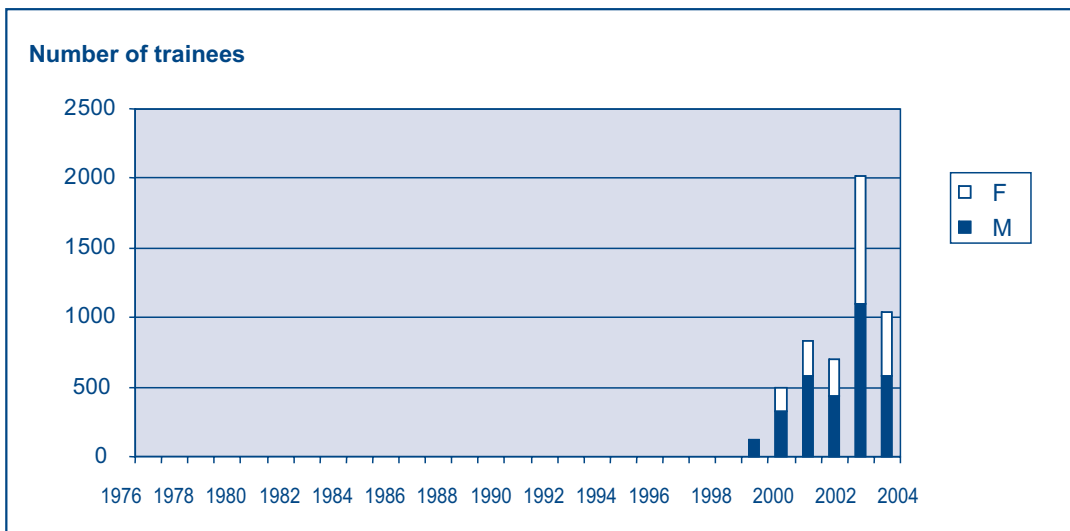
Source: Prepared from VTC data

Figure 9: VTC trainees at skilled level by gender, 1976-2004



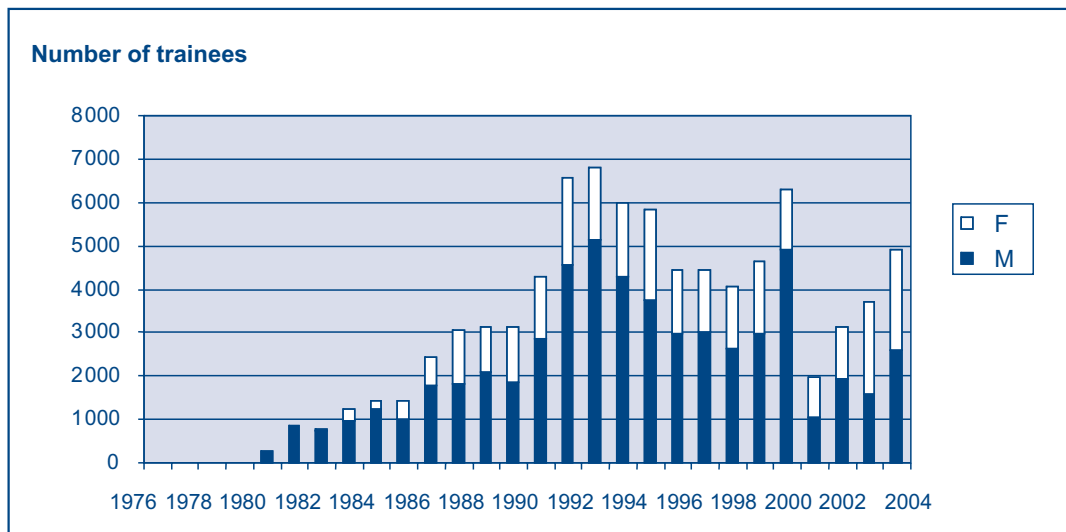
Source: Prepared from VTC data

Figure 10: VTC enrolment in craft level training by gender, 1976-2004



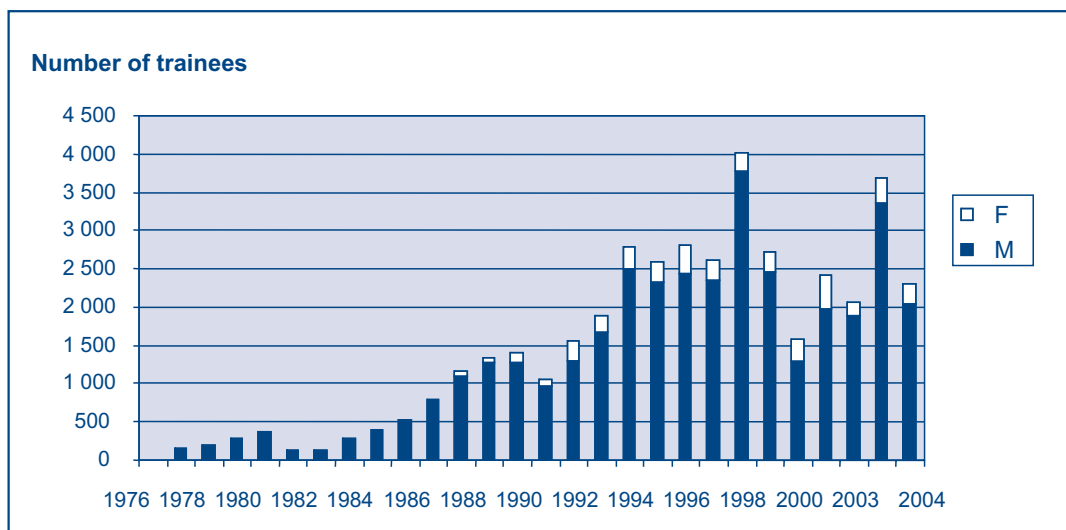
Source: Prepared from VTC data

Figure 11: VTC enrolment in semi-skilled training by gender, 1976-2004



Source: Prepared from VTC data

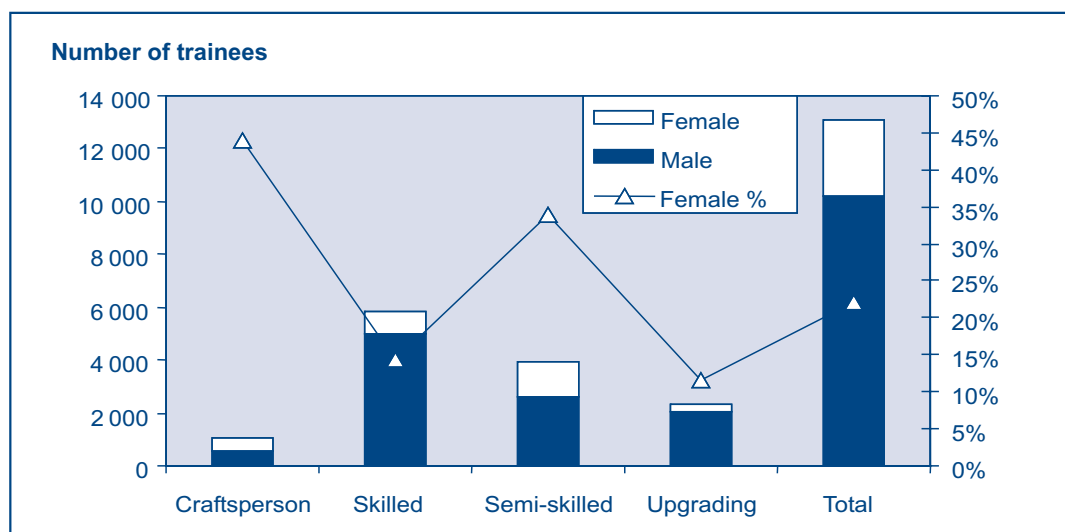
Figure 12: VTC enrolment in upgrading training by gender, 1976-2004



Source: Prepared from VTC data

Figure 13 shows the enrolment by gender and type of training for the most recent year (2004), and the percentage of female enrolment for each level.

Figure 13: VTC enrolment by type of training and gender, 2004



Source: Prepared from VTC data

Female trainees still represent a minority of total trainees – only about 22% of the total in 2004.

Selection procedures

The main requirements for entry into the various levels of training are given in Table 8 (p. 106). For skilled worker training the entry requirement is to have completed grade 10. For the skilled level programme, staff of the training centres hold annual open days and other promotional events, which parents and prospective students can attend. Staff visit secondary schools in the surrounding area and explain the programmes available. Advertisements are also used. The training centres tend to accept all the applicants they receive. Trainees are allocated to the various specialisations available after an introductory period in which they are oriented to all specialisations available in the centre. Students indicate their preferences, and places are filled in the specialisations according to preference and available space.

Socioeconomic background

The VTC has undertaken no studies on the socioeconomic background of students. However, data on parental income are captured on trainee enrolment and used as a basis for financial assistance.

Attrition rates

Student attrition and drop-out rates have been a major feature of VTC enrolments, particularly at the skilled worker level. First, trainees may enter the programme without sufficient knowledge, guidance and aptitude. Second, the trainees are the lowest performers in secondary education. Some have limited abilities in reading and writing, and therefore have difficulty in following the training programmes. Others may not be able to afford even the modest fees. Finally, there is a more positive aspect of drop-out rates: trainees may be able to secure employment and leave the training to take up work. As one official pointed out, however, under the Occupational Work Organisation Law of 1999, they may need to return to the VTC eventually in order to upgrade their skills and qualify for an occupation.

A study of four VTC centres in 1999 found substantial trainee attrition rates. The average attrition rates in the apprenticeship system were 33% (years 1 to 2), 12% (years 2 to 3) and 26% (year 3 to graduation), giving an accumulated attrition rate of 56%. Thus, the overall completion rate (percentage of original entrants who successfully completed the programme) was only 44% (Rostron et al., 1999a, p. 36).

The VTC administration provided the following current figures on attrition for two quarters in 2003.

Table 14: Attrition rates in VTC trainee enrolment by quarter, 2003 (% total enrolment)

Level	1st quarter	2nd quarter
Craft	6.6	6.1
Skilled	11.6	9.9
Limited	12.0	0.9
Applied	2.5	12.0
Overall average	11.2	9.0

Source: Vocational Training Corporation

Teachers

Tables 15 and 16 show the number of full-time staff employed in the VTC, by qualification, in 1997 and 2002 respectively.

Table 15: Full-time VTC staff by qualification, 1997

Education level	Position						
	Adminis-trator	Training coord'r	Training officer	Instructor	Teacher	Service	Total
University	121	22	41	42	21	4	251
Comm. coll.	118	0	5	234	40	6	403
Sec. sch.	43	0	3	142	0	50	238
<Sec.	11	0	0	70	0	154	235
Total	293	22	49	488	61	214	1 127

Source: Vocational Training Corporation

Table 16: Full-time VTC staff by qualification, 2002

Education level	Position						
	Adminis-trator	Training coord'r	Training officer	Instructor	Teacher	Service	Total
University	150	26	73	28	18	2	297
Comm. coll.	135		6	193	56	1	391
Sec. sch.	41		1	132	2	55	231
<Sec.	18			70		154	242
Total	344	26	80	423	76	212	1 161

Note: In addition, the VTC employed 295 people on a part-time basis.

Source: VTC Annual Report, 2002, p. 11

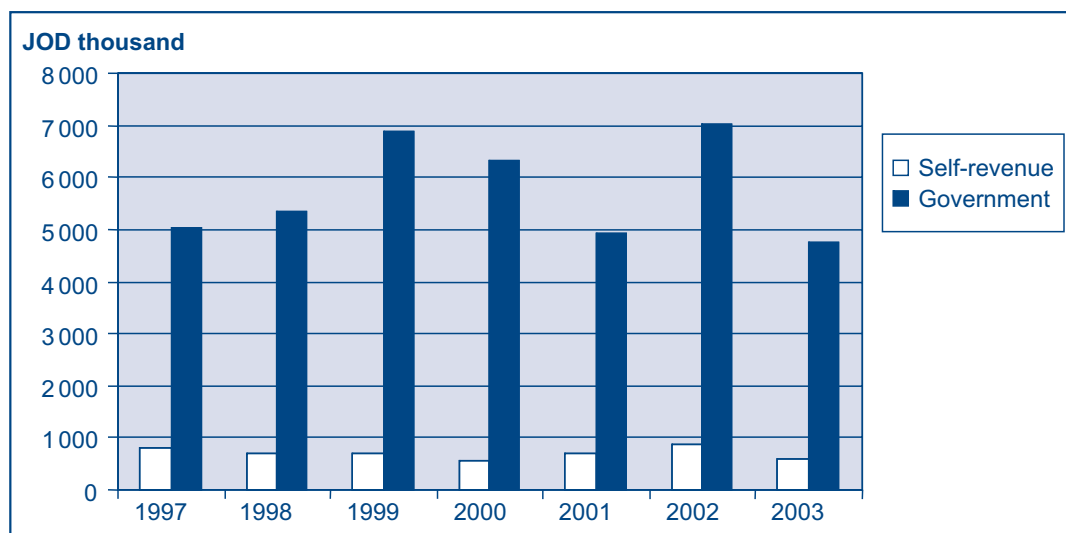
Between 1997 and 2002 the overall number of VTC staff changed only slightly, increasing by a total of only 2.5%. Data are not available on the increases in training budgets compared with budgets for central administration. In 2002 instructors and teachers made up around 54% of the total full-time staff of the VTC (excluding service staff), compared with 60% five years earlier in 1997. Almost half (47%) of the instructors in 2002 had qualifications at only secondary school or below, compared with 43% in 1997. Data are not available on the previous industrial work experience of instructors, but most VTC officials believe such experience is rare.

Budget and financing (and costs per student)

Sources of financing

The VTC receives most of its budget directly from the government. In 2002, for example, the VTC received JOD 7 million from the government and JOD 868 800 from tuition fees and production (a ratio of 8:1). The ratio was similar (7:1) in 2001, when the government’s contribution was particularly constrained. In 2003 the projection is again for a ratio of 8:1. The comparison is shown on the following graph.

Figure 14: VTC budget – Government contribution and self-revenue



Source: Prepared from VTC data

Budget processes

The annual budget is submitted by the board to the cabinet, via the MoL, for approval.

Budgets

Table 17: VTC budget 1997-2002 (JOD thousand)

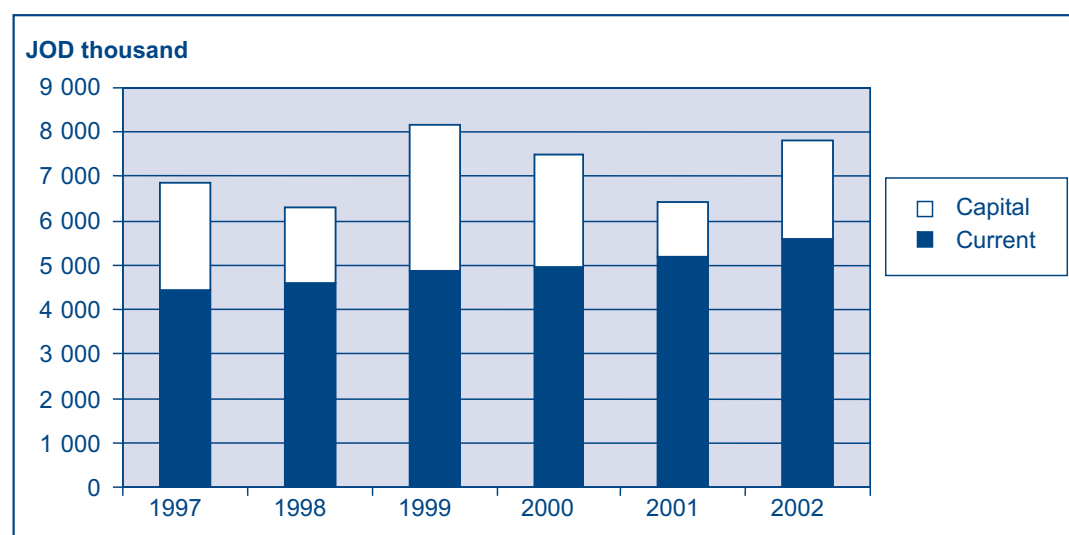
	1997	1998	1999	2000	2001	2002
Revenue						
Self-revenue	795.9	698.7	710.9	554.9	691.6	868.8
Government contribution	5 044.1	5 345.4	6 894.8	6 334.2	4 923.6	7 029.1
External loans	445.7	187.3	1 244.1	1 047.5	684.3	189.4
Other	229.0	141.0	150.1	285.9	284.4	322.0
Total revenue	6 514.7	6 372.4	8 999.9	8 222.5	6 583.9	8 409.3
Expenditure						
Current	4 422.4	4 607.0	4 872.0	4 962.2	5 189.3	5 579.2
Capital	2 434.5	1 693.5	3 308.5	2 532.0	1 241.9	2 223.0
Total expenditure	6 856.9	6 300.5	8 180.5	7 494.2	6 431.2	7 802.2
Surplus/deficit	-342.2	71.9	819.4	728.3	152.7	607.1

Note: Deficits were covered from cash advances and drawdown of cash reserves. Surpluses were put to cash reserves.

Source: Calculated from VTC data

The trends in VTC budgets are shown in Figure 15.

Figure 15: VTC current and capital expenditure, 1997-2002



Source: Vocational Training Corporation

Costs per student

A study carried out in 1999 showed that the cost per full-time equivalent (FTE) trainee, including administration, was around JOD 450 in 1998. This translated into a cost per graduate of around JOD 1 765, which is an important indicator of efficiency. The cost per graduate is much higher than the unit cost times the number of years (three in this case) because of the attrition rate of 54% (Rostron et al., 1999b, pp. 22-23).

TECHNICAL AND VOCATIONAL EDUCATION AND TRAINING IN JORDAN

The cost per trainee as calculated by the VTC currently is shown in Table 18. This indicates that only 10% of the recurrent cost for each trainee goes on operational costs, compared to 88% for wages, allowances and social security. Operational costs include expenditure on such items as training materials, stationery, electricity, water and fuel.

Table 18: VTC training costs per FTE trainee, 2002

	JOD/trainee
Total capital cost, of which:	159.2
● construction	35.4
● equipment	100.6
● furniture	12.0
● transportation/vehicles	11.2
Total recurrent, of which:	557.0
● salaries, wages & allowances	452.3
● operational cost	55.1
● transfers to social security	38.6
● others	10.5
Less revenues (self-generated)	69.5
Total annual cost/trainee	647.0

Source: 'Report on the Cost of Training for Year 2002', Department of Studies, Directorate of Planning, VTC, Amman, March 2003

The cost per training hour was estimated at JOD 0.46 for each trainee.

Costs per trainee vary considerably by training institution, as shown in Table 19. The most expensive training is provided by the two specialised institutes for metal and chemical industries (JOD 5 800 and JOD 5 000, respectively), in part because of the relatively low number of trainees. The Occupational Safety and Health Institute also has a relatively high cost at JOD 2 600 per participant. The costs per FTE trainee also vary widely among the training centres, from JOD 135 per trainee at the Yajooz centre to around JOD 2 300 at the Thlail centre. Five vocational training centres have unit costs greater than JOD 1 000.

Table 19: Costs per FTE trainee by institution, 2002

Institution	Cost per FTE trainee (JOD)
Specialised Institute for Metal Industries	5 842
Specialised Institute for Chemical Industries	5 023
Occupational Safety and Health Institute	2 628
Vocational Training Centre\Thlail	2 285
Training and Development Institute	1 803
Vocational Training Centre\Madaba	1 297
Vocational Training Centre\Maan	1 292
Vocational Training Centre\Ramtha	1 173
Vocational Training Centre\Tafeileh – male/female	1 000
Vocational Training Centre\Marka	945
Vocational Training Centre\Zarka	799
Vocational Training Centre\Middle Ghor	798
Vocational Training Centre\Aqaba	788
Vocational Training Centre\Irbid	565
Vocational Training Centre\Ghor Safi	545
Vocational Training Centre\Moab – male	503
Vocational Training Centre\Hakama	421
Training and Testing Institute	347
Vocational Training Centre\Ain-Elbasha	345
Information Technology Institute	320
Information Technology Institute\Irbid	301
Vocational Training Centre\Khazan	299
Vocational Training Centre\Quesmeh	290
Vocational Training Centre\Sahab	254
Vocational Training Centre\Hashimiah	218
Training Centre for Press Printing	198
Vocational Training Centre\Yajooz	135
Vocational Training Centre\Moab – female	129
Training Centre for Drivers	124

Source: 'Report on the Cost of Training for Year 2002', Department of Studies, Directorate of Planning, Vocational Training Corporation, Amman, March 2003

Data are not available on the budgets of training institutions compared with central administration.

Outputs – Terminal test results

In 2002 VTC trainees recorded an overall pass rate of 79% (1 737 out of 2 206), including a pass rate of 99% on practical tests (2 070 out of 2 092) and a 79% pass rate on theory tests (1 795 out of 2 271). The pass rates varied greatly by programme, ranging from a high of 90% for semi-skilled programmes and 88% for crafts to a low of 58% for skilled

programmes (which enrol the majority of trainees) and 65% for applied vocational (which is being phased out). Trainees are allowed to sit three times for the tests without fees, but thereafter have to pay fees (there is no limit on the number of times a trainee may take the tests).

Outcomes and destinations of students

The VTC has undertaken two tracer studies. The most recent (2003) followed graduates from limited skills training (around 700 hours). The other (2002) traced graduates from craft training (1 400-2 000 hours). The main results of each are reported below.

Tracer study: limited skills level

The VTC undertook a tracer study on the status of graduates from limited skills level training programmes in 2001. The objective was to find out to what extent the outputs were being absorbed in the labour market, and at what levels of income. The study sample covered 220 graduates from 19 training centres (30% of the annual output) and 49 employers. The main findings of the tracer study are reported below.

Around a third of trainees had grade 10 education or less, or secondary education. Another 20% had higher education. Around a third of the graduates were in information technology and textile/leather industries. Another 15% were in metal fabrication and mechanical maintenance. In terms of training duration, 21% had received 150 hours of training, 22% 300 hours and 34% 700 hours. Only 36% of the graduates were in full-time work, and another 11% were working part time; 53% were unemployed. Of those working, almost all (97%) were in waged employment; 76% were in the private sector and 65% in the industrial sector. Around 40% were working in the enterprises where they had been trained. Just over two-thirds of the trainees working full time said that their jobs matched their specialisations, compared with only 39% of those working part time. This means that only 34% of the total number of graduates were working in their own specialisation – 68% working in their specialisation x 50% employment rate. Almost half the graduates expressed an interest in starting their own business; however, 70% faced financial difficulties in doing so. The trainees mainly (81%) chose to enrol in skill training programmes in the VTC and 87% chose their professions. Almost 70% of the trainees working full time said that their wages were JOD 80-120 (the minimum wage is JOD 80). Some 63% said their wages were equal to those of other workers in the labour market, and only 15% said they were greater.

The overwhelming majority of the employers surveyed were in the private sector, were engaged in manufacturing, employed more than 20 people and were located in Amman. Around 80% of them knew about VTC services. They were mainly interested in the following services from the VTC:

- manpower training (92%)
- occupational safety and health programmes (74%)
- instructor and supervisory training (61%)
- occupational work organisation (43%).

Interestingly, many said they were not interested in participating in training programme development (74%) or developing new training specialisations (69%). The employers were split approximately 50:50 over whether the VTC training programmes totally or partially met the needs and requirements of employers. In evaluation of graduate performance the weakest categories were identified as following:

- safety and health regulations (39%)
- effective communication (33%)

- working well with others (31%)
- ability to learn new skills (29%).

Graduates were rated highest on:

- appearance (92%);
- following instructions and directions (90%);
- working with the work environment (88%)
- attention to detail in practical skills (74%).

Significantly, employers rated the performance of VTC graduates as better than that of other workers of the same level in 60% of the responses, and less than other workers in only 4% of the cases. Some 78% of the employers said that VTC graduates had received additional training after graduation (39% by the employers themselves and 53% by employers plus VTC institutes). This contrasts markedly with trainees, 91% of whom (including those employed) had received additional training after graduation. Around half of the employers said that VTC graduates with limited skills training were employed at JOD 85 per month. Just under half (44%) of the employers said they will need new training specialisations in the future. The one job title most in demand is expected to be quality control craftsman. The main requirement for limited skills level was in food production, particularly the sweets and pastry specialisations. The main suggestion for developing the vocational training centres was to increase site visits to trainees by instructors.

Graduate tracer study – Craft level

The purpose of the tracer study, similar to the one on limited skills, was to:

- determine the extent to which VTC training output met the demands of the labour market;
- identify the employment rate and level of pay of graduates;
- identify future trends in the labour market.

The study followed 199 graduates, including eight females, and their employers. Almost all the graduates (90%) were 29 years of age or below, and 72% were aged 20-24. In terms of level of education, 85% had secondary education (including 45% secondary pass); 9% had community college qualifications; and 5% had university qualifications. They were about equally divided into three groups, having graduated from three specialised institutes of the VTC. Some 40% were trained in information technology and 33% in metal fabrication and maintenance. Half the trainees had 2 100 hours of training and the rest around 1 400 hours. A total of 62% of the graduates were in full-time employment and 36% were unemployed; 44% of the unemployed graduates were those trained in using or maintaining computers. Some 90% of those working were in waged employment, with 81% in the private sector, 50% in industry and 38% in services. A total of 40% were working in the enterprises in which they had undertaken practical training, and 55% felt the training matched their job. Of the 199 graduates, eight (4%) had set up their own businesses, and 44% were planning to establish businesses (though 70% of those faced financial constraints in doing so). Just over 80% of the unemployed graduates had been unemployed for five months or less. Almost 80% had enrolled in the training programme according to their own interest. Almost 75% felt the training met the needs of the labour market, but almost half felt the practical training was weak. Almost 75% felt the need for further upgrading in their occupation, mainly in relation to computers, e.g. networks, computer maintenance and programming. In terms of wages, around 40% received JOD 80-120 and 35% JOD 121-170; the rest were above this level. Only 16% felt that they were getting higher wages than others in the labour market. A quarter of the graduates had received additional training, half of those in the workplace, and a third in private training institutes.

Employer questionnaires were completed by 44 enterprises, 90% in Amman, 86% in the private sector and 60% in manufacturing. In terms of services they desired from the VTC, 90% wanted workforce training, 70% wanted consultancy services, and 60% wanted occupational safety and health and instructor training. Over two-thirds of the employers expressed a willingness to work on the evaluation of graduates, and over 60% on training programmes development and implementation. Significantly, 70% of the employers said that the training programme was only partially able to meet their requirements. Graduates were rated weakest (by 36% of the firms) on employability skills and highest (86%) on the ability to follow instructions and work in teams. VTC graduate performance in relation to other workers at the same level was ranked better by 50% of the firms and the same by 43%. Graduate salaries ranked higher than other workers in 30% of the cases and were equal in 64%. Half the employers said they were not asking for occupation practice certificates. A quarter of the firms had training units. The companies estimated that 70% of the VTC graduates had received additional training since they were hired, 84% of these in the workplace, mainly because they needed additional technical skills. A slight majority (54%) of employers said they had difficulty in finding workers at the craft level, mainly because of the specialised nature of the jobs and applicants' lack of practical experience. In terms of wages, 36% of the graduates received JOD 80-100 and 30% received JD 120. General suggestions for improvement of the VTC included developing better relations with industry, following more closely the development of the labour market and more instructor site visits to trainees.

Plans

The government plans to establish a 'vocational university' based on the German model of the *fachhochschule*. The institution will grant degrees in vocational-technical fields. It is to be located at the present institute's complex in Marka. The objective is not only to increase the supply of highly trained skills for the labour market, but also to act as a magnet to attract trainees to lower-level programmes.

Summary of recent innovations in the VTC

There have been no innovations in terms of organisation of the VTC. However, several pertinent changes have taken elsewhere in the corporation:

1. the change from a three-year system for apprenticeships to the semester system (two to four semesters, depending on the occupation); the new system is more flexible;
2. the introduction of employability skills into the teaching programme, e.g. IT skills and English;
3. the creation of specialised institutes, e.g. IT institutes in two locations, and specialised training for metal industries and chemical industries;
4. the implementation of the Work Organisation Law;
5. the introduction of student allowances in ad hoc programmes, e.g. NTP, which trained 4 000 individuals for the garment industry;
6. the phasing out of the applied secondary programme;
7. the 12 new training centres that are currently under construction;
8. the shift from an exclusive focus on pre-service training of young people to training for unemployed people.

Strengths

1. The basic pattern of 'dual training', which combines centre-based training with workplace experience and training, on the whole produces graduates with practical skills.
2. There is flexibility to change the content of training programmes as required, with no need to go through extensive bureaucracy for the changes.

3. There is an extensive network of employer relations at the apprenticeship level: around 5 000 employers are involved in providing workplace experience.
4. There is an extensive network of training infrastructure: around 50 existing centres are distributed across the country. Surveys of local needs are carried out before a centre is established.
5. The VTC provides a wide range of training courses.
6. The VTC has the freedom to handle its own budget once this has been approved by the cabinet.
7. Periodic follow-up of graduates takes place, including tracer studies.
8. Hundreds of training modules have been developed (around 750).

Problems and issues

Staff of the VTC and its training centres identified the following main problems and issues in the system.

1. Low abilities of students enrolling: Trainees are the weakest students academically from the 10th grade. This contributes to learning problems for trainees, and also to the drop-out rates.
2. Civil Service rigidities lead to low instructor competencies. Being part of the Civil Service limits the quality of instructors. The VTC cannot hire staff with the appropriate qualifications. The pay is often insufficient for trainers in high-paying occupations. The VTC has instructors sent to it through the Civil Service recruitment system who do not have practical experience. Various current and former VTC executives estimate that between 20% and 50% of the trainers have qualifications below those necessary. Moreover, there are few (positive or negative) incentives provided by the VTC for staff to upgrade themselves.
3. Lack of clarity in the job market: Overall, training supply exceeds demand and Jordanian enterprises tend to be small. It is difficult to discern market trends and identify the skills that are in demand. Consequently, there is a lack of timely and accurate data on the labour market.
4. Low status of vocational training: People traditionally look down on occupational training.
5. Upgrading and maintaining equipment is a problem in many centres. Inevitably, much of the equipment used in institutional training is different from that used in the workplace.
6. The recent innovation of paying trainees to attend training (and even that did not operate for males in the National Training Programme) may create an undesirable precedent for regular training programmes.

The following points could be added to this list.

1. Traditionally, the structure of the VTC board has a majority of representatives from the public sector. Only three positions are for employer representatives, and they often feel ignored. The Minister of Labour reports that the employer representatives have not even attended some regular meetings.
2. The VTC management structure is top-heavy in the sense that all key decisions must be made by the Director General. There is no way to resolve issues or disputes within the organisation below the level of the Director General.
3. Training managers have little incentive to perform better. They are not held accountable for results, in terms of either skills acquisition or employment of graduates.
4. There is substantial attrition of students, and low consequent completion rates. This translates into high costs per graduate (Rostron et al., 1999b).
5. The quality of graduates is criticised in the labour market. Instructors often lack focus on quality and standards of work.

6. The VTC conducts tests of its own graduates. No employers or third (objective) parties are involved.
7. There is a lack of authority at the level of administration of training centres. Heads of training centres do not have their own budgets.
8. Several observers report difficulties in getting employers involved effectively in the definition of occupational standards, designing training programmes and the evaluation of graduates. Several technical sectoral committees were established in 1996 to enhance the content of teaching programmes (and neither the MoE nor BAU use these), but these are not functioning well because of lack of employer interest.
9. Apprenticeships are a problem. Most enterprises are small, and only perhaps a third of them have the facilities, equipment and trained staff to be able to provide effective apprenticeships. The problems are compounded by patchy supervision by vocational training centres of trainees in apprenticeships. It is no longer instructors from the centres who carry out the supervision, but staff from separate follow-up units. Communication from supervisors to centre instructors is tenuous.
10. The vocational training centres generate only a small percentage their total revenue themselves, and are overreliant on government funding.

Strategies and plans³³

The VTC has adopted the following mission statement: 'The VTC mission is to collaborate with employers in the development of a skilled national workforce, and to serve as a resource in the field of enterprise development. This is achieved through the design and delivery of responsive training programmes and advisory services, characterised by excellence and relevance.' The VTC's first objective is to ensure that its training profile reflects labour market demands. The strategy to achieve this centres on establishing partnerships with private sector enterprises and agencies in order to understand their labour needs. The second objective of the VTC is to achieve excellence and entrepreneurialism in all its activities. The means to achieve this include greater autonomy and a remodelled organisational structure built around devolved and distributed management efficiency control, accountability and staff motivation. A specific target is to achieve greater financial autonomy by increasing self-generated income by at least 10% per year. This will require the adoption of internationally recognised management practices, rigorous capacity-building and extensive organisational development. The third objective is to become a critical resource to support SMEs. A fourth objective is to improve the performance of workplaces and the labour force through managing the implementation of the Occupational Work Organising Law, including the certification of workers and workplaces. The fifth objective is to be recognised as the leading provider of VET within the Jordanian TVET system and to establish active linkages with sister institutions regionally and internationally.

The VTC Strategic and Implementation Plan, 2005-07, amends the above statement. It states that the VTC mission is as follows: 'The VTC seeks to excel in providing training, qualifying, rehabilitating and upgrading the Jordanian workforce efficiency in accordance with the highest international standards to match the labour market needs internally and externally. It also seeks to offer vocational work organisation services and to promote small and medium-sized enterprises' (p. 2). The statement outlines eight different 'strategies' and 'procedures', (more properly 'objectives' and 'means'), and these are reproduced below.

Strategy 1

Provide comprehensive services in line with the needs of the growing population to graduate a well-trained workforce. Means:

1. provision of appropriate training facilities to train citizens throughout the kingdom, including studies on current distribution in relation to demographics and on regional and governorate labour market needs, with a view to establishing a long-range plan of provision;

³³ Based on 'VTC Mission Statement and Strategic Plan', n.d.

2. provision of training in line with current labour market needs and future investment projects, based on meetings with employers, analysis of investment projects and establishment of specialised technical committees; pioneering training projects will be undertaken in sectors that lack a national workforce, such as agriculture, construction, food preparation, building security, and the garment and chemical industries;
3. supporting the establishment and promotion of SMEs, including reactivation of the Small and Medium Enterprise Institute at the VTC, support to vocational training centres to offer consulting services to establish SMEs, and development of VTC training programmes for promoting entrepreneurship;
4. establishing training and consulting services in occupational safety and health (OSH) fields in line with labour market needs; this includes a training needs analysis in OSH, revision of programmes by the Safety Institute, enhancement of the capability of the Vocational Health Institute to carry out training and consulting, and increased cooperation with the MoL to create awareness of OSH.

Strategy 2

Sustainable progress for vocational training curricula and programmes in accordance with labour market needs and technical advances. Means:

1. developing occupational criteria in line with international standards;
2. upgrading curricula to reflect the knowledge-based economy, including offering lifelong learning opportunities and basic training in IT, communications and English;
3. promoting programmes and curricula in line with labour market needs, including upgrading mechanisms for continuous revising of VTC programmes, studies of labour market needs, assessment of VTC programmes and follow-up of graduates;
4. providing efficient training that parallels community college programmes, including a study to determine demands for technical training, and development of an operational plan to provide needed technical training in collaboration with BAU;
5. providing modern technical facilities preparations, including establishment of a computer laboratory in each training centre;
6. upgrading planning, implementing and education to improve the efficiency of training, including enhancing the capacity of the IRCDC in preparing and developing curricula, institutionalising a programme planning and review process, and preparing and implementing key performance indicators (KPIs);
7. promoting vocational guidance and counselling services, including upgrading the capacity of vocational counsellors, and implementing vocational awareness campaigns and annual marketing programmes;
8. enhancing the skills and knowledge of VTC staff, including linking financial incentives with job regulations, and conducting a training needs analysis followed by training programmes to upgrade staff accordingly.

Strategy 3

Partnerships with the private sector and communities. Means:

1. developing efficient mechanisms to enhance the role of the private sector and the civil community in planning, implementing and assessing vocational training, including establishing mechanisms, pacts and partnerships with the private sector, and activation of community counselling committees.

Strategy 4

Training for all. Means:

1. encouraging females to join vocational training programmes, including through provision of essential facilities, promotion of non-traditional training programmes for

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- females, fostering female participation in SMEs and establishment of business incubators for women;
2. encouraging those with special needs to join vocational training programmes, including upgrading trainers' skills and integration of special needs categories with existing training programmes;
 3. upgrading and rehabilitating the workforce, including expansion of training for unemployed workers and those at risk of becoming unemployed.

Strategy 5

High standards of occupational performance to suit the vocational labour market needs.

Means:

1. implementing the Vocational Work Law Regulations for occupations that are directly related to citizens' lives, including completion of regulations on vocational classifications, vocational examinations for workers and development and implementation of classifications standards for workshops.

Strategy 6

Integration with national bodies that relate to HRD. Means:

1. exchanging data and information related to the labour market with the national bodies concerned, including the establishment of databases on VTC centres, programmes and graduates, coordination with the NCHRD, and the use of the information obtained to adjust VTC activities and programmes;
2. coordinating and integrating with the bodies concerned to prepare and implement the vocational training and guidance programmes.

Strategy 7

Gain beneficial feedback from Arab and international experiences regarding the vocational training fields. Means:

1. enhancing Arab and international vocational training cooperation.

Strategy 8

Efficient legislation system in line with the nature of the corporation's work. Means:

1. developing effective legislation to support the efficiency and effectiveness of its performance, including the establishment of an independent financial and administrative incentive system, endorsement of regulations relating to the implementation of the Vocational Work Law, and periodic revision of its regulations;
2. computerising the various types of work, including development of an effective information and computing system and development of a modern website;
3. enhancing its teaching and education trends, including annual staff development plans, convening of workshops and seminars, and dissemination of the results of its studies and reports;
4. promoting an effective administration system, including revising and streamlining current processes and structures in accordance with process analysis, and implementation of a management development and training plan with a view to implementing performance-based management (pp. 5-33 of the plan).

In accordance with the plan, the VTC has outlined a project to develop VTC training programmes in accordance with technological developments, requirements for a

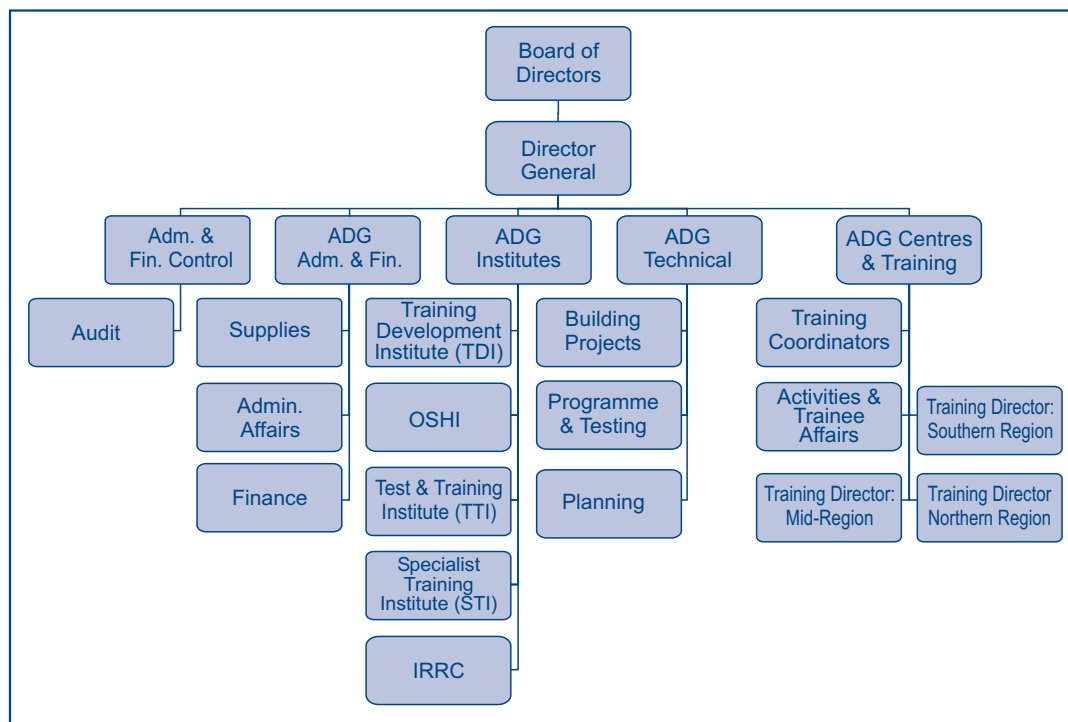
knowledge-based economy and the needs of the labour market. The proposal consists of an evaluation of current training programmes, developing curricula and learning materials, upgrading trainers in accordance with new curricula and upgrading training equipment in VTC training centres. The project would take three years and cost JOD 4 million, made up of JOD 750 000 for studies, curricula and learning materials, JOD 250 000 for training trainers and JOD 3 million for upgrading centre equipment.

Assessment

The plan contains important elements, including revision of curricula, upgrading of staff, and more equitable provision. However, it seems to be lacking on several fronts. The overall plan is lacking in its vision to transform the VTC into a relevant, highly effective organisation. It says little about how improvements could be made to the orientation, governance and management of the current complicated structure. It says little about how to build incentives into the system for better performance by instructors and management. It does not touch on how to mobilise resources better from within the VTC system. Moreover, the plan does not identify the necessary actions by level of priority or sequence, nor does it spell out the main concrete steps required to achieve the objectives. Finally, it provides no analysis of the resources (financial and human) required to implement the plan (apart from a perfunctory JOD 4 million proposal that would address only some of the requirements). In short, the plan is not a credible reform programme for the VTC.

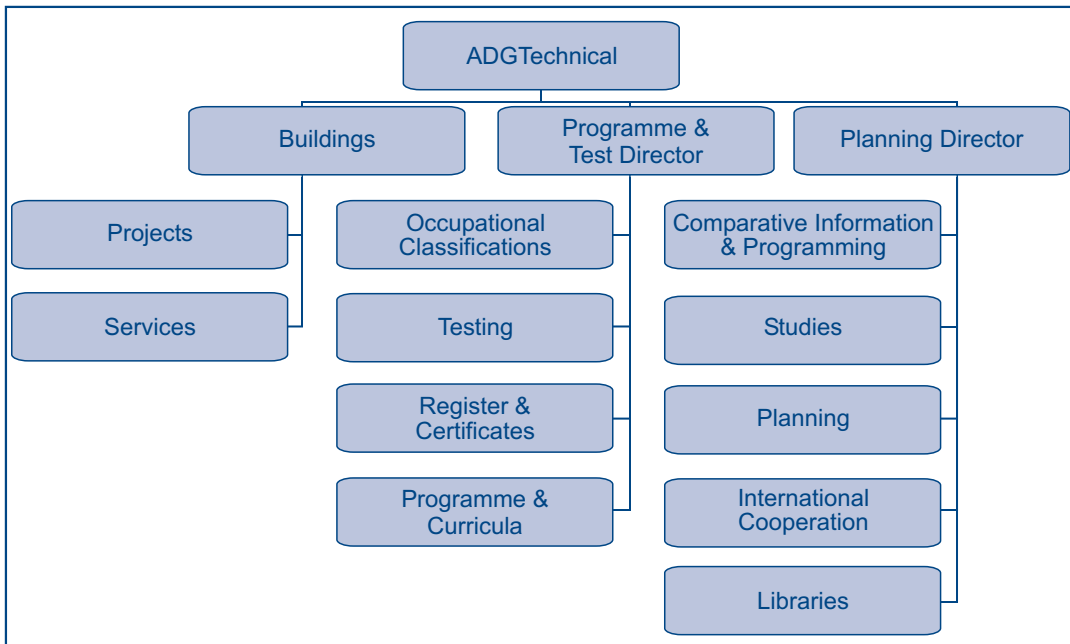
Statistics and charts

Appendix 1: Simplified organisational structure of the VTC, 2003



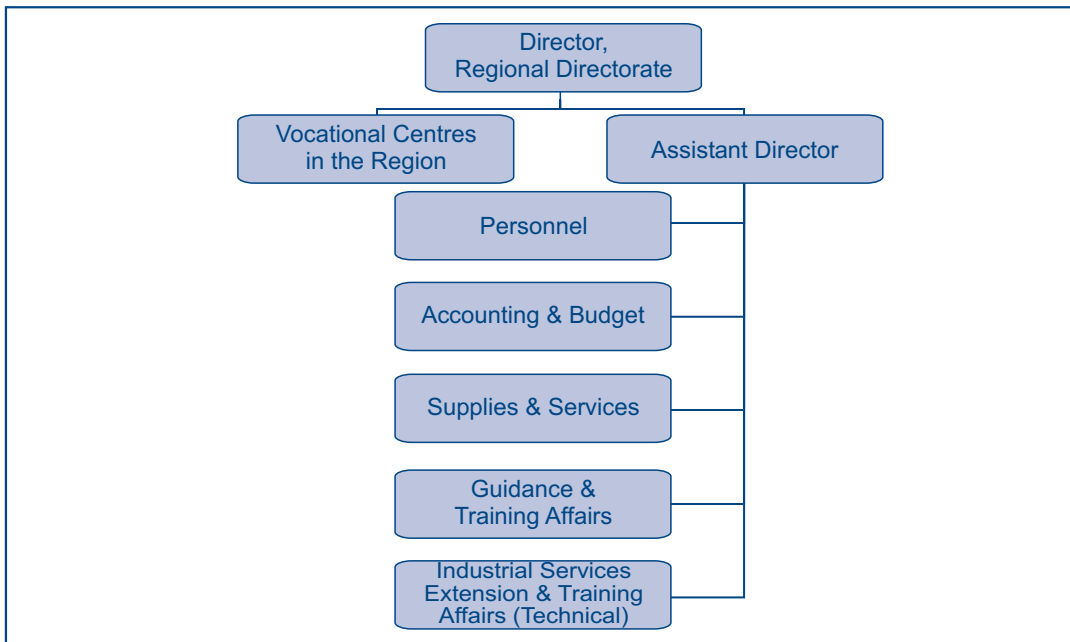
Source: Vocational Training Corporation

Appendix 2: Detailed organisational structure of the ADG Technical Affairs, 2003



Source: Vocational Training Corporation

Appendix 3: Organisational chart for Vocational Training Directorate, 2003



Source: Vocational Training Corporation

Appendix 4: Semi-skilled worker training programmes, 2003

No	Training programme	No	Training programme
1	Knitting machine operation	18	Gypseous worker assistant
2	Aluminum profile fabricator	19	Wiring electrician assistant
3	Steel profile fabricator	20	Auto electrician assistant
4	Leather bag sewing	21	Arc welder assistant
5	Home sewing	22	Computer maintenance assistant
6	Building painter	23	Excel and Word training
7	Bread, sweets and pastries	24	Word processing
8	Data entry	25	Food service assistant
9	Men's barber assistant	26	Automotive upholstery assistant
10	Women's barber assistant	27	Central heating mechanic assistant
11	Hair chemicals	28	Plumbing mechanic assistant
12	Sweets production assistant	29	Domestic refrigeration mechanic
13	Bakery assistant	30	Furniture carpenter
14	Turning mechanic assistant	31	Stitch machine operator
15	Food production assistant	32	Plastic flower arranging
16	Automotive speed service mechanic	33	Machine embroidery
17	Mould fabricator	34	Carpet textiles

Appendix 5: Skilled worker training programmes, 2003

No	Training programme	No	Training programme
1	Video and TV repairer	24	Line network electrician
2	Radio and recorder repairer	25	House wiring electrician
3	Radio and TV repairer	26	Automotive electrician
4	Food production	27	Indust. equip. main. elect.
5	Sales and retail	28	Cable electrician
6	Tile setter	29	Machine winding electrician
7	Metal furniture fabricator	30	House keeping
8	Plate metal fabricator	31	Mould fabricator
9	Metal profile	32	Prepress worker
10	Pipe welder	33	Furniture upholster
11	Barber	34	Automotive upholster
12	Hairdressing	35	Domestic refr. and A.C. mechanic
13	Sweets production – oriental	36	Heavy equipment mechanic
14	Sweets production – western	37	Auto-body repair mechanic
15	Bakery	38	Central heating mechanic
16	Food service	39	Plumbing mechanic
17	General mechanic	40	Truck and bus mechanic
18	Dress and skirt sewing	41	General maintenance mechanic
19	Dress model sewing	42	Light vehicle mechanic
20	Sandcasting	43	Furniture carpenter
21	Offset printing	44	General construction carpenter
22	Gypseous worker	45	Carving carpenter
23	Substation electrician	46	Excavator

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Appendix 6: Craft training programmes, 2003

No	Training programme	No	Training programme
1	Office machine maintenance	11	Paint production supervisor
2	Computer maintenance	12	Plastic products production
3	Instrumentation mechanic general	13	Liquid detergent production
4	Auto electronics	14	Water filtration unit supervisor
5	Light vehicle mechanic general	15	Furniture carpenter general
6	Automotive spare parts sales	16	Building carpenter general
7	Plate metal fabricator general	17	Reception supervisor
8	Turning mechanic general	18	Barber and hairdresser general
9	General caster	19	Cosmetology
10	Pipe welder general	20	Office work

Appendix 7: VTC trainee enrolment by level, 1976-2004

No	Year	Training programme										
		Crafts		Skilled		Limited skilled		Upgrading		Total		
		M	F	M	F	M	F	M	F	M	F	Total
1	1976	0	0	20	0	0	0	0	0	20	0	20
2	1977	0	0	156	0	0	0	155	0	311	0	311
3	1978	0	0	421	17	0	0	204	0	625	17	642
4	1979	0	0	450	0	0	0	284	0	734	0	734
5	1980	0	0	679	0	289	0	378	0	1 346	0	1 346
6	1981	0	0	832	0	865	0	139	0	1 836	0	1 836
7	1982	0	0	1 529	0	749	12	121	0	2 399	12	2 411
8	1983	0	0	1 980	0	948	281	295	0	3 223	281	3 504
9	1984	0	0	2 733	43	1 253	163	392	0	4 378	206	4 584
10	1985	0	0	2 566	82	1 022	390	524	0	4 112	472	4 584
11	1986	0	0	2 809	68	1 763	690	796	0	5 368	758	6 126
12	1987	0	0	2 434	106	1 808	1 261	1 100	53	5 342	1 420	6 762
13	1988	0	0	2 468	134	2 102	1 028	1 266	67	5 836	1 229	7 065
14	1989	0	0	1 943	47	1 873	1 256	1 279	121	5 095	1 424	6 519
15	1990	0	0	1 870	48	2 865	1 426	964	97	5 699	1 571	7 270
16	1991	0	0	3 049	108	4 550	2 025	1 299	264	8 898	2 397	11 295
17	1992	0	0	2 926	121	5 121	1 675	1 664	223	9 711	2 019	11 730
18	1993	0	0	3 100	120	4 288	1 696	2 500	286	9 888	2 102	11 990
19	1994	0	0	3 392	128	3 742	2 080	2 334	253	9 468	2 461	11 929
20	1995	0	0	3 818	169	2 994	1 442	2 447	363	9 259	1 974	11 233
21	1996	0	0	4 881	303	3 007	1 420	2 349	274	10 237	1 997	12 234
22	1997	0	0	4 987	391	2 639	1 434	3 785	239	11 411	2 064	13 475
23	1998	0	0	4 523	384	2 995	1 641	2 450	282	9 968	2 307	12 275
24	1999	121	0	5 212	334	4 892	1 399	1 302	281	11 527	2 014	13 541
25	2000	324	166	5 835	248	1 028	950	1 975	436	9 162	1 800	10 962
26	2001	584	248	5 990	400	992	919	1 894	161	9 460	1 728	11 188
27	2002	433	266	5 057	1 266	1 935	1 190	2 897	201	10 322	2 923	13 245
28	2003	1 097	915	4 435	1 662	1 594	2 103	3 356	330	10 482	5 010	15 492
29	2004	581	454	5 074	846	2 583	2 331	2 036	268	10 274	3 899	14 173

Source: VTC Annual Report, 2004

ANNEX 3: AL-BALQA APPLIED UNIVERSITY AND COMMUNITY COLLEGES

Background

Community colleges (grades 13-14) were created from teacher-training colleges that previously operated under the MoE. Traditionally their main function was to prepare students for careers in teaching in basic education. However, the education reforms of 1988 raised the level of qualifications required for teaching in basic and secondary schools, so that teachers needed a full degree. This led to a major change in teaching programmes outside education, and provided a stimulus to diversify programmes.

Objectives

The objectives of community colleges are twofold:

- to serve as terminal education in practical fields, preparing students for entry to the labour market;
- to prepare for entry to university degree-level studies for a minority of the students.

Governance and organisation

In 1996 the government established Al-Balqa Applied University (BAU) for the purpose of coordinating all community colleges in the country, both public and private. The BAU subsequently began to offer university degree programmes itself, but retained overall coordinating responsibilities (technical, financial and administrative supervision) for community colleges. It implements this coordination through a vice president at the university in charge of community colleges. The vice president is assisted by a Planning Unit that deals exclusively with community colleges. The responsibilities of BAU include announcing the principles and conditions for admission, preparation and coordination of the comprehensive examination, and establishment of the academic calendar applicable to both public and private colleges. The BAU ensures that students are admitted according to the principles of administration.

Another innovation was the establishment of a Deans' Council made up of the heads of all public community colleges in the country (no deans from private colleges are included). The BAU already had a Deans' Council that comprised the academic heads of departments within the university. Establishment of a second council for the community colleges has therefore met some resistance from the MoHE. Thus, while the Deans' Council for community colleges functions, it has yet to receive official recognition.

Institutions and institutional management

Community colleges are categorised into four groups:

- those under the authority of the BAU;
- those operated by other government agencies;
- colleges administered by UNWRA;
- private colleges.

Reportedly Jordan has 15 public community colleges, 9 operated by other government agencies, 2 operated by UNWRA and 19 private colleges. Table 20 shows the distribution of enrolment in community colleges by ownership.

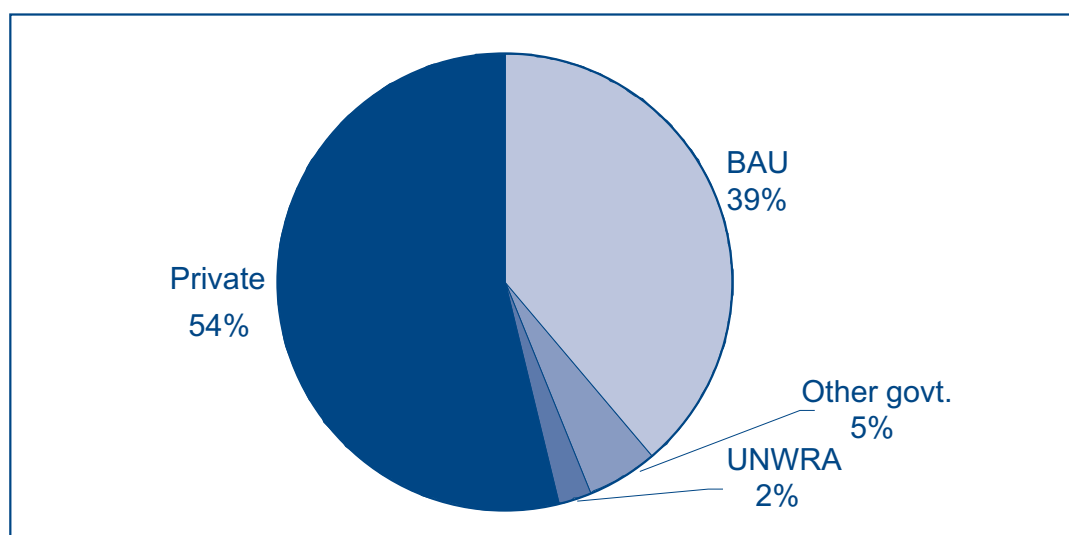
Table 20: Community college enrolment by ownership and gender, 2002/03

Owner	Enrolment			
	Total	% of total	Females	% of females
BAU	10 497	39	7 364	70
Other govt.	1 323	5	810	61
UNWRA	638	2	470	74
Private	14 509	54	8 475	58
Total	26 967	100	17 119	63

Source: Ministry of Higher Education

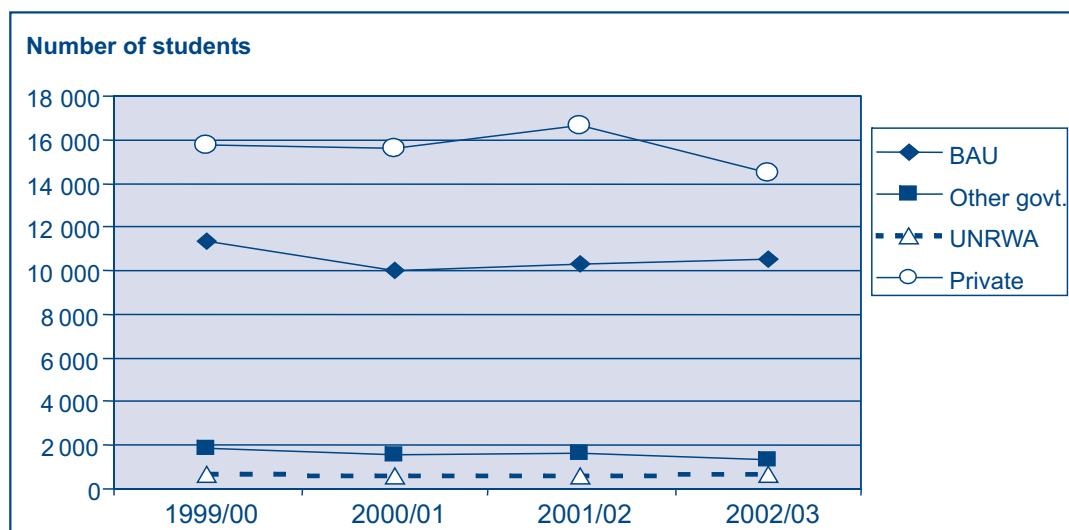
Over half the enrolment is in private institutions, and 63% of the total enrolment is female.

Figure 16: Total community college enrolment by ownership, 2002/03



Source: Ministry of Higher Education

Figure 17: Total community college enrolment by ownership, 1999/00 to 2002/03



Source: Derived from Ministry of Higher Education data

Enrolment in all types of community colleges was less in 2002/03 than in 1999/00, as shown in Figure 17. Enrolments at the BAU declined by around a third, from around 13 000 students in 1998/99 to 8 940 students in 2003/04. The decline is attributed to the expansion of private universities, including the decision by the Higher Education Council to ease university requirements. Entry requirements for private universities have been lowered from a 65% pass rate in the *Tawjihi* to 50% in 2004. In addition, enrolment in private community colleges has been affected by the presence of 'parallel programme' students in public community colleges. These parallel programmes are somewhat of a misnomer, as they consist of privately financed students who take the same classes as publicly subsidised students. The public community colleges charge higher than usual tuition fees for these parallel programmes, though they are below the levels charged by private colleges. The owners of private colleges have protested against this practice on the grounds that it undercuts their enrolment base and is unfair competition (since government subsidies to the public community colleges allow them to charge less than the full cost). Despite the protestations, the community colleges have continued this practice. Another factor in the decline has been the inability of students to pay the higher fees in private community colleges.

Community colleges are headed by deans. The President of the BAU hires the dean for each public community college. Many of the administrative decisions within a public community college are handled by a college council consisting of the dean as chairperson, administrative assistance, student affairs assistant, and the head and one elected representative from the academic divisions, e.g. applied science, administrative science and basic science.

Private community colleges are subject to accreditation standards. No new community colleges have been approved in the past 10 years. The procedures for opening a new private community college are as follows.

1. The owners submit a feasibility study to the MoHE.
2. The MoHE refers the application to the Council of Higher Education.
3. Initial approval is given to successful applicants to procure the necessary inputs and start teaching (if not started within two years, the initial approval is cancelled).
4. The Council for Accreditation will form a committee to visit the college and look at its various inputs, buildings, laboratories, teaching staff and administrative structures.
5. If everything is up to the specified standards, the college receives general accreditation. The evaluation is reviewed and evaluated by the BAU president. If the president approves, it is sent to the Higher Education Council for final approval. However, the Board of Higher Education has stopped approving any new private community college programmes except those with a clear technical base, e.g. hotel management, IT.
6. The institution then applies for special accreditation of its general teaching programmes. Subject-specific committees visit the institution and check teaching programmes in each specialisation (or for proposed new specialisations in colleges that have already been accredited).

The government does not regulate the tuition and other charges of private colleges.

Programmes

Programme development

Two major innovations have taken place over recent years in community colleges. The first relates to the fact that part of the motivation for the establishment of the BAU was to rationalise the course offerings in community colleges and reorient them to the more practical requirements of the labour market. As a result, the more than 125 existing different programmes were trimmed to 86 diploma programmes with better labour market

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prospects. For example, in the process courses such as sports, Islamic studies were dropped, and others such as MIS, hotel management, autotronics and mechatronics were introduced. The second major innovation was the adoption of a new process for introducing new teaching programmes. Programme Advisory Committees made up of seven members, of which five are usually from local industry, are being formed at each community council. They can propose new programmes to the dean of the college who, after review, can forward these to the Deans' Council for endorsement. The actual teaching programmes are designed at the BAU by university and college staff, who ensure that the content complies with proper design and bridging to university. Thus, while local views about demand are taken into account, the actual design of teaching programmes is mostly carried out by academic staff.

Teaching programmes at private community colleges are evaluated and approved by the university Deans' Council. Basically, both public and private community colleges are expected to have the same curricula. After two years the students must sit for the same standard examination, as set by the BAU.

Enrolment by specialisation

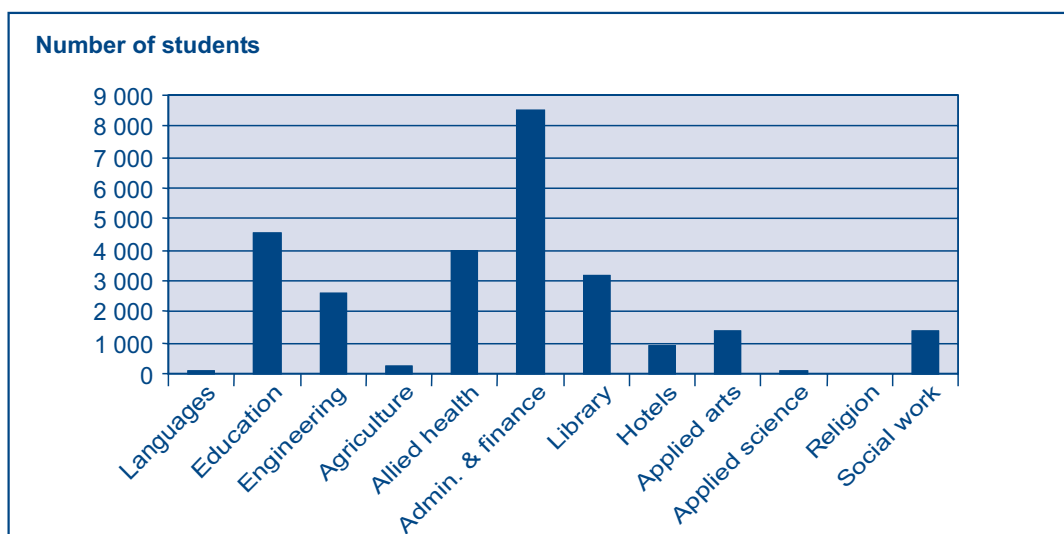
Table 21 gives the total enrolment in community colleges by specialisation.

Table 21: Community college enrolment by specialisation, 2002/03

Enrolment by subject	No of students	% of total
Languages	81	0
Education	4 511	17
Engineering	2 627	10
Agriculture	236	1
Allied health	3 961	15
Admin. and finance	8 554	32
Library	3 190	12
Hotel services	914	3
Applied arts	1 412	5
Applied science	83	0
Religion	1	0
Social work	1 397	5
Total	26 967	100

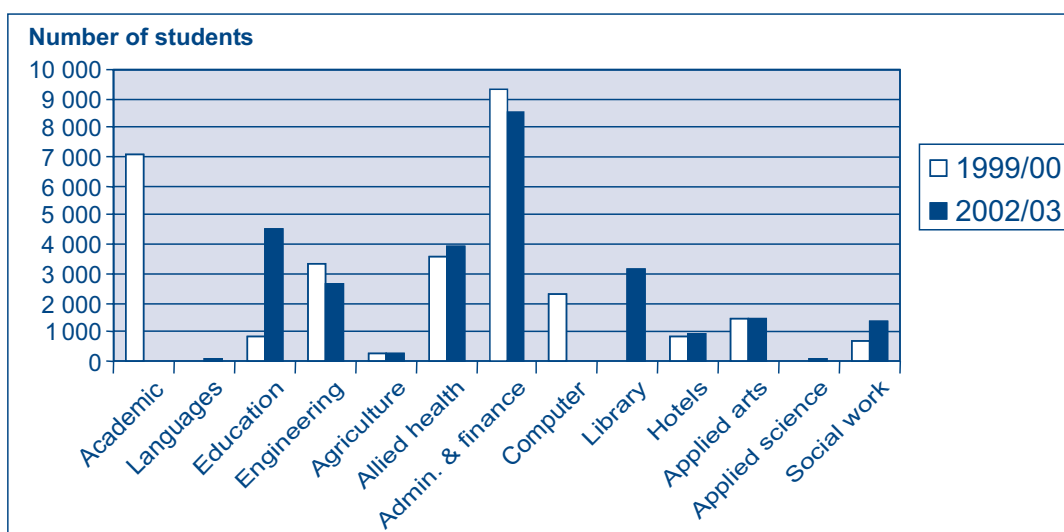
Source: Ministry of Higher Education data

Five subjects account for the bulk (86%) of the enrolments, namely: education, engineering, allied health, administration and finance, and library science.

Figure 18: Community college total enrolment by subject, 2002/03

Source: Ministry of Higher Education data

Over the past four years the composition of enrolment by specialisation has changed in several respects. Academic programmes have been phased out. Enrolment has decreased somewhat in engineering, administration and finance and applied arts. Enrolment has increased substantially in education (e.g. pre-school education and child development), and library science, and modestly in allied health, hotel services and social work, as shown in Figure 19.

Figure 19: Enrolment by subject in community colleges, 1999/00 and 2002/03

Source: Ministry of Education data

As established by the Higher Education Council, 20% of those who obtain a diploma can continue on to degree programmes, i.e. generally those with a 75% pass level in the common examination. However, for financial reasons, not all those who are eligible actually continue. For example, of the 7 000 graduates in 2002, less than 1 000 continued with degree studies the following year, even though at least 1 400 would have been eligible to do so. One effect that this 'bridging' quota has had on the curriculum is that diploma and degree subjects in the first two years have the same content and subjects.

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Enrolment in some fields tends to be gender-specific. Enrolment in engineering and hotel management are overwhelmingly male: females account for only 19% and 7% of total enrolment, respectively. Four programmes are overwhelmingly female: education (99%), languages (92%), applied sciences (100%) and social work (91%). Other programmes tend to be more mixed, but still have a majority of females (administration and finance (69%), management (66%), paramedical (68%), applied fine arts (73%) and agriculture (54%).

Student selection procedures

For admission to public community colleges, students apply to the BAU. Private community colleges advertise in the news media, indicating programmes that will be available and when applications will be accepted. Students apply to the colleges in their catchment areas (this is a requirement) for specific specialisations. They are given six choices in public institutions. Students are then allocated to specialisations based on their scores in the *Tawjihi* examination. If courses are undersubscribed, they may be discontinued for lack of demand. This has happened, for example, in medical records and architectural engineering. The most popular courses are business administration, accounting, IT and MIS and nursing assistant training.

Student attrition and completion rates

Up-to-date data are not available on student drop-out and completion rates. The most recent study of the topic surveyed four institutions in depth in 1999. Using data from 1996-98, this study found that the total pass rate (i.e. completion rate, taking into account the proportion of the original students enrolled who completed their studies successfully) was just 57% in 1996, 52% in 1997 and 47% in 1998. (The current pass rate is reported to be higher at 65%.) These levels were based on detailed examinations of four public community colleges. Attrition between the first and second years was 8%-20% depending on the institution. Attrition between the second year and graduation was more substantial, between 25% and 38% (Rostron et al., 1999b, pp. 44-45).

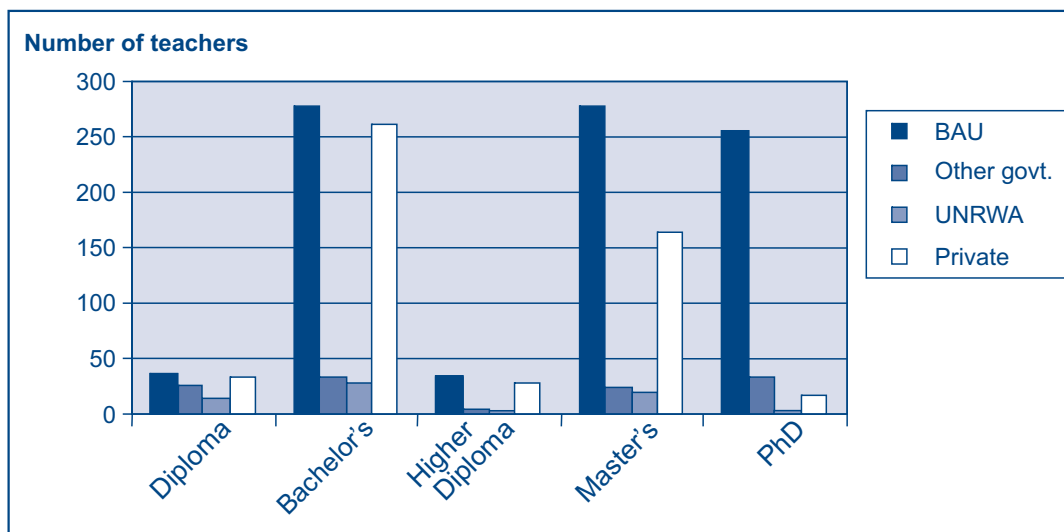
Teachers

Overall, teachers must have at least a Bachelor's degree to teach at community colleges. Around 9% of the instructors do not have this qualification. Most of the instructors with Master's degrees and PhDs are located at the BAU. Table 22 shows the actual distribution of staff according to qualification.

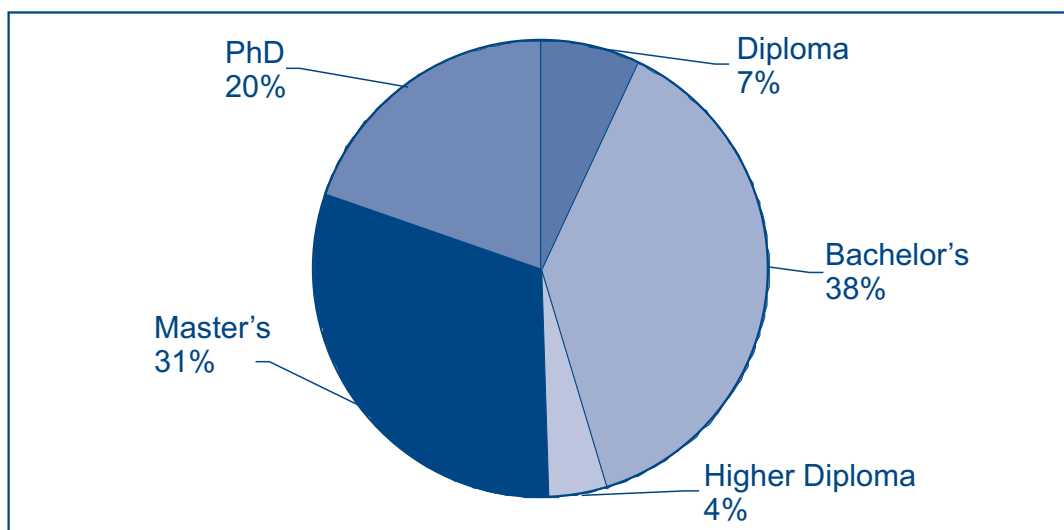
Table 22: Full-time instructors by supervising authority and level, 2002/03

Owner	Diploma	Bachelor's degree	Higher diploma	Master's degree	PhD	Total
BAU	36	277	32	279	255	879
Other govt.	26	34	3	21	34	118
UNWRA	14	29	0	20	3	66
Private	33	262	28	164	17	504
Total	109	602	63	484	309	1 567
% of total	7	38	4	31	20	100

Source: Ministry of Higher Education data

Figure 20: Community college teaching staff by qualification and location, 2002/03

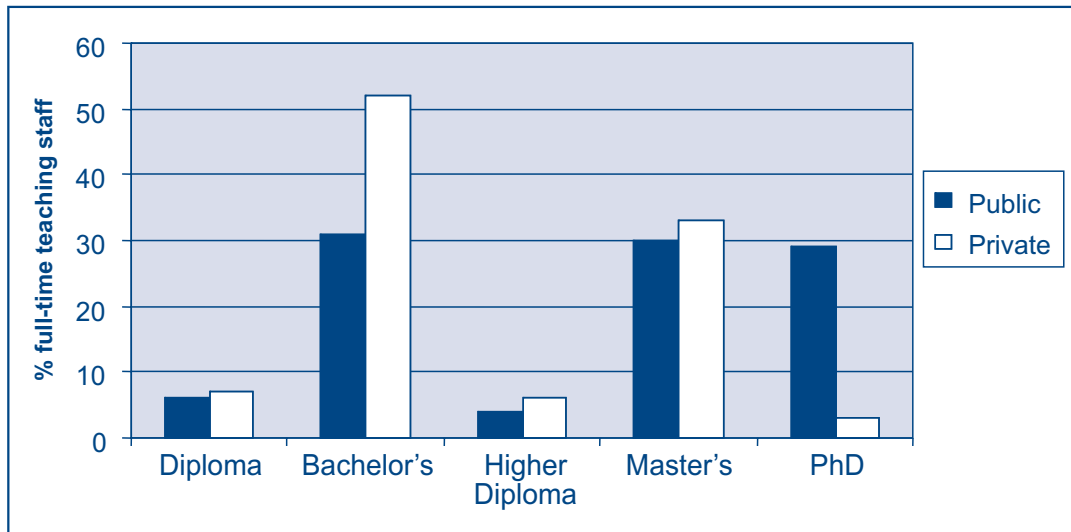
Source: Ministry of Higher Education data

Figure 21: Community college teaching staff by qualification, 2002/03

Source: Ministry of Higher Education data

Private community colleges, according to accreditation standards, stipulate that all teaching staff must have at least a Bachelor's degree, and 50% should have higher teaching degrees (Master's degrees, PhDs). In 2002/03, the actual profile was as follows for public and private institutions.

Figure 22: Public and private community colleges – Teacher qualifications, 2002/03

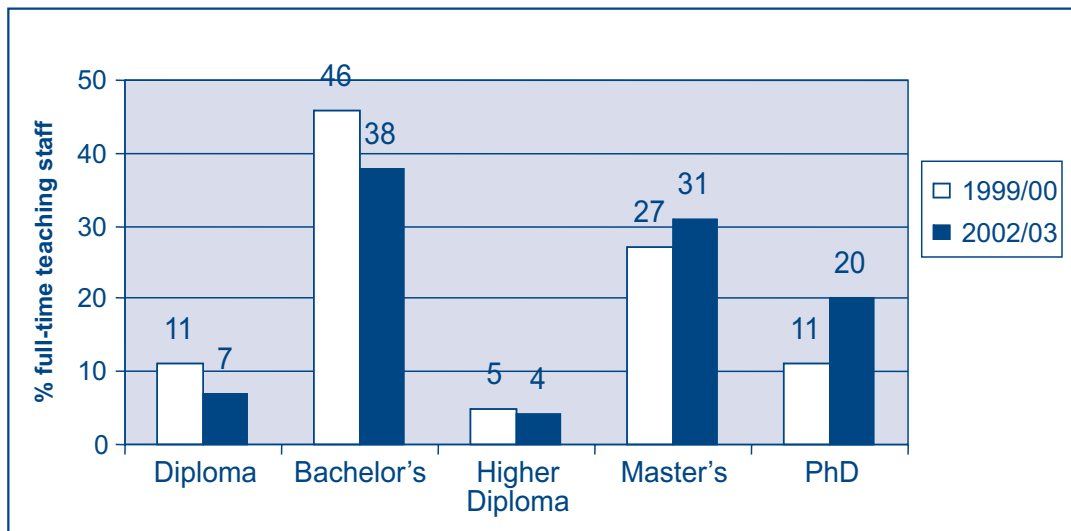


Source: Calculated from Ministry of Higher Education data

Private institutions have a much higher proportion of teaching staff with only a Bachelor's degree, and public institutions have substantially more with PhDs. Despite accreditation standards stating that 50% of their teaching staff should have qualifications above a Bachelor's degree, the figure for private community colleges is only 42%.

Overall, teacher qualifications have improved considerably, as shown in the following comparison.

Figure 23: Community colleges: full-time teacher qualifications, 1999/00 and 2002/03

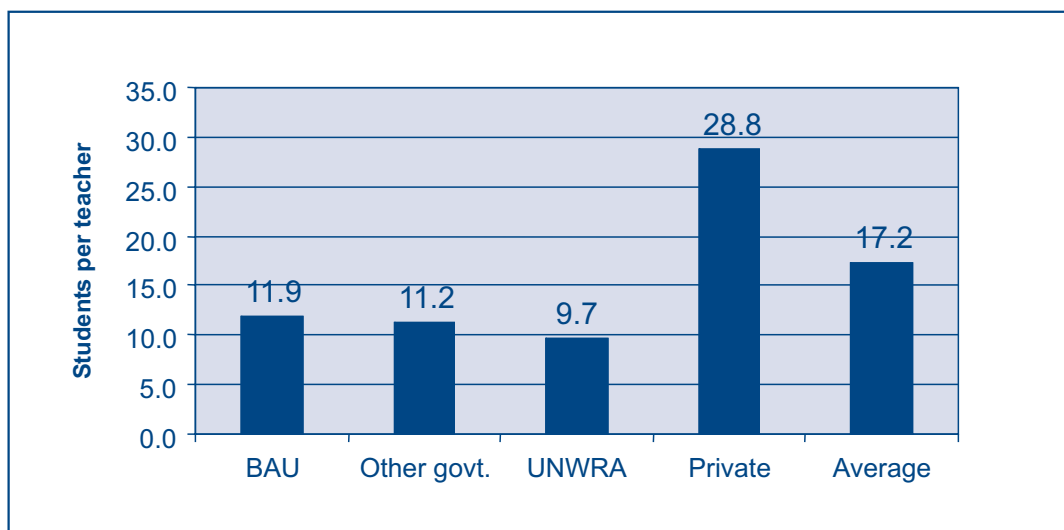


Source: Ministry of Higher Education

Students per teacher

The staff-to-student ratio varies greatly between the public and private sector, as shown in Figure 24. In fact, the number of students for each full-time instructor in private community colleges is more than twice that for the BAU.

Figure 24: Community college students per teacher, 2002/03



Source: Derived from Ministry of Higher Education data

Accreditation standards allow 40 students per session in humanities subjects and 30 per session in the theoretical subjects of the sciences stream. Laboratory work carries a maximum of 15 students per session. These numbers allow the private community colleges to make intensive use of staff and thereby economise on salary costs per student. The numbers for BAU may also be artificially low because teachers of academic subjects that have been phased out are still on the BAU's official roll.

Budget and financing (and costs per student)

Each community college has its own budget. At the end of the financial year it proposes a new budget. This is submitted to the finance manager at the BAU, is discussed by the dean and the finance manager, and is then sent to the president of the BAU. The president discusses the budget informally with the university's Board of Trustees. The president then submits the BAU budget and consolidated community college budget to the Higher Education Council for approval. Allocations to each community college are usually based on historical trends, numbers of students and staffing levels, plus special requests. The money is held at the BAU and college deans must apply for it against their line-item budgets. The only funds available directly to the college are the fees paid by students.

Students are required to pay JOD 5-12 per credit hour in public community colleges, compared to JOD 20-60 for university courses. Student fees finance around 20% of the total costs of public community colleges.

The average unit cost per full-time equivalent student was JOD 1 105 in 1998. The average cost per graduate in the four institutions was JOD 4 163, ranging from a low of JOD 2 127 for a large institution with high numbers of students per instructor (35:1) to a high of JOD 8 083 for a relatively small institution with many fewer students per member of staff (15:1) (Rostron et al., 1999b, pp. 27 & 46).

Testing, outcomes and destinations of students

All students, whether public or private, must take comprehensive national examinations in five subjects in order to graduate. Students can apply twice for the exam. The overall pass mark is 60%, and there is a 65% success rate nationwide. Overall pass rates in the exam were 62.1% in 1999; 60.8% in 2000; 65.5% in 2001; 60.4% in 2002; and 66.3% in 2003.

Public institutions do better on average than private institutions. The BAU collects statistics on performance by institution but does not publicise it. Only the names of the first five performers in each category are announced. Publishing the statistics by institution would provide a powerful stimulus for raising quality, particularly in private institutions that depend on their reputations for a continuous supply of fee-paying students.

Few tracer studies have been carried out on community college graduates, but the Planning Department has a new division responsible for tracing graduates.

Problems and issues

The SETVET project carried out a final assessment study in 2005. Some of its findings are presented below in terms of five criteria.

Linkages with the labour market

Overall conclusion. Colleges are performing below the level of their potential in terms of impact on the labour market because of the tenuous connection of college programme planning to the skill demands of the workplace.

- In general, in 2004 employment among college graduates was lower than for those with secondary education and the same as those with a degree.
- A poor match was found between college programmes/specialisations and economic activity. High labour market demand was found in engineering fields, though demand was low for childhood and special education (which made up 18.5% of the graduates in 2004).
- Employers reported difficulties in finding candidates for technical engineer, building inspector, survey technician, architectural drawing and corporate financing posts; and there were also too few candidates for nursing, paramedic, x-ray technician, and disability diagnosis jobs. There appears to be significant demand for graduates in business-related fields, but diploma graduates must compete with the oversupply of university graduates for these jobs.
- The most common deficiency among graduates in almost all fields was their lack of proficiency in the English language.
- Employers indicated a general need for colleges to provide advanced computer skills.
- Employers acknowledged that the two-year programmes provide the basic entry-level knowledge for employment in most fields.
- By and large, employers found that the fields of study in the colleges were too narrowly focused.
- Employers believed too much time is spent on theory and too little on practice. Field training, in particular, is not relevant, long enough or well enough organised by the colleges. Employers felt that colleges place too much emphasis on preparing students to pass the comprehensive exams at the expense of preparation for the practical aspects of the occupation.
- However, around two-thirds of graduates said they eventually found employment in jobs that were at least partially related to their specialisations.
- In future the expansion in university enrolment and graduates in a job market already oversupplied with degree graduates will make it ever more difficult for college graduates to find employment at their skill level and at an appropriate starting salary.

Colleges are primarily supply-driven. Colleges were not found to plan their programmes around labour market needs. Colleges typically do not have a formal means of identifying labour market skill requirements.

- Most college planning focuses on the continuation of existing or creation of new programmes/specialisations for which there is sufficient student interest to ensure adequate enrolments.
- Colleges all too willingly continue to offer programmes and enrol large numbers of students in areas where there will not be sufficient job demand (e.g. childhood education; pharmaceuticals).
- In the main the colleges do not actively seek employer input into their programmes and curricula, and lack any real information on the labour market at national, regional or local levels.
- There are no formal consultative bodies in place to enable the colleges to gather labour market information from employers.
- Linkage with employers is the weak link in the current college system. Few colleges have any formal arrangements with employers or their associations. There are no employer incentives for cooperating with colleges.

Some efforts are being made to identify and fill 'niche' markets. Several private colleges have introduced one-year vocational or commercial programmes that provided graduates with skills sought in the labour market. These programmes have apparently been profitable, as they have been continued for more than one year. This suggests that a mix of one-year vocational with traditional college-level programmes might improve the long-term prospects for maintaining student enrolments in programmes with direct labour market relevance. The need for shorter (less than one year) upgrading programmes was mentioned by employers. This is a niche market that colleges are ideally situated to fill.

The college mandate is not to produce graduates with a good general education. It is to produce graduates with the specific skills needed in the labour market. Unfortunately, the emphasis has been more on academic excellence than on the development of practical skills.

The greatest obstacle to making the colleges more responsive to the labour market is that they are organised on an academic rather than a skills training model. Colleges are held to account by the BAU for their success in comprehensive exams and not for the students' employment success.

Equity

The unemployment rate for females was highest for those with a college diploma. The reasons are that (1) females graduate in many programme areas where job demand is low (e.g. child education) and (2) many appear to attend college for reasons other than labour market preparation, e.g. to upgrade their general education.

Quality

- The colleges do provide students with an education that meets high academic standards. Successful completion of comprehensive examinations is required to obtain a diploma, and the comprehensive examinations pass rate never falls below 60%.
- In the main, employers were quite positive about the quality of the college programmes and their graduates. They felt that the college diploma has a recognised value in the labour market and that a college diploma does increase an employee's chances of advancement.

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- The articulation between the college and university levels of study is good. Up to a quarter of the public college students are admitted to university after completing college bridging programmes.
- Around two-thirds of college graduates seemed to feel that their goals, or reasons, for going to college, were met. However, half felt that their college training was inadequate in terms of employment preparation.
- Funding is adequate for low-cost programmes such as languages and secretarial science that require relatively little equipment, but government funding is inadequate for high-cost programmes where enrolment is not large, e.g. in many engineering fields.
- There are difficulties in recruiting and retaining qualified teachers. Industry pays higher salaries and this drains these teachers from colleges, e.g. in engineering fields. Many also move to university teaching positions.
- The overemphasis on theory at the expense of practical expertise is probably related to the background and qualifications of college teachers and administrative staff: they are academics first and practitioners second, or not at all.
- The examinations measure theory well, but are not as effective at measuring practical aspects. Employers suggest that teaching to the exam narrows the occupational preparation of students.

Management effectiveness

- There is an absence of accountability on the part of the colleges for the post-graduation employment of their students. The colleges do not believe that the BAU is interested in the success of their graduates in finding employment.
- Except for the UNRWS colleges, the majority of the public and private colleges do not have a systematic way of determining the employment success of their graduates.
- The colleges and the BAU have not acquired a 'performance culture'.
- Public college deans move all too frequently, and many come from the universities (academia), making it more difficult for colleges to connect with employers.
- The private colleges feel they have little influence on the BAU, even though the BAU regulates them.
- The colleges seem reticent about making programme changes. The complaint is that the BAU process for change is prohibitively slow.
- By offering degree programmes, the public colleges are eroding enrolments and eventually the quality of education and training in the two-year programmes. This trend could spell the end of the two-year diploma programme in Jordanian colleges.
- Only the Amman Training College has an active employment service. This is a critical missing ingredient in the college system.
- No mechanisms exist within the college system for coordinated, college-wide programme planning based on key performance indicators. There is no system for programme review based on performance.
- It is very difficult for the colleges to hire part-time or sessional teachers, even though the place to hire college teachers is often from the ranks of practitioners in the field.
- The college administration in Jordan is highly centralised, with tight control exerted over the colleges by the BAU. It is difficult for the colleges to make changes in the curriculum in response to changes in the labour market, as all such changes must be approved by the BAU and the process is reported to be very long. Even the private colleges must seek approval from the BAU to alter their curricula. When colleges develop a new or revised programme, the BAU shares the revised programme with all the colleges, eliminating any possible competitive advantage for the innovative private college.

Efficiency

- There is evidence of duplication of programme offerings and competition for student enrolment among the public colleges in many regions of the country.
- Competition among the colleges appears to be one of the greatest barriers to any rationalisation of programme offerings across the public colleges.
- Duplication provides fertile ground for those seeking to rationalise public expenditure and seek reductions in funding for colleges.

The SETVET final report concludes with four recommendations:

1. establish stakeholder councils;
2. rationalise the college programme and specialisation offerings;
3. reconsider the policy on college faculty qualifications;
4. establish a permanent graduate follow-up information system.

Other issues

1. The private community colleges face declining enrolment and therefore decreasing income. This limits their income and ability to hire good teachers.
2. In order to facilitate communication and control, the BAU wants to establish an Internet communications system among public community colleges.
3. If admission to parallel programmes in community colleges continues, this would cut into the number of students at private community colleges.
4. Some public community college administrators complain that many students are poorly prepared academically and are unable to handle the content of some teaching programmes.
5. Public college administrators have little autonomy when it comes to budgets and expenditure.

Strategic plan

The BAU has prepared its own strategic plan with Canadian assistance. This plan starts with the following mission statement: 'The mission of the BAU is to prepare graduates capable of making a productive contribution to the economic and social development of the nation. This is to be achieved through strong collaborative initiatives with employers resulting in the design and delivery of diploma, degree and continuing education programmes, characterised by excellence and relevance to the work of work' (BAU Strategic Planning Committee, 2002). The main goals from its ambitious operational plan, 2002-05, are as follows.

1. The BAU should have an effective management framework in place to achieve its vision. This includes leadership and organisational development, planning, and human and financial resource development.
2. It should have an education profile responsive to the social and economic development requirements of the country and region, and its graduates should have skills consistent with international standards. This includes:
 - development of a policy framework;
 - development and use of labour market information;
 - development of a programme development unit;
 - formulation and measurement of graduate competencies;
 - establishment of active continuing education and contract training for its constituencies;
 - mechanisms for approval and maintenance of national standards for private colleges;
 - establishment of pilot colleges and centres of excellence;

- introduction of applied degree programmes;
 - establishment of programme advisory committees at colleges;
 - introduction of one-year post-degree applied programmes.
3. The BAU should establish itself as a source of expertise on applied research relevant to individual enterprises and society at large.
 4. It should have high-speed broadband Internet access and should exploit ICT for both learning effectiveness and management efficiency.
 5. Its student services must operate to support the student learning environment, e.g. guidance and counselling.

ANNEX 4: CASE STUDY (NORTH REGION, IRBID)

A study was carried out to identify the functioning of public TVET providers at local level in the Irbid region. The study examined both the economic and the training environments.

The mission, which was initially expected to last three days, was conducted in one day, mainly as a result of external events that occurred in Jordan at the time of the visit (a terrorist attack in Amman) and obliged the experts to avoid travelling for security reasons. Hence, contact with other stakeholders such as the BAU colleges, other TVET centres and employers' associations was not possible.

The recommendations based on the case study should be considered as preliminary. A more in-depth analysis of the situation at local level is needed in order to deliver a complete picture of the situation and offer conclusions based on a scientific approach.

Aim of the study

The study aims to analyse the governance principles of TVET within an employment area (all training providers), including the links with the economic environment (social partnerships) and the mechanisms in place with regard to the definition of strategies, monitoring and assessment of performances of the TVET sector.

Scope of the study

Four meetings were organised, at:

- the Prince Hasan Industrial Estate (a major employment area);
- the VTC Directorate of the North region;
- the VTC Vocational Training Centre of Ramtha, located on the Prince Hasan Industrial Estate;
- the Vocational Education School at the MoE.

Analysis of the situation

Definition of strategies

Both in VTC and in MoE institutes the formulation of strategies is concentrated in the headquarters in Amman. The regional VTC Directorate does not play a role in defining regional strategy. The office in charge of eight centres covering four governorates (Irbid, Ramtha, Jarash and Ajlun) is technically responsible for the functioning of the vocational training centres. The office has neither administrative nor financial autonomy.

Decentralisation

The concept of decentralisation at local level in the VTC and MoE centres is unknown. Neither management of financial and human resources nor autonomy to develop curricula and introduce new specialisations are left to the local level. The decision-making process is overcentralised and inflexible. The information processing is slow and requires a cumbersome planning system based mainly on administrative procedures rather than on the needs of the training centres, and even less so on the needs of their economic environment. At the VTC the centres communicate only through the regional office, which in turn transmits the centres' requirements to VTC headquarters for decision-making.

Administration of MoE vocational schools and VTC training centres

The management of training centres at both the VTC and MoE is rather limited and that there is no autonomy for managers to deal with administrative and human resources.

While an Advisory Committee does exist at the VTC, with representatives from public sector (five), employers (two) and trade unions (one), in addition to the principal, it is purely advisory and has no direct management role. The committee advises on training programmes offered by the centres.

In both cases staff are recruited through the Civil Service Bureau (CSB) procedures at central level without any input from the centre's principal. At vocational training centres the principal is authorised to purchase training materials not exceeding JOD 50, but not to purchase tools, equipment and spare parts, which are only supplied through annual bidding through a central department of supplies in Amman. At MoE the school principal is authorised to purchase materials not exceeding JOD 40. Communications must go through the office of education in Irbid, be transmitted to the MoE, then be transferred to the Directorate of Vocational Training for a decision. The small amount of income generated by the centres themselves goes directly to the central budgets.

In the centres visited the equipment was rather outdated. The MoE school lacks training material and the technology of the equipment is relatively old-fashioned.

It is remarkable that centres cannot apply directly to the TVET Support Fund for funds for joint training programmes with employers.

Links of TVET institutes with their local environment

Although they are situated in a large industrial environment (the Prince Hasan Industrial Estate), which attracts 21 000 workers, mainly in labour-intensive industries (85% of production is for export to USA), TVET centres of the VTC and MoE are offering a very limited number of specialisations (the VTC centre offers a total of six specialisations at skilled worker and limited skilled worker levels, and the MoE offers 13 specialisations). The enrolment for 2005/06 at the VTC centre is 68 trainees at skilled worker level and five trainees at limited skilled worker level. This represents 50% of the centre's capacity. At the MoE school, 322 VET students are enrolled for 2005/06 (90% of the school's capacity). It is calculated that the total number of VTC graduates employed in the industrial estate is 2 400, out of a total of 11 000 Jordanians working there. This means that the external efficiency of the VTC centres in terms of employment opportunities for Jordanian graduates is around 22%, and only of 12% in relation to the total number of employees. According to the principal, 40% of the graduates of the VTC centre find employment in occupations for which they trained, or in related occupations.

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The links between the training centres and their economic environment are rather limited. The centres lack flexibility in organising and implementing training programmes to meet local demands; instead, programmes are designed centrally.

Employers do not play any part in the management of the centres. Training relationships are limited to a network of SMEs that implement apprenticeship programmes (VTC). The follow-up of the apprentices is irregular and ineffective.

The MoE school has no linkages with the labour market.

Both of the training centres visited are supply-driven and do not respond to the needs of their environment, even to the extent of developing continuing training activities, which would be a way of boosting the relationship and supporting the development of capacities at both enterprise and school level.

Recommendations

A limited number of recommendations are proposed that should be part of the overall reform of the TVET system. They concern both the VTC and MoE.

Priority should be given to actions that will improve communication procedures, speed decision-making processes and ensure flexibility in meeting the needs of the local environment.

In order to give the centres the potential to respond to labour market needs in a flexible and autonomous manner, the following actions are recommended:

- define clear and user-friendly procedures that allow greater responsibility for decision-making at training centre and school level, in order to improve the quality of the training process and to enable centres and schools to become research and development centres for their economic environment;
- analyse the potential of bridging VTC and MoE resources, leading to greater efficiency of the TVET system at local level;
- introduce financial and administrative autonomy in general at the local level in order to ensure greater flexibility to respond to qualitatively changing needs of the local environment, and to attract and maintain more experienced trainers;
- introduce results-based incentives for training staff in order to improve their performance, job satisfaction and stability;
- upgrade the role of the advisory committees to that of a management body with a majority of members from the social partners;
- give the centres the opportunity and authority to apply directly to the TVET Support Fund to request funds for programmes that will meet the needs of the local environment through co-management with employers.

Individuals met on the visit

Mr Talal Radaideh, Director of the North Regional Office (VTC)

Mr Majed Hammad, Principal of Ramtha Vocational Training Centre (VTC)

Mr Munther Rsheidat, Principal of Vocational Education School (MoE)

ACRONYMS

ASEZ	Aqaba Special Economic Zone
BAU	Al-Balqa Applied University
CIDA	Canadian International Development Agency
CSB	Civil Service Bureau
CSC	Civil Service Council
DEP	Direct Employment Generation-Promotion
DFID	Department for International Development
DoS	Department of Statistics
EDTSP	Economic Development through Technical Skills Development Project
EFTA	European Free Trade Association
EIB	European Investment Bank
EJADA	Euro-Jordanian Action for the Development of Enterprise
ENP	European Neighbourhood Policy
EPC	Enhanced Productivity Centre
ERfKE	Educational Reform for a Knowledge Economy
ETF	European Training Foundation
ETVET	Employment and technical and vocational education and training
EU	European Union
FDI	Foreign direct investment
FTA	Free trade agreement
GAFTA	Greater Arab Free Trade Area
GDP	Gross domestic product
GSECE	General Secondary Education Certificate Examination
GTZ	Gesellschaft für Technische Zusammenarbeit (German assistance agency)
HRD	Human resource development
ICT	Information and communication technology
IDB	Islamic Investment Bank
ILO	International Labour Organisation

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IME	Individual and micro enterprise
JICA	Japanese International Cooperation Agency
JOD	Jordanian dinar
KFW	Kreditanstalt für Wiederaufbau
LM	Labour market
MoE	Ministry of Education
MoF	Ministry of Finance
MoHE	Ministry of Higher Education
MoL	Ministry of Labour
MoP	Ministry of Planning
MSE	Micro and small enterprise
MTEF	Medium-term expenditure framework
NCHRD	National Centre for Human Resources Development
NIP	National Indicative Programme
NSEP	National Social and Economic Programme
NTP	National Training Programme
NTTI	National Teacher Training Institute
OECD	Organisation for Economic Cooperation and Development
QIZ	Qualifying industrial zone
RTA	Regional trade agreement
SETP	Social and Economic Transformation Programme
SETVET	Sustaining and Extending Technical and Vocational Education and Training
SME	Small and medium-sized enterprise
SPSP	Sector Policy Support Programme
SSC	Social Security Commission
STIMI	Specialised Training Institute for Metal Industries
SWAP	Sector-wide approach
TESP	Training and Employment Support Project
TVET	Technical and vocational education and training
UN	United Nations
UNDP	United Nations Development Programme
UNRWA	United Nations Relief and Works Agency (for Palestinian Refugees in the Near East)
USA	United States of America
USAID	United States Agency for International Development
VTC	Vocational Training Corporation

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