

*TECHNICAL EDUCATION AND
VOCATIONAL TRAINING
STRATEGIC DEVELOPMENT PLAN*



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LIST OF ABBREVIATIONS

<i>BE</i>	<i>Basic Education</i>
<i>BEDS</i>	<i>Basic Education Development Strategy</i>
<i>CBY</i>	<i>Central Bank of Yemen</i>
<i>CSO</i>	<i>Central Statistical Office</i>
<i>DHS</i>	<i>Demographic Household Survey</i>
<i>EFARP</i>	<i>Economic, Financial and Administrative Reform Program</i>
<i>EU</i>	<i>European Union</i>
<i>FFYP</i>	<i>First Five Year Plan</i>
<i>FTA</i>	<i>Free Trade Area</i>
<i>GAVTT</i>	<i>General Authority for Vocational and Technical training</i>
<i>GDP</i>	<i>Gross Domestic Product</i>
<i>GIA</i>	<i>General Investment Authority</i>
<i>GNP</i>	<i>Gross National Product</i>
<i>GoY</i>	<i>Government of Yemen</i>
<i>IDA</i>	<i>International Development Agency</i>
<i>ILO</i>	<i>International Labor Organization</i>
<i>LM</i>	<i>Labor Market</i>
<i>LMIS</i>	<i>Labor Market Information System</i>
<i>LMISP</i>	<i>Labor Market Information System Program</i>
<i>MENA</i>	<i>Middle East and North Africa</i>
<i>MoSAL</i>	<i>Ministry of Social Affairs and Labor</i>
<i>MoTEVT</i>	<i>Ministry of Technical Education and Vocational Training</i>
<i>NITI</i>	<i>National Institute for Technicians and Instructors</i>
<i>PMS</i>	<i>Poverty Monitoring System</i>
<i>PRS</i>	<i>Poverty Reduction Strategy</i>
<i>PRSP</i>	<i>Poverty Reduction Strategy Paper</i>
<i>RoY</i>	<i>Republic of Yemen</i>
<i>SDF</i>	<i>Social Development Fund</i>
<i>SDF</i>	<i>Skills Development Fund</i>
<i>SFYP</i>	<i>Second Five Year Plan</i>
<i>SPAVT</i>	<i>Support to Priority Areas of Vocational Training</i>
<i>TEVT</i>	<i>Technical Education and Vocational Training</i>
<i>TI</i>	<i>Technical Institute</i>
<i>UNDP</i>	<i>United Nation Development Program</i>
<i>VE</i>	<i>Vocational Education</i>
<i>VET</i>	<i>Vocational Education and Training</i>
<i>VTC</i>	<i>Vocational Training Center</i>
<i>WB</i>	<i>World Bank</i>
<i>YR</i>	<i>Yemeni Ryal</i>



Introduction

1

During the past two decades, significant progress has been made in moving towards achieving universal basic education in Yemen. This has been accompanied by rapid growth in both public and private post-secondary education opportunities. With respect to the Technical Education and Vocational Training sector however, a parallel level of growth has not occurred. This has resulted in an imbalanced situation in the labour market, characterized by high unemployment coupled with a shortage of skilled workers in some sectors in the labour market.

In order to address the current and projected imbalance between the human resource requirements of the labour market in Yemen and those skills available in the labour force, the Government of Yemen (GoY) has committed to a significant

expansion of its Technical Education and Vocational Training (TEVT) system. This expansion is founded on the premise that all future investments should reflect and respond to current and projected labour market requirements.

The proposed reorientation of the TEVT system has been developed within the overall development framework of Yemen as expressed in the Strategic Vision 2025, the 2nd Five Year Socio-economic Development Plan (2001-2005), and the Poverty Reduction Strategy.

In order to ensure that this expansion takes place as effectively and efficiently as possible, the Ministry of Technical Education and Vocational Training (MTEVT), with support from the World Bank and the European Commission, has prepared, during 2003, a TEVT sector profile, and a sector strategy that would

guide development over the next ten-year period.

The Strategic Plan which follows builds on the sector profile, which provides a comprehensive description of the history, organizational structure, institutional capacity, and TTEVT programming in Yemen, together with a detailed analysis of challenges and opportunities. The strategic development plan comprises two sections. Firstly, an outline of the strategic planning

process followed by an analysis of strategic issues. This leads to the identification of a series of strategic goals and enabling objectives. The second section of the document comprises an implementation plan detailing the activities, responsibilities and timelines associated with pursuit of the strategic goals during the initial four-year period 2005 - 2008.

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Background to TEVT Development and Planning in Yemen

2

During the past 30 years, the TEVT system in Yemen evolved from 10 training centres operated by the Ministry of Labour and Vocational Training, to the current level of 54 Vocational and Technical Centres, Vocational Institutes and Technical Institutes now operated under the mandate of the Ministry of Technical Education and Vocational Training. GoY, with Saudi funds and national contribution had already planned for the coming years, the implementation of 35 other new VT centres /institutes, some of them are under construction.

During this 3 decades period, GoY received TEVT related technical co-operation from countries such as China, Algeria, Russia, Egypt, Germany and Saudi Arabia. This resulted in the introduction of different methodologies surrounding the development, design, and delivery of

training, and the absence of unifying strategic development approach.

In 1999, based on the identification of TEVT as a national development priority, GoY convened a National Conference on TEVT. Policies and recommended actions arising from this conference addressed the following principal concerns regarding performance of the system.

- (1) The need to develop TEVT policies, which would satisfy the national development objectives and the priorities of different economic sectors.*
- (2) The low capacity of the TEVT system together with a need to increase the number of training institutions and diversify the available specializations.*
- (3) A low relevance of the TEVT system to labour market needs which should be addressed through improved labour*

market information and the associated updating of programs and curricula.

- (4) A need to enhance the effectiveness and quality of TEVT through the definition of quality standards implemented at all levels of the training process, and the establishment of appropriate audit and control mechanisms. It was suggested that the TEVT system should be linked cooperatively and interactively with local communities, as well as with general and higher technical education.*
- (5) A need to improve staffing by developing programs for initial as well as lifelong training for teachers and trainers. Limited number of industry-based trainers were also called upon to participate in training provision as part-time trainers.*
- (6) A need to ensure that training institutions are provided with adequate buildings and equipment, together with ongoing maintenance and upgrading.*
- (7) Development of vocational guidance and counselling, including the creation of public awareness programs for the target groups.*

These themes illustrate the complexity and interconnections associated with the delivery of TEVT, and hence the imperative to adopt a systemic approach to its development. MTEVT has energetically pursued a number of the issues arising from the 1999 conference as illustrated by initiatives to diversify program offerings, to collaborate with the employer community in the delivery of short courses, and to strengthen the institutional capacity. While these initiatives have been undertaken, as they were both relevant and achievable, they have not addressed the underlying systemic strategic issues. The foregoing

findings and recommendations arising from the National Planning Workshop provided important guideposts for design of the strategic planning process outlined in the following section of the document.

In the absence of a unified strategy for TEVT system, different curricula were applied at TEVT institutes, therefore and responding to Conference recommendations the MoTEVT has taken the following actions

A. *The MoTEVT since 2001 has started to adopt the modular approach system which has been prepared by specialized committees in collaboration with representatives from the Employers and other related parties, to study the labour market trades, consequently, curricula preparation was based on this concept.*

B. *The Ministry submitted to the cabinet (Council of Ministers) a proposed plan to raise up the TEVT institutions intake capacities up to 15 % from the total basic and secondary education graduates within the TEVT system during the next coming 10 years (2003-2012), this plan was approved by the cabinet decree 270, in the year 2002.*

The ministry supported the plan with very useful statistical data showing the existing numbers of TEVT graduates compared to basic and secondary education group which is at the ratio of 1: 131, and there is no balance at all, the universities can not absorb all secondary school graduates due to its limited capacity, so the question is where the graduates go if universities have a very limited capacity? And the labour market needs skilled man power and technicians, in addition the ministry plan gave some reference to other Arab countries which have huge numbers of institutes even though of having lower population than Yemen. The plan was

supported by objectives, general concepts and frame work, plan for implementation in terms of curricula and staff required, number of institutes required 137 vocational institutes (after basic education) and the distributions of these institutes all over the country to enable each governorate to accommodate the targeted expected 15 % of the basic education graduates at the academic year 2010/2011.

The plan expected that the graduates joining the vocational institutes at 2010/2011 will reach 36,704 students representing 15 % of the total basic education graduates of the same year .In addition, 82 Technical institutes (for students after secondary schools and vocational levels) will be established to allow 21,094 to join Technical education level out of 140,618 total secondary education graduates at the year 2010/2011 again this will represent 15 %.

The plan estimated that the annual increase of additional institutes required would be 15 Vocational and 8 Technical. The plan not only included the physical facilities but includes the additional technical and managerial staff, as well as the financial resources to make these institutions fully operational, implementation plan to achieve these tasks was prepared within the overall mentioned plan.

C. The ministry recognized the importance of quality which was one of the major TEVT conference recommendations, and one of the international community concerns, the

ministry works hard to start applying the TQM requirements in the ministry and all TEVT institutions for this purpose, Some training for the ministry staff have been conducted locally and abroad, TQM system was applied at two general directorates in the ministry, the general directorate for inspection and TQM, and general directorate for examinations .The application of TQM concept within the ministry and its institutions all over the country will improve the ministry performance and reflects it self in improving TEVT graduates who will be more responsive to both local and regional labour market which considers quality of graduates and high level training skills are the main criteria for employment .

The improvement in ministry performance will aim to apply the ISO standards, and TQM requirements for facilities, and human resources, TQM shall be dealt with as culture at all the levels, as a result to that the new technology and efficient programs will be created to make graduates level more compatible to local and external labour market needs.

D. as a continuing response to the TEVT conference recommendations the ministry in collaboration and support from the World Bank and EU completed the final TEVT sector profile as a pre requisite to prepare the national TEVT strategic development plan for the next coming ten years.

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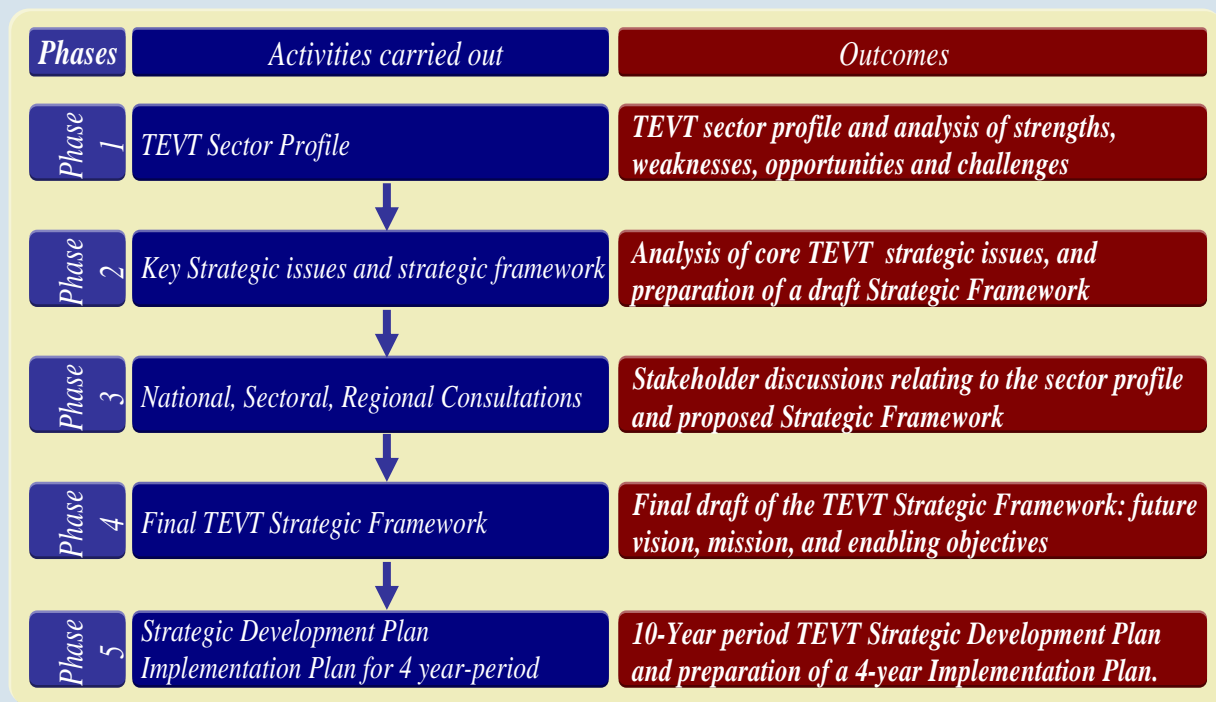


The Strategic Planning Process

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In 2003, GoY entered into discussion with the World Bank and the European Commission seeking support for collaboration with Yemeni authorities in the preparation of a strategy for the TEVT sector. Based on agreements reached with MTEVT, the European Commission (EC) gave a mandate to the European Training Foundation (ETF) to collaborate with the World Bank in providing technical guidance to the planning process. GoY subsequently appointed a National Planning Team including representatives of MTEVT, other line ministries, NGOs, the private sector, and other stakeholders. This National Planning Team, chaired by the Vice-Minister of TEVT has subsequently led the strategic planning process.

Based on understandings reached between the National Planning Team, the World Bank and the EC/ETF, the strategic planning process included 5 phases as illustrated below:



As noted in the Introduction, the Sector Profile outlines the Yemeni global situation, its economic perspectives and the structure and content of the current TEVT system. This includes a description of the existing policies in the field of human resources development, and an analysis of strategic issues facing the development of the TEVT sector. During this phase a preliminary series of strategic issues were identified, together with potential goals for discussion during subsequent phases of the planning process.

In order to ensure continuous stakeholder awareness and involvement in the planning process, MTEVT convened a national workshop on September 13th and 14th 2003 to present the sector profile, and provide an opportunity for all stakeholders to react to the identified strategic issues and preliminary strategic goals. Output from this Workshop included a series of working group reports that were

incorporated into next steps of the planning process.

On the basis of the sector profile, the outcomes from the national workshop, and further discussion with MTEVT, a draft TEVT Strategy Framework providing background to the key development issues and strategic goals, was prepared. This framework provided a basis for discussion during regional and sectoral consultations and for the preparation of the strategy document and the subsequent implementation plan.

Recognising that the strategy should fully respond to, and reflect the priorities of the respective regional communities, a series of six regional and sectoral consultations were convened between December 9th and 26th 2003. These consultations, attended by 321 delegates, included representatives from regional authorities, training institutions, decision-makers, private sector, members of the

local universities and institutions. During each consultation, the strategic issues and proposed goals were discussed. Valuable feedback was provided and recorded for incorporation into the draft strategy document.

Following completion of the regional and sectoral consultations, the Strategic Framework was revised to reflect all stakeholder perspectives. A draft Strategic Plan was then prepared, outlining the main issues arising from the analysis of the sector. This plan includes a vision and mission for TEVT in Yemen, together with a series of focussed strategic goals and enabling objectives to be achieved in a ten-year period. An implementation plan was also developed for the first four years of the planning period. Both the Strategic Plan and Implementation Plan were prepared in a results-based format, outlining the outcomes, activities, responsibilities, timing, and performance indicators associated with each objective.

As proposed and agreed by the MTEVT, the implementation of the TEVT

strategy will be carried out through 3 phases:

Phase 1: 2005 – 2008 Reorienting and strengthening of the TEVT System and completion of the new 35 new Institutes, implementation of the demand driven approach.

Phase 2: 2009- 2012 Expansion and developing linkages of the VET institutions with sectors, labor markets and catchments' areas and

Phase 3: 2013-2014 Review and audit of the VET system and consolidation of its assets.

As a final step in the planning process, the two volumes of the Strategic Development Plan will be reviewed and validated by the MTEVT planning team and other representatives of key stakeholders.

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Socio-Economic context

4

4.1 Basic data on Yemen

Yemen : 527,790 sq. kilometres (203,730 sq. miles); Sana'a (capital), Aden, Al Hodeidah, Taiz

Natural resources: petroleum, fish, rock salt, marble, small deposits of coal, gold, lead, nickel, and copper, fertile soil in west

Land use: arable land: 2.75%; permanent crops: 0.21%; other: 97.04% (1998 est.)

Irrigated land: 4,900 sq km (1998 est.)

Natural hazards: sandstorms and dust storms in summer

Environment - current issues: very limited natural fresh water resources; inadequate supplies of potable water; overgrazing; soil erosion; desertification

Population (2003E): 19.5 million

Currency: Yemeni Rial (YR) US\$1 = YR184 - 1€ = 204 YR (average for 2003)

Gross Domestic Product (GDP) (2002E) - market exchange rate: \$8.7 billion

Real GDP Growth Rate (2002E): 3.4% (2003F): 4.5%

Consumer Price Inflation (2002E): 10.0% (2003F): 9.4%

Major Trading Partners: China, Japan, Saudi Arabia, Singapore, South Korea, United Arab Emirates, United States

Major Export Products: *Crude oil, cotton, coffee, hides, vegetables, dried and salted fish.*

Major Import Products: *textiles and other manufactured consumer goods, petroleum products, sugar, grain, flour, other foodstuffs, cement, machinery, chemicals*

Proven Oil Reserves (1/1/03): *4 billion barrels*

Oil Production (2002E): *443,288 barrels per day (bbl/d)*

Oil Consumption (2002E): *74,000 bbl/d*

Net Oil Exports (2002E): *369,288 bbl/d*

Crude Oil Refining Capacity (1/1/03): *130,000 bbl/d*

Natural Gas Reserves (1/1/03): *16.9 trillion cubic feet (Tcf)*

Natural Gas Production/Consumption: *None.*

Electric Generating Capacity (1/1/01): *810 megawatts (100% oil-fired)*

Electricity Generation (2001E): *3.0 billion kilowatt-hours*

The following section of the document provides an overview of the socio-economic context within which the TEVT Sector Strategy is set. Information is provided on the current economic situation of the country together with future prospects. The demographic structure of the country is described, and details of the overall education system provided. The basic structure of the TEVT system is described, together with an analysis of core strategic issues.

4.2 Yemeni development context

The 1990s were a critical period for the Republic of Yemen. Major events such as reunification, the first Gulf War and the civil war in 1994 aggravated an already difficult economic situation in the country. Since the mid-90s, Yemen has been striving to enhance its socio-economic development through the implementation of several ambitious reform programs supported by the IMF as well as by the World Bank and other international organizations. These reforms are aimed at strengthening the foundations of a market-based and private sector-driven economy, integrated into world markets and operating in a context of

broad financial stability. This approach continues to reflect current government policy directions. While strenuous reform efforts are hand, Yemen is nevertheless classified amongst the 20 least-developed countries in the world.

During the second half of the 1990s, Yemen's economic performance improved significantly on the macroeconomic front, but considerably less so in terms of social indicators. This reflects several factors: the return of political stability and peace, oil sector developments that were on the whole favorable, and the first fruits of reforms. In order to build on these achievements however, an even greater focus on growth and poverty reduction is needed. The Yemeni authorities have therefore embarked on preparing a comprehensive poverty reduction strategy (PRSP) in the context of the Second Five-Year Plan (2001–06) and in broad consultation with civil society.

The major development challenges identified during this process include social, economic, demographic, and geographic aspects. Principal economic challenges arise from the low level of per capita income and a heavy reliance on oil revenue, combined with increasing pressure

on government spending for new development projects. Social challenges revolve around the high illiteracy rate and the negative attitude toward girls' education and the participation of women in the workforce. The high population growth rate impacts on all aspects of life, the most important of which are increasing poverty; low levels of school enrolment; and poor coverage of health services. Finally, wide geographic dispersal of the population makes it costly and difficult to provide sufficient basic services, especially in rural areas.

Despite the above-mentioned challenges, Yemen has several positive features necessary for economic growth and development. The country is endowed with rich natural resources including fisheries, gas, oil, mineral reserves, fertile lands, tourism assets, and rich heritage of handicrafts. Besides these resources, Yemen has a strategic location and natural endowments for services in a young and dynamic labor force. In addition, Yemen currently enjoys political stability and wide ranging foreign relations and support.

4.3 The development perspectives of Yemen and its privatisation program

The major development challenges facing Yemen have been identified in the Vision 2025, the Second Five Year Plan (SFYP), and the PRSP. These include mainly social, economic, demographic, and geographic aspects.

The GoY started implementation of the Economic Financial and Administrative Reform Program –EFARP - in 1995 by adopting a new budget for that year and by the implementation of some of the measures for economic stabilization and restructuring, as it proceeded to announce

the first set of reform measures for the achievement of economic stability and the removal of structural imbalances in the economy. The primary success for the implementation of the economic reform program is exemplified by the reduction of the major macroeconomic imbalances, where the budget deficit, the growth in money supply and the inflation rate all came down, and by the same time, the foreign currency reserves grew, the now floating exchange rate of the Yemeni Riyal became stable, and the balance of payments relatively improved.

The high potential economic opportunities presented in recent economic reports and driving Yemen's future development will deal with the following promising sectors:

1. **Fishery Sub-Sector**
2. **Industrial and manufacturing Sector**
3. **Construction**
4. **Services Sector**
5. **Tourism**
6. **Transport and Communication**
7. **Handicraft sector.**

Under terms of its agreements with the IMF and World Bank, Yemen is required to initiate a privatization program. The government has said that it will encourage private investment in the agriculture, fisheries, and oil, and sell off its stake in companies throughout the Yemeni economy. The government also stresses that it is seeking both foreign and local investors. State-owned businesses cited as candidates for privatization include farm and agricultural cooperatives, construction companies, power stations, public housing facilities, refineries, the state's petroleum retail network, shipping companies, and the state telecommunication company Progress toward privatization, however, has been slow. The Yemeni government decided in June 2001 not to fully privatize the Aden Refinery, but rather to divest only part of its

ownership stake. Price controls also have been reintroduced for some commodities, mainly foodstuffs, within the last year.

The necessary conditions for rapid economic growth are now better in Yemen than at any time in the past. Despite the above-mentioned challenges, Yemen has many positive features necessary for economic growth and development. Yemen is endowed with rich natural resources (fisheries, gas, oil, mineral reserves, and fertile lands, tourism assets, and rich heritage

of handicraft). Besides these resources, Yemen has a strategic location and natural endowments for services, a young and dynamic labor force. In addition, Yemen currently enjoys political stability and wide ranging foreign relations and support. The Yemen economy is dominated by the service and oils sectors, with a limited importance of manufacturing, while the agriculture sector, on which about three-quarters of the population live at subsistence level is characterized by a lack of dynamism.

4.4 Population and the labour market

Population:	19,349,881 (July 2003 est.)
Age structure:	0-14 years: 46.8% (male 4,606,110; female 4,446,229) 15-64 years: 50.4% (male 4,972,946; female 4,778,034) 65 years and over: 2.8% (male 272,921; female 273,641) (2003 est.)
Median age:	total: 16.4 years; male: 16.4 years; female: 16.4 years (2002)
Population growth rate:	3.42% (2003 est.)
Birth rate:	43.23 births/1,000 population (2003 est.)
Death rate:	9.04 deaths/1,000 population (2003 est.)
Net migration rate:	0 migrant(s)/1,000 population (2003 est.)
Sex ratio:	at birth: 1.05 male(s)/female under 15 years: 1.04 male(s)/female 15-64 years: 1.04 male(s)/female 65 years and over: 1 male(s)/female total population: 1.04 male(s)/female (2003 est.)
Infant mortality rate:	total: 65.02 deaths/1,000 live births female: 59.81 deaths/1,000 live births (2003 est.) male: 69.98 deaths/1,000 live births

Source: The world fact book

Since 1975, Yemen's population has grown by two and a half times reaching 19.349 million in 2003. According to projections, the population is expected to grow to 43 million by the year 2025. The population growth rate increased to 3.7

percent (1994 census), before falling recently to 3.5 percent, which still stands as one of the highest in the world. The young age structure of the population (47 percent under 15 years old) implies a fast growing

labour force and the imperative to rapidly expand employment opportunities.

Yemen is still predominantly a rural society as only 26 percent of the population lives in urban areas. The country is characterized by the prevalence of small population concentrations dispersed throughout the country. However, a rapidly increasing urban population, growing at almost double the population growth rate, points to a high rate of internal migration.

Great pressure is put on the labor market, with 9.3 million people of working age, and an average annual rate of growth of 4.6 percent. During the 1994-1999 period, total employment in Yemen increased by an average annual rate of 3.8 percent, reflecting an annual increase of 115,000 jobs. In spite of this increase however, the number of unemployed workers grew from 277 thousand to 469 thousand. In addition to population growth, other distortionary factors include an increase in graduates with post-basic education and skills not relevant to labor market needs, high dropout rates from basic education, and increased female labor force participation. During the 2000-2025 a projected 170,000 new annual job opportunities are required in order to provide jobs for all new labor market entrants. This is significantly higher than the current employment creation rate, thus emphasizing the need to equip school leavers with skills that will enable them to participate effectively in the formal economy or establish independent micro-enterprises.

Workers are currently concentrated in the agricultural sector (53 percent), which depends largely on traditional skills, while employment in high-value-added sectors, which could contribute to increasing national income, is low. The industrial sector comprises only about 10 percent of

employment. The informal sector absorbs 62 percent of all workers, which illustrates the weakness of the formal sector in creating new employment.

In 1999, total unemployment (under-employment included) reached 36 percent of the working age population. Unemployment is most apparent among unskilled workers and workers with only elementary education. However, there is a hidden problem in the rise of unemployment among holders of post basic education qualifications; in particular graduates in social sciences, technical and vocational specializations, and graduates of teachers' schools. In 1999, this group comprised 22 percent of the total unemployed population. This surplus in qualified workers does not correspond to the labor force demand profile, where there is a shortage of qualified Yemenis in a number of occupational specializations; resulting in a growing dependence on expatriate workers.

The rate of women participating in economic activity continues to be low, in spite of an increase from 18 percent to 23 percent during the 1994 and 1999 period. This increase is attributable to an increase in the number of female graduates and the increasing number of women participating in economic activity in order to alleviate poverty. Widespread illiteracy and the low level of educational attainment of women are considered major constraints that inhibit increased participation of women in the economy and in society in general.

The labour market information situation in Yemen is at the earliest stages of development. The last population census was in 1994 and there has only been one comprehensive household labour survey, which was undertaken in 1999. This survey followed ILO definitions and presented some basic insights into the labour market situation. In the absence of time series data

however, few conclusions can be drawn on the trends of key labour market indicators. Information regarding the needs of establishments for employees has been scarce.

However, based on the latest labour market survey for the next years which has been carried out in line with standard TEVT occupational classification for the Republic of Yemen, and excluding the government sector, it appears that only in the private sector small and medium size enterprises will need 44,468 new jobs vacancies within the period 2004 – 2006, this number includes the increased opportunities vacancies which reach 25,052, and the cancelled jobs reach 2,074, but the new expected opportunities will reach 21,390 . The survey indicated that 56.5 % of the total new jobs needed for professional staff of university graduation, the same survey indicated that 49.8 % out of the demand for new jobs is for the vocational and technical levels and skilled workers for operating factories, and automotives .the Demand for Technical level (2- 3 Years after secondary school) is 30.8 %, while for Vocational level 19.1 %.

The labour market survey report mentioned that TEVT graduates who are employed in the labour market are distributed as follows

- **6.7 % skilled labours Vocational training centres graduates**
- **11 % vocational Institutes graduates**
- **25.3 % technical institutes graduates.**

As the labour market demands 49.8 % from the total required workforce within the period 2004- 2006 this means that about 20, 000 graduates of the TEVT institutes are expected to join labour market at this period. Excluding the Public sector requirements, which have not been included in the mentioned survey, which is a

potential source to employ TEVT graduates working in most of public sector agricultural, industrial, and other public service sectors. And since privatisation process in Yemen is still at the very beginning, and the possibility of having small private business owned by the TEVT graduates, this gives strong indicator that TEVT graduates have good chance and demand in the labour market. If the number of TEVT students enrolment at the year 2004- 2006 at all levels and programs will not exceed 12,428 and assuming only 80 % are expected to be graduated on the extremist side, it is concluded that number of graduates are less than the required and the ministry has to close this gap by increasing the number of graduates, and this is the strategic ministry vision to raise up the percentage of low intake capacity of TEVT institutes from 2.2 % up to 15 % from the total basic education graduates during 2004- 2013 which is the right decision approved by the Government .

Regarding the continuing education and training i.e. in service training the survey showed that 42,000 employees in the small and medium enterprises need skill development training; importance of training could be arranged according to its priority as follows

- **70.5 % professionals**
- **60.1 % technicians and skilled labours**
- **34.1 % managers**
- **15.2 % craftsmen**
- **11.4 Clerks, on the other hand, fields and programs of training are as follows**
- **13.1 % TEVT training**
- **13.1 % management**
- **12.5 % Accounting**
- **11.8 maintenance of equipment**
- **11.7 % IT – Information technology**
- **0.9 – 7.1 % miscellaneous training – health, agriculture, languages, journalism etc,**

This situation adds up to the overburden load of the Continuing education system programs under implementation by the MOTEVT

Labor Demand Survey: significant indicators for 2003

A labour force demand survey how was initiated in 2003. This survey provides a preliminary level of information on labour force demand by occupational classification during the coming years. Some 692189 people were found to be employed in 250903 institutions. This amounts to an average of 2.75 employees per institution, which confirms the Micro and small enterprise structure of the Yemeni economic tissue. In fact 35.5% of the surveyed population are employers, 21.7% are unpaid family members while paid full-timers represent 34.5% of labor force. The remaining 8.3% are part-timers and trainees or probationers. With 57.2% total labor force composed by employers and unpaid family members, one can easily state that the economy of Yemen is based on micro and small family businesses.

This tendency is also explicit through the distribution of personnel by jobs. It was found that 35% of the labor force is operating in shops' services, wholesaling and retailing. Skilled traders represent 10.3% while personnel in factories and vehicle reparation and assembly were estimated to 13.8%. Only 2.3% were found to be skilled fishers and farmers. (This percentage excludes house holdings)

As for educational distribution of personnel, 57.1% of the total labor force is at basic education level and below. Only 4.6% graduated from the vocational

training centers, technical and occupational institutes. General secondary level personnel amount to 22.7% while university post-graduates represent 10% of the paid personnel.

Out of the surveyed institutions 1% experienced difficulties to find required skilled labor:

- **42.5% lacking qualified manpower**
- **18.4% lacking adequate experienced labor**
- **12.2% unable to find funds**
- **11.7% lacking skills of foreign language, management, accounting, computer applications and so on.**
- **3.6% lacking sufficient training of the labor turnover**
- **9% lacking other qualifications and experiences**
- **2.6% confronted with employment contracts duration.**

From 2004 up to 2006 the net demand of labor force was estimated to 44 486 including the existing jobs both could be increased or decreased in addition to the potential vacant positions to be filled in.

Traditional trades of wholesaling, retailing, and vehicle repairs and households goods are the greatest demanders with 41.2% of the net demand. Prefabricated products activities are demanders of some 20.9% of the net demand, while health and social services come at the third position with a demand of 10.5%.

Small institutions account for 47% of the net demand against 21.1% for large institutions. The remaining 31.9% of the net demand is equally divided between medium and medium/large institutions.

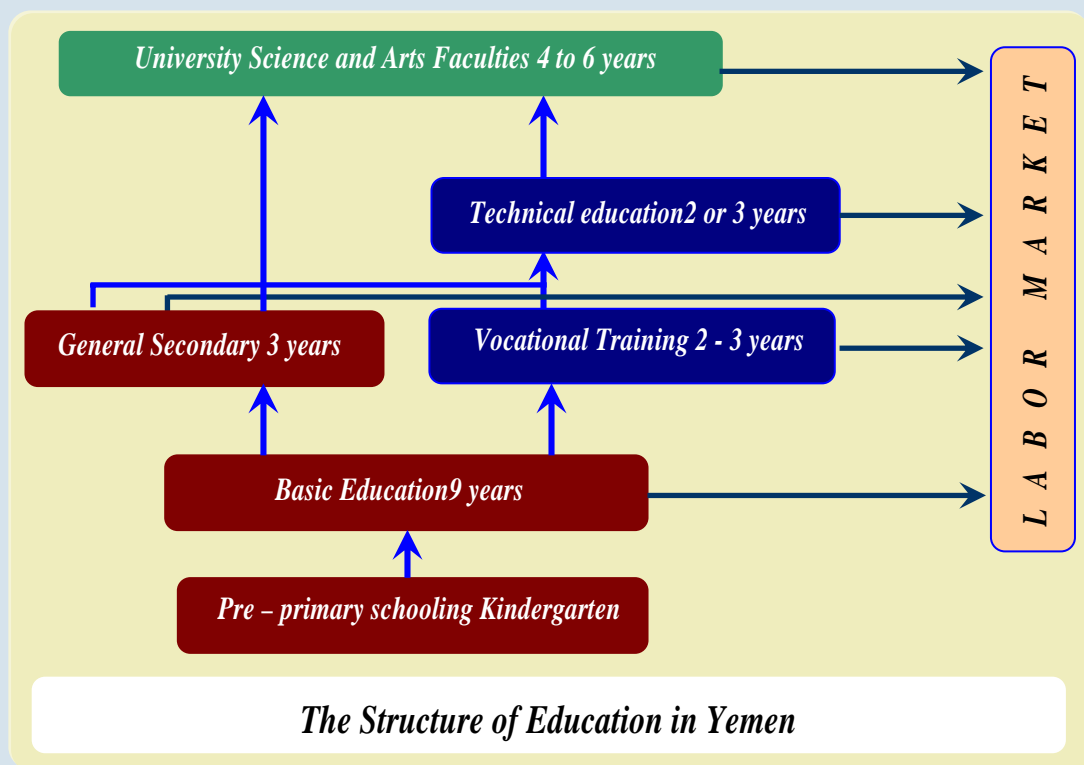
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The education system

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After the pre-primary schooling, the formal education system in Yemen is composed of three levels:

basic education, post-basic education and higher education as illustrated in the diagram shown.



Although the education system has improved during the past two decades, much remains to be done in order to increase access, and improve equity and enrolment rates. In 2001, the enrolment rates in basic education were 66 percent for males and 34 percent for females including noticeable urban-rural disparities. Many obstacles account for these disparities including the absence of schools in the vicinity; a negative attitude towards the education of girls; an inability to afford education-related expenses; widespread use of child labour; and, a shortage of teachers.

A particular characteristic of the education system at the TEVT and university level in Yemen is that the pyramid of graduates is the inverse of that required by the labour market. At the base are high numbers of university graduates,

while at the summit there are small numbers of graduates from vocational institutes. The international standards for developing countries indicate that for 3 graduates from the TEVT, higher education will provide 1 graduate. For Yemen we do have 7 graduates from university for 1 graduate from TEVT system. Furthermore, the preponderance of university graduates is those who have received a theoretical education in subjects such as social sciences, literature, or anthropology. This structure is inconsistent with labour market needs, thus aggravating the qualitative gap between labour supply and demand.

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The TEVT System

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The TEVT sector comprises an important component of the Yemeni education system with a mandate linked directly to social and economic development of the country. Recognising this mandate, the TEVT sector has gained increased importance as an instrument of national policy in terms of poverty alleviation, labour market development, and rationalisation of the education system.

In the year 2001, the Ministry of Technical Education and Vocational Training (MTEVT) was established through the consolidation of training activities previously undertaken by the General Authority for Vocational and Technical Training, the

Ministry of Education, and other public providers.

The MTEVT comprises six general administrative departments and four thematic sectors. The four sectors under the direct supervision of the Minister and the Vice Minister include the following principal functions relating to TEVT design and delivery: (i) Standards and quality covering 4 General Directions; (ii) Curricula and continuous education covering 3 General Directions; (iii) Labour market and private sector relationships with 4 General Directions; and, (iv) Planning and projects covering 4 General Directions.

MTEVT Regional offices are responsible for the administration of activities undertaken by the respective training centres and

institutes. Regional offices supervise the training institutions and allotted the resources and budget according the capacity ad the specialties in each institution. Regional offices are able to readjust and develop curricula within the limits of 20 % of the content and according to the specific needs of their catchments' area.

There are three levels of vocational training available for trainees depending on the number of years in the program, and the institution providing the training. Vocational training centres

provide training of two years duration, open to graduates from basic education. Vocational institutes deliver a more technical education lasting three years. Technical education, which is delivered by technical institutes, is available for secondary education graduates as an alternative to university studies. This lasts 2 or 3 years depending on the subject. Interest in pursuing vocational training and technical education continues to be low due to previously identified socio-economic reasons..

Level of qualification	Duration	Prerequisites	Provider
Skilled worker	2 years 3 years	Preparatory certificate	Vocational Training Centres
Technician	2 or 3 years	Secondary diploma or skilled worker or technical secondary level	Technical Institutes

- In 2003 the Ministry of TEVT supervises currently 54 operational institutes and centers: 43 vocational Centers and 11 Technical institutes. 35 other new centers are undergoing restructuring, searching for financing, being built, or in need of equipment. Among these 35 Centres/institutes 19 centers are projected to be built in the short term by GoY with bilateral/multilateral co-operation.

- The operating 54 centers and institutes provide training for 12428

trainees in 26 specialities. Among the whole number of students, only 717 girls (0.57 % of the total number) are registered in these institutions.

- In addition, there are 52 licensed TEVET private providers, who mostly cover a limited number of specialization's including computer and language training. The total training enrolment capacity is estimate to 4000 trainees.

- Besides the MTEVT training institutions and private sector providers,

51 other training centers / institutes belong to the other ministries and public organizations and provide specific training for these institutions.

In 2003, enrolment in public technical education and vocational training institutions reached some 12428 students, half of them in vocational institutes, almost 35 percent in vocational training centers and the remaining 15 percent in technical institutes. At the present time, only 0.4% of the total student populations from all education levels are enrolled in technical/vocational fields. At the graduation stage TEVT provides one graduate for seven graduates from universities and faculties.

The current MTEVT policy regarding curricula and program development for vocational training adopts the competency-based approach. This is implemented through modular training units that are taught in a step-by-step process, during which the trainee receives a "general grounding program", then "special grounding programs", ending up with "specialized programs" in the chosen occupation. This approach is designed to ensure a level of flexibility and adaptability of training outputs that is consonant with changing labour market requirements. This competency-based approach has proven to be relevant to the vocational training context and socio-economic conditions in Yemen. Effective implementation however, requires continuous investment in staff development and program maintenance.

As with other jurisdictions, staffing presents challenges to the Yemeni vocational system on a number of fronts. There is a quantitative lack of trainers that decreases the operational potential of many

centres. Available trainers are sometimes poorly qualified to transfer knowledge and skills to their students, which are consistent with those required by employers. Many are similarly weak in their pedagogical skills.

Continuing training is provided through four modes of short-term courses. Despite a fivefold growth of the number of continuing trainees during the 1998-2002 period, delivery of this type of training continues to be constrained by limited institutional capacity and the absence of mechanisms that encourage employers to demand training services.

A Skills Development Fund (SDF) was established in 1995 with the objective of securing a stable source of funding for vocational education and training programs, and providing private sector's enterprises with the opportunity to enrol their employees in specifically designed training and upgrading programs. The funds are collected, from the monthly contributions of the employers amounting to 1 percent of the total wages and all cash or non-cash benefits paid to all workers of the enterprise. As noted in the following section however the objectives for which the fund was established have yet to be realised.

MTEVT has recently developed a Vocational and Technical Education Graduates' Follow-up System, or tracer system, designed to assess the extent to which educational institutions have been fulfilling their role in preparing graduates in accordance with the specifications of jobs offered by the surrounding labour market. In a second step, improvements are to be introduced in the content and educational methods pursued by the

concerned training centres and technical institutes.

Since 1996, a formal regulatory framework has been in place for training to be undertaken in a co-operative manner with educational and training institutes on the one hand, and the business and production sector on the other hand. Despite the commitment of MTEVT to encourage the implementation of

cooperative training, enterprises have so far been reluctant to participate in such programs. Employers consider TEVT provision to be inadequate to the skill development needs of their enterprises, while MTEVT officials hold the view that the business sector is not ready yet to play a greater role in training provision.

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Key Issues Facing Further Development of the TEVT sector

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7.1. The overall TEVT vision

The overall vision for the TEVT sector as articulated under the Technical Education and Vocational Training Law is fully consistent with the country's principal strategic objectives relating to poverty reduction and sustainable social and economic development. A global strategic approach for the sector, integrating the common vision within well-defined strategic goals and an achievable action plan, has however yet to be developed. The creation of the MTEVT in 2000, unifying all employment linked skill development initiatives under a single Ministry, creates a receptive environment for the adoption of strategic development approach as outlined in this document.

7.2. Responsiveness and equity

While TEVT enrolment has been progressively increasing during the past six years, the current program framework is responsive only to a limited number of citizens and for limited employment opportunities. There is an evident need for the TEVT system to increase public and private training capacities and to be more responsive to the needs of other target groups such as women; drop-outs from the education system; handicapped; those seeking to establish micro-enterprises; and, those seeking to upgrade skills in order to move from the informal economy into formal employment. There is a similar need to diversify the program framework to be more responsive to the specific skill development needs of those entering employment into the traditional economy, as well as those entering employment in the

more technologically advanced emerging economy.

7.3 Institutional capacity

The current structure of the MTEVT shows weak linkages between the different departments, whether in staff or in line. This results in an organization with two levels that operate independently leading to gaps, redundancy, or duplication. At the central level, the different departments of the Ministry lack both autonomy and direct contact with the different TEVT stakeholders. At the regional level, the regional offices are geographically and operationally separated from the four headquarters directorates concerned with TEVT design and provision. As such, they are confined to the conduct of bureaucratic and administrative tasks, instead of serving as a linkage between the policy and operational domains.

The organisational structure of public vocational institutions, their budgets, programming, enrolments, staffing and operational procedures are directly determined by the MTEVT. This administrative centralisation both restricts the autonomy of vocational institutions, and detracts from ministerial capacity for the development of more strategic and conceptual activities. Similarly, vocational institutions have few incentives and little freedom for self-development, innovation and quality improvement of TEVT delivery.

The current TEVT information system focuses on the assembly of data at the macro level. This includes information related to technical and vocational institutes, student numbers and profiles, and enrolment levels in the different specializations. All information is recorded and distributed in hard copy leading to an

absence of real time data, or the ability to undertake more sophisticated analysis relating to the efficiency and effectiveness of the TEVT system as a whole. It is apparent that in order to manage an expanded system effectively, a fully functional VEMIS, designed within the context of currently available ICT infrastructure, is required.

7.4 Labor market linkages and enterprise involvement

The predominant characteristic of the Yemeni TEVT sector at the present time is its strongly supply-driven approach. Despite some attempts at reform, linkages between the TEVT system, labor market requirements, and private sector enterprises continue to be weak.

The labor market information system at the national level is not well developed. Studies identifying the human resource requirements associated with development of the respective geographic regions or economic sectors of the country are absent. Vocational training centers do not have the mandate, skills, or resources that would enable them to develop and maintain strong working relationships with the employer community, in fields for which they are training workers.

Mechanisms have yet to be developed that would enable employers to participate substantially in program and curricula development, or to provide training services. The fragility of the private sector, coupled with a labour market surplus and low wage levels, creates an environment where human resource development and investment in training, is a low level priority amongst employers. This situation is compounded by a mutual distrust between the TEVT system and the business

community, which hampers cooperation in moving towards the development of a more demand driven system.

7.5 Training provision

As previously noted there is an evident need for the TEVT system to increase public and private training capacity in a manner that is more responsive to the needs of a wider range of target groups. The ability to be increasingly responsive is currently constrained by: (i) Small number of TEVT institutions; (ii) An imbalance in terms of geographic distribution; (iii) low utilization levels of existing TEVT institutions; (iv) Lack of cooperative training; and, (v) Low use of potential training opportunities in enterprises. The training capacity problem is further exacerbated by the absence in training centers, of those tools and equipment that are required to develop graduate competencies which are mandatory for employment in the respective occupational areas. While a number of these issues will be addressed by projected expansion of facilities in various parts of the country, a comprehensive strategic approach remains to be articulated.

The GoY is currently embarked upon a major investment program for the TEVT sector. As previously noted, there are currently 20 centres undergoing restructuring, being built, or in need of equipment. An additional 19 centres are projected to be built under bilateral / multilateral co-operation. While MTEVT recognises the need for new centres to respond to the skill development needs of a wider constituency, the present design and equipping of training centres is predominantly based on the needs of those courses that comprise the existing program framework. This presents rigidities in terms of responding to the needs of a wider range of learners and occupational

specialisation's, leading to a further decline in effectiveness and efficiency. Capacity expansion needs to be driven by the requirements of a more diversified program framework, changes in system organisation and management, and proposed changes to program design and delivery.

Staffing continues to be a significant problem for the Yemeni vocational system. This fact is illustrated by: (i) the qualifications of teachers and trainers are relatively low; (ii) no clear standards are in place for staff recruitment; (iii) trainers are receive low wages in comparison with private sector counterparts, resulting in low levels of commitment in the conduct of their work; (iv) the system does not attract trainers with enterprise based work experience; (v) some trainers are providing instruction in fields different from their own specialization; and (vi) there is no national directory listing existing trainers, their qualifications or training needs.

The system does not currently provide an adequate level of resources for the training of trainers to up-grade their knowledge and technical or pedagogical skills. Most trainers are presently not familiar with the competency-based approach and few trainers use computers or other information communication technologies (ICT). The NITI implemented in Aden with support of German cooperation provides an initial but inadequate solution.

In the area of curricula development, standards, certification, and assessment, the situation is mixed. Despite a number of initiatives to upgrade curriculum design, program delivery, and the national qualifications framework, many problems persist. These include: (i) the level of employer participation in curricula design and implementation needs to be increased; (ii) instruction in a number of currently

offered specializations, has not been upgraded since inception; (iii) standardization of qualifications, assessment methods, and teaching approaches has yet to be achieved; and, (iv) no plan is currently in place to initiate the incorporation of ICT in the teaching and learning process.

7.6 Finance

The current TEVT system operates on the basis of negotiated annual budgetary allocations. While these allocations satisfy immediate operational needs, they are inadequate to address increased staffing needs, equipment needs, training material development or system upgrading. This results in the delivery of low-quality training, and a consequent low level of external efficiency arising from weak graduate employment, and a continuing lack of confidence between training providers and the employer community. In terms of internal efficiency, the current

capacity is not being fully utilized, recognizing that most vocational institutions operate on a single shift per day.

The Skills Development Fund, designed to enhance the funding base for TEVT institutions, currently faces a number of shortcomings in fulfilling its mission, including ensuring that employers pay their dues or to contract training programs. This situation is considered to be mainly attributable to the legislative framework under which the fund was established.

The foregoing situation is clearly unsustainable and inconsistent with the proposed system-wide expansion or the strategic objectives to enhance quality relevance and efficiency. Consequently, a core element of the strategic plan will need to be a dialogue with GoY and the external community, leading to the development of a sustainable system financing model.

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Strategic development plan

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It is apparent from an analysis of the foregoing issues that a strategic approach to further development of the TEVT sector in Yemen is required, in order to fulfil its mandate regarding social and economic development of the country. The following section of the document provides details of the proposed strategic development plan, together with a series of goals and enabling objectives.

8.1 TEVT Mandate

Under the General Law of Technical Education and Vocational Training the mandate for delivery of TEVT in Yemen is assigned to MTEVT; the National Council for Technical Education and Vocational Training; and, Local Councils for Technical Education and Vocational Training. Specific responsibilities of each

agency are detailed under Articles 7, 8 and 9 of the law.

Against the mandate assigned by law, the designated agencies are responsible under Article 5, for achieving 8 objectives that focus on:

- *Providing new entrants to the workforce with relevant skills for employment*
- *Engaging the employer community in the design and delivery of training*
- *Ensuring that all training activities are maintained to a level consistent with current best practice*
- *Providing citizens with the opportunity for lifelong learning*
- *Supporting government plans relating to poverty eradication, unemployment reduction, improving standards of*

living and facilitating the establishment of micro-enterprises.

- Enhancing and facilitating the participation of women and those with special needs into the workforce and community development
- Maintaining and promoting the national cultural heritage and associated traditional skills.
- Enhancing environmental protection, health, and safety in the workplace.

The foregoing mandate provides the reference point for development of the overall strategic plan.

8.2 Mission Statement

As the agency having the lead mandate for technical and vocational education in Yemen, the following mission statement for MTEVT provides direction for all policies, programs and operational activities of the ministry.

The law for TEVT assigned TEVT delivery to The Ministry of Technical Education and Vocational Training (MoTEVT), the National Council for Technical Education and Vocational Training and the Local Councils of Technical Education and Vocational Training. This law details the mission of the different parties.

"The mission of MTEVT is to maximize the opportunity for Yemenis in all walks of life to gain the technical, vocational, and lifelong learning skills necessary for employment or income generation in the formal and informal sectors of the economy. This will be achieved through close cooperation with the employer community in the design and delivery of training programs and other activities that are responsive to the needs of all stakeholders."

As for the MoTEVT, and since it is considered to be the main party responsible

for TEVT delivery in Yemen, it is stipulated in its organizational chart number 105 of Year 2003, that the ministry is due to conceive the policies, plan, manage execute and evaluate TEVT -whether formal or continuing, before and during employment- in all its fields, specialties and levels; and to enhance its inputs and outputs in order to satisfy the needs and prerogatives of global development and labour market locally and externally.

So the MoTEVT's mission is to "enhance the opportunities for Yemenis from different social classes to acquire technical and vocational skills and continuing education skills so that they get a job opportunity or conduct revenue-generating activities within formal or informal economies".

8.3 Strategic Issues, Goals and Enabling Objectives

The following five strategic issues comprise the key elements to be addressed in the TEVT strategy: (i) responsiveness and equity, (ii) labor market linkages and enterprise participation; (iii) institutional capacity development; (iv) training provision capacity; and, (v) sector financing. Each issue is summarized, followed by the presentation of a goal statement. Each goal statement is presented as a "result" that would be achieved by the end of the ten-year period encompassed by the plan. Each goal statement is followed by a series of enabling objectives. These enabling objectives are again presented in a result-based format, and describe a series of themes or pathways that must be taken in order to achieve each strategic goal. Action plans to pursue each of the enabling objectives during the next four-year period are fully detailed in Section 2 of the Document

8.3.1 STRATEGIC ISSUE 1: RESPONSIVENESS AND EQUITY

From the analysis of existing training arrangements in Yemen it is apparent that while enrolment has been progressively increasing during the past six years, the current program framework is responsive to a limited constituency of citizens and a limited number of employment opportunities. There is an evident need for the TEVT system to be more responsive to the needs of women, drop-outs from the education system, handicapped, those seeking to establish micro-enterprises, and those seeking to upgrade skills in order to move from the informal economy into formal employment. There is a similar need to diversify the program framework to be more responsive to the specific skill development needs of those entering employment into the traditional economy, as well as those entering employment in the more technologically advanced emerging economy.

Within the foregoing context, a draft goal statement for the responsiveness and equity issue would read as follows:

GOAL 1: RESPONSIVENESS AND EQUITY

"The TEVT system has diversified its programming in order to respond to the skill development needs of a wider range of social and sectoral partners"

ENABLING OBJECTIVES: RESPONSIVENESS AND EQUITY

Achievement of the following objectives would serve to meet the "Responsiveness and Equity" goal statement outline above.

Objective 1: School Drop-Outs.

The TEVT system is providing post-literacy and employment linked skills training to school dropouts by all public TEVT providers.

Objective 2: Women and Employment.

The TEVT system has developed partnerships with other stakeholders and is delivering programs designed to increase the participation of women in employment and income generation activities. Emphasis is placed on activities consistent with the social and economic environment in Yemen.

Objective 3: Youth Preparing for Employment in the Traditional Economy.

The TEVT system has a comprehensive framework of programs designed to respond to entry-level employment opportunities in the traditional economic sectors. An emphasis has been placed on apprenticeship and cooperative training models.

Objective 4: Upgrading for Employees in the Traditional Economy.

The TEVT system has identified and is delivering programs to meet the skill upgrading needs of employees working in the traditional economy. These needs have been identified by employers.

Objective 5: Youth Preparing for Employment in the New Economy.

The TEVT system has developed a relevant suite of education and training programs for youth preparing to enter employment in the new economy. These programs are of an international standard and have been developed in competency based format through collaboration with employers. Emphasis is placed on the development of employability skills.

Objective 6: Upgrading for Employees Working in the New Economy.

The TEVT system has established mechanisms for continuous dialogue with employers in the new economy with a view to determining skill or knowledge upgrading requirements. Flexible mechanisms have been established to develop programs that are responsive to

these requirements. Emphasis is placed on the development of task specific competencies and employability skills.

Objective 7: Skills and Knowledge for the Operators of Small Enterprises.

The TEVT System has developed a capacity to support and enhance the economic

efficiency of small enterprises through flexible and responsive enterprise management programs. Entrepreneurial skills and knowledge have been built into all TEVT programs.



In order to serve its mission of maximizing the opportunity for Yemenis in all walks of life to gain those skills necessary for employment or income generation in the formal and informal economy, a strategic issue for the TEVT system is to deepen its understanding of labour market needs, motivations, behaviours and actions. This represents a particular challenge in Yemen where the employer community includes a wide range of micro enterprises operating in the traditional economy, through medium scale companies who are beginning to adopt modern technologies, and a small number of employers linked to the international market place where international skill levels are required of the workforce. While recognising the fragmented nature of the labour market, there is nevertheless an imperative to provide technical, administrative and financial resources that will progressively build a capacity within employer groups to clearly identify their human resource development requirements over a longer time period. This should ultimately result in an employer council model that will enable employers in the respective sectors of the economy, to lead a dialogue with training providers that will identify graduate competencies and employability skills relevant to the needs of their sector. This should comprise a central pillar of the labour market linkage strategy.

In order to strengthen labour market linkages, it is necessary to address the issue from both ends of the continuum. Consequently, in order to serve its mission of maximising the opportunity for Yemenis in all walks of life to gain those skills necessary for employment or income generation in the formal and informal economy, the TTEVT system needs to expand its understanding and engagement with the labour market at a number of levels.

At the national policy level, knowledge of the structure and dynamics of the labour market in the country is required in order to develop an overall HRD framework that mirrors the general structure of the economy and the distribution of employment in the respective economic sectors. This information is also required when making investment decisions regarding the development of human resources for new or emerging sectors of the economy.

At the planning and management level, labour market knowledge and linkages, are required in order make operational and resource allocation decisions regarding those activities which are to be funded in each institution in order to enhance achievement of beneficiary employment and income generation objectives. At the present time decisions of this nature is being made on the basis of broadly based information regarding the structure of economic activity within the catchment's area served by each of the respective training institutions. Initiatives need to be taken that will ensure enhanced understanding of the structure and employment needs of the regions and economic sectors.

At the institutional level, knowledge of the labour market, and regular contact with the employment community facilitates the student selection process, ensures relevance of workshop based skill development, supports work based training and the use of contract trainers, and facilitates tracer studies and job placement.

At the program level the maintenance of continuous linkages with the labour market is necessary in order to ensure that all training activities are based on employer articulated competencies and the development of employability skills. These linkages also facilitate the development of co-operative training activities and apprenticeship based training models.

Within the foregoing context, a draft goal statement for the labour market linkage issue would read as follows:

GOAL 2: LABOR MARKET LINKAGES AND ENTERPRISE PARTICIPATION

Within the foregoing context, a draft goal statement for the labor market linkages would read as follows:

"The TEVT system has developed linkages with the labor market at a number of levels in order to ensure that all the activities of the system are driven by employer and employment demand."

ENABLING OBJECTIVES: LABOR MARKET LINKAGES AND ENTERPRISE PARTICIPATION

Achievement of the following objectives would serve to meet the "Labor Market Linkages and Enterprise Participation" outlined above.

Objective 1: Building employers understanding of human resources development issues.

The employer community has an improved understanding of human resources development issues and is progressively co-operating with the TEVT system. A methodology of defining skill needs and human resource development within enterprises is implemented. Employer organisations have been established that are better able to identify and document the skill sets required by enterprises at the sectoral, regional and national level.

Objective 2: Labor Market Information System.

The TEVT system has developed a close working relationship with the Ministry of Social Affairs and Labor (MSAL) directorate that is assigned responsibility for development of the Labor Market Information System in Yemen. Output from the LMIS is being used to provide policy and directional guidance relating to expansion of the system and significant changes in labor market demand.

Objective 3: Regional and Local Labor Market Monitoring.

The TEVT system has established mechanisms at the regional and local level regional to establish linkages with the employer community. These mechanisms would be tasked and resourced to undertake employment demand profiling, occupational analysis, maintenance and promotion of employer linkages, and the provision of feedback into curriculum development processes.

Objective 4: Tracer Studies.

The TEVT system has initiated the conduct of annual tracer studies to determine the experience of graduates within the labour market. These studies will closely examine skill matching with employer requirements, together with employer satisfaction regarding graduate employability skills.

Objective 5: Apprenticeships, and Cooperative Education and Training.

Working collaboratively with employers, the TEVT system in collaboration with the employer community has completed an analysis of those occupations where apprenticeship and cooperative training models can effectively be adopted. Candidate programs have been revised and are being implemented in each TEVT institution. Enterprises have an increasing involvement in cooperative training at the policy, management and operational levels.

Objective 6: Accreditation and Articulation.

The TEVT system has initiated the development of a National Qualifications Framework that provides accreditation against the demonstrated acquisition of increasing levels of skill and knowledge. The TEVT program framework permits full articulation between respective program levels.

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In order to transform the TTEVT system from a public sector supply driven model, to a model that is driven more by the requirements of the labour market and employer community, it is evident that there will be a parallel need to address issues of governance, organisational structure, operational procedures, and staff development.

At the policy level, the TTEVT system is currently driven by national imperatives to address employment creation, social equity and access issues, together with a need to develop labour market policies that encourage external investment. This is reflected in ongoing revision of labour law, expansion and wider geographic distribution of TTEVT institutions, and the articulation of a policy objective to increase participation rates in technical and vocational education from 2% of eligible candidates to 15%. Inherent in the foregoing lies a need to rationalise the potential conflict between social and economic objectives. These issues need clarification at the political level with subsequent translation into program responses that are guided by clearly identified objectives.

At the planning and management level, MTEVT is currently reflects the characteristics of a traditional hierarchical bureaucratic model that operates within a rigid regulatory framework. The system is also constrained by a lack of real time information. In order to increase flexibility and responsiveness, there is an identified need to devolve a measure of responsibility and accountability to the local level. This will require careful examination of the organisational structure of MTEVT and its

decision-making processes, coupled with regulatory change, and a significant measure of staff development.

At the program design and development level, investments have been made in the development of a capacity to design training programs in a competency-based format built on input from the employer community. Recognising the need to diversify the program framework and to expand coverage, this capacity will need to be significantly enhanced and similarly distributed to the local level.

At the institutional level, the assignment of increased autonomy will call for the development of new skill sets and operating procedures in order to ensure that performance standards are achieved and accountabilities met.

GOAL 3: INSTITUTIONAL CAPACITY DEVELOPMENT

Within the foregoing context, a draft goal statement for the "institutional capacity development" issue would read as follows:

"MTEVT has completed a review of its governance, management and organizational structure to better reflect the flexible, responsive, quality oriented requirements of a demand driven employment marketplace. Management responsibilities and accountabilities have been devolved to the local level where appropriate. Professional competencies of management and instructional staff have been upgraded."

ENABLING OBJECTIVES: INSTITUTIONAL CAPACITY DEVELOPMENT

Achievement of the following objectives would serve to meet the "Institutional Capacity Development" goal statement outlined above.

Objective 1: Organizational Review.

MTEVT has completed a review of its central organizational structure against a background of mission, mandate, values and development commitments outlined in the sector strategy. The resultant organizational structure has been fully documented with functional responsibilities, accountabilities, performance standards, staffing levels, and position descriptions in place. A change management approach has been developed and implementation is taking place.

Objective 2: Regulatory Review.

MTEVT has undertaken a review of all regulations that would support or inhibit accomplishment of its proposed reorganization. Steps have been taken to amend the regulatory environment accordingly.

Objective 3: Management Information System.

MTEVT has undertaken an assessment of its management information system requirements at the policy level, management and administrative level, and training center level. The characteristics of an appropriate Vocational Education Management Information System (VEMIS) have been identified and procurement action taken. System users have been trained at all levels.

Objective 4: TEVT System Management.

Building on output from the Organizational Review, MTEVT has reviewed all its operational procedures against the principles of flexibility, responsiveness, efficiency, quality and effectiveness. A

revised Operations Manual reflecting distributed and devolved responsibilities has been prepared and is being implemented. All Training Center and MTEVT Directors and managers have completed a program of professional development relevant to their responsibilities.

Objective 5: TEVT Program Development.

A unified system-wide approach has been adopted to all phases of instructional program design, delivery and evaluation. Core programs are being developed centrally in a competency-based format, through an Instructional Resource and Curriculum Development Center established within MTEVT. Responsive programs are developed locally and approved centrally. All evaluation is taking place within the context of a national qualifications framework

Objective 6: Instructional Staff Development.

MTEVT has adopted an approach to recruitment and development of instructors, based on a blended profile of permanent and contractual staff. Contractual staff would be expert practitioners drawn from the employer community. MTEVT has developed and is implementing a program of staff development designed to upgrade both pedagogical and applied skills of teachers, in accordance with the requirements of the diversified program framework

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The challenge of TEVT system is to optimise the use of the existing and the future planned capacities through policies and practices that allow greater flexibility in training delivery and a diversification of training services. The whole process of upgrading and/or creation of new TEVT institutions should contribute to the development of a new organisation that will cover all functions: administrative and financial, (ii) pedagogical, (iii) delivery, (iv) development / communication, and (v) quality control.

Support for quality improvement will be achieved through strengthening links between vocational institutions and enterprises (in terms of information, organisation and delivery) leading to improved training delivery.

The capacity issue is also related to infrastructure, equipment and the problems raised by maintenance of both, as well as under-utilisation of the premises. This will be linked to the process of competency-based curricula implementation. It will cover work in areas such as the facility utilization, equipment inventory, procurement and maintenance, and introduction of ICT. On the other hand, an analysis of facility and equipment requirements for different program levels may suggest designating a limited number of centres for advanced training only while others respond to a broader range of training needs. Consideration will also be taken to the possibilities of reaching synergy effects with neighbouring TEVT institutions and local enterprises.

Within the foregoing context, a draft goal statement for the "Training Center

Capacity Development" issue would read as follows:

GOAL 4: TRAINING CENTER CAPACITY DEVELOPMENT

Within the foregoing context, a draft goal statement for the "Training Center Capacity Development" issue would read as follows:

"MTEVT has reoriented its network of TEVT institutions to have the capacity, flexibility, and responsiveness to meet a wide range of employer and community training needs. An equipment procurement and maintenance plan is in place that enables the accomplishment of all training program learning outcomes."

ENABLING OBJECTIVES: TRAINING CENTER CAPACITY DEVELOPMENT

Achievement of the following enabling objectives would serve to meet the "Training Center Capacity Development" goal statement outlined above.

Objective 1: TEVT Training Center Development Plan.

A development plan has been established for each training center that is designed to address responsiveness and equity objectives. The development plan includes definition of strategic goals, operational targets and investment requirements. Mechanisms have been established for each TEVT institution to be evaluated against a set of criteria combining internal and external effectiveness and efficiency.

Objective 2: TEVT Training Center Staff Development.

A staff development program addressing all aspects of leadership, management, and administrative development necessary to achieve the objectives of the institution development plan has been completed for each training center. An annual staff performance evaluation system is in place.

Objective 3: Facilities and Equipment Management Plan.

A comparative review of stated curriculum learning outcomes vs. required workshop equipment has been completed for all TEVT institutions. For each TEVT institution, an inventory of all workshops, tools and equipment has been completed identifying age, condition, utilization levels, maintenance requirements, and training program linkages. A bar code based asset management system at local and national levels is in place. All equipment needs have been identified, and prioritized. A progressive procurement plan is in place. Equipment maintenance procedures, and workshop safety practices, have been documented. Compliance measures have been incorporated into student and instructor performance assessments.

Objective 4: Workshop Maintenance And Safety.

Equipment maintenance procedures, and workshop safety practices, have been documented for each training center. Compliance measures have been incorporated into student and instructor performance assessments.

Objective 5: Introduction of ICT.

An assessment has been made of Information Communication Technology (ICT) requirements for MTEVT and each training center based on the introduction of an EMIS. The progressive adoption of ICT based learning has been introduced into instructional programs. Procurement, commissioning and staff training have been completed.

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Recognising the scope of the proposed expansion of the TEVT system and the incremental costs this will impose on government, there is an urgency to fully analyse and document the capital and recurrent costs of the intended developments in order to put a long term financing plan in place. This will include an exploration of the full range of financing mechanisms for TEVT and their relevance to the economic and enterprise development environment in Yemen. One of the foregoing mechanisms adopted in order to diversify financing of the TEVT sector in Yemen, has been the establishment of a Skills Development Fund. While the objectives of the Skills Development Fund remain valid, there is a need to review and restructure its operation. Other mechanisms for diversifying financing sources will need to be explored including encouragement of the role of private training providers, while maintaining a balance with the role of the government. The financing plan will also need to address donor support and co-ordination.

Within the foregoing context, a draft goal statement for the "Sector Financing" issue would read as follows:

GOAL 5: SECTOR FINANCING

Within the foregoing context, a draft goal statement for the "Sector Financing" issue would read as follows:

"The Government of Yemen has adopted policies designed to diversify the financing of TEVT with a view to sharing costs more equitably amongst the respective beneficiaries. A long-term sector-financing plan is in place. Emphasis has been placed

on promoting the entry of private sector training providers."

ENABLING OBJECTIVES: SECTOR FINANCING

Achievement of the following enabling objectives would serve to meet the "Sector Financing" goal statement outlined above.

Objective 1: Financing Study & Strategy.

MTEVT has implemented a Technical Assistance activity designed to assess the capital and operating costs of the TEVT system in Yemen, in accordance with the new strategic profile, over a ten-year period. A financing options analysis has been completed and a strategy developed to distribute costs more equitably amongst beneficiaries.

Objective 2: Skills Development Fund.

The Skills Development Fund has been restructured in accordance with findings arising from the "Financing Study and Strategy", and is being used as one of the instruments to strengthen labor market linkages.

Objective 3: Private Sector Development.

Incentives to encourage diversification of private training providers are in place. MTEVT has accredited an increasing number of private providers.

Objective 4: Donor Coordination.

A Donor Coordination meeting has been convened for the TEVT sector to review the sector strategy and associated financing plan. Donors have indicated areas of interest for future support. A mechanism has been established for regular communication, coordination and harmonization of activities during implementation of the sector strategy.



riorities and hort-medium term implementation strategy (2005-2008)

The short-medium term implementation strategy will focus on the introduction of the required re-orientation of the TEVT system and the adoption of a change management process designed to achieve a flexible, responsive, equitable system, linked to the labour market training demand. It will cover a progressive implementation of the enabling objectives of the five strategic issues. This strategic development plan is associated with a detailed implementation plan covering the next four years (2005-2008). It gives an indication on outcomes, actions and lead responsibilities for each enabling objectives and also timelines necessary for implementation. The main priorities for the first phase will cover the following:

- (1) Strengthen dialogue and partnership and linkages development with stakeholders and the labour market: (i) Dialogue and development of an inter-ministerial plan together with the Ministry of Education, the Ministry of Higher Education, and the Ministry of Social Affairs and Labour to determine a common strategy and mechanisms for cooperation. (ii) Consolidation of national and local training councils consisting of key stakeholders in the vocational education and training area (education and training authorities, training providers, social partners, employment offices, private and civic interest groups) with clear terms of reference to ensure coherence of TEVT provision with the local economic environment and labour market requirements. The objective is to create community based TEVT institutions with tight linkages with their catchment's area.

- (2) Building awareness and understanding amongst the employer community regarding the importance of Human Resources Managements issues. Establish increased visibility regarding skill development needs in the productive sector at the local and sectoral levels.
- (3) Consolidate the assets of the young MTEVT institution: Building on its relevant experience and empowering its strengths. Design and progressively establish management information and decision support systems. Prepare the Staff development plan and progressively implement it's main components.
- (4) Complete the ongoing training capacity development and progressively improve the effectiveness and efficiency of training centres. Open the 30 new VT institutes. Progressively diversify training services according to target groups and labour market skills needs. Plan and introduce new management practices that increase autonomy and accountability for the training providers.
- (5) Develop permanent information on TEVT system and labour market needs. Map and register all significant vocational training providers operating in Yemen, including the establishment and maintenance of a live database for information and monitoring purposes. Establish regular labour market surveys, and sectional and regional assessment needs for training and skills acquisition for young and adult Yemenis.

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Implementation issues

9

9.1 Management

The TEVT strategy implementation faces administrative, human and organizational concerns. The appropriate success of the strategy needs a “Strategy Implementation Unit (SIU)” which should be in charge of coordinating and monitoring the activities planned according to annual working plans and adequate management procedures.

The previous sections present an introduction for a strategy to improve the performance of the TEVT in Yemen. When it comes to the strategy implementation, the MTEVT is responsible for developing annual working plans and monitoring the implementation activities. A quality based management system is necessary in order to ensure effective implementation.

9.2 Monitoring and evaluation

The strategy should be reflected in a logical framework giving for each goal and enabling objectives clear and where possible quantifiable outputs. Within the framework of annual work plans, indicators will be developed to measure progress on each outcome and action of the implementation plan. Close monitoring of progress will allow the SIU to use these indicators for a continuous assessment of the strategy implementation. The SIU will provide periodic progress reports to the concerned stakeholders for approval. The SIU will also present annual progress reports as part of annual work plans and budget proposals.

9.3 Communication

The SIU will design and implement an effective communication strategy, which responds to the information and communication needs of the stakeholders. For a better visibility of the TEVT strategy, the information and communication strategy will also cover the organization of appropriate seminars and other events, press releases, strategy website and other communication tools.

9.4 Assumptions and Risks

The foregoing strategy is founded on the following assumptions and risks:

Assumptions:

- *Investment in building human capital consonant with the developing requirements of the economy continues to be a national priority.*
- *The strategy receives a level of endorsement and ratification that provides a measure of immunity from political change.*
- *A climate can be developed between the employer community and GoY to engage in a collaborative approach to human resources development.*
- *There is a readiness and a capacity within MTEVT to address structural and regulatory issues that are necessary to provide training centers and institutes with the autonomy to adopt a proactive and responsive position with respect to the specific needs of their adjacent community.*
- *Programs offered by the TEVT system are found to be relevant and valuable by the learner community.*

Risks:

- *Social and political stability is not maintained*
- *Government funding to the sector is not sufficient to adopt the holistic approach required to achieve the objectives outlined in the strategy*
- *Employers show continuing reluctance to actively collaborate with training providers in needs analysis and training program design and delivery*
- *Training center directors are not provided with the skills and incentives necessary to adopt a strong leadership and development approach to their institutions and communities.*
- *The teaching staff profile can not be progressively upgraded, attributable to public/private sector wage differentials.*
- *Increased levels of external efficiency are not achieved by the TEVT system, thereby reducing GoY commitment to sector financing.*
- *The environment for increasing private training provider participation is not improved.*

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The estimative Budget

10

The estimative Budget for strategy and Executive Program to raise admission capacity to (15%) during the years, 2005-2015, which includes:

- ☞ Investment*
- ☞ Training*
- ☞ Institutionalism*
- ☞ Operation*

Vocational Institutes (after Basic Education) need to be established to assimilate 15% of Basic Education Outputs during the years 2005-2015

<i>SN</i>	<i>Governorate</i>	<i>Basic Education students expected to graduate in the year 2012-2013</i>	<i>Targeted students with 15% ratio</i>	<i>Required Institutes</i>
.1	<i>Sana'a city</i>	33608	5141	14
.2	<i>Sana'a</i>	19994	2999	11
.3	<i>Aden</i>	10090	1513	4
.4	<i>Taiz</i>	42933	6439	19
.5	<i>Hodeidah</i>	20764	3114	11
.6	<i>Lahj</i>	11195	1679	6
.7	<i>Ibb</i>	35424	5313	17
.8	<i>Abyan</i>	6031	904	3
.9	<i>Dhamar</i>	1863	2794	9
.10	<i>Shabwah</i>	3855	578	2
.11	<i>Hajjah</i>	12706	1905	7
.12	<i>Al-Baidha</i>	6833	1025	4
.13	<i>Hadramout</i>	10050	1508	6
.14	<i>Sa'adah</i>	5690	854	3
.15	<i>Mahweet</i>	6645	997	4
.16	<i>AL-Mahrah</i>	448	73	1
.17	<i>Marib</i>	3621	543	2
.18	<i>Al-Jawf</i>	3664	550	2
.19	<i>Al-Dhalae</i>	3858	1029	4
.20	<i>Amran</i>	15756	2364	8
<i>Total</i>		274797	41222	
<i>Number of students assimilated in present institutions</i>			3840	
<i>Number of institutions to be assimilated</i>			41222	137

Technical Institutes (Post Secondary Education) need to be established to assimilate 15% of Secondary Education Outputs during the years 2005-2014

<i>SN</i>	<i>Governorate</i>	<i>Basic Education students expected to graduate in the year 2012-2013</i>	<i>Targeted students with 15% ratio</i>	<i>Required Institutes</i>
.1	<i>Sana'a city</i>	13900	2085	7
.2	<i>San'a</i>	11635	1745	6
.3	<i>Aden</i>	6058	909	4
.4	<i>Taiz</i>	30243	4537	14
.5	<i>Hodeidah</i>	10717	1608	6
.6	<i>Lahj</i>	8294	1244	5
.7	<i>Ibb</i>	16205	2431	8
.8	<i>Abyan</i>	4001	600	2
.9	<i>Dhamar</i>	8049	1207	4
.10	<i>Shabwah</i>	2505	376	2
.11	<i>Hajjah</i>	8294	1244	4
.12	<i>Al-Baidha</i>	3179	477	2
.13	<i>Hadramout</i>	5083	762	3
.14	<i>Sa'adah</i>	3132	470	2
.15	<i>Mahweet</i>	2983	447	2
.16	<i>AL-Mahrah</i>	172	26	0
.17	<i>Marib</i>	1942	291	1
.18	<i>Al-Jawf</i>	3028	454	2
.19	<i>Al-Dhalae</i>	3896	584	2
.20	<i>Amran</i>	11361	1704	6
<i>Total</i>		154680	23202	
<i>Number of students assimilated in present institutions</i>			828	
<i>Number of institutions to be assimilated</i>			23202	82

Required staff for running and operating VIs and TIs

<i>SN</i>	<i>Classification</i>	<i>Management</i>	<i>Instructors of cultural & Essential subjects</i>	<i>Instructors of Major and Applied subjects</i>
<i>.1</i>	<i>BA</i>	<i>1100</i>	<i>3105</i>	<i>4371</i>
<i>.2</i>	<i>Technical</i>			<i>4832</i>
<i>.3</i>	<i>Vocational</i>			<i>952</i>
<i>.4</i>	<i>Subordinate Jobs</i>	<i>4379</i>		
<i>Total</i>		<i>5479</i>	<i>3105</i>	<i>10155</i>

Required Staff Sources

<i>SN</i>	<i>Statement</i>	<i>Sources</i>	<i>Average Anticipated</i>	
<i>1.</i>	<i>Management Staff</i>	<i>Yemeni Universities</i>	<i>%100</i>	
<i>2.</i>	<i>Instructors of cultural and Essential subjects</i>	<i>Yemeni Universities</i>	<i>%100</i>	
<i>3.</i>	<i>Instructors of Applied subjects</i>	<ul style="list-style-type: none"> • <i>Graduates of current Technical Institutes</i> • <i>Job seekers</i> • <i>Abroad Graduate Returnees</i> • <i>Local Contracted</i> • <i>Abroad Contracted coincide with a gradual replacement</i> 	<ul style="list-style-type: none"> <i>%36.5</i> <i>%10</i> <i>%5</i> <i>%10</i> <i>%38.5</i> 	
		<i>Total</i>		<i>%100</i>
		<i>Assistant Trainers</i>	<i>Vocational</i>	<i>%100</i>

Table No. (1)

***The investment budget for (115) industrial and vocational training institutes
during the years (2005 – 2014)***

SN	Category	In thousands of US\$										
		2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	Grand Total
.1	Land purchase	1,622	1,622	1,622	1,622	1,622	1,622	1,622	1,081	0	0	12,435
.2	Design & Studies works	0,162	0,162	0,162	0,162	0,162	0,162	0,162	0,108	0	0	1,242
.3	Constructions	0	21,621	40,540	40,540	40,540	40,540	40,540	40,540	32,432	13,513	310,806
.4	Equipment & Machines	0	0	24,476	24,476	24,476	24,476	24,476	24,476	24,476	24,476	195,808
.5	Wages & General expenditures	0,048	0,121	0,243	0,243	0,243	0,243	0,243	0,243	0,202	0,162	1,991
Grand Total		1,832	23,526	67,043	67,043	67,043	67,043	67,043	66,448	57,110	38,151	522,282

Table No. (2)

*The investment budget for (65) Technical institutes
during the years (2005 – 2014)*

SN	Category	In thousands of US\$										
		2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	Grand Total
.1	Land purchase	0,864	0,864	0,864	0,864	0,864	0,864	0,864	0,972	0	0	7,020
.2	Design & Studies works	0,086	0,086	0,086	0,086	0,086	0,086	0,086	0,097	0	0	0,699
.3	Constructions	0	10,810	21,621	21,621	21,621	21,621	21,621	21,621	21,621	13,513	175,670
.4	Equipment & Machines	0	0	17,128	17,128	17,128	17,128	17,128	17,128	17,128	17,128	137,024
.5	Wages & General expenditures	0,028	0,086	0,172	0,172	0,172	0,172	0,172	0,172	0,183	0,145	1,474
Grand Total		0.978	11,846	39,871	39,871	39,871	39,871	39,871	39,990	38,932	30,786	321,887

Table No. (3)

***The operational expenditures and the required expenditures for the staff in the plan
during the years (2005 – 2014)***

SN	Category	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	Grand Total
.1	<i>Operational Costs (Thousands of US\$)</i>	5,027	1,864	1,864	1,864	1,864	1,864	1,864	1,540	1,630	1,740	21,121
.2	<i>Pedagogical Training costs (thousands of US\$)</i>	1,073	0,416	0,416	0,416	0,416	0,416	0,416	0,324	0,416	0,416	4,725
.3	<i>Costs of the Specialized & the Management Training courses</i>	<i>The specialized training will be handled by the chosen equipment dealers, beside the use of the programs in the international cooperation in case, enough fund will be dedicated yearly for this purpose.</i>										
.4	<i>No. of institutions that will start operating</i>	62	23	23	23	23	23	23	19	23	23	

- *The average is YR 79,000 per student.*
- *The average is YR 15,000,000 per year for each training institution.*

Table No. (4)

The required budget for the Institutional capacity building and the constructions & equipment maintenance during the years (2005 – 2014)

SN	Category	In thousands of US\$										
		2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	Grand Total
.1	<i>Institutional capacity building</i>	0,300	0,329	0,362	0,398	0,438	0,482	0,530	0,584	0,482	0,530	4,435
.2	<i>Equipment maintenance</i>	0,419	0,423	0,433	0,512	0,563	0,620	0,682	0,750	0,682	0,682	5,766
.3	<i>Constructions maintenance</i>	1,081	1,189	1,308	1,438	1,582	1,741	1,915	2,106	1,841	1,915	16,116
Grand Total		1,800	1,941	2,103	2,348	2,583	2,843	3,127	3,440	3005	3,127	26,317

Constructions maintenance includes:

- *The rehabilitation activities for the current ministry buildings and institutions besides the institutions that are added to the ministry from other firms.*
- *The rehabilitation of the sewage networks.*
- *The maintenance of the sewage.*
- *The maintenance of the electricity networks.*

Table No. (5)

***The required budget for the staff training in the current training institutions
during the years (2005 – 2014)***

SN	Category	In thousands of US\$										
		2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	Grand Total
.1	Local training	0,944	1,038	1,142	1,256	1,382	1,520	1,672	1,839	1,682	1,764	14,239
.2	Overseas training	1,008	1,109	1,220	1,342	1,476	1,624	1,786	1,965	1,362	1,473	14,365
.3	Scholarships	0,862	0,949	1,044	1,148	1,263	1,389	1,528	1,681	1,148	1,267	12,279
Grand Total		2,814	3,096	3,406	3,746	4,121	4,533	4,986	5,485	4,192	4,504	40,883

Table No. (6)

*The required budget for curricula- making, training programs and equipment
during the years (2005 – 2014)*

<i>In thousands of US\$</i>										
<i>2005</i>	<i>2006</i>	<i>2007</i>	<i>2008</i>	<i>2009</i>	<i>2010</i>	<i>2011</i>	<i>2012</i>	<i>2013</i>	<i>2014</i>	<i>Grand Total</i>
3243	3892	4670	5604	6725	8070	9684	11621	13945	16734	84190

This includes making curricula and providing training programs:

- *Survey of Labor market needs to set up training programs (occupational analysis)*
- *Prepare the content (subject- matter and revise it.*
- *Typing / printing*
- *Editing*
- *Provision of instruction aids*

Table No. (7)

***The investment budget for (115) industrial and vocational training institutes
during the years (2005 – 2014)***

SN	Category	In thousands of YR										
		2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	Grand Total
.1	Land purchase	300,000	300,000	300,000	300,000	300,000	300,000	300,000	200,000	0	0	2,300,000
.2	Design & Studies works	30,000	30,000	30,000	30,000	30,000	30,000	30,000	20,000	0	0	230,000
.3	Constructions	0	4,000,000	7,500,000	7,500,000	7,500,000	7,500,000	7,500,000	7,500,000	6,000,000	2,500,000	57,500,000
.4	Equipment & Machines	0	0	4,528,125	4,528,125	4,528,125	4,528,125	4,528,125	4,528,125	4,528,125	4,528,125	36,225,000
.5	Wages & General expenditures	9000	22,500	45,000	45,000	45,000	45,000	45,000	45,000	37,500	30,000	369,000
Grand Total		339,000	4,352,500	12,403,125	12,403,125	12,403,125	12,403,125	12,403,125	12,293,125	10,565,625	7058125	96,624,000

Table No. (8)

*The investment budget for (65) Technical institutes
during the years (2005 – 2014)*

SN	Category	In thousands of YR										Grand Total
		2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	
.1	Land purchase	160,000	160,000	160,000	160,000	160,000	160,000	160,000	180,000	0	0	1,300,000
.2	Design & Studies works	16,000	16,000	16,000	16,000	16,000	16,000	16,000	18,000	0	0	130,000
.3	Constructions	0	2,000,000	4,000,000	4,000,000	4,000,000	4,000,000	4,000,000	4,000,000	4,000,000	2,500,000	32,500,000
.4	Equipment & Machines	0	0	3,168,750	3,168,750	3,168,750	3,168,750	3,168,750	3,168,750	3,168,750	3,168,750	25,350,000
.5	Wages & General expenditures	5,280	16,000	32,000	32,000	32,000	32,000	32,000	32,000	34,000	27,000	274,280
Grand Total		181,280	2,192,000	7,376,750	7,376,750	7,376,750	7,376,750	7,376,750	7,376,750	7,202,750	5,695,750	59,554,280

Table No. (9)

The operational expenditures and the required expenditures for the staff in the plan during the years (2005 – 2014)

ر	Category	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	Grand Total
.1	Operational Costs (Thousands of US\$)	930,000	345,000	345,000	345,000	345,000	345,000	345,000	285,000	301,550	321,900	3,908,450
.2	Pedagogical Training costs (thousands of US\$)	198,606	77,025	77,025	77,025	77,025	77,025	77,025	60,040	77,025	77,025	874,846
.3	Costs of the Specialized & the Management Training courses	<i>The specialized training will be handled by the chosen equipment dealers, beside the use of the programs in the international cooperation in case, enough fund will be dedicated yearly for this purpose.</i>										
.4	No. of institutions that will start operating	62	23	23	23	23	23	23	19	23	23	

- *The average is US\$ 427 per student.*
- *The average is US\$ 81,081 per year for each training institution.*

Table No. (10)

The required budget for the Institutional capacity building and the constructions & equipment maintenance during the years (2005 – 2014)

SN	Category	In thousands of YR										Grand Total
		2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	
.1	<i>Institutional capacity building</i>	55,540	60,995	67,095	73,803	81,183	89,301	98,230	108,053	89,170	98,050	821,420
.2	<i>Equipment maintenance</i>	77,575	78,350	80,185	94,804	104,284	114,712	126,184	138,800	126,170	126,170	1,067,234
.3	<i>Constructions maintenance</i>	200,000	220,000	242,000	266,200	292,820	322,102	354,312	389,743	340,585	354,275	2,982,037
Grand Total		333,115	359,345	389,280	434,807	478,287	526,115	578,726	636,596	555,925	578,495	4,870,691

Constructions maintenance includes:

- *The rehabilitation activities for the current ministry buildings and institutions besides the institutions that are added to the ministry from other firms.*
- *The rehabilitation of the sewage networks.*
- *The maintenance of the sewage.*
- *The maintenance of the electricity networks.*

Table No. (11)

***The required budget for the staff training in the current training institutions
during the years (2005 – 2014)***

SN	Category	In thousands of YR										Grand Total
		2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	
.1	Local training	174,667	192,133	211,346	232,484	255,732	281,305	309,435	340,378	311,170	326,340	2,634,990
.2	Overseas training	186,586	205,244	225,768	248,344	273,178	300,495	330,544	363,598	251,970	272,505	2,658,232
.3	Scholarships	159,636	175,599	193,158	212,473	233,720	257,092	282,801	311,081	212,380	234,395	2,272,335
Grand Total		520,889	572,976	630,272	693,301	762,630	838,892	922,780	1,015,057	775,520	833,240	7,565,557

Table No. (12)

***The required budget for curricula- making, training programs and equipment
during the years (2005 – 2014)***

<i>In thousands of YR</i>										
<i>2005</i>	<i>2006</i>	<i>2007</i>	<i>2008</i>	<i>2009</i>	<i>2010</i>	<i>2011</i>	<i>2012</i>	<i>2013</i>	<i>2014</i>	<i>Grand Total</i>
600000	720000	864000	1036800	1244160	1492992	1791590	2149908	2579890	3095868	15575208

This includes making curricula and providing training programs:

- *Survey of Labor market needs to set up training programs (occupational analysis)*
- *Prepare the content (subject- matter and revise it.*
- *Typing / printing*
- *Editing*
- *Provision of instruction aids*

**Grand total of the investment plan of the TEVT strategy and the implementation program
for increasing the participation rate to 15% out of basic and Secondary Education
during the years (2005 – 2014)**

In thousands of US\$

<i>SN</i>	<i>Category</i>	<i>Costs</i>	<i>annex no.</i>
1.	Total investment budget of the vocational training institutes	522.282	1
2.	Total investment budget for the technical institutes	321.887	2
3.	Total operational costs of the staff training in pedagogical methods	25.846	3
4.	Total expenditures of the institutional capacity building and constructions & equipment maintenance	26.317	4
5.	Total expenditures of training courses (locally and abroad) and scholarships	40.883	5
6.	Total The required budget for curricula- making, training programs and equipment	84.190	6
<i>grand total</i>		1.021.405	

In thousands of YR

<i>SN</i>	<i>Category</i>	<i>Costs</i>	<i>annex no.</i>
1.	Total investment budget of the vocational training institutes	96.624.000	7
2.	Total investment budget for the technical institutes	59.554.280	8
3.	Total operational costs of the staff training in pedagogical methods	4.783.296	9
4.	Total expenditures of the institutional capacity building and constructions & equipment maintenance	4.870.691	10
5.	Total expenditures of training courses (locally and abroad) and scholarships	7.565.557	11
6.	Total The required budget for curricula- making, training programs and equipment	15.575.208	12
<i>grand total</i>		188.973.032	

After completion the final document of national strategy for TEVT, it has been forwarded to the Council of Ministries for approval, the strategy was approved by the cabinet on its regular meeting (29), July 7 – 2004, decree on. 196/2004, on a later stage, the strategy was sent to the consultative council for discussions, the TEVT strategy main issues were discussed and studied in detail by the council members.

Finally, the council came out with some recommendations to be raised to the higher political leadership to support the strategy and instruct the government make available the financial resources required for implementation.

The council member discussed it the between 8-11/12/2004, in their meetings.

