

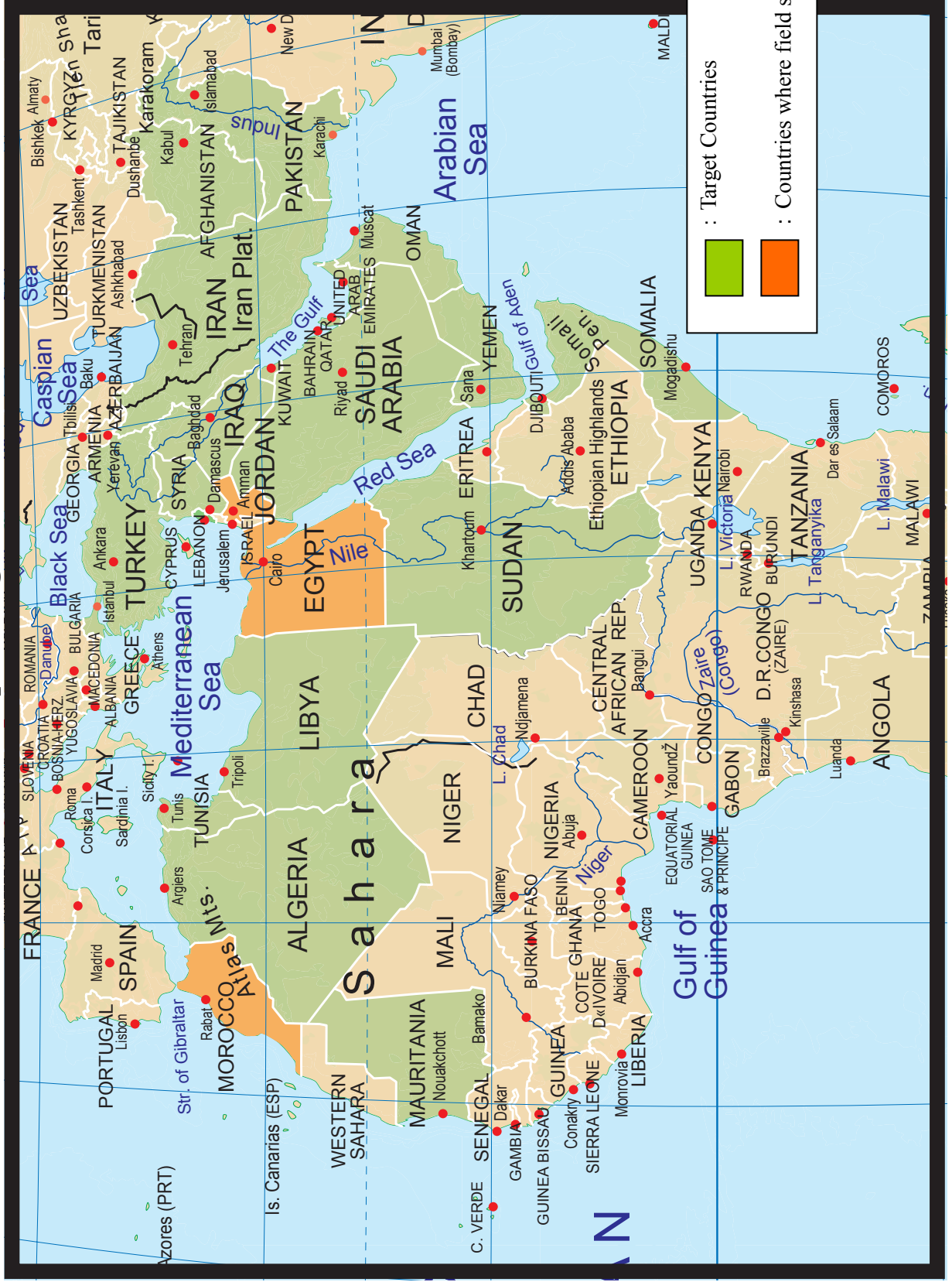
**Japan International Cooperation Agency (JICA)**

**Preliminary Survey on Vocational Training  
in the Middle East and North Africa**

**March 2005**

**KRI International Corp.**

# Location Map of Target Countries



: Target Countries  
 : Countries where field survey is conducted

## **Abbreviations**

AFD	Agence Francaise de Developpement
BDS	Business Development Service
BMENA	Broader Middle East and North Africa
CAPMAS	Central Agency for Public Mobilisation and Statistics
C/P	Counterpart
CGEM	Confederation Generale des Entreprises du Maroc
CNC	Computerized Numerical Control
DDR	Disarmament, Demobilization and Reintegration of Ex-combatants
ESITH	Ecole Superieure des Industries du Textile et de l’Habillement
ETP	Enterprise Training Partnership
EU	European Union
FTA	Free Trade Agreement
GCC	Gulf Cooperation Council
GDP	Gross Domestic Product
GIAC	Groupements Interprofessionnels d’Aide au Conseil
GNI	Gross National Income
GNP	Gross National Products
GOTEVOT	General Organization for Technical Education and Vocational Training
GPGE	General Presidency for Girls’ Education
GTZ	Gesellschaft fur Technische Zusammenarbeit
HIBA	Higher Institute for Business Administration
IAEA	International Atomic Energy Agency
ICT	Information and Communication Technology
ILO	International Labor Organization
IMF	International Monetary Fund
INSET	In-service Training
ISO	International Organization for Standardization
ISTA-IE	Institut Superieur de Technologie Appliquee Inter-Entreprise
IT	Information Technology
JOCV	Japan Overseas Cooperation Volunteers
M & E	Monitoring and Evaluation

MEDA	EU MEDA Programme
MENA	Middle East and North Africa
MICE	Meeting, incentives, conferences, events
MKI	Mubarak-Kohl Initiative
NGO	Non-Governmental Organization
NPP	National Priority Programmes
ODA	Official Development Assistance
OFPPT	Office de la Formation Professionnelle et de la Promotion du Travail
OJT	On-the-job Training
PPP	Public & Private Partnership
PRESET	Pre-service Training
QIZ	Qualified Industrial Zone
S/W	Scope of Works
SHERN	Syrian Higher Education Research Network
SMEs	Small and Medium-Sized Enterprises
STIMI	Specialized Training Institute for Metal Industries
SV	Senior Volunteers
TTI	Testing and Training Institute
TVET	Technical and Vocational Education and Training
UNDP	United Nations Development Program
UNIDO	United Nations Industrial Development Organization
UNRWA	United Nations Relief and Works Agency for Palestine Refugees in the Near East
USAID	US Agency for International Development
VET	Vocational Education and Training
VTC	Vocational Training Corporation
WB	World Bank
WDI	World Development Indicators
WTO	World Trade Organization

## Executive Summary

1. In many Middle-Eastern countries, unemployment is one of the most serious social problems; the unemployment rate often exceeds 10 percent, with the problem being especially serious among younger generations. As free trade agreements are being signed with Europe, industries with low productivity and less competitiveness in the Middle-Eastern countries face difficulties due to stronger competition in trade with Europe and neighboring Middle Eastern countries.
2. This Preliminary Survey analyses the current situation of unemployment and Technical and Vocational Education and Training (TVET) in the Broader Middle East and North Africa (BMENA), which was declared at the Sea Island Summit in June 2004. At the same time, the Survey identifies the achievements and issues of Japan's technical cooperation in TVET. At its completion, the Survey assesses future directions and needs of technical cooperation associated with TVET.
3. Target countries of this Survey are those in BMENA: Republic of Afghanistan, Islamic Republic of Pakistan, Republic of Yemen, Kingdom of Bahrain, State of Kuwait, Sultanate of Oman, State of Qatar, United Arab Emirates (UAE), Kingdom of Saudi Arabia (hereafter referred to as Saudi Arabia), Islamic Republic of Iran, Republic of Iraq, Republic of Turkey, Syrian Arab Republic, Republic of Lebanon, State of Palestine, Hashemite Kingdom of Jordan (hereafter referred to as Jordan), Arab Republic of Egypt (hereafter referred to as Egypt), the Greater Socialist People's Libyan Arab Jamahiriya, Republic of Tunisia, People's Democratic Republic of Algeria, Kingdom of Morocco (hereafter referred to as Morocco), the Somali Democratic Republic, The Republic of the Sudan, Islamic Republic of Mauritania, Republic of Djibouti, and Federal Islamic Republic of the Comoros. A field survey was conducted in Jordan, Morocco and Egypt.
4. The Survey was conducted on the basis of the following approaches:
  - (1) To produce a database of social, economic and cultural information in relation to TVET in order to understand the characteristics of BMENA;
  - (2) To assess effective approaches that have led to the employment of graduates and technical level improvement of industries (based on lessons learned and recommendations from previous TVET-related projects);
  - (3) To propose practical suggestions on future TVET cooperation, including associations with the private sector and promotion of entrepreneurship, considering the trend of industrial policies, and foreign direct investment;
  - (4) To consider how to improve women's access to TVET through analysis and from the

gender perspective of the current situation of women's participation in economic and social activities;

5. The Survey in Japan was conducted according to the following work flow:
  - (1) Analysis of government policies and plans in the relevant areas (unemployment and TVET) in the target countries;
  - (2) Extraction of achievements and issues from the past and ongoing TVET projects;
  - (3) Preparation of the field survey and submission of Inception Report;
  - (4) Organisation and analysis of the collected information;
  - (5) Preparation of Preliminary Survey Report.
6. During the field survey, data and information not available in Japan were collected.
7. A summary of the survey follows. Firstly, the Target Countries are categorized into four groups according to their socio-economic and employment structures, as outlined below.

Group	Characteristics	Country/Area	Background of TVET
Group 1 (7 countries)	Countries where GDP per capita is large and with high oil reliance	Saudi Arabia, UAE, Qatar, Bahrain, Oman, Kuwait, and Libya	(i) Aiming to transform from oil-reliant economy to economy with diversified industrial structure  (ii) Nationalization of labor force
Group 2 (9 countries)	Countries where relative share of manufacturing sector in the industrial structure is large, or the oil producing countries where the degree of oil reliance is relatively low; GDP per capita is at a mid-level	Egypt, Turkey, Jordan, Algeria, Morocco, Tunisia, Syria, Lebanon, and Iran	(i) Aiming to strengthen the competitiveness of export industries  (ii) Lack of absolute number of jobs (due to privatization of state-owned enterprises)  (iii) Aiming for poverty gap reduction
Group 3 (5 countries)	Countries with relatively small GDP per capita	Mauritania, Pakistan, Comoro, Yemen, Djibouti	Aiming for poverty reduction
Group 4 (5 countries /areas)	Countries (areas) with conflict or post-conflict	Afghanistan, Somalia, Iraq, Palestine, and Sudan	Peace-keeping and reconstruction are the priority issues.

\* This Grouping table has been prepared by the Study Team based on the data from World Development Indicators 2000 and 2004, as well as UNDP Human Development Report 2004.

8. In these countries, participation of women in the labor force has been increasing; however, their unemployment rate is higher.
9. Secondly, the TVET system was primarily analyzed for the Group 1 and Group 2 categories

outlined above, with more attention paid to the countries where JICA technical cooperation exists and the field survey was conducted.

10. The TVET situation analysis in the target areas is summarized below:

- (1) Many countries in BMENA, such as the Gulf countries, Jordan, Morocco, and Egypt set TVET policy as a national priority. They consider TVET as a key to solving pressing issues in the national economy, industrial development, unemployment and in particular, poverty. As a result, many BMENA countries focus on TVET sector improvement.
- (2) In many BMENA countries, after finishing junior secondary education under the formal education system, the separation in courses commences. This is based on a general (ordinary) course and a vocational course; the former provides students with academic knowledge to continue to higher education, and the latter with applied skills for use in the commercial or industrial sectors.
- (3) Training for working people and jobless people who are outside the formal education system is being conducted as part of a vocational training center course for those who finished either junior secondary or senior secondary education.
- (4) The type and mode of TVET, which includes training outside the education system, is shown in the following table.

Type of Training	Description
Pre-service Training (PRESET)	This training provides the youth with knowledge and skills, qualifications before entering the labor market, and qualifies them mostly in the education system. It provides several mode of training: alternation training, apprenticeship training and night courses.
Training for the Unemployed	This training targets those who have lost their jobs or who have never worked before.
Training for Entrepreneurs	This course generally targets university and community college students to provide training on how to commence and manage their businesses, and market and sell their products. There is also a course targeting socially vulnerable people to provide training on becoming self-employed so as to improve their income and living standards.
Training to improve living standards targeting the socially vulnerable people with a poverty reduction objective	Some components are duplicated with the ‘Training for Entrepreneurs’. This training emphasizes the aspect of acquiring skills to generate income, which would result in reducing poverty in targeted people, who are the socially vulnerable (the poor, women, and young dropouts). It has a double role of providing training skills and offering a safety net. It contributes to reducing poverty and ameliorating social problems, but also expands the labor market in the medium and long-term through producing small-scale entrepreneurs. (e.g.: the case of Entraide Nationale of Morocco)

Mode of Training	Description
Alternation Training	This is the training mode comprising one month of training at school and one month of training at companies on an alternately basis. It contributes to strengthening the tie with the private sector and produces human resources corresponding to the needs of the private sector in terms of skill type and skill level.
Apprenticeship Training	This is similar to alternation training but the focus is more on practical applications, which are often conducted in the sector, such as artisan and construction, as well as agriculture.

- (5) As outlined in (2) above, the TVET system is diversified and is overseen by several ministries, according to the courses explained above. In general, in these countries the Ministry of Education supervises the formal education sector (primary and secondary education sub-sectors), and Ministry of Higher Education oversees the higher education sub-sector. Ministry of Labor or Vocational Training is in charge of supervising vocational training centers.
- (6) The TVET implementing agencies in Egypt, Jordan and Saudi Arabia are mostly public sector agencies, whereas in Morocco, the number of private sector institutions exceeds public sector institutions.
- (7) Overall, the TVET sector in these countries can be outlined as below:
- (i) The number of graduates exceeds the labor market demand;
  - (ii) Due to a multiple administration system, information cannot be shared and there is no comprehensive labor market database;
  - (iii) There exists a mismatch between the labor market (demand side) and TVET program (supply side);
  - (iv) TVET is led by the public sector;
  - (v) There is a preference among people for higher education;
  - (vi) Social status of TVET sector is low;
  - (vii) The quality of TVET graduates is low;
  - (viii) TVET qualification does not always guarantee value to its graduates;
  - (ix) There is availability of vocational training for the socially vulnerable, which contributes to enhancing living standards and reducing social problems;

11. A summary of TVET problem analysis based on the observations in 10 above is as follows:

- (1) At the central government level, the responsiveness to the labor market is the main problem, with the following issues being identified:



- (i) Imperfect information (several ministries involved in TVET administration);
  - (ii) No coordinating agency, or lack of capacity to activate the coordinating agency even if it is available;
  - (iii) Imperfect system to reflect private sector needs to TVET program;
  - (iv) Difficulty in incorporating private sector needs into the training program as trainers are civil servants;
  - (v) Time lag is unavoidable in designing training program contents;
  - (vi) Companies themselves might not recognize the training needs;
  - (vii) Lack of consistency between financial allocation and target number of trainees.
- (2) At the school level, the problems identified are as follows:
- (i) Lack of monitoring and evaluation leads to a low quality of education;
  - (ii) The salary level of trainers is low;
  - (iii) The quality of trainers is low;
  - (iv) Teaching methodology for theory is biased to the lecture method.
- (3) From the gender perspective, in general, access to TVET is legally guaranteed for both male and female. Since boys and girls opt for different job sectors, this results in the difference in the number of applicants in different courses and thus the sector of employment after graduation. In some countries TVET is offered in separate schools for boys and girls.
- (4) The main reforms and programs which are on-going in Jordan, Egypt, Morocco, and Saudi Arabia are summarized in the following table:

Country	Central government and policy level	Traditional TVET (skills development)	Support for entrepreneurship and income generation
Jordan	<ul style="list-style-type: none"> <li>- Setting up a coordinating agency in TVET sector (TVET council)</li> <li>- Setting up TVET Fund</li> <li>- Creation of comprehensive labor market database (Al Manar Project), and TVET sector Institutional Reform (CIDA)</li> <li>- Strengthening capacity in planning and management, and setting up institution for curriculum development training (EJADA:EU)</li> <li>- Technical college institutional reform and strengthening technical education (GTZ)</li> </ul>	<p>Traditional TVET (skills development)</p> <ul style="list-style-type: none"> <li>(1) Setting up TVET schools</li> <li>- Setting up TVET school in metal and machinery sector (STIMI: JICA)</li> <li>- Provision of TVET targeting Palestinian Refugees</li> <li>(2) Targeting the unemployed</li> <li>- National Training Project to replace foreign workers</li> </ul>	<p>Support for entrepreneurship and income generation</p> <p>NAFES: Promoting entrepreneurship (Japan)</p>
Egypt	<ul style="list-style-type: none"> <li>- Setting up a coordinating agency: Supreme Council of Human Resource Development (SCHRDR)</li> <li>- Setting up TVET Fund</li> <li>- TVET Sector Reform, setting up a Sub-Committee (WB)</li> <li>- Revision of Accreditation System (British Council, etc.)</li> <li>- Ministry of Higher Education: institutional reform of technical college (WB)</li> </ul>	<ul style="list-style-type: none"> <li>(1) Collaboration with the private sector</li> <li>- Mubarak Kohl Initiative (GTZ)</li> <li>- Skills Development Project (WB)</li> <li>- Enterprise Training Partnership (EU)</li> <li>(2) Enhancing existing TVET schools/centers</li> <li>- Provision of equipment and revising training programs (France, Spain and JICA)</li> <li>(3) Targeting the unemployed</li> <li>- TVET through Social Development Fund (UN, etc.)</li> </ul>	<ul style="list-style-type: none"> <li>- Under the Social Fund for Development, entrepreneurship training by Social Fund for Development (UN, etc.), start-up loan Entrepreneurs (JBIC), and skills training for women</li> </ul>
Morocco	<ul style="list-style-type: none"> <li>- Implementation of TVET by OFPPT to strengthen practicals through alternation system incorporating internship at private enterprises</li> <li>- Implementation of TVET by Entraide Nationale targeting poor people and young dropouts</li> </ul>	<ul style="list-style-type: none"> <li>(1) Collaboration with the private sector</li> <li>- Setting ESITH through PPP (EU)</li> <li>- Introduction of in-house training (GTZ)</li> <li>(2) Enhancing existing TVET schools/centers</li> <li>- Construction of TVET centers and program development (MEDA:EU)</li> <li>- Dispatching volunteers to TVET schools (JICA)</li> <li>- Training young dropouts (USAID)</li> </ul>	<ul style="list-style-type: none"> <li>- Supporting women entrepreneurs in setting up cooperatives, production skills, &amp; marketing (UNIDO)</li> </ul>
Saudi Arabia	<ul style="list-style-type: none"> <li>- Larger budget allocation to human resource development to promote Saudization Policy</li> <li>- Institutionalizing Manpower Development Fund and subsidizing training fees and short-term salaries through the Fund</li> <li>- Introduction of NOSS (UK)</li> </ul>	<ul style="list-style-type: none"> <li>- National System for Joint Training (NSJT): OJT training system targeting high school graduates and young dropouts who have difficulty in finding jobs, through support from Manpower Development Fund and the Chamber of Commerce</li> </ul>	<ul style="list-style-type: none"> <li>- Support for young entrepreneurs (male and female) through Hundred Year Fund</li> <li>- Conducting workshop for women entrepreneurs (English Royal Court and private company)</li> </ul>

12. Seven best practices were chosen from the table above, and one case from Asian experience was introduced to indicate likely areas for improvement of TVET in the target countries:

- (1) High employment rate due to the high level of private sector involvement
  - (i) Successful participation of private sector in industrial secondary school management: Egypt Mubarak-Kohl Initiative (MKI)
  - (ii) Private sector-oriented school management providing consistent program to labor market, leading to high employment rate: Morocco ESITH
  - (iii) Promoting confidence among private sector through alternation training, resulting in high employment rate: Morocco Institut Supérieur des Technologies Appliquées-Inter Entreprise (ISTA-IE)

\* Asian Experience: Demand-oriented program contents and high quality training resulting in high employment rate: Thailand Toyota Automotive Technology School

- (2) Securing high quality education and training
  - (i) Securing high quality education and high work ethics, leading to high rate of continuation to higher education and high employment rate: Egypt Don Bosco Vocational Secondary School
  - (ii) Securing high quality of practical training: Jordan STIMI and UNRWA
- (3) Enhancing living standards and promoting entrepreneurship targeting the poor
  - (i) A series of support from formulation of cooperatives to product development and marketing to selling the products, resulting in improvement of living standards among women groups: Morocco projet de developpement des systemes productifs locaux de la marqueterie a Essauira et de la toterie a Safi
  - (ii) Assisting socially vulnerable people and women to participate in economic activities and promoting entrepreneurship: Morocco Entraide Nationale

13. Thirdly, current and past TVET cooperation by JICA was reviewed.

- (1) Background and project objectives: Project objectives have been set reflecting the needs of improving industrial technology standards and strengthening competitiveness in Groups 1 and 2. In the post-conflict countries in Group 4, the project objective is to enhance the living standard for survival rather than skills development. In general, the objectives of the cooperation are highly relevant to the national priorities of the countries.
- (2) Project Scheme: The majority of the project scheme is project-type technical assistance,

which provides comprehensive sets of experts being dispatched, equipment provision and counterpart training in Japan. Infrastructure, such as buildings, was provided by the recipient government or other donors.

- (3) Counterpart institution: Cooperation normally targets one institution.
- (4) Implementation structure: Most projects have adopted a two-committee system: a technical committee and a steering committee. The technical committee comprises representatives from the counterpart institution and is responsible for project implementation; the steering committee, which consists of personnel from counterpart ministries, oversees and supervises the progress of project implementation.
- (5) Outputs: Most TVET cooperation aims at either upgrading the existing course or adding a new course that responds better to the needs of the labor market. The components of the activities include technical transfer in the development of curriculum and syllabus, as well as textbooks and teaching methodology to counterparts.
- (6) Fields of cooperation: Fields of cooperation are the manufacturing sectors, such as automobiles, metal works, mechanics, electric work, electronics, and computerized numerical control (CNC) machines, where Japan has a comparative advantage.

14. The achievement analysis of the cooperation is as follows:

- (1) Perspective 1: Relevance
  - (i) Relevant to national priorities and motivated counterparts
  - (ii) Important in promoting TVET status advancement
- (2) Perspective 2: Upstream and Downstream (link between TVET sector and the labor market)
  - (i) Projects have realized high level of effectiveness by concentrating the different types of input to a focused target
  - (ii) Equipment provision based on the assessed needs provides a large impact
  - (iii) Impact on employment differs
- (3) Perspective 3: Implementation Structure
  - (ii) Technology contents to be transferred are so condensed that it might be difficult to transfer all of them to the counterparts

- (iii) Some counterparts leave the job
  - (iv) Different pictures in sustainability
- (4) Perspective 4: Private Sector Participation
- (i) The case of Saudi-Japanese Automobile High Institute (SJAHI)
  - (ii) It is important to establish new status as mid-class engineers
- (5) Perspective 5: Technology Transfer
- It is difficult to transfer technology during the limited working hours
- (6) Perspective 6: Donor Support
- (i) There is collaboration with other donors. The typical pattern in TVET sector cooperation is that the recipient government bears the cost of the training facility construction and Japanese cooperation provides it with technical assistance.
  - (ii) The difference with other donor cooperation is that JICA's support is in the form of a technical cooperation project, which normally targets one institution, whereas some donors support institutional and legal reform.
15. Three main issues of the TVET System are summarized with possible solutions as follows:
- (1) Problems of lack of connection between the training program and the labor market could be solved by:
- (i) Having comprehensive information systems and operationalizing the function of the coordinating agency;
  - (ii) Involvement of private sector in the program setting processes;
  - (iii) Awareness campaign for enhancing status of TVET sector.
- (2) Problem of securing quality of education could be solved by:
- (i) Ensuring planning, monitoring, and evaluation systems at school level;
  - (ii) Providing regular INSET to trainers.
- (3) The importance of supporting the poor within the framework of TVET to contribute to improving living standards and promoting entrepreneurship should be recognized.
16. The future directions for TVET cooperation by donors for each of the the target country groupings are summarized in the table below:

Group	Objectives of TVET	Directions for future cooperation	
Group 1	<b>Skills Development</b> which contributes to industrial development	(1) Bigger outputs and impact through assistance with focused scope	(9) Introduction of monitoring and evaluation system at school level  (10) From gender perspective, it is essential to diversify the program contents for girls with careful consideration given to social and cultural backgrounds of the countries for poverty reduction and promotion of self-reliance of women.
Group 2	<b>Skills Development</b> which contributes to industrial development  and  <b>Training</b> mainly targeting the poor to <b>improve living standards and reduce poverty</b>	(2) Presentation of a sustainable model through strengthening cooperation with the private sector: maintaining the sustainability and pursuing the broader impact  (3) Importance of institutional reform, as well as establishing a system which can operationalize the new institution (especially for Group 2 countries)  (4) Strengthening awareness campaign to enhance the status of TVET sector (especially for Group 1 countries)  (5) Importance of support SMEs which contributes to labor market expansion (especially for Group 2 countries)  (6) Modernization of management towards more competitiveness (especially for Group 2 countries)	
Group 3	<b>Training</b> mainly targeting the poor to <b>improve living standards and reduce poverty</b>	(7) Importance to support the poor in the framework of TVET	
Group 4	<b>Training</b> mainly targeting the poor to <b>improve living standards and reduce poverty</b>	(8) Importance of enhancing access to basic education (primary education)	

# **Preliminary Survey on Vocational Training in the Middle East and North Africa**

## **Table of Contents**

**Location Map**

**Abbreviations**

**Executive Summary**

<b>CHAPTER 1 OUTLINE OF THE STUDY .....</b>	<b>1</b>
1.1 BACKGROUND .....	1
1.2 OBJECTIVES .....	1
1.3 TARGET COUNTRIES .....	1
1.4 LIST OF MEMBERS AND ASSOCIATED TASKS .....	2
1.5 APPROACHES.....	2
1.7 OUTLINE OF FIELD SURVEY.....	3
1.7.1 Objective .....	3
1.7.2 Schedule and Those Interviewed .....	3
<b>CHAPTER 2 SOCIO-ECONOMIC AND EMPLOYMENT SITUATION IN TARGET COUNTRIES .....</b>	<b>7</b>
2.1 SOCIO-ECONOMIC SITUATION .....	7
2.1.1 Group 1: Countries where GDP per capita is large and with high oil reliance .....	7
2.1.2 Group 2: Countries where relative share of manufacturing sector in the industrial structure is large, or the oil-producing countries where the degree of oil reliance is relatively low, and GDP per capita is at mid-level.....	12
2.1.3 Group 3: Countries with relatively small GDP per capita.....	17
2.1.4 Group 4: Countries (area) with conflict or post-conflict.....	19
2.2 EMPLOYMENT SITUATION.....	20
2.2.1 High unemployment.....	21
2.2.2 Women labor participation is low .....	22
2.2.3 Public sector is shrinking and private informal sector (microenterprises and self-employed) offers more employment .....	23
2.2.4 Labor migration .....	25
2.2.5 Employment policy .....	25
<b>CHAPTER 3 CURRENT SITUATION OF TECHNICAL AND VOCATIONAL EDUCATION AND TRAINING SYSTEM.....</b>	<b>29</b>
3.1 CURRENT SITUATION AND PROBLEM ANALYSIS OF TVET SECTOR .....	29

3.1.1	Summary of current situation .....	29
3.1.2	Problem analysis .....	37
3.2	TVET COOPERATION BY OTHER DONOR AGENCIES .....	42
3.2.1	World Bank .....	42
3.2.2	European Union (EU).....	42
3.2.3	GTZ.....	43
3.2.4	CIDA.....	43
3.2.5	Major Donor Activities In Other Countries.....	45
3.3	BEST PRACTICES .....	46
3.3.1	High employment rate due to high level of private sector initiative.....	46
3.3.2	Securing high quality education and training .....	49
3.3.3	Enhancing living standards and promoting entrepreneurship targeting the poor .....	50
<b>CHAPTER 4 REVIEW OF JAPANESE TECHNICAL COOPERATION IN TVET SECTOR.....</b>		<b>52</b>
4.1	OVERVIEW OF PROJECTS CONDUCTED IN THE TARGET COUNTRIES OF THE SURVEY .....	52
4.2	ACHIEVEMENT ANALYSIS OF JAPANESE COOPERATION IN TVET SECTOR.....	57
4.2.1	Perspective 1: Relevance .....	57
4.2.2	Perspective 2: Upstream and downstream (link between TVET sector and labor market)...	57
4.2.3	Perspective 3: Implementation structure .....	59
4.2.4	Perspective 4: Private sector participation.....	60
4.2.5	Perspective 5: Technology transfer .....	61
4.2.6	Perspective 6: Donor support.....	61
<b>CHAPTER 5 SUMMARY.....</b>		<b>63</b>
5.1	SUMMARY ON ISSUES OF TVET SYSTEM.....	63
5.1.1	Connection between the training program and the labor market.....	63
5.1.2	Securing quality of education.....	64
5.1.3	Training to improve living standards and promote entrepreneurship .....	64
5.2	SUMMARY OF THE FUTURE DIRECTIONS OF DONOR COOPERATION .....	65
5.2.1	Group 1 and Group 2.....	65
5.2.2	Group 3 and Group 4.....	68
5.2.3	For All Groups.....	70
<b>Main Data Summary.....</b>		<b>71</b>



## **Chapter 1 Outline of the Study**

### **1.1 Background**

In many of the Middle Eastern countries, the high unemployment rate is one of the most serious social problems; the unemployment rate exceeds 10 percent with the problem being especially serious among younger generations. As free trade agreements are being signed with Europe, industries with low productivity and less competitiveness in the Middle Eastern countries face difficulties due to greater competition in trade with Europe and neighboring Middle Eastern countries.

Based on the concept of 'Broader Middle East and North Africa (BMENA)', declared at the Sea Island Summit in June 2004, to which Japan agreed, it promised to support the efforts of the BMENA countries, particularly in such areas as vocational training as well as basic education. This would involve educating 100,000 people in the area of basic education and literacy and 10,000 in the area of vocational training in the next three years.

JICA decided to conduct a preliminary survey on technical and vocational education and training (TVET) in BMENA in order to determine the future direction of its TVET cooperation in BMENA. The Survey analyzed the issues of TVET from the viewpoint of how TVET could strengthen industrial competitiveness and deal with the unemployment problem.

### **1.2 Objectives**

The objectives of the Survey were to analyze the current situation of unemployment and TVET issues in BMENA countries, to identify the achievements and outputs of Japan's technical cooperation in TVET, and to evaluate future needs and direction of technical cooperation in the area.

### **1.3 Target Countries**

The target countries of the Survey were the BMENA countries which included: Republic of Afghanistan, Islamic Republic of Pakistan, Republic of Yemen, Kingdom of Bahrain, State of Kuwait, Sultanate of Oman, State of Qatar, United Arab Emirates (UAE), Kingdom of Saudi Arabia (hereafter referred to as Saudi Arabia), Islamic Republic of Iran, Republic of Iraq, Republic of Turkey, Syrian Arab Republic, Republic of Lebanon, State of Palestine, Hashemite Kingdom of Jordan (hereafter referred to as Jordan), Arab Republic of Egypt (hereafter referred to as Egypt), the Greater Socialist People's Libyan Arab Jamahiriya, Republic of Tunisia, People's Democratic Republic of Algeria, Kingdom of Morocco (hereafter referred to as Morocco), the Somali Democratic Republic, the Republic of the Sudan, Islamic Republic of Mauritania, Republic of Djibouti, and Federal Islamic Republic of the Comoros. A field survey was conducted in Jordan, Morocco, and Egypt, although with reference to Saudi Arabia, the

Survey refers to information collected by another JICA study conducted in that country.

#### **1.4 List of Members and Associated Tasks**

The Study Team was composed of four team members.

<b><u>Title (associated tasks)</u></b>	<b><u>Name</u></b>
Team Leader/Technical Education Vocational Training 1	Ms. Yoko Ishida
Deputy Team Leader/Industrial Analysis 1	Ms. Yuki Kobayashi
Technical Education Vocational Training 2	Mr. Hiroaki Umamo
Industrial Analysis 2	Mr. Tetsuya Ishii

#### **1.5 Approaches**

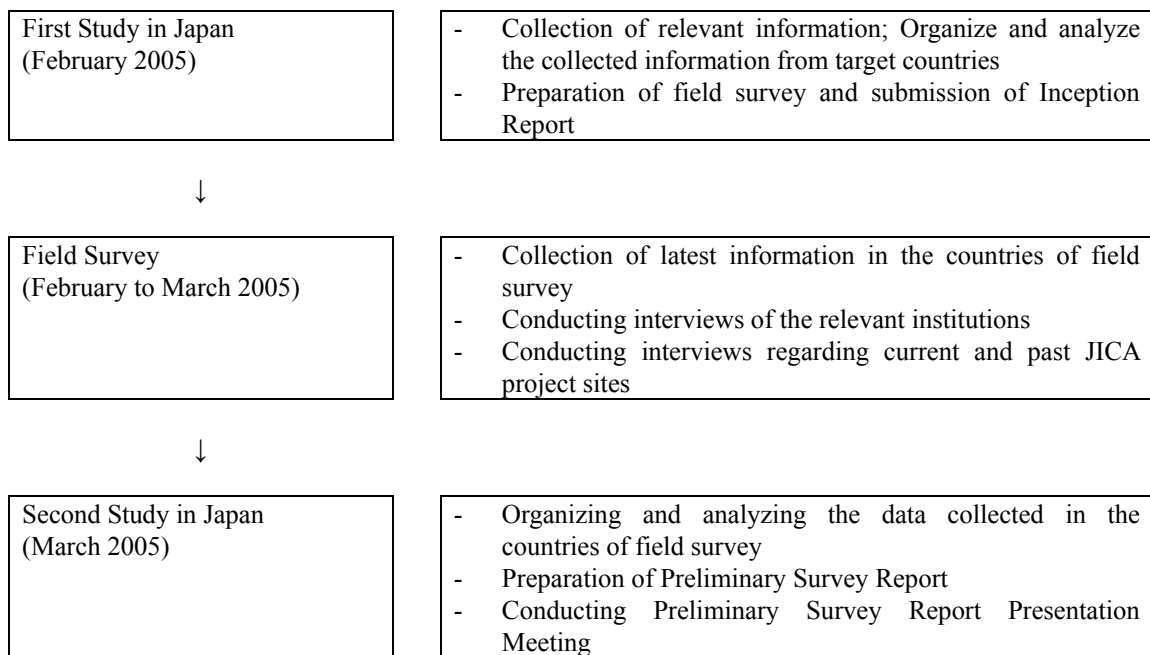
The Survey was conducted based on the following approaches in order to achieve the above objectives.

- (1) To produce a database of social, economic and cultural information in relation to TVET, in order to comprehend the characteristics of BMENA;
- (2) To assess the effective approaches which led to the employment of graduates and technical level improvement of the industries, the lessons learned and recommendations from TVET-related projects which have been conducted;
- (3) To propose practical suggestions regarding future TVET cooperation, including tie-ups with the private sector and promotion of entrepreneurship, after considering the trend of industrial policies and foreign direct investment;
- (4) To consider the improvement in women's access to TVET, through analyzing the current situation of their participation in economic and social activities from a gender perspective.

#### **1.6 Work Flow**

The work flow of the Survey is as shown in below:

**Chart 1-1 Work Flow of the Study**



### **1.7 Outline of Field Survey**

Of the 26 target countries, the Study Team conducted the field survey in Morocco, Jordan and Egypt. The field survey schedule and members in charge are as follows:

Country	Member in Charge	Duration of the Field Survey
Morocco	Mr. Umano	20 <sup>th</sup> February to 1 <sup>st</sup> March 2005
Jordan	Mr. Umano	2 <sup>nd</sup> March to 16 <sup>th</sup> March 2005
Egypt	Ms. Kobayashi	26 <sup>th</sup> February to 12 <sup>th</sup> March 2005

#### **1.7.1 Objective**

The Study Team intended to collect information that could otherwise not be obtained during the study undertaken in Japan. This included responses from the TVET authorities and schools, enabling the Team to focus its analysis on the future TVET cooperation direction and needs.

#### **1.7.2 Schedule and Those Interviewed**

The schedule and those interviewed during the field survey are as follows:

### Survey Schedule and Those Interviewed in Morocco

Date	Those Interviewed
22 February	Secrétariat d'Etat à la Formation Professionnelle
	Office de la Formation Professionnelle et de la Promotion du Travail (OFPPT)
23 February	Confédération Générale des Entreprises du Maroc (CGEM)
	Ecole Supérieure des Industries du Textile et de l'Habillement : (ESITH)
	Coopération Allemande au Développement (GTZ)
	Institut Supérieur de Technologie Appliquée Inter-Entreprises ( ISTA-IE)
	Groupements Interprofessionnels d' aide au conseil (GIAC)
24 February	Entraide Nationale
	Direction de l'Investissement Extérieur
	EU Commission Européenne au Maroc
27 February	Ministère de l'Industrie, du Commerce et de la Mise à Niveau de l'Economie
	UNIDO
	USAID
28 February	Agence Française de Développement (AFD)

### Survey Schedule and Those Interviewed in Jordan

Date	Those Interviewed
3 March	JICA Jordan Office
	Ministry of Planning and International Cooperation
6 March	Vocational Training Corporation (VTC)
	Specialized Training Institute for Metal Industries (STIMI)
	Moulding Technologies Corporation (private company employing graduates from STIMI)
7 March	TVET Council
	TVET Fund
	Japanese Embassy
8 March	Amman Chamber of Commerce
	Ministry of Labor
	EU (Euro-Jordanian action for the development of enterprise: EJADA)
	National Fund for Enterprise Support (NAFES)
	Vocational Training School
9 March	National Council for Human Resource Development (NCHRD)
	Amman Chamber of Industry
	Testing & Training Institute (TTI)
10 March	Ministry of Higher Education
	UNRWA
	USAID
	Ministry of Industry & Trade
	Girls' Vocational Institute
	Boys' Vocational Training Secondary School
13 March	SETVET Project, NCHRD
	AL MANAR Project, NCHRD
	Japanese Embassy

### Survey Schedule and Those Interviewed in Thailand

Date	Those Interviewed
15 March	Toyota Automotive Technology School (TATS)

### Survey Schedule and Those Interviewed in Egypt

Date	Those Interviewed
27 February	JICA Egypt Office
	Japanese Embassy
	Mr. Hasegawa, JICA Expert, Job Opportunity Study and Development of Pilot Training Courses Project
	Productivity and Vocational Training Department (PVTD)
	Mr. Hasegawa, Mr. Kubo, Mr. Hashimoto, JICA Expert, Improvement of Science and Mathematics Education in Primary Schools Project
28 February	Ministry of Foreign Trade and Industry
	Egyptian Federation of Industry
	Ministry of Higher Education
	World Bank Skills Development Project
1 March	Shoubra Maintenance Vocational Training Center
	GTZ Technology Competence Center
	Egyptian Italian Company
2 March	Ministry of Education
	Small Enterprise Development Organization (SEDO)
	Itochu Corporation
3 March	World Bank
	Don Bosco Multipurpose Vocational Training Center
	Ministry of Tourism
5 March	Mataria Technical Institute
6 March	Ministry of Manpower
	Cairo American University
7 March	GTZ
	ILO
	Best Graphic Advertising / Net for Leather Products (enterprises supported by Social Fund for Development)
8 March	USAID
	EU
	Japan Bank of International Cooperation Cairo Liaison Office
9 March	Advanced Technical School for Maintenance Technology
	10th Ramadan City Investors Association
	Mubarak-Kohl Initiative (MKI) Textile Technical Secondary School
10 March	6th October City Investors Association
	Japanese Embassy
	JICA Egypt Office

## Chapter 2 Socio-Economic and Employment Situation in Target Countries

This chapter overviews the socio-economic situation, industrial structure, education level, population and employment situation of the target countries in relation to TVET. Statistics are summarized in the chapter but some figures are also extracted from the Main Data Summary attached at the end of this Report.

### 2.1 Socio-Economic Situation<sup>1</sup>

The 26 targeted countries are categorized into four groups based on their GDP per capita (Table 2-1), GDP contribution by sector (Table 2-2), merchandise exports (Table 2-3), employment by sector (Table 2-4), and social situation as follows:

Group	Characteristics	Country
Group 1 (7 countries)	Countries where GDP per capita is large and with high oil reliance	GCC Countries (Saudi Arabia, UAE, Qatar, Bahrain, Oman, Kuwait), and Libya
Group 2 (9 countries)	Countries where relative share of manufacturing sector in the industrial structure is large, or the oil producing countries where the degree of oil reliance is relatively low ; GDP per capita is at mid-level	Egypt, Turkey, Jordan, Algeria, Morocco, Tunisia, Syria, Lebanon, and Iran
Group 3 (5 countries)	Countries with relatively low GDP per capita	Mauritania, Pakistan, Comoro, Yemen, Djibouti
Group 4 (5 countries/ area)	Countries (area) with conflict or post-conflict	Afghanistan, Somalia, Iraq, Palestine, Sudan

The characteristics of each group are described below:

#### 2.1.1 Group 1: Countries where GDP per capita is large and with high oil reliance

This group includes seven GCC countries, namely Saudi Arabia, UAE, Qatar, Bahrain, Oman, and Kuwait, and Libya.

These countries have larger GDP per capita than the other target countries, and as shown in Table 2-1, are categorized as High Income and Upper High Income Countries.

Since the Iraq War, the increase in oil price has led to an increase in oil income, resulting in favorable economic conditions in these countries. All countries in this group are highly dependent economically on oil, and they plan to diversify their economic structures in order to

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<sup>1</sup> Country information is summarized from homepages of Ministry of Foreign Affairs, embassies, Japan Cooperation Center for Middle East News, Government of BMENA, and JICA Reports

move away from high oil dependency, through a down-scaling of the public sector and increasing the proportion of the private sector in the economy.

**Table2-1: GDP Per Capita and World Bank Categorization of Countries (2002)**

Category	Country (GDP per capita in US Dollar)
Low Income	Mauritania (348), Pakistan (408), Sudan (412), Comoro (437), Yemen (537), Afghanistan (no figure), and Somalia (no figure)
Lower Middle Income	Djibouti (861), Palestine (1,051), Morocco (1,218), Syria (1,224), Egypt (1,354), Iran (1,652), Algeria (1,785), Jordan (1,799), Tunisia (2,149), Turkey (2,638), and Iraq (no figure)
Upper Middle Income	Libya (3,512), Lebanon (3,894), Oman (8,002), and Saudi Arabia (8,612)
High Income	Bahrain (11,007), Kuwait (15,193), UAE (22,051), and Qatar (28,634)

Source ) Main Data Summary

According to Table 2-2, the GDP ratio of the industrial sector (in terms of the oil-related industry) is higher for the Group 1 countries than for others, for example, Qatar (69%), Saudi Arabia (61%), UAE (57%), Oman (53%), Kuwait (49%), Libya (46%), and Bahrain (42%). The service sector ratio is also higher in comparison to those of countries in other groups.

In addition, Table 2-3 indicates the proportion of fuel exports is large not only in GCC countries but also in Libya (94%).

Sector proportion of employment in these countries shows that the service sector is the main employer, e.g. Kuwait (proportion of service sector: 73.6%), Libya (66.1%), Qatar (65.3%), Saudi Arabia (61%), and UAE (58.6%). However, UAE and Qatar have relatively higher proportions of employment in the industrial sector with 33.4% and 32.1%, respectively.

In terms of population, Saudi Arabia, with 23.5 million, has the largest population, followed by Libya (5.4 million), and others with less than 3 million people such as UAE (2.9 million), Oman (2.8 million), Kuwait (2.4 million), Bahrain (0.7 million), and Qatar (0.6 million). In terms of education level, the primary school enrolment rates in these countries are in the 80-90 % range, although the female enrolment rate in Saudi Arabia is lower than for other countries at 57%.

The sectoral structure and economic direction for each country are outlined below.

The oil-related industry in Saudi Arabia comprises approximately 30% of GDP. Most of the capital accumulated through oil production has been invested in the service sector rather than industrial sector and, as a result, the former is well-developed. The government plans to diversify the sectoral structure, to control the public sector, and to transform the economy into a private sector-led structure. Currently, the manufacturing and construction sub-sector is leading



the industrial sector<sup>2</sup>.

Bahrain, Qatar, Oman and UAE are keen to develop non-oil sectors such as tourism, exhibitions and events.

Bahrain plans to diversify its economic structure through manufacturing promotion and becoming the international economic activity center, which will lead to investment in the manufacturing sector and employment creation.

Qatar plans to develop not only natural gas, but also the concept of Meeting, Incentives, Conferences, Events (MICE) and seeks to be the hub for sports, education services, leisure, and industrial tourism. Qatar plans, in particular, to be the center for higher education in the region and Education City, which is meant to be the center for education, research and technology development, will be constructed.

Oman attempts to develop tourism along its coast line. It has a mono-cultural economy relying on oil for economic development. However, in Oman it is planned that by the year 2020 the economy will not be reliant on oil, but rather, will have diversified into non-oil sectors. The 5<sup>th</sup> Five Year Plan (1996-2000) indicates that by 2020 the country plans to double individual income. The government will nurture a stable economic environment and invest the oil and natural gas income into non-oil sectors, so that the private sector will develop. It also plans to utilize human and natural resources more effectively. The private sector is expected to lead the national economy, and foreign investment is expected to introduce modern technology, to create industrial opportunities, to develop human resources, and to improve the national income.

UAE had started earlier than other countries to diversify its economic structure and, as a result, the degree of oil reliance is smaller than for other countries. Dubai, in particular, has built on its strategic location and has been successful in offering incentives to attract investment and to establish a status as the international and regional center for trade, finance, and commerce.

The Kuwait economy is also dependent on oil, which comprises 90 percent of total exports, and oil income accounts for around 50% of GDP. The priority for industrialization has been the capital-intensive high productivity oil-related sectors, and surplus oil income has not been invested in non-oil sectors. Rather, the surplus has been invested outside Kuwait to hedge the impact on the economy of oil price fluctuations. As a result non-oil sectors have not been developed, and consumables and goods for living have to be imported. However, the country plans to reform education to develop human resources with entrepreneurial skills.

Libya has shaken off its reputation as a terrorist-supporting state, and re-entered the international society by announcing the abrogation of a mass destruction weapon plan, accepted the IAEA and is handing over nuclear weapons. Its main industry is the oil sector. The Five-Year Plan up to 2008 proposes privatization of the state-owned enterprises, and to promote

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<sup>2</sup> JICA (2004) 'Saudization Project Formulation Study Report'

tourism as part of nurturing the non-oil industry. The issue to be tackled before negotiating the accession to the WTO is how to make industries and the banking sector competitive and to deal with unemployment.

**Table 2-2: Structure of Output by Sector (2002)**

Country	Agriculture	Industry	Services
	% of GDP	% of GDP	% of GDP
Afghanistan	59	21	18
Algeria	9	49	36
Bahrain	1	42	66
Comoro	42	13	50
Djibouti	3	14	71
Egypt, Arab Rep.	16	35	49
Iran	11	39	48
Iraq	32	5	65
Jordan	2	22	64
Kuwait	0	49	64
Lebanon	11	22	74
Libya	10	46	44
Mauritania	23	30	48
Morocco	16	35	49
Oman	2	53	47
Pakistan	23	24	53
Qatar	0	69	32
Saudi Arabia	5	61	33
Somalia	65	10	25
Syria	25	31	44
Tunisia	10	29	50
Turkey	13	30	59
UAE	3	57	40
Yemen	16	42	41

Source) World Development Indicators 2003

\* Palestine and Sudan are not included in the table due to absence of data.

**Table2-3 : Structure of Merchandise Exports**

Country	Merchandise Exports (\$ millions)	% of Total				
		Food	Agricultural raw materials	Fuels	Ores and metals	Manufactured Goods
Afghanistan	81	-	-	-	-	-
Algeria	20,050	0	0	97	0	2
Egypt	4,128	10	5	40	5	33
Iran	25,270	4	1	84	1	10
Iraq	15,905	-	-	-	-	-
Israel	29,019	3	1	1	1	94
Jordan	2,293	15	0	0	19	66
Kuwait	16,142	0	0	79	0	20
Lebanon	871	19	6	0	6	69
Libya (1990)	13,225	0	0	94	0	5
Mauritania	280	-	-	-	-	-
Oman	11,074	6	0	81	1	12
Morocco	10,960	14	3	18	3	63
Pakistan	9,242	11	2	2	0	85
Saudi Arabia	68,200	1	0	90	0	9
Somalia	110	-	-	-	-	-
Sudan (1990)	374	61	38	-	0	1
	(2001:1,630)					
Syria	4,490	9	5	76	1	8
Tunisia	6,606	9	1	12	2	77
Turkey	31,197	13	1	1	2	82
UAE (1990)	23,544	8	1	5	39	46
	(2001:42,900)					
Yemen (1990)	692	75	10	8	7	1
	(2001:3,205)					

Source) World Development Indicators 2003

\* Comoro and Palestine are not included in the table due to absence of data.

**Table 2-4 : Employment by Sector**

Country	Year	Total employment	Agriculture (%)	Industry (%)	Service (%)	Others (%)
Afghanistan	1990	5,981	70.3	10.7	19.0	-
Algeria	1990	7,023	26.1	31.3	42.6	-
Comoro	1990	233	77.3	9.4	13.3	-
Djibouti	1991	77	2.3	7.9	80.2	9.6
Egypt	2000	17,203	29.6	21.3	49.1	0.0
Iran	1996	14,572	23.0	30.7	44.5	1.8
Iraq	1990	4,617	16.1	17.5	66.4	-
Israel	2002	2,284	18.5	23.7	57.0	0.8
Kuwait	1990	898	1.2	25.2	73.6	-
Lebanon	1990	798	7.3	31	61.8	-
Libya	1990	1,302	10.9	23	66.1	-
Mauritania	1990	910	55.2	10.4	34.4	-
Morocco	1999	4,174	5.7	33.4	60.6	0.3
Oman	1990	497	44.7	23.7	31.6	-
Pakistan	2000	36,847	48.4	18	33.5	0.0
Qatar	1990	274	2.6	32.1	65.3	-
Saudi Arabia	1990	5,401	19.2	19.8	61.0	-
Somalia	1990	3,818	75.3	8.3	16.4	-
Sudan	1990	8,927	69.5	8.5	22.1	-
Tunisia	1980	2,209	38.9	30.3	30.8	-
UAE	2000	1,779	7.9	33.4	58.6	0.1
Palestine	2001	508	12.0	28.8	58.5	0.1
Yemen	1999	3,622	54.1	11.1	34.7	0.0

Source) World Employment Report 2004-2005

\* Jordan and Syria are not included in the table due to absence of data.

**2.1.2 Group 2: Countries where relative share of manufacturing sector in the industrial structure is large, or the oil-producing countries where the degree of oil reliance is relatively low, and GDP per capita is at mid-level**

This group is comprised of nine countries including Egypt, Turkey, Jordan, Algeria, Morocco, Tunisia, Syria, Lebanon, and Iran.

In these countries, agriculture accounts for approximately 10 percent of GDP output, and the industrial sector more than 30 percent. The economic structure is therefore relatively diversified. Every country attempts to liberalize trade, targeting the EU market. The issue of these countries is therefore how to strengthen competitiveness of export industries.

Economic growth has been the trend since 2003 in these countries, which is attributed mostly to the growth of high prices of exported oil and natural gas. On the other hand, the growth of vehicles, textiles, electric appliances by Turkey, and light industries in Northern Africa have also contributed. Consumable goods production takes place in these countries but the degree of technology transfer has not been large. The share of knowledge-intensive capital goods in manufacturing is relatively small. Investment by foreign enterprises has been imported through franchising or licensing, which does not necessarily result in technology transfer. Modernization of industries in Tunisia, Morocco, and Egypt has been the pressing issue.

Table 2-3 on Structure of Merchandise Exports indicates that the proportion of food and manufactured goods is larger in Egypt (43%), Jordan (81%), Turkey (95%), Morocco (77%), and Tunisia (86%). Among these countries, Egypt and Syria are the oil-producing countries. Algeria has a higher proportion of fuel exports (97 %), as does Iran (84%) and Syria (76%), all of which are higher than for the other countries in this group. Lebanon has a greater proportion of service sector, which comprises 74% of GDP. This is mostly related to the finance sector.

The contribution of the industrial sector to employment is larger than for the other groups, for example Morocco (industry sector 33.4%), Algeria (31.3 %), Iran (30.7%), and Tunisia (30.3%).

In this group, the populations of Egypt (70.5 million), Turkey (70.3 million), and Iran (68.1 million) are large, although still smaller than for Pakistan. Populations of other countries in the Group are Algeria 31.3 million, Morocco 30.1 million, Syria 17.4 million, Tunisia 9.7 million, Jordan 5.3 million, and Lebanon 3.6 million.

In terms of the education level of this group, primary school enrolment is in the range of 80 to 90 %. Egypt and Morocco have an adult literacy rate of around 50% which is relatively low, but youth literacy is around 70%. The adult literacy of other countries in this group is approximately 70 % and above.

The industrial structure and direction of economic planning of each country are outlined below.

The industrial structure of Egypt, according to GDP contribution in 2002/03, was agriculture 16.9%, mining and industry 19%, oil and oil-related 9%, power generation 2%, construction 4%, transport and communication 9%, trade, finance, and insurance 21%, hotel and restaurant 2%, housing and real estate 4%, and government services 10%. Main export goods are oil and oil-related products, cotton and garments, rice, vegetables, and textiles. Main import goods are machinery, vehicles and vehicle parts, chemicals and pharmaceuticals and food items. Since

manufacturing is still at an undeveloped level, industrialization requires more imports of intermediate goods and machinery, and food such as wheat also has to be imported. The public sector expenditure ratio of GDP is 30.5%. The Egyptian government is fostering export industries and competitiveness of the industries through attracting foreign direct investment and maintaining a good business environment.

**Table 2-5: Structure of Manufacturing**

Country	Year	Value added in manufacturing (US Dollar, million)	Share of Sector (%)				
			Food, beverages, and tobacco	Textiles and clothing	Machinery and transport equipment	Chemicals	Other manufacturing
Algeria	1990	3,897	13	17	-	-	70
Egypt	2000	17,969	12	39	6	-	43
Iran	2000	15,456	15	22	17	4	42
Iraq	2000	-	38	22	11	4	25
Jordan	2000	1,122	2	9	2	3	85
Kuwait	2000	2,142 (1990)	8	5	4	3	81
Lebanon	2000	1,560	-	-	-	-	-
Libya	2000	-	40	6	10	7	36
Mauritania	2000	75	-	-	-	-	-
Morocco	2000	5,857	33	17	12	15	23
Oman	1990	396 (1990)	19	8	5	7	62
Pakistan	2000	8,637	16	33	6	6	38
Sudan	2000	1,059	21	29	1	1	49
Syria	2000	4,579	33	43	1	1	21
Tunisia	2000	3,545	35	9	3	7	46
Turkey	2000	26,994	13	18	17	11	41
UAE	2000	2,643 (1990)	3	3	3	1	90
Palestine	2000	562	-	-	-	-	-
Yemen	2000	593	-	-	-	-	-

Source) World Development Indicators 2003

In Turkey, the main export merchandise is knitted garments, which together with non-knitted garments, comprises 20% of total exports. Vehicles and vehicle parts comprise 11% of the total export. The progress in privatization of state-owned enterprises is slow and strengthening the competitiveness of export industries is the key to EU membership.

Jordan is a non-oil producing country and it has been relying on Iraq to obtain oil<sup>3</sup>. In order to improve this situation, through the strong initiatives of the King, in 1999 the country established a regional ICT center under REACH Initiative. This has resulted in the creation of an export-oriented information technology service. The target of the Initiative is to achieve 30,000 new jobs, foreign direct investment of \$150 million and annual IT exports of \$550m by 2004. This is supported by USAID's Achievement of Market-Friendly Initiatives and Results Program:AMIR.

For Tunisia, Morocco and Algeria, the EU is the main export market and these countries have Partnership Agreements with the EU. The movement of target countries towards trade liberalization is summarized in Box 2-1 below:

**Box 2-1: Movement towards Trade Liberalization**

It is mainly Group 1 and Group 2 countries that actively aim for trade liberalization. The main movement is to sign the partnership agreement with EU, accession to WTO and Free Trade Agreement.

Accession to WTO was been realized for 12 countries with 6 countries now negotiating..

Table 2-6 : WTO Accession Status

Accession completed	UAE, Qatar, Kuwait, Turkey, Bahrain, Jordan, Oman, Egypt, Djibouti, Tunisia, Mauritania, Morocco
Under negotiation	Saudi Arabia, Lebanon, Yemen, Algeria, Sudan, Libya

Source ) [http://www.wto.org/english/thewto\\_e/acc\\_e/status\\_e.htm](http://www.wto.org/english/thewto_e/acc_e/status_e.htm)

EU has implemented the Euro-Mediterranean Partnership with the Mediterranean Partnership to replace the 1970s Cooperation Agreements with these countries. The provisions of Euro-Mediterranean Association Agreements, governing bilateral relations vary from one to the other, but it includes not only free trade to be established gradually in accordance with WTO rules in the future, but also political dialogue, financial cooperation and social and cultural cooperation.

The Euro-Mediterranean Partnership has been in force as follows: Palestinian Authority (1997), Tunisia (since 1998), Morocco (2000), Algeria (2001), Lebanon (2002), Jordan (2002), Egypt (2004), and Syria (2004).

<sup>3</sup>According to the World Bank, Jordan's industrial structure in terms of ratio to GDP in 2003 is as follows: Agricultural, Fishing and Forestry sector: 2.2 %, manufacturing sector 26.0 % and service sector 71.8 % which covers the largest pie.

Negotiation is underway to have 12 countries in Eastern and Middle Europe as members of the EU. When this is achieved, the EU market will be quite large.

Following is the example of the Partnership Agreement from Egypt:

#### **Outline of Egypt-EU Partnership Agreement**

Based on the negotiation started in 1995 and ended in 1999, the Partnership Agreement was signed in June 2001. In the same year (November), EU Parliament approved the Agreement and parliaments in each EU member country followed with approval. This Agreement is to replace the Cooperation Agreement, which had been in force since 1978. This agreement involves not only the Free Trade Agreement but also includes development and technical cooperation, and financial assistance.

It is planned to establish a free trade area between EU and Egypt in 12 years from when the Agreement came into force. When it is realized all industrial and processed goods exported from Egypt to EU will be duty free. The industrial goods, which Egypt will import from EU countries, will be exempted from duties according to the detailed schedule set for each type of group in the agreement. The schedule is set considering the importance of the goods imported for the industrialization of Egypt and the adverse impact on the competitiveness of domestic products of Egypt. (Source : [http://www.jetro.go.jp/turkey/middleeast/jijimondai/cairo\\_tpc040330.pdf](http://www.jetro.go.jp/turkey/middleeast/jijimondai/cairo_tpc040330.pdf))

Algeria has the biggest stock of hydrocarbon in the world, and together with oil and natural gas, it comprises 97% of the country's total export<sup>4</sup>. The country aims for economic integration to the world economy by restructuring and privatization of industries, attracting foreign investments, and transition to a market economy.

Morocco is a non-oil producing country where the diversification of industrial structure is witnessed to a greater extent than in other countries. The main export goods have been garments, followed by agricultural and fishery products. Recently, fertilizer utilizing the phosphorus resources and electronic circuit are increasing as export goods.

Tunisia also aims for economic integration into the world market. It has been successful in improving productivity and economic diversification, and achieved an economic growth averaging 5.4% per annum. The 10<sup>th</sup> Five-Year Plan (2001-2004) states that it will level up manufacturing and the IT industry, and will target an economic growth of 5.5% per annum. Tunisia is a small-scale oil producing country but manufactured goods comprise three-fourths of its exports. The main export items are textiles and leather, although recently the proportion of vehicle-related parts and electronic machinery have increased.

Tunisia and Morocco are, before completely opening the door to EU products, implementing a

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<sup>4</sup> JETRO Sensor 2003.7



“level-up program”, which attempts to strengthen the domestic industry base and provide diversification, quality and technology improvement, and human resource development. This program is a government-private partnership financially and technically and is supported by the EU with MEDA program funding. More resources are being assigned to the manufacturing and service sectors.

In Iran’s 4<sup>th</sup> Five-Year Plan (2005-2010), the country plans to pursue economic growth at the rate of 8% of GDP per year. The Plan also states that it will concentrate on promoting small-scale projects and merging state-owned enterprises, with foreign investments in the manufacturing, agriculture, investment, and non-oil export areas as an important aspect. Controlling unemployment and inflation is part of the plan, and the country proposes to create one million jobs per year within the private sector to reduce unemployment to 8.4%. Since the second national plan (1995-99), the government has been attempting to transform to a market economy, to move away from an oil monoculture economy, and to promote human resource development including vocational training.

In Syria, oil is the main foreign currency earner but the industrial structure itself is balanced between the agriculture, mining and industry, and commerce sectors. In terms of crude oil, the role of the public sector is significant and manufactured goods and machinery imports are mainly owned by this sector<sup>5</sup>. The Syrian economy has been in stagnation since the 1990s and the high population growth of 3% imposes difficulties on this situation. On the other hand, a series of economic reforms are in progress, which includes establishing private and foreign banks, and the stock market.

Lebanon’s main industries are finance, commerce, service and industry (textile, food processing). Remittance to Lebanese from those outside the country is the main source of foreign currency income. The capital city of Beirut has been the center of finance and trade in the Middle East, but the civil war from 1975 to 1990 resulted in a deterioration in the economy. However, the government plans to reduce the accumulated debt and normalize finances.

### **2.1.3 Group 3: Countries with relatively small GDP per capita**

Mauritania, Pakistan, Comoro, Yemen, and Djibouti are in Group 3.

Among the target countries, Pakistan has the largest population with 149.9 million people. This is followed by Yemen (19.3 million), Mauritania (2.8 million), Comoro (0.7 million) and Djibouti (0.7 million).

In comparison to the education levels of those countries in other groups, which achieve 80 to 90 percent of primary school enrolment, countries in group 3 have relatively low primary school

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<sup>5</sup> JICA (2005) Syria Education Sector Project Formulation Study Report

enrolment rates: Yemen (67%), Mauritania (67%), Comoro (55%), Djibouti (34%), and low adult literacy: Yemen (49%), Pakistan (41.5%), and Mauritania (41.2%).

Each country has a different economic situation but the common issue is poverty reduction.

Countries where the agricultural sector is the main source of employment are Comoro (77.3%), Mauritania (55.2%), Yemen (54.1%), and Pakistan (48.4%). Conversely, in Djibouti the biggest employer is the service sector, which employs 80.2%.

Djibouti has had civil war since independence in 1977, but an accord was agreed in 2001 and a general election was conducted in 2003. With the severe natural environment, agriculture cannot develop in the majority of the country, and two-thirds of the population lives in the capital with the remainder being nomadic. A few agricultural products include fruits and vegetables, with the rest being imported. The main foreign currency income source is Djibouti Railway, trade, port facility services, and French military service in the country. The unemployment rate in 2000 was 43.5%. With few natural resources and industry, the country depends on grants.

The main industries in Yemen are agriculture, fisheries, and those associated with the oil sector. In 2002, the government formulated the 2<sup>nd</sup> Five-Year National Development Plan. In the Plan, the government aims to reduce poverty and to transform the national income structure, of which 75% is currently sourced from oil, to become manufacturing-based.

In Comoro, the main industry is cash crop agriculture such as vanilla, clove, and ylang ylang, which are also available for export. There are no natural resources in the country and the population is growing rapidly. The economy is primarily at the subsistence level. The unemployment rate is high and the country depends on external aid. Agriculture represents 40% of GDP. The country cannot feed itself and must import rice and other foods. Although it has been struggling with coups, the government aims for an improvement in education and vocational training and health services, industry privatization, export diversification, tourism promotion, and suppressing population growth. Remittance by 1.5 million nationals living abroad assists the country's income.

Pakistan's main industry is the agricultural and cotton industry, while the main export items are cotton products, leather products, fiber synthetic garments and rice. The growth rates in 2002/03 were 7.7% for manufacturing and 5.8% for agriculture. The share of manufactured goods in merchandise exports is large at 85%. The government has mapped the way forward for textile, leather, fertilizer and engineering industries to be developed. The country has also reduced duties for raw material imports and introduced the ISO in order to increase exports.

In Mauritania, half of the population is engaged in agriculture. Iron ore comprises around 40% of exports although the country also exports fishery products. Oil and natural gas stocks were confirmed, thus some income from these resources is to be expected. The government's main

focus area is poverty reduction, health, education, and privatization of the economy.

#### **2.1.4 Group 4: Countries (area) with conflict or post-conflict**

The Group 4 countries (area) include Afghanistan, Somalia, Iraq, Palestine and Sudan.

Each country (area) in this group differs in terms of economic and industrial structure, but is either currently experiencing conflict and seeking peace, or is in a post-conflict state and seeking to recover from the past difficulties.

From the economic structural viewpoint, Somalia and Afghanistan have larger GDP shares in terms of agriculture, at 65% and 59% respectively. Sudan and Iraq are oil-producing countries.

The populations are: Sudan 32.9 million, Iraq 24.5 million, Afghanistan 22.9 million, Somalia 9.5 million, and Palestine 3.4 million.

In terms of education, primary school enrolment in Sudan is at 46%, however no figures are available for Afghanistan, Iraq or Somalia. Palestine has a high primary school enrolment rate of 95%.

The economy and industrial situations of each country are as follows:

Afghanistan agreed on a peace process in Bonn, Germany in December 2001, which led to the adoption of a new constitution and presidential election in 2004. On 9 October 2004, Hamid KARZAI became the first democratically-elected president of Afghanistan. The new state development framework announced in April 2002 indicates a plan for reconstruction based on: (i) human and social capital, (ii) physical infrastructure, and natural resources, and (iii) security and private sector development. In April 2004, National Priority Programmes (NPP) were formulated to shift from reconstruction to sustainable development. NPP includes National Skills Development and Market Linkages Programs, which aim for sustainable economic and social participation. These are overseen by the Ministry of Labor and Society. NPP also has the National Private Sector Program where industrial sites are planned as infrastructure of private sector development. The government also plans to restructure state-owned enterprises. The main industry is agriculture, while manufacturing is mainly led by the big state-owned industries and an informal sector, which engages in handicraft production and sewing, metal work, and maintenance of machinery.

The Somalia economy is led by the livestock and agriculture sectors. Since 1991 there has been turmoil and fighting that still divide the country.

Sudan started exporting oil in 1999. The main export items are oil and agricultural products (cotton, sesame, and livestock). Oil accounts for around 70%<sup>6</sup> of exports but the main employer is the agriculture and animal husbandry sector, which absorbs 75% of the working

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<sup>6</sup> <http://www.africa-energy.com/html/public/data/sudan.html>

population. Plots that can be cultivated account for only 5% and with low agricultural technology, civil war, and drought, the southern region is suffering from hunger. The only industry found was light industry, which is situated around the capital. The income source mainly comprises remittance from nationals working in Arab oil-producing countries and grants from foreign countries<sup>7</sup>. The peace treaty for the civil war, which started in 1983, was signed between the Sudan Government (Islamic government) and SLPM/A on 9<sup>th</sup> January 2005, and both parties agreed on the distribution of petrol and political power. However, the ethnic cleansing of Islamic people by SLA/M in Darfur is not included in the Treaty and the conflict still continues.

Iraq's industrial structure comprises a service industry (65%) and agriculture (32%), as outlined in the Table 2-2, which defines the GDP share of these sectors. It produces oil but aims to establish a non-oil income source.

There has been turmoil in Palestine since September 2000, and the loss in GNI is said to reach 2.4 billion US dollars by the end of 2001. It is estimated that it will take another 2 to 3 years for economic conditions to fully recover to the level existing prior to the turmoil, even if the conflicts were solved immediately. Income of Palestinian people working in Israel accounts for a big share of Palestine's GNI. The GDP proportion of industry in 2000 was agriculture 8%, industry 8% (manufacturing 15.2%), and the service sector 65.5%. The country has been supported by donors and the construction sector has grown. But since September 2000, closure and attacks, which have resulted in a lack of raw materials and labor and destruction of agricultural land and factories, have affected the main sectors (agriculture and manufacturing).

## **2.2 Employment Situation**

The target countries have the higher proportion of population, including those less than 15 years old, which represent 30 to 40% or more of the overall population. The expected annual growth rate in population from 2002 to 2010 is 2 to 3%. According to the World Bank, the labor force of the Middle East and North Africa during 1990-2000 grew at a rate of 3.6%, with forecasts of 3.38% p.a. from 2000 to 2010, and 2.36% from 2010 to 2020<sup>8</sup>.

The characteristics of employment in this region are: (1) high unemployment rate, especially that of youth, (2) participation rate of women in the labor force is low, (3) public sector is reducing and private sector has more small and medium enterprises, and (4) labor force migration.

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<sup>7</sup> <http://homepage1.nifty.com/ptolemy/nations/africa/sudan.htm>

<sup>8</sup> World Bank (2004) *Unlocking the Employment Potential in the Middle East and North Africa*. Middle East and North Africa Region includes 18 countries of the Target Countries except for Afghanistan, Pakistan, Turkey, Somalia, Sudan, Djibouti, Comoro, and Mauritania.

### 2.2.1 High unemployment

The public unemployment rate is around 10% in the area, although this is higher in Algeria (29.8%), Morocco (22%), Djibouti (43.5%), and Palestine (25.5%). Saudi Arabia's unemployment rate was at 12.5% in 2003<sup>9</sup>. On the other hand, UAE has a lower unemployment rate of 2.3 %, with Kuwait at 0.8%<sup>10</sup>.

In comparison to the rest of the world, the proportion of employed youth (population more than 15 years old and less than 24 years old) is smallest in North Africa and Middle East (excluding Afghanistan, Pakistan, Turkey, and Comoro), with a rate of 29.6% in 2003. In the same year, the youth unemployment rate was at 25.6%, which was more than 3.3 times greater than for unemployed adults (more than 25 years old)<sup>11</sup>.

In the Middle East particularly, the absolute number of employment has been growing, but has not yet matched the rate of population increase. From 1993 to 2003, the rate of nominal unemployment growth was faster than the increase in employment. In order to halve the unemployment by 2015, it will be necessary to increase GDP growth rate well above the current rate of 3.5% p.a., but the prospect is bleak<sup>12</sup>.

For example, in Egypt, *it is obvious that the growth rate of vacancies has not caught up with the number of graduates. Recently, it is stated that every year 700,000 people are produced from the education system*<sup>13</sup>, and the 5th Five Year Plan (2002-07) aims to develop human resources development and to create 750,000 new positions annually. *The calculation during the mid-1990s indicates that the number of graduates is four times the demand in the labor market, and even if employment increases at a rate of 10% per year, it will take 15 to 20 years just to absorb the new graduates, let alone the existing unemployed.*<sup>14</sup> The basic problem is a lack of demand in the labor market compared to the number of graduates. Therefore, even if the TVET system were improved and started producing the quality of labor to match market demand, it would remain difficult to rapidly improve unemployment rates, if the total employment (private enterprise, starting new business, and working abroad) does not grow. In Egypt, the TVET system serves to keep the potentially unemployed youth in the education system and only delays them facing the reality of unemployment. At the same time, TVET graduates do not obtain jobs nor do they earn better salaries than non-TVET graduates or people with lower academic qualifications. *Therefore it is necessary to create jobs for youth.*

In Iran, two-thirds of the population is less than 30 years old, and the formal unemployment rate is 12.6%<sup>15</sup>. But in reality, it is also said to be 20 -25%<sup>16</sup>. Recently, the main employer has

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<sup>9</sup> Japan Cooperation Center for Middle East News 2004. 6/7

<sup>10</sup> Macro-Data attached at the end of this report

<sup>11</sup> ILO (2004) *Global Employment Trends for Youth*

<sup>12</sup> ILO (2004) *World Employment Report 2004-05*

<sup>13</sup> Interview at Ministry of Education in Egypt

<sup>14</sup> World Bank (2000) *Vocational Education and Training Reform: Matching skills to markets and budgets*

<sup>15</sup> Japan Cooperation Center for Middle East News 2004. 4/5

been the private sector rather than the public sector. Since the public sector is not expected to grow, it is important to have the larger private sector as the major employer, otherwise employment will be dependant on the oil-reliant structure.

On the other hand, GCC countries also have a greater employment creation force than other countries. From 1996-2000, it is said that the UAE created 100,000 positions per year, while Saudi Arabia created 130,000<sup>17</sup>. However, these countries have seen an influx of labor from neighboring countries and Asia and therefore have attempted to nationalize the labor force.

The rate of women's unemployment is higher than that of men. For example, according to the statistics by Central Agency for Public Mobilization and Statistics (CAPMAS) in Egypt, the total labor force in 2002 was 19.9 million (with 22% women) while the unemployment rate of men was 6% and of women was 24%. In Syria, the overall unemployment rate in 2002<sup>18</sup> was 11.2% but the rate for women was 24%; in Jordan, the overall unemployment rate was at 13.2% while that of women was 21.0%<sup>19</sup>.

According to the World Bank Report<sup>20</sup>, in Morocco the unemployment rate rose because of firm closures, while in Egypt the reason for unemployment differed because people claimed that no jobs were available. In terms of the backgrounds of unemployed people, in Morocco unemployment is highest among primary school and lower secondary school graduates, but in Egypt, the highest probability of unemployment is among upper secondary school graduates and those from post-secondary institutions. This reflects the fact that the educational attainment is lower in Morocco than in Egypt.

In the case of Syria, education attained by the unemployed included elementary school graduation (46.8%), followed by those with preparatory school graduation (15%), and secondary school graduation (16%)<sup>21</sup>.

### **2.2.2 Women labor participation is low**

In the Middle East and North Africa Region, the participation rate of women in the total labor force increased from 21.9% in 1960 to 32.2% in 2000, however, this remains low compared to the rest of the world<sup>22</sup>. The increase of women's participation in labor is attributed to the fact that more women are educated and at the same time a lower birth rate was observed. For

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<sup>16</sup> JICA (2005) Iran Donor Coordination Expert Study Report (Vocational Training Sector)

<sup>17</sup> Fasano, U. et al (2004) *Emerging Strains in GCC Labor Markets*

<sup>18</sup> JICA(2005) Syria Education Project Formulation Study Report

<sup>19</sup> JICA (2005) *JICA Main cooperation areas and TVET situation in Middle East countries (Jordan, Syria, and Yemen)*

<sup>20</sup> World Bank(2004) *Unlocking the Employment Potential in the Middle East and North Africa*

<sup>21</sup> Syria Labor Force Survey 2003

<sup>22</sup> World Bank(2004) *Gender and Development in the Middle East and North Africa*. Middle East and North Africa here includes 18 of our target countries other than Afghanistan, Pakistan, Turkey, Somalia, Sudan, Djibouti, Comoro, Mauritania. Eastern Asia and Pacific Region 74.9%, South Asia 46.5%, Eastern Europe and Central Asia 66.8%, Latin America and Caribbean 44.2%, Sub-Saharan Africa 62.5%.

example, in Egypt, the birth rate decreased from 5.3 during 1979-1980 to 3.2 in 2000-2003<sup>23</sup>. The proportion of women in the labor force in target countries is shown in Table 2-7 below.

**Table 2-7: Women share of Labor Force**

Women's Share of Labor Force	Country (%)
10-19%	UAE (15.9), Qatar (16.4), Saudi Arabia (17.7), Oman (18.9)
20-29%	Iraq (20.4), Bahrain (21.6), Libya (24.0), Jordan (25.6), Syria (27.6), Yemen (28.3), Iran (28.4), Algeria (29.0), Pakistan (29.5)
30-39%	Sudan (30.0), Lebanon (30.1), Egypt (31.0), Kuwait (32.1), Tunisia (32.1), Morocco (34.9), Afghanistan (35.8), Turkey (38.1)
40% and more	Comoro (42.2), Somalia (43.4), Mauritania (43.5)

Source) Extracted from Macro Data of this Report

Employment based on economic activity (Table 2-8) indicates that women tend to concentrate on the agriculture and service sectors.

**Table 2-8 : Employment by Economic Activity and by Sex (2000-2002)**

Country	Male (% of male employment)			Female (% of female employment)		
	Agriculture	Industry	Service	Agriculture	Industry	Service
Turkey	24	28	48	56	15	29
Palestine	9	32	58	26	11	62
UAE	9	36	55	0	14	86
Egypt	27	25	48	39	7	54
Pakistan	44	20	36	73	9	18

Source) Extracted from the Macro Data of this Report

In Egypt, 45.7% of employed women worked in the public sector in 2002, whereas 25.3% of working men were employed in the public sector<sup>24</sup>. Some 43% of employed men work in the informal sector while 31% of working women are also employed in this sector. In the informal sector, in the case of men, 51.8% own enterprises or are self-employed, whereas 60.2% of women perform family duties without being paid.

Although the situation indicates the gender difference in employment and unemployment, it is worth noting that the increase in employment in the Middle East is primarily related to females<sup>25</sup>. However, the employment level of female remains low compared to other regions.

### **2.2.3 Public sector is shrinking and private informal sector (microenterprises and self-employed) offers more employment**

In sections of the target countries the share of public sector employment in total employment and

<sup>23</sup> Egypt CAPMAS

<sup>24</sup> Egypt CAPMAS

<sup>25</sup> ILO (2004) *World Employment Report 2004-05*

non-agriculture employment is shown in Table 2-9.

**Table 2-9 : Share of Public (Government and State-Owned Enterprises) Sector Employment  
(1996-2000)**

Country	Public Sector Employment	
	Share of Employment (%)	Share of Non-Agriculture Employment (%)
<b>Algeria</b>	31.3	39.0
<b>Egypt</b>	34.9	70.3
<b>Iran</b>	28.4	36.6
<b>Jordan</b>	36.1	42.1
<b>Morocco</b>	9.5	20.7
<b>Pakistan</b>	9.6	17.1
<b>Tunisia</b>	21.9	28.2

Source) <http://www.imf.org/external/pubs/ft/med/2003/eng/gardner/>

The Government of Egypt guaranteed jobs to university, technical institute, and technical high school graduates under the socialist regime, which started in the 1960s. However, with the increase of new graduates from the education system, and the trend of privatization and public sector restructuring, it has become difficult to guarantee jobs for all graduates. People's expectation to be employed in the public sector still, however, remains high.

In this region, the private sector is comprised of a few large-scale foreign companies but the majority are small enterprises and the informal sector. For example, in Egypt, in 1996 the number of enterprises which employed more than 100 comprised only 0.1% of the total number of enterprises. In Jordan, the number of enterprises employing less than 50 staff comprised 94% of total enterprises<sup>26</sup>.

In Egypt, 55% of the non-agricultural sector employees are working in the informal sector<sup>27</sup>. This compares to 42% in Syria. The informal sector comprises mostly micro-enterprises and self-employed in the non-agriculture sector. Business sizes are small and labor-intensive, with traditional forms of management. It works in peripheral and niche markets. Informal sector employment takes the form of apprenticeships as vocational training and after the apprenticeship period, those participating will operate on their own with no opportunities of upgrading their knowledge or skills. Informal employment cannot be ignored for basic education graduates and drop-outs, therefore it is important to leverage in this area from the

<sup>26</sup> Arab Human Development Report 2003

<sup>27</sup> World Bank (2004) *Unlocking the Employment Potential in the Middle East and North Africa*

<sup>29</sup> Japan Cooperation Center for Middle East News 2004. 6/7, as of 2003.



viewpoint of employment policy.

#### **2.2.4 Labor migration**

In Group 1 oil-producing gulf countries, the share of foreign labor is large and is sourced partly from the Middle East and North African countries. For example, in Bahrain, the national labor share in the private sector is 32% and in the public sector is 91%. In Kuwait, the proportion of foreign laborers is 4.3 times greater than Kuwait laborers<sup>29</sup>. In Saudi Arabia and the UAE, it is said that 50% and 90%, respectively, of total employment are foreigners<sup>30</sup>.

Foreigners are employed to a greater extent in the private, non-oil and accounting sectors. They are more skilled and less expensive than national labor and can be employed under flexible conditions, therefore, private enterprises tend to prefer foreigners. The public sector employment style is life-long and employment is evaluated by seniority. Working hours are less and fringe benefits are greater, so the sector normally selects nationals. As a result, nationals of any educational background prefer to work for the public sector. In Kuwait, Oman, Qatar and the UAE, more than 60% of the national labor force works in the public sector<sup>31</sup>.

In the past, the public sector has been large and has employed many nationals. The sector almost guaranteed employment but is now shrinking. As a result, although GCC countries create sufficient employment for its nationals, part of this employment is being taken by non-nationals despite the unemployment rate among nationals being high.

On the other hand, Egypt and Morocco (Group 2 countries), export their nationals as a labor force to neighboring countries. Jordan also exports nationals to gulf countries. From Jordan, highly educated people and skilled labor tend to work outside the country and are replaced by labor from Egypt and South Asia. Egyptian labor mainly work in neighboring gulf countries, although since these countries are now adopting a nationalization policy, Egypt now considers exporting their people to non-gulf countries, as long as there is a demand.

In 2001, 450,000 university graduates from Arab countries migrated to Europe and America<sup>32</sup>.

#### **2.2.5 Employment policy**

GCC Countries in Group 1 adopt a labor force nationalization policy. For example, Saudi Arabia in 2004 it thought to have some 6.14 million foreigners in a total population of 22.67 million.<sup>33</sup> The government attempts to maintain the share of foreign labor and families to below 20% of the population, and the share of specific nationality foreigners to the total number of foreigners to less than 10 % by imposing a quota system on foreign labor. The target sector to

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<sup>30</sup> Fusano, U. et al (2004) *Emerging Strains in GCC Labor Markets*

<sup>31</sup> Fusano, U. et al (2004) *Emerging Strains in GCC Labor Markets*

<sup>32</sup> ILO (2004) *World Employment Report 2004-05*

<sup>33</sup> Japan Cooperation Center for Middle East News 2004.12/2005.1

be controlled is mainly in the retail business. From 2004, the government has attempted to nationalize the labor force in this sector in three phases (to be completed in three year). The policy is called Saudization and it defines: (i) the sectors which will not allow foreigners to work, (ii) controls the number of working visas given to foreigners, and (iii) increases the number of TVET facilities for Saudi youth. In Oman and UAE, entrepreneurs are promoted by offering start-up loans at preferential interest rates. In Qatar, a strategy of strengthening the TVET of nationals has been adopted so that they can supply quality human resources to the private sector.

In Jordan, which is in Group 2, foreign labor totals 0.25 million out of a total labor force of 2.5 million. The country also adopts a labor force nationalization policy. The country specifies the sector for a greater number of foreigners, such as agricultural processing, construction, textiles, and food processing, and attempts to replace the foreign labor force in those sectors using unemployed nationals by offering them TVET. The policy is referred to as the Replacement Policy.

On the other hand, according to the statistics of the Egyptian Ministry of Manpower, Egypt (which is also a Group 2 country) has 0.84 million nationals working outside the country. These are employed in Jordan, Kuwait, Saudi Arabia, UAE, and Greece in agro-fisheries, science technology, skilled labor, commerce and service sectors.<sup>34</sup> The remittance from these nationals working outside the country contributes to the foreign currency income, lagging only behind oil exports, Suez Canal transit fees, and tourisms. The Ministry of Manpower promotes nationals working abroad by checking the working conditions of the offers from abroad and issuing working abroad permits.

Turkey, also a Group 2 country, also has nationals working outside the country. It promotes its nationals to return home through measures such as the government paying for the returning nationals' pensions, assisting them to obtain houses, and supporting their children's education.

There is a new movement in the Group 2 countries of Jordan and Egypt to gain both employment creation and increase its export. This is the Qualified Industrial Zone (QIZ) set up under the trade agreement with the US and Israel. Exports to the US will be duty-free for products produced in the QIZ on the condition that 35% value is added in QIZ and 11.7% in Israel. Egypt followed Jordan and expects to create 200,000 to 300,000 new jobs per year in the textile industry<sup>35</sup>.

On the other hand, the QIZ in Jordan aims at promoting export of its products to the US; products manufactured within the areas of QIZ can be exported to the US without any tariff and quotas. As a result, Jordan is said to have created 40,000 new jobs in five years from 1999 to

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<sup>34</sup>Egypt Ministry of Manpower Statistics (April-June 2004)

<sup>35</sup> [http://www.idcj.or.jp/IDS/11ee\\_josei041217\\_5.htm](http://www.idcj.or.jp/IDS/11ee_josei041217_5.htm)

2004, many of whom are foreigners, in addition to the increase in exports to the US. Foreign companies can construct their plant in QIZ and are classed as domestic.

The public sector functions not only as an employer but also as a mediator of jobs in some countries.

In the Group 1 country of Saudi Arabia, the private recruitment company is mediating employment in the private sector and the Ministry of Labor also mediates. The Ministry, together with the Manpower Development Fund, started the registration campaign for job seekers in 2004, and plans to introduce jobs to half the applicants. The campaign has so far been planned once but does not mean that the Ministry has strengthened the mediating function. The Ministry has, however, recently started to share vacancy information with the Manpower Development Fund and Chamber of Commerce.<sup>36</sup>

In Egypt, the Ministry of Manpower received 15,427 vacancies from the private sector from April to June 2004 with 89% being filled. Those not filled included machine operators, supervisors, printing technicians, and bodyguards<sup>37</sup>. Even if the same number of vacancies continued for one year, the total number of vacancies in the private sector would be 61,700 annually. In reality, the vacancies captured by the Ministry are part of the total vacancies in the private sector. Not all companies go through the government to recruit their staff, and there are other routes such as personal introductions and the internet. No private mediator company has yet been approved by the government, although it is suspected that there are some under different business registrations.

In Afghanistan, a Group 4 post-conflict country, there is a program to create employment as a part of the reconstruction process by UNDP. It is called the Rehabilitation and Employment Afghanistan Programme (REAP) and offered a job of reconstruction around Kabul to some 25,000 unemployed people including women, un-skilled laborers, and returnees. It was aimed to achieve both employment creation and rehabilitation of infrastructure. Currently, there is also support extended to ex-combatants for Disarmament, Demobilization, and Reintegration of Ex-combatants (DDR) and for the stability and security of the society, which also contributes to employment creation.

For Palestinian refugees, United Nations Relief and Works Agency for Palestine Refugees (UNRWA) implements vocational training in Jordan, Syria, Lebanon, Gaza and the West Bank.

For countries such as Egypt, the prospect of large growth in public and private sector companies is not sufficiently fast to absorb job-seekers. The country has started to create the environment for self-employed, micro-, small and medium enterprises with the expectation that these

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<sup>36</sup> JICA (2005) Project Formulation Study Report for supporting Saudization (Vocational Training Sector)

<sup>37</sup> Egypt Ministry of Manpower Statistics (April-June 2004)

enterprises will create more jobs for the unemployed.

In Egypt (a Group 2 country), the new Small Enterprises Law was issued in June 2004, where the Social Fund for Development<sup>38</sup> was entrusted to provide financial support and non-financial business development services such as training and marketing support to small enterprises. Also, in the Group 3 country of Yemen, the Social Fund for Development offers microfinance to support entrepreneurs in the communities<sup>39</sup>.

Other sections of employment policies are more directly related to TVET, which are described in the next chapter.

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<sup>38</sup> SFD was established in 1991 with the support from World Bank and UNDP to offer the safety net for poverty alleviation

<sup>39</sup> World Bank (2004) *Unlocking the Employment Potential in the Middle East and North Africa*

## **Chapter 3 Current Situation of Technical and Vocational Education and Training System**

### **3.1 Current Situation and Problem Analysis of TVET Sector**

#### **3.1.1 Summary of current situation**

##### **TVET within the national policy**

There had been significant investment in the TVET sector through the 1960s and 1970s in many developing countries. Since the 1980s, however, it has been proven in different research and literature that the effects of TVETs were quite limited. It is therefore regarded as difficult to expand investment in this sector in the future.

Many countries in the BMENA, such as Jordan, Morocco, and Egypt, set TVET policy as national priority, considering TVET as a key to solving pressing issues in the national economy, industrial development, unemployment and, in particular, poverty. As a result, many BMENA countries focus on TVET sector improvement.

For example, Egypt's 5th five-year plan (2002/03-2006/07) stipulates the increase in employment (creation of 750,000 jobs every year), large scale reform such as institutional development in the TVET sector and establishment of a TVET fund. Saudi Arabia is promoting technical college level expansion, and the number of colleges increased from 12 in 1998 to 28 in 2004 (with a corresponding expansion in the number of students from 22,835 to 43,234<sup>40</sup>). As for Iran, job creation and industrial development are considered as highest priority policy areas and human resource development is therefore promoted. The number of TVET centers increased fivefold from 70 in 1989 to 350 in 1999. On the other hand, Jordan is now promoting a replacement policy, which replaces foreigners to Jordanian people through the National Training Project. The Project focuses on specific sectors in which there are more foreign workers, such as construction, food processing, agro-industry sectors, and trainees who are unemployed Jordanian people who receive a monthly allowance during the training. It is proposed that the graduates from the Project should obtain jobs in the designated industry sectors.

As indicated in the Employment Policy in the previous chapter, recent TVETs included not only traditional skill training, which aims at graduates being employed, and also income generation and entrepreneurship training, which aims at the graduates starting an enterprise or becoming self-employed upon completion. These reflect the fact that the number of job opportunities cannot catch up with the number of job seekers, and the rampant poverty that exists.

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<sup>40</sup> JICA (2005) Project Formulation Study Report for supporting Saudization (Vocational Training Sector)

## TVET in education system

### ■ Outline of the education system

In many BMENA countries, after finishing junior secondary education under the formal education system, separation in courses commences: a general (ordinary) course and a vocational course. The former provides students with academic knowledge to continue to higher education, and the latter with applied skills for application in the commercial or industrial sectors. There is another option, namely to proceed to a vocational training center, which is not within the formal education system, after finishing either junior secondary or senior secondary education. Although the details are different from one country to another, the rough outline of the education system, including the TVET sector, can be described as shown in Figure 3-1 below<sup>41</sup>.

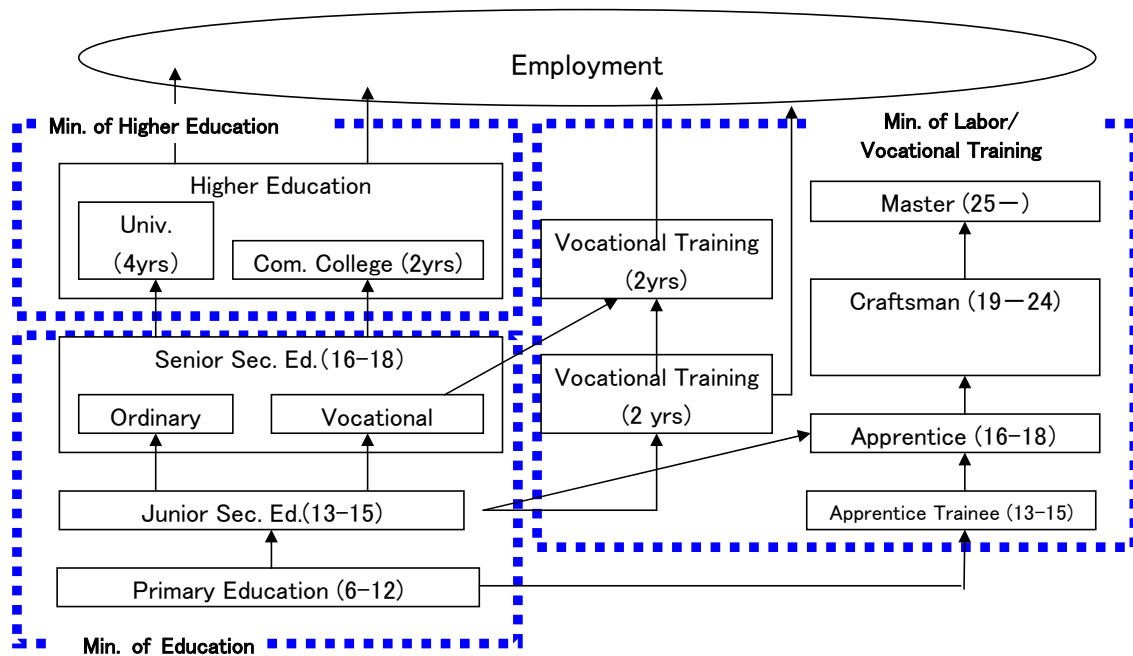


Figure 3-1: Typical Education System in BMENA Countries

There are several ministries overseeing the TVET sector according to the courses explained above. As Figure 3-1 indicates, generally the Ministry of Education supervises the formal education sector (primary and secondary education sub-sectors), and Ministry of Higher

<sup>41</sup> In Turkey, according to OVTA, there is an apprenticeship system, which is a traditional and historical institution, recognized by Turkish law. One can start being apprentice even after finishing primary education. This apprenticeship system emphasizes practical side of training more than ordinary TVET schools; 1 day subject learning and 5 days practicals per week. This Turkish Apprenticeship system has three stages: 1) Apprentice Trainee, 2) Apprentice, and 3) Craftsman. As for stage 1, one is supposed to be 13 to 14 years old before proceeding to stage 2), where one is supposed to be around 14 to 16 years old. After at least 5 years of experience as Craftsman, one can become a Master. One needs to pass the exam to be both a Craftsman and a Master. One can be a candidate of acquiring a qualification of this Master with one year's working experience after graduating from technical senior secondary schools

Education oversees the higher education sub-sector. The Ministry of Labor or Vocational Training is in charge of supervising vocational training centers.

That suggests different subsectors in the TVET sector are administered by several different ministries, which causes a structural problem. It is difficult to prepare consistent policy to improve the TVET sector as a whole at national level, due to this administration structure with information dispersed in several institutions.

#### ■ TVET outside the education system

The previous section has seen the placement of the TVET sector in the education system. There is also training outside the education system, which includes: 1) In-service Training (INSET) including short and intensive courses, 2) training for the unemployed, 3) training for entrepreneurs, and 4) training for the poor to improve their income.

In-house training is a part of INSET and, for example, Egypt is promoting the concept of in-house training among SMEs with the cooperation of World Bank's 'Skills Development Project'. In Morocco, GTZ attempts to import the German tradition of in-house training culture and ACCOR, a French international hotel chain, is incorporating this system into its corporate culture through GTZ's technical assistance.

Training for entrepreneurs can be divided into two categories: one is a business management and entrepreneurship course targeting students at universities and community colleges, and the other one is meant as a safety net for socially vulnerable and poor people, women and primary and secondary school drop-outs, and supports their income enhancement.

#### ■ Type of training

The type and mode of TVET can be categorized in general as indicated in the tables below<sup>42</sup>:

Type of Training	Description
Pre-service Training (PRESET)	This training provides the youth with knowledge and skills and gives qualification before entering labor market, and qualifies them mostly in the education system. It provides several modes of training: alternation training, apprenticeship training and night courses.
INSET (In-service Training)	This training targets those who are actually working and aims to enhance their skills and careers. This training targets not only those in private sector but also those working in public sector, as well as trainers.
Training for the Unemployed	This training targets those who have lost their jobs or who have never worked before.

<sup>42</sup> JICA(2004) Basic Study on Improvement of TVET Sector in the Kingdom of Morocco

Training for Entrepreneurs	<p>This course generally targets university and community college students, to train them on how to start up and manage their business, and market and sell their products.</p> <p>There is also a course targeting socially vulnerable people to train them on how to be self-employed to improve their income and living standards.</p>
Training to improve living standards targeting the socially vulnerable people with poverty reduction objective	<p>Some components are duplicated with the ‘Training for Entrepreneurs’.</p> <p>This training emphasizes the aspect of acquiring skills to generate income, which would result in reducing poverty in targeted people who are the socially vulnerable people (the poor, women, and young dropouts). It has double roles of training skills and offering a safety net. It contributes to reducing poverty and ameliorating social problems, but also expanding labor market in the medium and long-term through producing small-scale entrepreneurs. (e.g.: the case of Entraide Nationale of Morocco)</p>

Mode of Training	Description
Alternation Training	<p>This is the training mode where one month of training at school and one month training in companies are alternately conducted. It contributes to strengthening the tie with private sector, and it produces human resources who correspond to the needs of private sector in terms of skill type and skill level.</p>
Apprenticeship Training	<p>This is similar to alternation training but focus is more on practicals, which are often conducted in the sector such as artisan and construction, as well as agriculture.</p>

#### ■ TVET implementing agencies

The table below summarizes the implementing agencies of TVET (public and private), largely focusing on the countries where the field surveys were conducted and Saudi Arabia.

Country	Description
Egypt	<p>TVET sector is administered largely by the public institutions and private providers have not yet been developed to any extent. Some private companies open up in-house training facilities to outsiders, which receive good reputations. New labor law regulates the program contents and quality, as well as conditions of registration of private TVET providers. WB’s Skills Development Project aims to foster private training providers as well.</p>
Morocco	<p>Public sector has responsibility for supervising overall TVET sector, however,</p>



	private TVET institutions have been developed and the number of private schools exceeds that of public ones <sup>43</sup> . Accreditation system has also been developed, which secures the quality of private TVET institutions by checking the quality of teaching periodically.
Jordan	As in Egypt, most TVET schools are administered publicly. There are few private schools. The Chamber of Commerce now provides training courses targeting university students on enhancing management capacity.
Saudi Arabia	GOTEVOT, established in 1980, although presided over by the Minister of Labor, is a financially independent institution. GOTEVOT oversees the public TVET provision, and also assumes responsibility to supervise private TVET schools and centers, which have been increased recently.

As the table above indicates, the TVET sector is largely implemented by the public sector, except for Morocco. On the other hand, as described later in the section on ‘Best Practices’, some private schools within the TVET sector in Morocco have achieved good school management, qualitative education and high employment rate.

### **Overall picture of TVET sector**

In general, the situation of the TVET sector in the target BMENA countries could be summarized as below.

#### **■ The number of graduates exceeds the demands of labor market**

As suggested in Chapter 2, one of the common problems in some BMENA countries is that each year the TVET sector produces a larger numbers of graduates than the demands in the labor market. Therefore the labor market cannot absorb all graduates, which contributes to increase the unemployment rate.

To overcome this structural problem, some TVET centers or schools added a module promoting entrepreneurship<sup>44</sup>.

#### **■ Due to multiple administration system, information cannot be shared and there is no comprehensive labor market database**

As the TVET sector is supervised separately by several line ministries in many BMENA countries, information is, in many cases, not shared among them. As a result, there is no comprehensive database of the labor market (on both the supply side and demand side

<sup>43</sup> According to the OFPPT annual report (2004), as of 2003, the number of private school stands at 77% and the number of students of private schools stands at 35 %.

<sup>44</sup> Interview at TVET schools in Morocco, Jordan and Egypt

information). This suggests that policies on vocational training have been formulated based on imperfect information.

#### ■ **Mismatch between labor market (demand side) and TVET program (supply side)** <sup>45</sup>

Due largely to imperfect information as suggested earlier, and to imperfect internal information feedback systems, there is a mismatch between labor market (demand side) and TVET program (supply side).

For example, it can happen that when labor force demands in a certain sector are for 600 skilled personnel, the TVET could only provide 300 skilled people, which results in missing job opportunities in the labor market. On the other hand, in a traditional vocationally-trained job such as car maintenance, the TVET sector could produce 900 when the demand is just 300. These situations highlight a symptom that many graduates cannot find a job in the sector in which they were trained.

In Saudi Arabia, GOTEVOT expands the technical college level. Although these colleges annually produce a certain number of graduates as middle-class engineers (either supervisor or technician), its labor market does not have capacity to absorb them<sup>46</sup>. The colleges responded to the increasing number of applications and did not consider the size of the labor market. However, there is also a report on Saudi Arabia that the policy of further involvement of the private sector in curriculum development has made the TVET more relevant to the labor market, and the Saudization Policy has also contributed to creating job opportunities for Saudi people<sup>47</sup>.

#### ■ **Public sector-led TVET**

In many BMENA countries including Saudi Arabia, Egypt and Jordan, the TVET sector is largely led by the public sector, which makes it difficult to be flexibly responsive to the demands of the private sector labor market. One of the reasons is that the trainers are civil servants. As they are employed in the public sector, it is difficult to dismiss them even when their specialty is no longer needed by the private sector. Therefore it is difficult to revise the program, especially in the case of so-called traditional TVET programs in which many trainers are specialized.

In Morocco, however, the number of private vocational schools is increasing, especially in the textile sector in which Morocco has comparative advantage. Some schools were established in close collaboration with the chamber of commerce/industry or federations, and have been preparing programs incorporating the needs of regional industries. Quality of training and

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<sup>45</sup> However, there are successful cases such as STIMI in Jordan. There is also another form of TVET such as Entraide Nationale.

<sup>46</sup> According to GOTEVOT, there are 13,434 students at technical college in 2003/2004.

<sup>47</sup> Kalem Mellahi (2000) Human Resource Development through Vocational Training in Gulf Cooperation Countries: the case of Saudi Arabia, in *Journal of Vocational Education and Training* Vol. 52, No. 2, 2000

education at these schools are often highly valued among companies in the area, achieving high rate of employment<sup>48</sup>.

### ■ Preference for higher education

The field survey in three countries has proved that there is a general tendency in preference for higher education in many BMENA countries.

For example, in Jordan, the yearly tuition fee for vocational training centers is about 20 JD (about 3,000 Japanese Yen), which is very cheap. Furthermore, the fee can be refunded if one is regarded as poor or one can achieve good marks. On the other hand, yearly tuition fees at higher education institutions (for example, engineering department of Jordan University) costs 825 JD (about 124,000 Japanese Yen), while the average monthly salary of university graduates (2-3 years of working experience) is around 300 JD (about 40,000 Japanese Yen). This therefore suggests that higher education is very expensive compared to TVET. In spite of these circumstances, parents of students who have achieved enough marks to be selected for university education try to send their children to universities<sup>49</sup>. (1JD = 150 Japanese Yen)

### ■ Low social status of TVET

The preference for higher education, on the other hand, results in the low status of TVET.

In general, the education system is set in a way that only students who achieve higher marks in the score can advance to the ordinary course. Students who are accepted to the vocational course are low score achievers at junior and senior secondary schools regardless of sex<sup>50</sup>.

The interview conducted during the field survey also revealed that private companies do not expect much from vocational schools because the education and skill level of graduates are very low.

On the other hand, there are unemployed university graduates who enter vocational schools, which receive high reputations from private companies for producing a quality labor force, to find better job opportunities.

### ■ Low quality of TVET graduates

The interviews during the field survey proved that most graduates from vocational training centers/schools had not satisfied expectations of private companies in terms of technical level, except for a few centers/schools. This might further lower the social status of TVET schools<sup>51</sup>.

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<sup>48</sup> Interview in Morocco

<sup>49</sup> Interview in Jordan

<sup>50</sup> Therefore to discipline students is one of the most important tasks among TVET schools. (Interview in Jordan)

<sup>51</sup> In addition to that, increase in the number of dropouts among technical colleges is a serious problem in Saudi Arabia.

MKI in Egypt and STIMI and UNRWA in Jordan are, however, the exceptions. Their graduates are highly valued by the private sector, and their employment rate is much higher than other TVET centers/schools. The details of these schools are explained later in the section on ‘Best Practices’.

■ **Qualification does not always guarantee the value**

Qualification can be obtained through passing the examination before graduating from TVET schools. However, it is often the case that the ministry supervising the sector is the organization that accredits the qualification. The conditions of whether to accredit therefore tends to be obscure and vague<sup>52</sup>. As a result, the value of qualification and the real capacity of the graduates do not balance, and the qualification does not always guarantee its value. This might also contribute to further lower the social status of TVET.

■ **Availability of vocational training for socially vulnerable people, which contributes to enhancing living standards and reducing social problems**

Apart from the ordinary TVET which trains people’s skills and introduces them to the existing labor market, there is a set of vocational training that contributes to enhancing living standards, reducing poverty and social problems, and expanding the labor market, targeting poor people, socially vulnerable people (especially girls and women) and young dropouts (e.g. Entraide Nationale of Morocco: refer to 3.3.3 Best Practice for more details).

This type of training accepts those who have failed to remain in the education system, neither ordinary course schools nor ordinary TVET schools (socially vulnerable people, poor people and young dropouts), and provides them with basic skills for jobs at restaurants, barbers, textile sectors, etc. After a certain period of training, the schools send participants to the labor market. Among girls and women, there are some who start up small businesses, often in the informal sector, making the most of the skills learned such as textile design and dress-making. As a result, this type of training course has contributed to reducing poverty and social problems, and in the medium and long-term, has expanded the labor market.

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<sup>52</sup> For example in Jordan, Testing and Training Institute (TTI), which is one of the TVET institutions under Vocational Training Corporation (VTC) is preparing and providing qualifications to students.

### **3.1.2 Problem analysis**

The World Bank (2000)<sup>53</sup> argues that the TVET sector needs to implement continuous institutional reform; since the sector is administered by several different ministries and information is stored separately, they have failed to grasp the comprehensive data on both demand and supply sides of the labor market so that more appropriate actions can be implemented to solve problems. The WB also suggests that in order to establish a more effective TVET system, it is essential for the governments to involve the private sector in policy level decision-making processes and to share costs with them.

The WB further indicates that the supply side (TVET sector) seems to have excluded private sector participation in the processes. It therefore recommends that in order to activate the labor market it is important to involve private training providers and to create competition principles, which would result in constructing a more effective TVET system. As an example, the WB recommends the application of a German-style dual system, where the public training institution provides lectures on the theoretical aspects while private companies conduct OJT, based on a combination of 2 days of lectures and 3 days of OJT per week.

The following section summarizes major TVET issues in BMENA countries, dividing them into central government and school levels and from a gender perspective.

#### **(1) Central government level**

##### **■ Responsiveness to Labor Market**

As suggested earlier, the supply side cannot respond to the demands in the labor market. The major reasons are listed below.

##### **➤ Imperfect information (several ministries involved in TVET administration)**

Information administered separately does not seem to be shared among different ministries. As suggested earlier, the TVET sector in many BMENA countries is administered separately by several ministries, and there seems to be no coordination. Therefore each organization manages only the information relevant to them; as a result, there is a lack of comprehensive national sets of information.

This has resulted in information on the supply and demand sides of the labor market being kept separately by several organizations, which makes it difficult to formulate concrete policy or action plans at the national level, corresponding to the actual situation.

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<sup>53</sup> World Bank (2000) *Matching Skills to Markets and Budgets*

➤ **No coordinating agency, or lack of capacity to activate the coordinating agency even if it is available**

Some countries have an agency that coordinates the TVET sector to solve the problem outlined in the previous section. For example, Egypt and Jordan have established a Supreme Council for Human Resource Development and TVET Council, respectively, to comprehensively coordinate the TVET sector. Saudi Arabia established GOTEVOT in 1980, integrating the administration of technical colleges, technical high schools and vocational training centers. On the other hand, in many countries these different education entities are administered by different ministries without having a coordinating agency, such as Morocco.

It can be said that the former countries are more advanced than the latter, however, the problem lies in whether this agency is active (operational) or not. For example, in Jordan the board of the TVET Council has Ministers of Education, Higher Education, Labor, and Finance, and it seems to be difficult to progress when all these ministers must agree. The major issue in Jordan is how to operationalize this institution.

➤ **Imperfect system to reflect private sector needs to TVET program**

In general, the needs of the local private sector are collected on the spot and shared at school level by the management board of each vocational school, which includes representatives of the private sector. Another information source is the companies that accept internship of vocational school students. The trainers of vocational schools usually visit these companies regularly and monitor their students who are working there. At the same time they collect information on what business people need and feed back these needs to the vocational schools. The point here is whether the system is actually working or not.

Another level of the feedback system is between vocational schools and the governing body of the TVET sector at the central level. Whether the system is working at this level or not is also an issue. If the information gathered at the school level does not reach the central level, the school cannot change its program because it is the central level that has authority to modify the contents of each program of TVET schools. At the same time, if the governing body does not have the capacity to incorporate the needs into the program, its revision does not take place.

➤ **Difficulty in incorporating private sector needs into program as trainers are civil servants**

Another reason it is difficult to reflect the private sector needs into program content is that trainers are civil servants. Even if needs of a certain program decrease rapidly, it is impossible to dismiss the trainers who implement the program. This is one of the causes creating mismatch between the program contents and private sector training needs.

➤ **Time lag issue in designing program contents**

As explained earlier, needs are identified by the school board through the voice of the private sector representatives each year. Most programs are for pre-service training and extend for one and a half to two years. Since it is difficult to predict the economic situation in the following two years and to completely incorporate the voice of the private sector into program contents, this is a structural problem.

For example, in Morocco, OFPPT, which is a TVET governing agency, prepares medium-term economic forecasts annually. Based on these, OFPPT discusses program revision with private sector representatives. However, there are many unexpected incidents and this forecast cannot always forecast the following two years. OFPPT therefore recognizes the difficulty of predicting economic conditions in the medium-term and hesitates fully reflecting the voice of the private sector into their program. It is therefore important to have a flexible management system, which can incrementally and flexibly change course content even after its commencement.

➤ **Companies themselves might not recognize training needs**

There are many countries, especially in Group 2, which promote free trade under FTA. Governments and the private sector recognize that it would be very difficult to maintain the current competitive status even in sectors where they have comparative advantages (such as the textile sector in Egypt, Morocco and Jordan), if quality of products and productivity remained the same given Chinese products are more competitive in the European market.

On the other hand, about 90% of companies in many BMENA countries are small and medium enterprises (SMEs), most of which are family-owned companies that maintain a traditional production system. SMEs have to modernize their production system to improve quality and enhance productivity in order to stay competitive under the free trade system in place. However, in reality it seems that most SMEs do not know how to cope with this trend. It is therefore considered that there is a need to raise awareness of the SMEs regarding what is necessary to increase productivity and to enhance production quality. The TVET sector should be responsible for this training.

In Morocco, the government and Confederation Generale des Entreprises du Maroc (CGEM), a Moroccan confederation of the private sector, promote SMEs to adopt this concept of increasing productivity and quality. However, the process has only penetrated slowly. The Moroccan Government has therefore started providing SMEs with consultants who analyze the training needs of the SMEs in order for them to improve productivity and quality of products. This has occurred with the financial and technical support of the World Bank.

### **Lack of consistency between training budget allocation and target number of trainees**

In Morocco, the government intends to increase the number of TVET graduates within three years without additional budget allocation. As a result, there is a possibility that the number of entrants would rapidly increase and the quality of education would not be ensured. Even if education was undertaken, there would be problems related to an increased unemployment rate reflecting the limited capacity of the labor market, where insufficient jobs may be created to cover the increased number of TVET graduates.

## **(2) School level**

### **■ Lack of monitoring and evaluation leads to low quality of education**

As already stated, communication between the TVET governing agency and schools is not active. Furthermore, it seems that a monitoring and evaluation (M&E) system is not institutionalized at TVET school/center level, which seriously affects the incentives of trainers and, more generally, the quality of education provided.

It appeared that in Jordan M&E for daily teaching of trainers in classrooms was not conducted by principals, which suggests that trainers who work hard are evaluated similarly to those who do not work well. This lack of M&E is a disincentive to trainers to work effectively and efficiently, which seriously affects quality of education<sup>54</sup>.

### **■ Low salary level of trainers**

In general, salary levels of TVET trainers are low, which makes it difficult to recruit personnel with high competence as trainers<sup>55</sup>.

### **■ Low quality of trainers**

Similar to Japanese teachers, most TVET trainers do not have working experience in the private sector. Therefore they tend to be insensitive to technology innovation and the changes in private sector training needs. At the same time, since their salary level is relatively low, it is difficult to recruit competent people from the private sector<sup>56</sup>. To overcome the problem, it is essential to strengthen regular INSET for trainers, which was not observed in Jordan as far as the field survey is concerned.

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<sup>54</sup> According to a JOCV, some trainers at TVET schools train students on average 2-3 hours out of the stipulated 5 hours of training.

<sup>55</sup> In a TVET school in Jordan, there are two type of employment of trainers: one is temporary and the other is permanent. The former receive only 100JD, which is insufficient to lead a decent life.

<sup>56</sup> In a TVET school in Jordan, there are two type of employment of trainers: one is temporary and the other is permanent. The former receive only 100JD, which is insufficient to lead a decent life.



## ■ Teaching methodology

Teaching methodology at vocational schools/centers includes theory and practicals (including internship). As far as TVET is concerned, practical training which reflects the needs of private sector and which can produce those who can adapt to the actual working environment, should be taken seriously. This view seems to be adopted in the countries where the field survey was conducted. However, there are some schools that failed to prepare the appropriate environment for practical training, as they could not afford the necessary materials (consumables) and equipment.

To learn the practicals skills effectively, it is important to fully understand the theoretical background. In Jordan, it was observed that trainers give lectures to students who silently take notes and memorize them<sup>57</sup>; this type of teaching appeared to be common in Jordan. In order to efficiently transfer information such as theories and knowledge it is important, however, for trainers to examine how students understand, show interest and go beyond lecture methods to communicate with students. This, along with the emphasis on practicals, would lead to a better quality of TVET graduates in the long term.

### (3) From Gender Perspective

In BMENA countries excluding Saudi Arabia, access to TVET is secured legally regardless of sex. Based on the field survey, girls appear to select the schools and courses at their own discretion.

However, when selecting jobs after graduating from TVET schools, there are two categories of jobs; one is traditionally accepted as a women's job and the other is not. For example, jobs requiring double and triple shifts to operate machinery in factories are culturally regarded as being unsuitable for women in Egypt.

Otherwise, based on the observation made during the field survey, the TVET system and labor market do not seem to exclude women. One minor exception is that STIMI has not yet installed enough toilets for female students, who are very few in number. In Jordan, most TVET schools are either male schools or female schools, and they provide different types of programs. This might reflect the idea of gender division of labor from the cultural and social values, and might directly or indirectly narrow the opportunity of women to participate in certain types of occupations.

In Saudi Arabia all schools are in principle either male or female schools. GOTEVOT supervises only male schools, and female schools (senior secondary level and TVET centers) are supervised by GPGE. As of 1999, female schools offered only textile and cooking-related

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<sup>57</sup> According to hearing survey from JOCV in Jordan

programs and content was very limited. As a result, the available TVET program together with the socio-cultural background might affect the job choice of girls. Most female university graduates in Saudi Arabia find jobs only in either the education sector or medical sector<sup>58</sup>.

### **3.2 TVET Cooperation by Other Donor Agencies**

Regarding the three countries in which the field survey was conducted and also Saudi Arabia, major activities by Donors are summarized in the table on page 44 along with the activities carried out by the government. For the other target countries, major activities are summarized on page 45. The characteristics of cooperation by major donors are outlined below.

#### **3.2.1 World Bank**

The World Bank's cooperation in the TVET sector includes large-scale financial cooperation such as construction of TVET schools and centers and institutional reforms. Both impact on the TVET system as a whole.

#### **3.2.2 European Union (EU)**

EU is also involved in relatively large scale TVET cooperation, which would contribute to enhancing quality of products in line with free trade agreements with EU countries. The scale of the program in financial terms is also huge. In Morocco, the MEDA project (1996-2004) covered 12 industrial sectors, constructed more than 120 vocational training centers and developed a training program and school administration system for each center. MEDA II (2004 and ongoing) has reduced the number of sectors from 12 to 3, but remains a large-scale program. In Egypt, the EU last year commenced 'Enterprise Training Partnership (ETP)' in 12 sectors in phase, to initiate a private-led TVET system involving private companies. This has a total budget of 66 million Euro (half the budget will be shared by the government).

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<sup>58</sup> JICA (1999) *Saudi Arabia Project Formulation Study Meeting Handouts*

### **3.2.3 GTZ**

GTZ is implementing technical assistance in introducing new systems (such as dual training and introduction of in-house training culture), making the most of German expertise. Like JICA, GTZ focuses its assistance at the school or center levels, but ensures the target institution will be a model to be replicated in the future.

### **3.2.4 CIDA**

CIDA has cooperated in the TVET sector by providing assistance for institutional reform at national level, such as the introduction of new institutions. For example, CIDA assisted the Jordanian Government in establishing a TVET Council, which coordinates all ministries and agencies involved in the TVET sector, and a TVET Fund, which justifies the collection of 1% of net profit of all private companies under TVET Council Law. This will be used to improve the TVET sector.

**Table 3-1: Major Activities in TVET sector in some BMENA countries**

Country	Central government and policy level	Traditional TVET (skills development)	Support for entrepreneurship and income generation
Jordan	<ul style="list-style-type: none"> <li>- Setting up a coordinating agency in TVET sector (TVET council)</li> <li>- Setting up TVET Fund</li> <li>- Creation of comprehensive labor market database (Al Manar Project) and TVET sector Institutional Reform (CIDA)</li> <li>- Strengthening capacity in planning and management and setting up institution for curriculum development training (EJADA:EU)</li> <li>- Technical college institutional reform and strengthening technical education (GTZ)</li> </ul>	<p>Traditional TVET (skills development)</p> <ul style="list-style-type: none"> <li>(1) Setting up TVET schools</li> <li>- Setting up TVET school in metal and machinery sector (STIME:JICA)</li> <li>-Provision of TVET targeting Palestinian Refugees</li> <li>(2) Targeting the unemployed</li> <li>- National Training Project for replacing foreign workers</li> </ul>	<p>Support for entrepreneurship and income generation</p> <p>NAFES: Promoting entrepreneurship (Japan)</p>
Egypt	<ul style="list-style-type: none"> <li>-Setting up a coordinating agency: Supreme Council of Human Resource Development (SCHRd)</li> <li>-Setting up TVET Fund</li> <li>- TVET Sector Reform, setting up a Sub-Committee (WB)</li> <li>- Revision of Accreditation System (British Council, etc.)</li> <li>- Ministry of Higher Education: institutional reform of technical college (WB)</li> </ul>	<ul style="list-style-type: none"> <li>(1) Collaboration with the private sector</li> <li>-Mubarak Kohl Initiative (GTZ)</li> <li>-Skills Development Project (WB)</li> <li>-Enterprise Training Partnership (EU)</li> <li>(2) Enhancing existing TVET schools/centers</li> <li>- Provision of equipment and revising training programs (France, Spain and JICA)</li> <li>(3) Targeting the unemployed</li> <li>TVET through Social Development Fund (UN, etc.)</li> </ul>	<ul style="list-style-type: none"> <li>-Under the Social Fund for Development, entrepreneurship training by Social Fund for Development (UN, etc.), start-up loan Entrepreneurs (JBIC), and skills training for women</li> </ul>
Morocco	<ul style="list-style-type: none"> <li>- Implementation of TVET by OFPPT to strengthen practicals through alternation system incorporating internship at private enterprises</li> <li>- Implementation of TVET by Entraide Nationale targeting poor people and young dropouts</li> </ul>	<ul style="list-style-type: none"> <li>(1) Collaboration with the private sector</li> <li>- Setting ESITH through PPP (EU)</li> <li>- Introduction of in-house training (GTZ)</li> <li>(2) Enhancing existing TVET schools/centers</li> <li>- Construction of TVET centers and program development (MEDA:EU)</li> <li>-Dispatching volunteers to TVET schools (JICA)</li> <li>- Training young dropouts (USAID)</li> </ul>	<ul style="list-style-type: none"> <li>-Supporting women entrepreneurs in setting up cooperatives, production skills &amp; marketing (UNIDO)</li> </ul>
Saudi Arabia	<ul style="list-style-type: none"> <li>- Larger budget allocation to the human resource development to promote Saudization Policy</li> <li>- Institutionalizing Manpower Development Fund and subsidizing training fees and short-term salaries through the Fund</li> <li>- Introduction of NOSS (UK)</li> </ul>	<ul style="list-style-type: none"> <li>- National System for Joint Training (NSJT): OJT training system targeting high school graduates and young dropouts who have difficulty in finding jobs, through support from Manpower Development Fund and the Chamber of Commerce</li> </ul>	<ul style="list-style-type: none"> <li>- Support for young entrepreneurs (male and female) through Hundred Year Fund</li> <li>- Conducting workshop for women entrepreneurs (English Royal Court and private company)</li> </ul>

### **3.2.5 Major Donor Activities In Other Countries**

#### **World Bank**

##### **Tunisia: Training and Employment Project**

This project aims to strengthen the competitiveness of the Tunisian economy through modernizing the training and employment sectors, making them consistent with the private sector. It also targets institutional reform, changing the training system from school basis to OJT basis in enterprises, as well as capacity building in analyzing training investment opportunities and monitoring labor market trends.

##### **Yemen: Vocational Training Project**

This project attempts to train technicians in the field where current labor market needs are high. There are three goals of this project: i) strengthening TVET system, ii) creating consistency between labor market and TVET sector, and iii) TVET reform through community participation and women's participation.

#### **GTZ**

##### **Yemen: Economic Reform and Economic Development (WIRAM)**

One of the components of WIRAM is employment-oriented private sector promotion, which intends to increase productivity, new business opportunities, and job creation through TVET and financial services for SMEs. Its overall goal is to reduce poverty.

##### **Tunisia: Economic Promotion**

One of the components of the project includes setting an organization that is responsible for promoting entrepreneurship and SMEs within the Ministry of Vocational Training and Employment.

#### **UNDP**

##### **Syria: Syrian Higher Education Research Network (SHERN)**

UNDP cooperates with 4 national universities to promote research and development functions as part of the assistance to the higher education sub-sector from 1999 to 2003.

## EU

### **Syria: Vocational Education and Training (VET)**

The EU is active in Syria in promoting a market economy. It has introduced dual system training in the field of textile and maintenance, targeting 16 institutions including vocational secondary schools and technical colleges in major industrial cities; it is to make the TVET system consistent with the demand of industries. The EU is also involved in formulating frameworks for human resources development in industrial sectors, in cooperation with the Syrian Chamber of Industry and the agency for enhancing employment. The cooperation is from 2004 to 2008.

### **Syria: Higher Institute for Business Administration (HIBA)**

The EU is developing courses for business administration (Master and Diploma level) and business English course in cooperation with universities in Europe, to train business people. The cooperation is from 2001 to 2007.

## **3.3 Best Practices**

This section introduces the best practices found during the field survey, which provides some hints in defining new directions for future TVET activities. They are divided into three categories:

- i) High employment rate due to high level of private sector involvement,
- ii) Securing high quality of education and training, and
- iii) Income generation and entrepreneurship support for poverty reduction.

### **3.3.1 High employment rate due to high level of private sector initiative**

#### **(1) Successful participation of private sector in industrial secondary school management: Egypt Mubarak-Kohl Initiative (MKI)**

This project was initiated by GTZ in 1995, and introduced a dual system to the existing industrial secondary schools. GTZ has modified the German dual system and applied it to the school: it comprises 2-day learning at school (lecture and practical) and 4-day training at company per week.

A total of 41 schools and 1,600 companies have so far participated in this initiative. The cumulative number of graduates from MKI schools is 11,000. RUDS (Regional Units of Dual

System), which is established by an Investors Association in each governorate, employs consultants and assumes responsibility for planning, implementation, monitoring, and evaluation of in-company training.

The participant companies accept students and bear the financial costs such as RUDS operation cost, allowance for students and learning materials. Some 86% of students have been offered jobs by the companies where they undertook training with 53% accepting these offers. The rest of the graduates continue their study at higher education, or join military services, while some girls have not tried to obtain jobs as they prepare for marriage.

GTZ's assistance in MKI is to supply equipment and provide teachers with appropriate training for the first four schools. It now concentrates on an advisory role as it is expected that the teachers who had been given training will train other teachers, adopting a cascade method.

The sense of ownership among Investors Associations is very high, and they are willing to share the costs to secure competitive human resources. Some Investors Associations developed RUDS into a Human Resource Unit, which looks into not only MKI schools but also other human resource development needs in the governorate.

There are a few issues arising in MKI. One is how to respond to the demand of human resources for SMEs with insufficient capacity to accept students. Another issue is how to increase the number of participating companies from the small private sector given the fact that the number of applications exceeds the participating companies' training capacity.

The ETP program by the EU is to adopt the MKI method.

**(2) Private sector oriented school management providing consistent program to labor market, leading to high employment rate: Morocco ESITH**

This school was established in 1995 with assistance from the EU under public-private partnership. The board of the school, which is composed of 50% public and 50% private institutions (Moroccan Textile Association), determines the direction of school management. This school has achieved a high employment rate for its graduates.

Morocco has comparative advantage in the textile sector. There is a high demand for the graduates among the Moroccan textile sector, and they have gained a high reputation in their practical skills, hence the high employment rate.

**(3) Promoting confidence among private sector through alternation training, resulting in high employment rate: Morocco Institut Supérieur des Technologies Appliquées-Inter Entreprise (ISTA-IE)**

ISTA-IE has adopted a complete intern system; the trainers find internship for all the students and they continue one month training at school and one month training at the company for two years. In the system, the school and private sector have developed a strong tie and confidence in each other, with the trainers becoming intermediaries between the students and companies and also providing support.

As a result, most students can find jobs at the companies where they did internship training, which suggests that they can make the most of the skills learned.

**BOX 3-1: Asian Experience<sup>59</sup>**

**Demand-oriented program contents and high quality training resulting in the high employment rate: Thailand Toyota Automotive Technology School**

This school was established in 1996. It was formerly Toyota 's in-house training center, which trained its own engineers to respond to the needs of Toyota dealers in Thailand. Judging from the high reputation of engineers who were trained at the center, the Government requested Toyota Thailand to upgrade the in-house training center to a formal secondary school. Based on the agreement between the two parties, Toyota financed new building construction, provision of facilities and equipment, and development of teaching and learning materials.

This school is a private school and income largely comes from tuition fee of the students. The school pays rent for the building and facilities and equipment to Toyota.

The program is revised every term, three times a year to totally meet the demands of the local Toyota dealers. According to the revision of the program, equipment and facilities as well as textbooks are updated and training for trainers is also conducted periodically.

In Thailand, as in many countries in BMENA, there is a general preference to continue study at higher education institutions. Reflecting this trend, 30% of the graduates continue their study at universities and 70% find jobs. Toyota Thailand and local Toyota dealers would like to keep all the graduates, but since they are marketable, half are selected by competitors of Toyota. Therefore, the employment rate is 100% and the graduates are evaluated highly in technical skills, especially their expertise on up-to-date mechanics.

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<sup>59</sup> According to hearing survey at Toyota Automotive Technology School in Thailand



### **3.3.2 Securing high quality education and training**

#### **(1) Don Bosco Applied Secondary School: Securing High quality education and High work ethics, leading to high rate of continuation to higher education and high employment rate**

This is not a donor project. Don Bosco Private Vocational Secondary School is managed by Saledian Institute (3-year or 5-year system, electronics and mechanics).

Two thirds of the Curriculum is theory and one third is practical. This school has just started internship training (commenced last year), which suggests that it does not have a particularly strong link with the private sector. However the school exercises strict education in a limited number of classrooms and only 60% can graduate from the school. As a result, the graduates have gained a reputation from the private sector as a high quality labor force. One of the advantages is that the qualification from this school can be applied not only in Egypt but also in Italy, as the curriculum follows the Italian style. Short courses targeting working people and university students are also offered.

Another advantage is that the school emphasizes not only producing highly skilled personnel but also training in discipline and work ethics (such as keeping time).

According to the interview, the general level of graduates from vocational schools and vocational training centers is not high and graduates are not attractive to companies. But the graduates from MKI and Don Bosco are exceptions. They have gained the reputation of having acquired high level practical skills and work ethics.

#### **(2) Securing high quality of practical training: Jordan STIMI and UNRWA**

STIMI, which JICA has assisted since 1997, is a vocational training institution at community college level. It provides craftsman-level engineers following 18-month training in the field of metal industry. This school has added modules and has provided necessary training to trainers, based on the needs of the private sector. As for UNRWA, where JICA has sent experts since the 1970s, it has provided technical training to Palestinian refugees. Its monitoring and evaluation system by 14 supervisors has contributed to the improvement of educational quality. As a result, both institutions have successfully established a high reputation in the private sector, producing personnel with high skills and work ethics.

Japan has concentrated its inputs to STIMI since 1997, by developing curriculums, quality of training and providing equipment based on the needs of the labor market; as a result, the school has provided students with consistent training to the labor market.

UNRWA has provided the labor market with human resources with a high level of skills and work ethics, through offering them intensive and lengthy training and practice as well as an established M&E system.

According to the interview, in general the level of graduates from vocational centers and applied secondary schools is not high, except for graduates from STIMI and UNRWA: they have gained a reputation of having acquired high level practical skills.

### **3.3.3 Enhancing living standards and promoting entrepreneurship targeting the poor**

#### **(1) A series of support from formulation of cooperatives to product development and marketing and selling the products, resulting in improvement of living standards among women's group: Morocco Projet de developpement des systemes productifs locaux de la marqueterie a Essauira et de la toterie a Safi**

UNIDO is implementing comprehensive support for enhancement of living standards targeting women in poor areas in the northern part of Morocco. This project is called 'Projet de developpement des systemes productifs locaux de la marqueterie a Essauira et de la toterie a Safi'.

UNIDO is providing technical assistance in developing the capacity of women's groups to formulate cooperatives, marketing, product development and sales. UNIDO tries to make the most of the lessons learned for women's further participation in economic activities. It also plans to collaborate with vocational training schools for product design training to enhance its INSET program, and targets applying microcredit to enhance its activities.

One of the characteristics of this project is to promote women's participation in economic and social activities in the Islamic society, and to provide a comprehensive set of support from formulation of cooperatives in the artisanal sector to selling of products in the commercial market.

The artisanal sector is one of the sectors in which it is difficult for women to enter, therefore this project is providing a job/business opportunity for women.

#### **(2) Assisting socially vulnerable people and women to participate in economic activities and promoting entrepreneurship: Morocco Entraide Nationale**

While vocational training schools/centers generally aim to provide skills to students who will participate in the labor market, Entraide Nationale tries to support young dropouts so that they would not indulge in delinquency and to send them back to the society after some training. The

graduates from Entraide Nationale are deemed to be semi-skilled laborers, and Entraide Nationale records relatively high employment rates (mainly at restaurants, barbers, artisanal production sector, etc.)

Entraide Nationale has also contributed significantly to girls' participation in economic and social activities. Many female graduates tend to start small-scale enterprises, making the most of skills learned such as artisanal production at household industry level, which might create job opportunities in the future. Furthermore, as suggested earlier, it is usually difficult for women to start a business in that sector, which suggests that Entraide Nationale provides a new route for girls to start such businesses, even if they are small.

## **Chapter 4 Review of Japanese Technical Cooperation in TVET Sector**

### **4.1 Overview of Projects Conducted in the Target Countries of the Survey**

This section provides an overview of the characteristics of JICA technical cooperation in the TVET sector implemented in the target countries, presenting project information such as background, project scheme, project field, targets and outputs. The points are also summarized in the table from page 54.

#### **➤ Background and project objectives**

As described in the previous chapter, industrial development and job creation are one of the national priority policies in many BMENA countries. The TVET sector is being developed and promoted as one of the concrete actions to achieve this goal.

The Governments of Group 1 and Group 2 countries, in particular, recognize as an urgent task the need to strengthen technological capacity to remain competitive given the trend of FTA with Europe and USA, of China's accession to WTO, and of lifting the tariff barriers. Due to this background, many projects under Japanese cooperation in the TVET sector provide assistance in strengthening middle-class engineers, in order to improve technological standards of their industry and strengthen competitiveness against other countries. Many of them also aim to create job opportunities along with upgrading technological capacity.

Project objectives have been set against this background, and in general, the objectives are highly relevant to the national priorities.

On the other hand, in Group 4 countries such as Afghanistan, which is currently in the process of reconstructing the entire nation, there are projects which promote and secure basic living standards rather than traditional skills training in specific sectors (e.g.: Basic Training Project for Re-Integration of Ex-Combatants Project and Enhancing Women's Economic Empowerment Project).

#### **➤ Project Scheme**

The majority of the project scheme is referred to as project-type technical assistance, which provides comprehensive sets of technical assistance including: i) expert displacement (combining of several types of expertise and both short- and long-term experts), ii) provision of equipment relevant to the project, and iii) provision of training to counterparts in Japan.

There are many cases where the recipient countries were responsible for construction of the

training facilities, and Japanese cooperation made the most of it and provided technical assistance. For example, STIMI in Jordan was constructed by the Government of Jordan with financial assistance by the World Bank, and Japan cooperated with the STIMI by providing project-type technical assistance.

➤ **Counterpart Institution**

One of the characteristics of Japanese cooperation in the TVET sector is that the counterpart institution is normally just one or a limited number of schools/centers. For example, the Automated Technical Education Improvement Project in Turkey targets only one applied secondary school in Anatolia, and the Project on the Improvement of Audio-visual Aids and Instruction Methods in Vocational Training at the Instructor Training Center (ITC) in Iran targets only the ITC.

➤ **Implementation Structure**

Most projects have adopted a two-committee structure. One is the technical committee, which is formed by representatives from the counterpart institutions, including principal and trainers, who are responsible for project implementation. The other is the steering committee, which is formed at central ministry level and includes personnel from counterpart ministries such as Ministry of Labor who supervise and coordinate the overall progress of project implementation.

➤ **Outputs**

Most project-type technical assistance aims to either upgrade the existing courses or to add new courses in response to labor market needs. The components of activities are: i) curriculum and syllabus development, ii) textbook development corresponding to the new curriculum and syllabus, and iii) teaching methodology development. The capacity required for these activities are transferred from those experts dispatched to the counterparts.

There is also a case of strengthening science and mathematics education at primary sub-sector level, as in Egypt, which has a similar set of activities. The cooperation is implemented after the government reviews its basic education and implements plans to transform it from a theoretical knowledge-based education to practical skill attainment education.

➤ **Fields of Cooperation**

Fields of cooperation include manufacturing sectors such as automobile, metal works, mechanics, electric work, electronics, and computerized numerical control (CNC) machines, where Japan has comparative advantage.

**Table 4-1: Summary of Japanese Cooperation in TVET sector**

Country	Name of Project	Duration	Background	Project Objective	Scheme	Field of Cooperation	Counterpart	Outputs
Saudi Arabia	The Project on Improvement of the Technical Education in the College of Electronics in the Technology in Riyadh	1997.4 - 2001.3	To restructure economy into job creating industry-led economy. To increase middle class specialist engineers	To provide appropriate electronics education and to improve the quality of engineers in the field	Project-type Technical Assistance	Industrial electronics, computer, information technology	College of Technology in Riyadh	Development of Curriculum Technology transfer to the trainers
Saudi Arabia	Development and Training Center Project	2004.9 - 2007.9	Saudization of workforce. Increase community college, urgent need to increase quality teachers at that level	To enhance capacity in implementing workshop for teachers	Project-type Technical Assistance	Machinery, Electricity, Construction	DTC	Industrial needs identified Training program developed Training system formulated Training management system established
Saudi Arabia	Saudi-Japanese Automobile High Institute (SIAHI)	2001.9 - 2006.8	Many young unemployed. Improve education for expanding job opportunity. Saudization of employment	To train Saudi technicians responding to request from car maintenance sector	Project-type Technical Assistance	Engine, Electricity	SIAHI	Management system formulated Equipment provided and maintained Teaching methodology and materials developed Curriculum implemented Internal evaluation carried out
Turkey	Istanbul-Tuzla Vocational and Technical High School Project	1987.10 - 1992.9	Due to the rapid industrialization, high demand for middle ranked engineers.	To conduct advanced engineering education	Project-type Technical Assistance	Electricity, Electronics, Computer	Istanbul-Tuzla Vocational and Technical High School	Laboratory set Action plan formulated Syllabus and curriculum developed Teaching materials developed
Turkey	Automated Technical Education Improvement Project	2001.4 - 2006.4	Rapid increase in manufacturing sector. Need to increase manufacturing engineers and middle ranked engineers	To formulate a new mode for education system to train middle ranked engineers to satisfy car makers	Project-type Technical Assistance	Information, Electronics, Information Mechanics	Anatoria Applied School	Curriculum developed Teaching materials developed Training system and teaching methodology developed Trainers' capacity improved Equipment introduced and maintained
Syria	UNRWA D.T.C	1995.5 - 1998.5	Provision of health, education and social services to Palestinian refugees	Technical transfer of how to use equipment and how to use them safely	Expert Dispatchment	Construction Machinery	UNRWA	Technology transfer on how to maintain construction machinery and how to operate it safely

Country	Name of Project	Duration	Background	Project Objective	Scheme	Field of Cooperation	Counterpart	Outputs
Jordan	The Project for Specialized Training Institute in the Hashemite Kingdom of Jordan (Vocational Training Corporation) (VTC)	1997.10 - 2002.9	Under economic recession, there is a need to train competitive human resources to cope with international competition	To establish management structure of STIMI To implement training course, and to improve the capacity of trainers	Project-type Technical Assistance	Metal, Machinery	STIMI	Management structure established Necessary equipments introduced Trainers' capacity improved Appropriate training courses implemented
Jordan	UNRWA	1986.12 - 1995.3	Established in 1950 for supporting Palestinian refugees	To improve curriculum and methodology for skills development	Expert and JOCV Dispatchment	Electronics, Car maintenance	UNRWA	Curriculum improved Teaching methodology improved Labor force matching demand of labor market supplied
Egypt	The Shoubra Maintenance Vocational Training Center	1977.1 - 1983.7	Comprehensive reconstruction plan is in progress. Urgent need for maintenance engineers	To train machine maintenance engineers	Project-type Technical Assistance	Metallurgy, Textile machines, Electricity	Shoubra Maintenance Vocational Training Center	3-year training course in metal machinery, textile machines and electricity started
Egypt	The Project of the Construction Equipment Training Center in Tenth of Ramadan (CETC)	1989.2 - 1994.1	Large-scale construction project is planned. Need to provide competent constructors and skilled workers	To train supervisors and engineers in construction mechanics sector	Project-type Technical Assistance	Construction Mechanics	CETC	Curriculum and syllabus developed Teaching materials developed Courses carried out Center managed
Egypt	The Mini-Project Type Technical Cooperation for the Development of Creativity Lessons for Primary Education	1997.12 - 2000.11	Need to increase access to quality and practical education Modernize science and mathematics education	To improve teaching methodology through INSET and guidebook development	Mini-Project-type Technical Assistance	Science and Mathematics	NCERD	Current situation on teaching methodology in science and mathematics education grasped Guidebook developed INSET plans improved
Egypt	The Technical Cooperation for the Development of Creativity Lessons for Primary Education	2003.4 - 2006.3	To modernize education. To improve teaching methodology	To disseminate the new teaching methodology using a guidebook	Project-type Technical Assistance	Science and Mathematics	NCERD	NCERD staff can train the trainers Trainers can use the teaching methodology Guidebook revised Teaching methodology established
Egypt	Job Opportunity Study and Development of Pilot Training Courses	2004.10 - 2005.10	Government is committed to modernization of its industry and reforming the HRD system; Shortage in basic	Counterpart agent to acquire skills to plan and implement the training course based on the needs of industries	Expert Dispatchment	To be decided based on the study results	PVTD	Job opportunity study implemented Pilot training course developed Network between industry and TVET created

Country	Name of Project	Duration	Background	Project Objective	Scheme	Field of Cooperation	Counterpart	Outputs
Tunisia	The Project for the Establishment of the Vocational Training Center for the Electric and Electronics Industry	2001.2 - 2006.1	information to develop the system Enhance technology standards and production productivity; Mechanization of production process; Shortage of quality workforce	Electricity and electronics TVET center is constructed and quality engineers are produced	Project-type Technical Assistance	Electricity, Electronics, Automation, Mechatronics, CNC, Production Line Network	Vocational Training Center	Training course in the field of electricity and electronics formulated; The trainers can conduct training to students; Management system established; Equipment maintained
Iran	Project on the Improvement of Audio-visual Aids and Instruction Methods in Vocational Training at the Instructor Training Center(ITC)	2002.6 - 2005.5	To restructure economy, to overcome high unemployment rate, to train quality skilled labour	To enhance standards in audio visual material production	Project-type Technical Assistance	Audio visual material production method, Teaching Methodology	ITC	Audio visual materials developed and managed; Video materials developed and technology instilled; Management capacity of trainers training courses transferred
Afghanistan	Basic Training Project for Re-Integration of Ex-Combatants	2005.3 - 2008.3	Disarmament and reintegration of the ex-combatants into the society leads to peace	To train ex-combatants and enhance capacity to conduct living, and to contribute to community	Project-type Technical Assistance	Enhancing Living Standards	TVET Trainers	Trainers are trained for TVET
Afghanistan	Enhancing Women's Economic Empowerment in Afghanistan	2005.2 - 2008.2	Through community development, the mechanism for women's empowerment is set and opportunities and choices in economic activity will be increased.	To identify mechanisms to support economic empowerment of women.	Project-type Technical Assistance	Enhancing Living Standards	Economic Development Agency	Living standards of women and community improved; Agency's implementation capacity improved; M&E carried out



## **4.2 Achievement analysis of Japanese Cooperation in TVET Sector**

Based on the reports available and the table above, the achievement of Japanese Cooperation in the TVET sector is analyzed based on the following six perspectives.

### **4.2.1 Perspective 1: Relevance**

#### **[Relevant to national priorities and motivated counterparts]**

Most TVET-related projects are in line with the national priority policy. Therefore, counterparts of the projects are generally motivated and cooperative; in some projects, the government succeeded in securing a budget to continue the activities after the end of project. It can therefore be said that the TVET-projects are in general highly relevant to the national needs.

Most projects seem to have been requested based on the medium- or long-term national plan to achieve economic development, such as industrialization, job creation and technological improvement. Regardless of outputs, counterparts seem to have been actively involved in project implementation with high levels of motivation.

#### **[Importance of promoting TVET status advancement]**

In countries where there is a strong preference of continuing to higher education and the social status of TVET schools/centers is low (especially in Gulf countries), continuous awareness-raising activities should be strengthened to increase applicants and to secure financial independence of target schools. For example, as suggested earlier, STIMI has gained a high reputation from the private sector and achieved almost 100% employment. Furthermore, its graduates can find a job in which they can make the most of the skills learned. Although the number of applicants to STIMI is comparable to the number of vacancies, there has been a period when STIMI accepted all applicants as the competition rate was less than one.

The governments in many BMENA countries should advance the social status of the TVET sector, conducting an awareness-raising campaign and increasing the number of applicants to the sector.

### **4.2.2 Perspective 2: Upstream and downstream (link between TVET sector and labor market)**

**[Projects have realized high level of effectiveness by concentrating the different kinds of inputs to a focused target]**

The method of concentrating different kinds of inputs to a focused target in TVET sector cooperation seems to have impacted on the motivation of counterparts and led to a good reputation within the private sector. This is because it is easy to understand what is happening and therefore the activities are easily evaluated by the stakeholders.

**[Equipment provision based on the assessed needs provides large impact]**

In the case of STIMI, CNC machines were provided in response to the strong needs of the private sector, which was seeking engineers who could operate them. This has further contributed to the reputation of STIMI within the private sector and students who studied CNC machines are in high demand. This is one of the positive impacts of providing equipment that is in high demand by the private sector. A similar case was witnessed at the Technology Competence Center for Cooperation by GTZ in Egypt; their mechatronics course graduates are highly demanded by the private sector.

**[Impact on employment differs]**

There is little information about the employment of graduates in the cooperative projects. Jordan STIMI is the rare case where the feedback system to incorporate private sector needs into program contents by adding new modules is put into practice. At the same time, by making the most of training on relevant equipment, graduates from STIMI are highly valued by the surrounding private companies. As a result, most graduates have found jobs at the company where they have undertaken internships, which suggests that they can make the most of their skills learned during the period of study. This is thought to be the achievement from the combination of focusing input to one institution and the existence of highly motivated counterparts.

Conversely, in the case of Shoubra in Egypt, the principal conducted a questionnaire tracer survey follow up the graduates five years after graduation. Some 33 responded to the questionnaire and no one was employed in the sectors where they could make the most of the skills learned. They had been either unemployed or temporarily employed in the service sector as shop-keepers or similar.

These represent the two extreme cases. Jordan's STIMI project ended in 2002, whereas, the Shoubra project in Egypt, excluding follow-up and after-service cooperation, ceased in 1983. There is a possibility of changes in background in the intervening periods of these two projects that may have affected the relevance of the training courses offered at Shoubra. (For detailed analysis, refer to [Different pictures in sustainability] under Section 4.2.3.)

### **4.2.3 Perspective 3: Implementation structure**

**[The technology contents to be transferred is so condensed that it might be difficult to transfer all to the counterparts]**

As there is a large content in technology transfer to either upgrade existing courses or to add a new course, including development of curriculum, teaching and learning materials and teaching methodology, this places quite a burden on counterparts. On the other hand, it has been reported in several projects that C/P agencies failed to allocate an appropriate number of counterparts. In addition, in some countries trainers at the counterpart school, who are the main counterparts to the experts, tended to leave the job to find a better paid one in foreign countries. Furthermore, working hours are shorter in many BMENA countries. It can therefore be physically difficult to transfer the entire technique and level of knowledge to the counterparts given the limited period of cooperation.

It is important to consider the volume of technology to be transferred, and then set an appropriate period of time to achieve the complete technology transfer.

**[Some counterparts leaving the job]**

Salary levels of trainers in the TVET sector are generally low. Trainers in non-Gulf countries tend to search for better paid jobs, especially in Gulf countries that offer salaries several times higher than the civil servant trainers would currently receive.

It has been reported that some counterparts of the projects left the positions and the counterpart agencies had to find replacements. This is a structural problem and it is essential to find a countermeasure to address this situation.

**[Different pictures in sustainability<sup>60</sup>]**

In 2003 the impact study of the 'Shoubra Maintenance Vocational Training Center in Egypt' was conducted. This was some 20 years after the project had been conducted in the 1970s and 1980s. According to the Study, the equipment has been maintained properly but there is now a significant time lapse between the equipment used at the school and that now used in the private sector; the former is the traditional manual type while the latter is computerized. The trainees cannot utilize the skills learned at the Center in their workplace. Although reasons for not having up-to-date machinery at the Center were not clarified, they can be due to either a lack of financial support from PVTD or lack of proper training needs assessment.

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<sup>60</sup> JICA (2003) Basic Study on Revitalizing Projects which ended in the Middle-East Countries

On the other hand, the results of the same Study on the ‘Project of the Construction Equipment Training Center in Tenth of Ramadan (CETC) in Egypt’, which was implemented from 1994 to 1998, indicated that short course training at CETC had been expanded. It would also be further strengthened by responding to the request of private companies who could not release their employees for lengthy training courses. At the same time, trainer skills had reached the level of teaching in other countries as they were trained in third countries. However, it seemed that the center itself could not purchase the necessary equipment nor hold seminars due to limited budgets.

‘Istanbul-Tuzla Vocational and Technical High School Project’ in Turkey ended in 1992. Subsequently, the trainers from the school progressed to advance the activities by holding training workshops and distributing reference manuals to other schools. At the same time the counterparts became active as Division Directors, which indicates the self-sustainability of the project.

#### **4.2.4 Perspective 4: Private sector participation**

##### **[The case of Saudi-Japanese Automobile High Institute (SJAHI)]**

In this project, there has been a clear demarcation between the stakeholders: the Japanese automobile industry association assumed the responsibility of training center construction, the Japanese government was responsible for technical assistance and provision of equipment, and Saudi Arabia was responsible for school management. At the same time one of the major features of this project is that local Japanese car dealers basically employ all the graduates from the Institute.

##### **[It is important to promote new status of middle-class engineers]**

STIMI in Jordan produces middle-class engineers whose qualification is located between high school graduates and university graduates. However, their salary level tends towards the level of high school graduates, which is one of the major complaints among STIMI graduates. It is therefore essential to recognize middle-class engineers and to systematically set a new salary level for them on a national basis.

#### **4.2.5 Perspective 5: Technology transfer**

##### **[It is difficult to transfer a large amount of technology during the limited working hours]**

The government working hours in some BMENA countries are from 8:00 to 15:00, which is much shorter than those in Japan. Furthermore, the counterparts have to spend some hours to teach trainees. As some reports indicated, it has therefore been difficult for Japanese experts to have sufficient time for achieve technology transfer to their counterparts. The counterparts also tend to avoid working overtime and have refused to accept technology transfer outside working hours. It is important to agree on this point beforehand with counterpart agencies.

#### **4.2.6 Perspective 6: Donor support**

##### **[Collaboration with other donors]**

The typical pattern in TVET sector cooperation is that the recipient government bears the cost of training facility construction and Japanese cooperation provides them with technical assistance. For example, in case of STIMI in Jordan the building was constructed by the Jordanian Government using a loan from the World Bank and the Japanese Government provided STIMI with technical assistance. The latter included curriculum and syllabus development and provision of equipment, and the technology transferred to the C/Ps.

In case of the Project of Science and Mathematics Improvement Project in Egypt, the textbook developed during the Project was utilized by the World Bank Program.

##### **[Difference from other donors]**

JICA cooperation normally targets one school/center as the counterpart institution and concentrates a combination of inputs such as dispatch of experts, provision of equipment, and counterpart training in Japan. These lead to a certain level of achievements, however, this type of cooperation is relatively weak in producing impacts beyond the target school/center.

On the other hand, GTZ cooperation of MKI in Egypt concentrates its input in the initial instance on several model schools. This initiative has succeeded in being replicated by other industrial secondary schools and other donors, such as the EU, have attempted to replicate the model in their new program of establishing training partnerships between the public and private sectors.

A JICA project considers the sustainability of the counterpart school/center before the implementation. However, its major assistance is technical transfer to the individuals and

equipment provision. This means that after the end of the project, the issue of sustainability is totally left to the counterpart ministry and individual trainers who will transfer the technology. Sustainability depends on whether the upgrading of the equipment, allocation of trainers, and securing the budget are handled by the counterpart ministry and if the individuals involved are themselves capable.

On the other hand, for MKI, the GTZ cooperation involves the private sector actively as a major actor in planning, implementation and M&E as well as financial responsibility of the TVET. This would ensure better sustainability than if left to the government institution and individuals working in the government sector.

While JICA concentrates on specific targets, EU conducts large-scale programs such as MEDA in Morocco, which covered 12 different sectors and constructed 120 training centers. MEDA I commenced in 1996 and ended in 2004. According to the interview, the logistical operation for construction required enormous tasks and they could not spend time to consider qualitative aspects of the program such as contents and quality of training. MEDA II, which has just started, learnt from the MEDA I experiences and has reduced the number of sectors to be covered from 12 to 3<sup>61</sup>.

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<sup>61</sup> Based on hearing survey in Morocco

## Chapter 5 Summary

It has so far been identified that the major issues regarding the TVET system are: i) how to connect the training program and labor market, ii) how to secure the quality of education, and iii) how to improve living standards and promote entrepreneurship for poverty reduction. This chapter summarizes these three major issues, and then indicates the direction of future TVET cooperation by major donors including Japan, in consideration of the grouping of target countries set out in Chapter 2.

### 5.1 Summary on Issues of TVET System

The issues to be considered for effective implementation of TVET policy are as follows.

#### 5.1.1 Connection between the training program and the labor market

##### **(1) To have comprehensive information system and to operationalize the function of the coordinating agency**

In BMENA countries, it has been identified that policy making is conducted without comprehensive information at the national level as the information is administered by several different ministries.

To solve this problem, it has therefore been argued that it is important to set up a coordinating agency to comprehensively supervise the TVET sector. Egypt, Jordan and Saudi Arabia have set up this type of institution, which also includes several sub-institutions. (Egypt: Supreme Council of Human Resource Development, Jordan: TVET Council, and Saudi Arabia: GOTEVOT)

It is also essential to consider how to operationalize the coordinating agency, if available. This can occur through understanding national level comprehensive information, formulating national policy as well as an action plan, budget allocation, and implementation, monitoring and evaluation of the action plan. This process should also be pursued not only at the central level but also at the local and school levels for the TVET system to connect to the needs of the labor market.

##### **(2) Involvement of private sector into the program setting processes**

As suggested earlier, it is difficult to have a perfect link between the training program contents and labour market needs, as far as the public sector is concerned. On the other hand, it was argued in the Best Practices in Chapter 3 that some privately managed TVET schools managed

to conduct relevant programs, showed high rates of employment, grew close ties with the private sector and secured a high quality of education.

Regarding MKI in Egypt, multiple impacts have been observed, such as sustainability through private initiative and the expansion of the activity through replication to other schools.

### **(3) Awareness campaign for enhancing status of TVET sector**

In BMENA countries, industrial development and employment is one of the national priority policies and TVET is recognized as a strong tool to solve the problems. On the other hand, the status of the TVET sector remains low. This gap may limit the impact of policy action in the sector. Therefore, it is important to raise awareness among nationals on the importance of TVET. The number of applicants to TVET schools would be an important indicator of this.

#### **5.1.2 Securing quality of education**

##### **(1) Importance of ensuring planning, monitoring, and evaluation system at school level**

Most students at TVET schools come from the lower level of primary or secondary schools in terms of scores. Despite this, TVET schools should assume the responsibility to produce students who can satisfy the labour market in terms of skill levels.

It is important to secure the quality of education, which can be achieved by strengthening daily monitoring and evaluation at school level. In particular, the principal's attitude to monitoring trainers' teaching is essential to raise the quality of students.

##### **(2) Importance of providing trainers with regular INSET**

It is indispensable to update trainers with regular INSET at least when programs or program contents are revised in accordance with private sector needs. It is therefore essential to institutionalize INSET for trainers to secure the quality of education in the TVET sector.

#### **5.1.3 Training to improve living standards and promote entrepreneurship**

##### **Importance to support the poor in the framework of TVET to contribute to improving living standards and promoting entrepreneurship**

It is important to strengthen activities targeting poor people in the framework of TVET. Young people from poor families tend to drop out of schools due largely to economic reasons. TVET can support them in not indulging in delinquency and assisting them in acquiring some skills



and entrepreneurship, which is also important from the viewpoint of a safety net<sup>62</sup>.

This means that institutions targeting specifically poor people have functions of reducing social problems and poverty, as well as alleviating unemployment.

As was suggested in Best Practices in Chapter 3, Entraide Nationale and Union's activities have contributed not only to reducing poverty but also to expanding the labor market, even at the small scale through promoting entrepreneurship.

It can be argued that setting up TVET institutions with such functions as described above will be relevant policy, especially in the countries of Groups 3 and 4.

## **5.2 Summary of the Future Directions of Donor Cooperation**

It has been argued that the major issues in the countries of Groups 1 and 2 are how to diversify their industries, and how to strengthen competitiveness of their products and services under the free trade system.

For the countries of Groups 3 and 4, it is important to consider how TVET can contribute to improving living standards and to reducing poverty, which also affect reconstruction and peace keeping.

This section proposes which directions donor agencies including Japan should take towards improving the TVET sector, considering the priority issues of each Group.

### **5.2.1 Group 1 and Group 2**

#### **(1) Bigger outputs and impact through assistance with focused scope**

Comparing the Em's MEDA assistance and JICA's assistance to STIMI in Morocco, the former covers many industrial sectors, constructing more than one hundred TVET centers, while the latter works on a specific sector (metal industry) with one TVET school (STIMI) and concentrates on different types of input to this one school. It seemed that the implementation of the former project requires significant time for logistical issues concerning construction with not much time spent to improve qualitative aspects. The latter concentrated its inputs on one school resulting in its graduates receiving a high reputation in terms of their skills and a high

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<sup>62</sup> Based on the interview at Entraide Nationale in Morocco: among graduates there are some who set up small scale business (for example, opened a cloth shop with his/her original design and production)

employment rate, that is, a positive impact is being produced<sup>63</sup>.

The way in which the latter has related the link with the private sector and specified the scope of technical transfer can improve the level of skills effectively and efficiently. Therefore this approach would be effective especially among the countries of Group 2, which have to create services and goods with high additional value and productivity to cope with international trade competition.

However, it would also be important to consider, when planning a project, the sustainability of the project and also the possibility of replication to the broader area. This would be essential from the perspective of cost effectiveness and contribution of the project to the recipient country.

**(2) Presentation of a sustainable model through strengthening cooperation with the private sector: maintaining the sustainability and pursuing the broader impact**

As seen in (1), Japan has contributed to creating bigger outputs in TVET sector assistance, while there is still a lot to be learned from other donors' cooperation regarding sustainability.

The example of the JICA project in Egypt, 'the Shoubra Maintenance Vocational Training Center' described in Chapter 4, suggests that after the end of the project, regular needs assessment of the labor market was not conducted and additional budget for improving equipment was not allocated. These were the reasons why the center has failed to provide training that has remained relevant to the labor market.

It is therefore important to incorporate a structure that reflects the needs of private sector on an ongoing basis. For example, MKI of Egypt has incorporated a sustainable system of incorporating the needs of private companies, which has enabled the schools to follow these needs without have to conduct expensive labor market surveys undertaken at the outset of the project.

MKI is also a good example in that its activity has successfully replicated from a certain number of pilot schools to non-pilot schools; it is important to consider broadening the impact of the project beyond one counterpart entity by involving the private sector initiative as MKI did.

Cooperation with the private sector is also a key for having suitable activities as well as effectively producing high impact levels on the broader areas. The case of MKI and Toyota Thailand referred to in the Best Practices are good examples to illustrate a model for sustainable development.

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<sup>63</sup> Based on the interview in Morocco and Jordan, including the interview with EU

### **(3) Importance of institutional reform, as well as establishing a system which can operationalize the new institution**

In many BMENA countries, the TVET sector is supervised by several different ministries and has a structure where it is difficult to formulate and implement a comprehensive policy. On the other hand, Egypt and Jordan have conducted an institutional reform and succeeded in establishing a new institution that coordinates and oversees a whole TVET sector, through technical and financial assistance by the World Bank and CIDA, respectively. The major issue for both countries is how to fully operationalize the new institution.

It is therefore important to: i) establish an institution that can comprehensively oversee the TVET sector and can formulate and implement its policy; and ii) once established, can fully operationalize the institution. This is where technical support is essential.

This support would be more appropriate in the countries of Group 2 as they have diversified industrial structures, have stable and clear TVET policy, and so far have taken certain actions in the TVET sector.

### **(4) Strengthening awareness campaign to enhance the status of TVET sector**

Governments tend to strengthen the TVET sector to further activate the national industry and economy, whereas, people still tend to prefer academic education (ordinary high school, community college and university) to TVET, which is regarded inferior to the former. There is a general tendency regarding the background social situation that those students who gain good marks will continue academic education, and those who do not will go into the TVET sector. Therefore the TVET sector tends to have difficulty in producing personnel with excellent skill levels<sup>64</sup>.

If governments would like to continue strengthening the TVET sector at national level, they should revise the balance between ordinary academic education and TVET, and conduct an awareness campaign including the view on occupations and working ethics, then get involved in uplifting of social status of the TVET sector, particularly targeting young people who will seek jobs. It is important, through these processes, to create the cycle of gathering human resources of high potential to the TVET sector and after a certain period of training, connecting them to the labor market.

This could be applied especially to the countries of Group 1, which needs to diversify industries and train their people to work in the various industrial sectors; it is also important for the

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<sup>64</sup> Based on hearing survey in Egypt, Morocco and Jordan

countries to change work ethics and views on occupations to allow their nationals to work not in limited sectors but in various industrial sectors.

**(5) Importance of support that contributes to expanding labor market: modernization of the management towards more competitiveness**

One of the structural problems is that the capacity of labour market to accept workers is small compared with the size of the working population. It is essential to consider how to expand the labour market itself, otherwise the effect of economic recovery and TVET sector reform cannot be seen.

In order to allow this, there could be two possibilities. In addition to the implementation of industrial promotion policy including foreign capital injection and trade enhancement, one option is to train the poor to be small-scale entrepreneurs in the informal sector (for example in artisanal handicraft making). The other option is to strengthen the higher education level program of marketing and management. Graduates from this program could lead to the enhancement of the labor market in the medium and long run, by contributing to international competitiveness in goods and services. In many BMENA countries, most companies of the private sector are SMEs. It could be regarded as important to support these SMEs to modernize production processes, which would result in their expansion in size and improved productivity.

If some countries, where the remittance from nationals working abroad is important to the national economy, intend to continue the current policy to support nationals working abroad (despite it possibly hampering their own country's development), it may be important to offer the opportunity to obtain internationally-recognized qualifications. For example, Don Bosco Vocational Secondary School provides students with a qualification that is accredited in Italy with some graduates actually finding jobs in Italy.

This can be applied particularly to the industries of countries in Group 2 who regard it as urgent to strengthen competitiveness through making management efficient under FTA, and enhancing productivity and improving quality of products and services.

## **5.2.2 Group 3 and Group 4**

**(1) Importance to support the poor in the framework of TVET**

As was suggested in Section 5.1.3, it is one of the tasks of the TVET sector to strengthen training by targeting youth and the poor to reduce poverty and promoting entrepreneurship. This training can provide them with a certain professional skill and introduce them to labor

markets or can help them to set up small businesses in the informal sector. These activities could contribute to reducing social problems and to expanding the labor market in the medium and long runs.

In Morocco, there are two distinct categories in the TVET sector; one is the ordinary TVET under OFPPT, and the other is run by Entraide Nationale to enhance living standards targeting poor people and young dropouts. In Egypt, there is the Social Fund for Development supporting poor people in enhancing living standards as part of activities targeting socially vulnerable people for poverty reduction. It should be regarded as equally important that the poor and socially vulnerable people be targeted to reduce poverty at the national level in the framework of TVET as occurs under the ordinary TVET activities.

As for the countries and area of Group 4, it is essential to plan TVET in careful consideration of the current national situation and policies.

## **(2) Importance of enhancing access to basic education (primary education)**

It has been proven through national and international studies on education that literacy provides an indispensable capacity to uplift the living standard. To obtain more effective outputs from the training, which enables improved living standards as described in (1) above, literacy is a necessary condition to make training more effective. There is a close relationship between literacy rate and enrolment rate at the basic education level.

Regarding the literacy rate of the countries of Group 3, the record of Mauritania is 41.2%, Yemen 49%, Pakistan 41.5%, all of which are relatively low. In terms of net enrolment ratio (2001-2002) at basic education level (primary education), Mauritania is at 67%, Yemen 67%, and Djibouti and Comoro (whose records of literacy rate are unknown) are 34% and 55%, respectively. These are quite low in comparison to the countries of Group 1 and Group 2, most of which are around 80% to 90%. From the viewpoint of EFA achievement, improving enrolment ratios among these countries is a pressing issue. For the countries and area in Group 4, the literacy rates and enrolment ratios in all countries and regions except for Palestine and Sudan are unknown<sup>65</sup>.

Therefore, in order to make the activities outlined in (1) above effective and efficient in the medium and long term, it is indispensable to strengthen basic education (an intellectual and mental backbone), especially in the countries of Group 3. Enhancing access to primary schooling is an urgent issue and there should be strong political commitment to allocate budget to improve basic education and training primary school teachers, etc. For the same reason,

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<sup>65</sup> From the Macro Data of the Report

Group 4 countries and area need to improve the basic education sector in order for the TVET sector to be strengthened in the next stage.

### **5.2.3 For All Groups**

#### **(1) Introduction of monitoring and evaluation system at school level**

As described in Chapter 3, the problem of the M&E system seriously affects the quality of education. This is where the Japanese cooperation approach can make the most of its experience to solve the problem. This type of cooperation is supposed to contribute to securing quality of the TVET sector.

Development of the employment support system at school level can also contribute to designing programs that are relevant to labour market needs, further strengthening the tie with the private sector.

#### **(2) Directions from gender perspective**

As discussed in Chapter 3, in some BMENA countries the TVET schools/centers are divided into male and female schools; in Saudi Arabia male and female schools are supervised by different ministries<sup>66</sup>. Male and female schools offer different program contents, reflecting social and cultural backgrounds. As a result, this situation might narrow the choice of occupation among girls and might become an obstacle in expanding the labor market.

To cope with this problem, it is essential to diversify the program contents at female schools in the TVET sector. This should be done in careful consideration with the social and cultural background of the countries, in order to develop their country both economically and socially, and to reduce poverty and to promote self-reliance of women.

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<sup>66</sup> Male education is supervised by GOTEVOT and female education by GPGE.









