



## Meeting Report

# Regional Workshop on the Role of Education and Training in Sustainable Development

Manama, Kingdom of Bahrain  
19-21 September 2005



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# Organisation of the Workshop

## Introduction

The UNESCO International Expert Meeting on "Learning for Work, Citizenship and Sustainability" held in Bonn, Germany, from 25th to 28th October 2004, aimed at reviewing and evaluating the extent to which Technical and Vocational Education & Training systems have developed at the national, regional and international levels since the Second International Conference on Technical and Vocational Education, which was held in Seoul, Korea in April 1999. The meeting also focused on the UNESCO-ILO recommendations with regard to Learning and Training in the field of Vocational and Technical Education in the 21st century, and on the importance of developing this type of education to support the issues of development, citizenship and life.

The Experts Meeting also considered the crucial role Education and Technical and Vocational Training can play as a tool to realize the objective of development in the 21st century (UN, Sep 2000). Participants also declared that the current decade (2005-2014) is the United Nations Decade of Education for Sustainable Development with its social, economic and environmental aspects.

In 1994, the Kingdom of Bahrain hosted the United Nations Regional office for Development Programmes. That year was land marked with the starting off of Technical and Vocational Education and Training programmes in the Arab Region, and the formulation of UNEVOC network, which includes 40 educational and training institutions in the Arab countries. This had an outstanding effect on increasing the interest of the Arab States in environmental issues and giving these issues priority as a main part of their educational and training programmes. These countries have been working hard on enhancing awareness of the different sectors in their societies on the extent of positive effect the environmental aspect has on both the social and economic dimensions of Sustainable Development.

The United Nations World Decade of Education for Sustainable Development (2005-2014) was launched on January 1st, 2005. In response to that, and to help in the promotion of the decade, UNESCO, represented by the UNESCO Regional office for Education in the Arab States-Beirut and the Doha office, the International Center for Technical & Vocational Education in Bonn, and in coordination with the United Nations Regional Office for International Programmes and the Ministry of Education (UNEVOC Centre) held a workshop on the "Role of Education and Training in Suitable Development". Delegates from most Arab States took part in that workshop, which was hosted by The Ministry of Education in the Kingdom of Bahrain at the Centre of Excellence at Sheikh Khalifa Institute of Technology, during the period from 19th to 21st September 05.

## Objectives and Main Themes

The workshop aimed at:

1. Reviewing national as well as regional policies with regard to the incorporation of Sustainable Development issues in educational and training programmes, with emphasis on the social, economic and environmental aspects, and the necessity for joint work programmes between the different institutions and states.
2. Sharing expertise between the participating countries and institutions with regard to how to overcome the anticipated problems and obstacles that might be encountered in the process of incorporation.

Cooperation and coordination are necessary for the realization of Sustainable Development in the educational and training institutions and work sites.

3. Enhancing the pioneer role of the institutions and UNEVOC Network Centers to participate efficiently in the activities leading to the promotion of the United Nations Decade of Education for Sustainable Development, (2005-2014).
4. Supporting cooperation and coordination between educational and training institutions and the sectors of industry and production with regard to the issues of sustainable development.

The main themes of the workshop were:

- > Models of national, regional and international policies with regard to social, economic and environmental aspects of sustainable development and their impact on the prosperity of individuals and societies.
- > Presentation of pioneer experiences in the field of Education and Training programmes, which are oriented towards comprehensive development and conserving the environment at work, at production sites and in our every day life practices.
- > Proposed programmes and projects (work plans) to activate and enhance the role of the national and regional educational, training and industrial institution in realizing Sustainable Development.
- > Suggested mechanism to carry out programmes and plans in the participating countries (the public and private sectors as well as the social services establishments).

## Documents of the Workshop

The Organizing Committee entrusted a group of Arab experts (representatives of the UNEVOC Network in the Arab States) with the preparation of the Workshop's working papers that include:

- > The Role of Education and Training in Sustainable Development in the Middle East - the Social Dimension, Dr. Mohammad Jabir Ali, Iraq.
- > The Role of TVET in Sustainable Development in the Maghreb - The Economic Dimension, Dr. Jilani Lamloumi, Tunisia;
- > The Role of Education and training in Sustainable Development in the Arab Gulf States - the Environmental Dimension, Dr. Abdallah AmboSaeedi, Sultanate of Oman.

The representations of UNESCO (Beirut and Doha Offices as well as UNESCO/UNEVOC Center in Bonn) also reported on the TVET programmes of action and on the activities of the United Nations Decade of Education for Sustainable Development (2005 - 2014).

As for the representatives of Arab States/UNEVOC Networks they were requested to prepare national reports on the main topics of the workshop in order to promote the exchange of expertise among participants. Reports were therefore submitted by: Algeria, Bahrain, Egypt, Iraq, Jordan, Lebanon, Mauritania, Morocco, Oman, Saudi Arabia, Sudan, and Tunisia.

## Participants

Thirty five (35) specialists and experts in the field of education and training participated in the workshop. They represented the following Arab states and international agencies:

Jordan - Tunis - Bahrain - Algeria - Saudi Arabia - Syria - Sudan - Iraq - Oman - Lebanon - Egypt - Morocco - Mauritania - UNESCO (UNESCO Regional Office for Education in the Arab States (Beirut) - UNESCO - UNEVOC International Center (Bonn) - UNESCO office in Doha.

Participants' expertise and the institutions they belonged to varied to include UNEVOC establishments and centers in the Arab Region - Ministries of Education - Ministries of Labour - Ministries of Higher Education - Universities (Colleges of Education, Science and Teacher Training) - Public & Private Educational institutions concerned with Technical Education and Vocational Training - industrial companies - organizations involved in the environmental issues.

A noticeable characteristic of the workshop is the comparatively high number of female participants, (12 females = 34%), who hold administrative & Technical posts in Educational and Training institutions in the Arab Region. Bahraini Representatives from governmental and non-governmental sectors specialized in education, training, development and environmental issues actively participated in the workshop.

## Opening of the Workshop

The Workshop was started with recitation from the holly Qur'an. Then the workshop was declared open under the patronage of His Excellency Dr. Majed Bin Ali Al-Nuaimi, the Minister of Education, on Monday 19th September, 2005.

On behalf of his Excellency the Minister of Education, Dr. Majed Bin Ali Al-Nuaimi, the first speaker was *Dr. Hussain Bader Al-Sada*, Secretary General of the Ministry of Education who welcomed the participants and referred to the support of the Cabinet in hosting the workshop due to its importance at the national and regional level. He also emphasized the role of education and training as two effective tools in the development of the society and achieving sustainable development. He added that investment in human resources development and preparing individuals for lifelong education is a top priority in the Kingdom of Bahrain. He pointed out that entering the international world of work and production has created new challenges for education to unavoidably face. New concepts are to be adapted to transfer the society from traditional practices to the world of building up knowledge to cope with globalization and the revolution in telecommunication and information technology. He emphasized the role of education and training for better sustainable life. At last Dr. Hussain wished the participants a good stay in Bahrain, and their workshop all the success.

**Dr. Sulieman A. Sulieman**, representative of the UNESCO Regional Office for Education in the Arab States (Beirut), conveyed the regards of the Director of the UNESCO Office in Beirut, Dr. Victor, who wished the participants all the success to achieve the objectives of the workshop. Dr. Sulaiman thanked the Kingdom of Bahrain, the Ministry of Education and Sheikh Khalifa Institute of Technology for hosting the workshop. He then spoke on the special peculiarity of the workshop as it came at the beginning of the United Nations Decade of Education for Sustainable Development with its economic, environmental and social aspects. Dr. Sulaiman praised the high spirit of responsibility and participation of the countries of the Region. He also thanked the representatives of these countries for the working papers they presented.

**Ms. Karina Veal** conveyed best regards to all participants from Mr. Rupert Maclean, the Director of the UNESCO- UNEVOC International Centre. Then she spoke about TVET for sustainable development as the notion of developing students so that they are capable of being involved in the creation of a better society, by developing their responsibility for the future of humanity and the quality of life for further generations.

She explained that the most common definition of Sustainable Development comes from the World Commission on Environment and Development 1987 (known often as the Brundtland Report) "development that meets the needs of the present without compromising the ability of future generations to meet their own needs." She added that there is, commonly, some notion of values and improvement implied in the various statements and definitions for sustainable development. And again, from the same report "Sustainability refers to the integration of environmental, economic and social considerations in the development that optimises human and natural welfare and integrity for present and future generations."

At the most basic level this is, of course, obvious: all countries want development, because this implies improvement; and they also want development that is long term and therefore *sustainable*.

The challenge, internationally, is how preparation for work can effectively equip people with the knowledge, competences, skills, values and attitudes to become productive and responsible citizens and contribute to sustainable societies.

Then Ms Veal highlighted the United Nations active involvement over some years:

- > First UN Conference on Human Development in Stockholm in 1972;
- > 1992 Earth Summit in Rio de Janeiro;
- > 2002 Earth Summit in Johannesburg;
- > 2005 United Nations World Decade of Education for Sustainable Development (2005–2014) launched in New York, March 1st;
- > UNESCO nominated as lead agency for Decade;
- > 2005 International Implementation Scheme discussed at UNESCO, September;
- > UNESCO-UNEVOC to play a role regarding the contribution of TVET in Sustainable Development.

The objectives of the Decade are to: facilitate networking, linkages, exchange, and interaction among stakeholders in ESD; foster an increased quality of teaching and learning in Education for Sustainable Development; help countries make progress toward and attain the Millennium Development Goals (MDGs) through ESD efforts; and to provide countries with new opportunities to incorporate ESD into education reform.

Education systems (including TVET) need to adapt and change to meet the challenges associated with sustainable development. It is important to adopt a transdisciplinary, holistic approach to education for sustainable development. A number of possible strategies were identified at the Bonn Experts Meeting, October 2004, and these can be taken up, as needed, by regions or individual Member States.

Finally Ms. Veal stressed on the need to educate the whole person, not just the worker. There is a need not only to educate the hand, but also the head and, perhaps most importantly, the heart.

## Procedural Session

The procedural session was managed by Mr. Nasser Moh'd Al Shaikh, Director of Intermediate and Secondary Education, who warmly welcomed the participants and requested them to introduce themselves and the countries they represented. Then the workshop programme was reviewed and approved as shown in Annex 3. Mr. Hasan Saleh Mubarak, Head of Technical Education in Bahrain, was nominated as the General Rapporteur for



the workshop meetings. Participants also approved the formulation of the three working groups and the coordinators and rapporteurs of the working groups were agreed on as follows:

Group A	Group B	Group C
Coordinator: Dr. Moh'd Krisht  Rapporteur: Mrs. Manar Alshawareb	Coordinator: Mrs. Latifa Al-Bunutha  Rapporteur: Dr. Moh'd Arabawi	Coordinator: Dr. Bader Al-Elaiwi  Rapporteur: Mrs. Mirvat Alhabrouk

## Closing of the Workshop

The final session was held at one o'clock on Wednesday 21st September, 2005. It was chaired by Dr. Sulaiman Awad Sulaiman, who thanked the kingdom of Bahrain for the facilities provided to hold the workshop. He also highly appreciated and praised the role of the Ministry of Education, the Directorate of Intermediate and Secondary Education, Technical Education Section and the Management of Shaikh Khalifa Bin Salman Institute of Technology for their support and the tremendous efforts they put to make the workshop a real success. After that the rapporteurs of the three working groups (A, B, C) were requested to present the outcomes of their working groups according to the topics and tasks assigned to them.

Reports were presented by the rapporteurs of the working groups as follows:

Group A: Ms. Manar Alshawareb

Group B: Dr. Mohammed Arabawi

Group C: Ms. Mirvat Alhabrouk

Then the general rapporteur, engineer Hasan Saleh Mubarak, was requested to present the general recommendations and the suggested steps which resulted from the working papers and the discussion of the three working groups. That was followed by a discussion which highlighted the following points:

- > The importance of identifying priorities of the issues raised.
- > To avoid integrating more than one recommendation into one point to guarantee giving appropriate importance and care to each of the proposed recommendations.
- > To focus on the differentiation between skills and knowledge
- > To give more consideration to attitude and behavior.
- > To take into account integrity when summarizing the outcomes of the working groups.

On behalf of the participants, Dr. Bader Bin Nasser Al-Aloliwi, the General Manager of Curricula Design and Development / GOTEVOT in the Kingdom of Saudi Arabia, gave a speech in which he thanked the Kingdom of Bahrain for the hospitality all participants felt and for the facilities provided by the Ministry of Education, the Directory of Intermediate and Secondary Education, Technical Education Section and the Management of Shaikh Khalifa Institute of Technology. He also praised and highly appreciated the efforts of all delegates and representatives of the UNESCO offices in Bonne, Beirut and Doha for their keen interest in achieving the objectives of the workshop. He stated that one of the distinguished features of the workshop was the cooperative-

ly high number of female participants (34%). This was considered high if compared with their participation in similar activities.

*Dr. Sulieman Awad Sulieman* extended thanks to the staff, who devoted themselves to providing distinguished secretarial, technical and administrative support and services throughout the workshop. He acknowledged the major role they played in making the workshop activities go on smoothly and successfully. Later on, an evaluation form on the technical and administrative aspects of the workshop was distributed, filled in by participants, and then collected by the organizers.

In a brief speech Ms. Karina Veal praised the distinguished organization of the workshop. She focused on the importance of adapting a transdisciplinary, holistic approach as a basic element of human resources development and education for sustainable development. She emphasized that this is crucial and as important as the acquisition of technical and scientific knowledge. She added that in all their meetings, organizations concerned with education focus on this aspect.

Mr. Hasan Saleh announced that the Public Relations Section at the Ministry of Education was going to organize a tour on Thursday 22nd Sep, 2005, for delegates to visit some of the landmarks in Bahrain including King Fahad Causeway and the National Museum of Bahrain to witness the ongoing development taking place in the Kingdom of Bahrain. At last he thanked all participants, hoped to see them in similar activities in Bahrain and wished them all the best and a safe journey back home.

## Technical Programme and Discussions

The following is a summary of the activities and the discussions which took place during the workshop, according to the approved programme-agenda.

### Day One: Monday, 19/09/2005

#### First Session (9:00 - 10:30)

Chairperson: Mr. Nasser Moh'd Al-Shaikh

Rapporteur: Mr. Hasan Saleh Mubarak

After a warm welcome to the audience, Mr. Nasser Al-Shaikh reviewed the working programme and timing of the session. Then he introduced Ms. Karina Veal, the consultant at UNEVOC International Center/ Bonne. Ms. Veal spoke about TVET for sustainable development as the notion of developing learners and trainees so they are capable of being involved in the creation of a better society, by developing their responsibility for the future of humanity and the quality of life for further generations. She also talked about the tremendous efforts made by UNESCO through the holding of workshops and meetings in different parts of the world to make the current Decade "the United Nations World Decade of Education for Sustainable Development" (2005 to 2014). This decade was launched in New York on 1st March, 2005 and aimed at orienting education towards sustainable development. Then Ms. Veal Summarized the active involvement the United Nations has had over some years:

- > First UN Conference on Human Development in Stockholm in 1972;
- > 1992 Earth Summit in Rio de Janeiro;
- > 2002 Earth Summit in Johannesburg;
- > 2005 United Nations World Decade of Education for Sustainable Development (2005-2014) launched in New York, March 1st;
- > UNESCO nominated as leading agency for the the Decade;
- > 2005 International Implementation Scheme discussed at UNESCO, September;
- > UNESCO-UNEVOC to play a role regarding the contribution of TVET to Sustainable Development

Dr. Sulieman A. Sulieman, Programme Specialist at UNESCO- Beirut, gave a detailed review of the development objectives of the 21st century with regard to education and Technical & Vocational Training. He focused on the importance of activating Technical and Vocational Education as a corner stone helping to solve many of the social, economic and environmental problems, which many societies encounter. He stressed on the role of Technical and Vocational Education in the holistic development. Dr. Sulaiman referred to the recommendation of ILO on the role of Technical and Vocational Education in enabling individuals to participate in realizing sustainable development through their work and other activities. Then Dr. Sulaiman defined the three aspects of sustainable development (social, economic and environmental aspects) and gave examples on each aspect as follows:

**The Social Aspect:** This is represented in respect to and acceptance of other cultures. Social Sustainability must achieve distributional equity, adequate provision of social services including health and education, genders equity, and finding suitable working atmosphere with distinguished interrelation and working within a group.

**The Economic Aspect:** The economic aspect involves the development of a better understanding of sustainable production and services and ways in which resources can be conserved and waste managed through recycling and reuse.

**The Environmental Aspect:** In this aspect focus is on how to use resources wisely and minimize waste and pollution. It is very important to incorporate environmental concepts in the field of Technical and Vocational Education and Training. This requires redesigning the curricula to include some units which promote the skills of critical thinking, field work and development of the concepts and situations which lead to the adoption of sustainable development.

## **Second Session (11:00 - 12:30)**

Chairperson: Dr. Jilani Lamloumi

Rapporteur: Ms. Manar Alshawareb

*In this session, two papers from Iraq and Bahrain were presented:*

- > The Social Aspect of Sustainable Development, Dr. Mohammed Jaber, Iraq
- > TVET Development in Kingdom of Bahrain, Eng. Hasan Saleh Mubarak Sulaibeekh

### **The Social Aspect of Sustainable Development, Dr. Mohammed Jaber, Iraq**

The first speaker was Dr. Mohammed Jaber Ali, Deputy Head of Alnahrain University in Iraq, who reviewed the role of Technical and Vocational Education in realizing Sustainable development. He focused on the general objectives of Technical and Vocational Education. He raised a number of queries with regard to the importance of tracing graduates, identifying an indicator for sustainable education, the link between social issues and educational institutions, evaluation of the effects and benefits of sustainable education and the role of follow up and effective planning. At last he launched a call for reform of the educational process.

Dr. Jaber referred to the reflection of sustainable education on the society through enhancing the role of educational institutions in spreading the culture of learning, and facilitating the acquisition of knowledge and providing consultancy. He stressed on the need for strengthening the relationship between the Technical and Vocational Education and the industrial sector, to the maximum, to give the opportunity for sustainable development and training.

He focused on the situation of sustainable education represented in the result of the joint projects in the Arab World and the suggested criteria to establish such projects, identifying the necessary requirements and facilities which further enhance the role of educational institutions in providing social services and the role of social institutions in providing training opportunities, as is the case in the experience of Saudi Arabia and the coupling experience in Iraq.

### **TVET Development in Kingdom of Bahrain, Eng. Hasan Saleh MubarakSulaibeekh**

The second speaker was Eng. Hasan Saleh Mubarak, Head of the Technical Education in the Kingdom of Bahrain. He elaborated on the role of the Technical and Vocational Education (Bahrain) in achieving sustainable development. He also focused on the objectives of Technical and Vocational Education and how these objectives are interpreted through the curricula and text books into factors and practices which directly affect the realization of the social, economic and environmental aspects of sustainable development. With regard to the impact of Technical Education and Vocational Training on achieving sustainable development, Mr. Hasan highlighted the following areas:

1. The positive effect of the implementation of Quality Awareness on improving Technical Education output in Bahrain, and consequently achieving positive impact on the social and economic aspects of sustainable development.
2. The development of the study plan which has been supported by modern up-to-date subjects which are directly oriented towards the achievement of sustainable development. These subjects are: "Problem Solving" - "Working with Others" - "Quality Awareness" - "Small Entrepreneur Projects".
3. The role of the Vocational Guidance System which is helping in achieving sustainable development by improving the Technical Education input as a result of attracting more students from Intermediate schools including distinguished graduates.
4. Taking into consideration the individual differences when streaming student to the routes and specializations that best suit their abilities, interest and aptitude. This helps a lot in motivating students to learn and succeed in the fields of study they join.
5. The "Work Placement Programme" which has been designed and implemented. This is a programme by which third year students are placed with industrial companies and institutions related to their field of specialization. They undertake specific training aimed at enriching their technical knowledge and preparing them for smooth transition to the labour market.
6. The follow up programme which has been started to trace Technical Education graduates. Feedback received is helping a lot in developing our educational programmes to meet the requirements of the labour market.
6. Further enhancing the relationship between Technical Education and the industrial sector. This relationship has been very fruitful and resulted in:
  - > Providing training opportunities for both teachers and students at many industrial companies;
  - > Acquainting the labour market with the standard of Technical Education graduates and the skills they are equipped with. This has helped a lot in directly giving employment to some of these graduates;
  - > Participation of the industrial sector with Technical Education in preparing the general framework of the Developed System which has been implemented in the Technical Education system schools.

To fulfill the needs of the industrial sector and the Bahraini Society, Technical Education has started the implementation of the HNC and HND programmes as well as some tailor-made programmes. These programmes are carried out by the "Center of Excellence for Technical and Vocational Education" which also provides specialized training courses for teachers and other social services programmes for the Bahraini community.

At Last Mr. Hasan spoke about prospective developments of Technical Education which will include the following:

1. Increasing the number of Technical Schools to meet the ever increasing demand on this type of education in Bahrain.
2. Starting the implementation of Technical Education programmes for females.
3. Further strengthening relationship and cooperation between educational establishments and the labour market.
4. Training students and teachers to acquire the concepts which help in realizing sustainable development.

### Third Session (13:00 - 14:30)

Participants then were split into three working groups (A, B, and C). The three groups were assigned the same task, to discuss the topic:

*"The Role of Education and Training in achieving Sustainable Development, to identify issues related to sustainable development, classify the suggested programmes according to their priority and state the mechanism that should be adopted to enhance cooperation and coordination."*

Guidelines for the work of the three groups were explained by Dr. Sulaiman Sulaiman from the UNESCO Office in Beirut.

Group A	Group B	Group C
Coordinator: Mohammed Krisht Rapporteur: Manar Alshawareb Participants: Munthir Alkayyali Hasan Saleh Mubarak Fareeda Esmail E'tidal Aldabbas Mazin Najeeb Mohammed Jaber Ali Sulieman Sulieman	Coordinator: Latifa Albnutha Rapporteur: Mohammed Arabawi Participants: Jilani Lamloumi Adel Ali Alarabi Boulhane Ebnat Bent Alkhalis Karina Veal Abdulraziq Ebrahim Manal al-Koheji	Coordinator: Bader Aloliwi, Rapporteur: Mirvat Alhabrouk Participants: Salah Al-Emadi Jameel Al-Saffar Susan Ajawii Alsheikh Magzoub Moh'd Ali Abdulla Ambusaid Tayseer AbdulAziz Mohammed Jawad

## Second day, Tuesday 20/09/2005

### First Session (8:30 - 10:00)

Chairperson: Dr. Bader Bin Nasser Aloliwi

Rapporteur: Dr. Alsheikh Almagzoub

Two papers were presented during this session:

- > The Economic Aspect of Sustainable Development–North African Countries, Dr. Jilani Lamloumi & Dr. Arabawi Moh'd

### **The Economic Aspect of Sustainable Development–North African Countries, Dr. Jilani Lamloumi & Dr. Arabawi Moh'd**

In this session Dr. Jilani Lamloumi, Director, ESST-Tunis presented and, in detail, the state of Technical and

Vocational Education in Tunis, Algeria and Morocco. He focused on the efforts being made by these three countries to orient education and Technical Education and Vocational Training to achieve sustainable economic development.

In the first part of the session, Dr. Lamloumi presented the Tunisian experience, starting with the establishment of Technical and Vocational Education Training and its development after independence. In 1993, this part of education became under the umbrella of the educational system. He then presented the development in the capacity of enrolment in the Vocational Training System, mechanism of implementation compared with the European systems, and the funding procedures being followed.

The second part of the session was on the Algerian experience. Dr. Lamloumi identified some of the challenges which Vocational Training encounters in Algeria, such as the high percentage of youth unemployment. The other challenge is that the Vocational Training System does not take into account the demography of the country. After that, he spoke about the training systems, their types and the mechanism of implementation through the presentation of statistical data showing the numbers of trainees in the public sector and the development in the number of institutions involved in Vocational Training. He also highlighted the role of the industrial institutions in supporting the efforts of the government in training and qualifying about one million of the youth. Finally, he acquainted the participants with the sources and mechanism of funding of Technical Education and Training programmes in Algeria.

In the last part of the session, Dr. Lamloumi spoke about the challenges and the difficulties which the society in Morocco suffers from. One of those problems is the centralization of the economic activities in the capital, and the incapability of competing internationally. Then focus was made on the government's efforts to:

- > improve the type of work by reviewing the educational system and the structure of the Vocational Education to ensure that the types of education available are capable of meeting the needs of the labour market.
- > promote the infrastructure and the institutional and administrative structure.

Statistical data were presented, showing the number of trainees at the initial stage and the limited funding resources for institutions concerned with vocational training.

At the end, Dr. Lamloumi referred to the efforts made in order to reform the routes of Technical and Vocational Educational Training (TVET) and the positive impact of that reform on sustainable economic development, which is represented in the following:

1. The quantitative and qualitative development in the different training programme provided.
2. Positive change in the prospective of the society towards Vocational Training.
3. Direct participation of the private sector in funding and implementing vocational training programmes.
4. Making training curricula more flexible and strengthening the link and coordination between the training institutions and the scientific research institutions.
5. Taking Into account the balance between the economic, social and environmental aspects of sustainable development throughout the training programmes.

Dr. Arabawi Moh'd, Inspector of Education and Training in Algeria, gave a brief presentation on the development taking place in the educational programmes in the Republic of Algeria. One of the most important developments is the government's July 2002 resolutions to overcome the obstacles which hinder the development

of the educational system which is part of the vast reform process. Those resolutions took into account national and international changes, political and economical developments and the revolution of information technology. All this has led to activating the role of educational and training institutions to achieve sustainable development. Recommendation stressed on:

- 1.The importance of exchanging educational expertise and researches on how to integrate trainees in the vocational system.
- 2.Providing precise description of the expressions related to sustainable development.
- 3.Providing educational materials to assist the teacher to perform efficiently and effectively.

*Dr. Alsheikh Almajzoub*, President, Technical Education Foundation, Ministry of Higher Education and Scientific Research in Sudan, spoke about the Technical Education and Vocational Training programmes in Sudan, and their role in achieving sustainable development in its economic, social and environmental aspects. He stressed on the boom in the Technical Education and Vocational Training after the establishment of a separate authority for this type of education in 2003, attached to the Ministry of Education and Scientific Research. Dr. Almajzoub presented data on the colleges and their locations in the states and provinces, their objectives and their role in all aspects of social development. He mentioned that colleges play a major role in female education. At last, he referred to the coordination and cooperation between the Technical Education institutions and the sector of industry and production in Sudan, and stressed on strengthening that link to achieve the objectives of Technical Education.

### **Second Session (10:30 - 11:30)**

The three working groups (A, B and C) continued their discussions to come out with their recommendation on the proposed programmes, the mechanism used to develop national, regional and international cooperation and coordination between the institutions interested in Technical and Vocational Education Training (TVET).

A field visit to Shaikh Khalifa Bin Salman Institute of Technology was arranged for participants, as part of sharing of experiences and programme development.

### **Third Session (12:30 - 13:30)**

Chairperson: Mrs. Mervat El-Habrouk

Rapporteur: Eng. Mazin Najeeb

There were two presentations in this session. The first was from Jordan and the second was from Lebanon.

The first speaker was *Eng. Munther Alkayyali*, Project Director, National Centre for HRD, Jordan. He presented his working paper on Joint Projects to Develop Technical and Vocational Education Training (TVET) in Arab countries as recommended by the Arab Experts Conference held in Amman 1 - 3 August, 2005. He mentioned that the current workshop on "Sustainable Development" was a step towards activating the recommendations of the "Arab Expert Conference". Eng. Munther talked about human resources development in the field of tourism. He pointed out that the Arab world is one of the most international tourism attractions and therefore the tourism industry should be a top priority in our training programmes. He also emphasized the need to develop the role of the private sector in the process of Technical and Vocational Education Training through:

- > Financial support;
- > Providing on-job-training opportunities;



- > Participation in carrying out appropriate educational and training programmes through the establishment of specialized specific councils in different fields;
- > Promoting the females participation in Technical and Vocational Education Training (TVET) and considering them as main partners in the social development. This can be achieved by giving females leading posts at the high administration and giving them a role in decision making and planning policies.

The second speaker was *Dr. Mohammed Hussain Krisht*, Director of Ali Alakbar Technical and Vocational Institute in Lebanon. He elaborated on the role of the private sector institutions in attaining sustainable development. He presented the experience of Almabarrat Charity Association in Lebanon. Dr. Krish put forward the objectives of Technical and Vocational Education which the association seeks to achieve, the routes followed to achieve those objectives through providing a variety of vocational levels of study. Then he talked about the latest development in techniques used in the Technical and Vocational Education Training. He focused on the importance of taking into consideration the Labour market needs when setting the contents of training plans, and the introduction of new specialization when developing Technical Education and Vocational Training to be in line with the requirements of the private sector. Finally, Dr. Krisht concluded his presentation with a number of suggestions on how to develop the Technical and Vocational Education Training in Lebanon.

### Third Day, Wednesday 21/09/2005

Chairperson: Dr. Mohammed Jaber Ali

Rapporteur: Eng. Munther Alkayyali

#### First Session (9:00 - 10:00)

The Environmental Aspect of Sustainable Development in the Arab Gulf Countries, Dr. Abdulla Ambusaidi

Dr. Abdulla Ambusaidi, Assistant Professor, Curricula and methodology, Sultan Qabus University, started off with a presentation on the environmental aspect and the effect of education and training on sustainable development. He gave a historical review to show the importance of the environmental aspect on the whole universe. He focused on the role of man as the main cause of environmental problems and the attempts made to find proper solutions to these problems.

Then Dr. Abdulla gave definitions of sustainable development, and the concepts of education and training. Then he gave an account of the international efforts to preserve the environment starting with 1992 First Earth Summit in Rio de Janeiro/Brazil, and then the Second Summit held in Johannesburg/South Africa in 2002, which ended with the adoption of the slogan, "Sustainable Development".

The speaker also referred to the national and international efforts which have been put to preserve the environment through the organization of conferences and seminars on environmental issues such as the conference on "Environmental Horizons" held in Muscat 17-18/6/2001 and the regional seminar on "Environmental Education" held in Dubai 28-30/4/2001. After that the speaker talked about the Arab regional efforts in achieving sustainability and gave some details on the components of sustainable development and emphasized the role of education in achieving it through:

- > Reviewing educational curricula;
- > Promoting the role of teachers; and
- > Considering the importance of work placement programmes (Field training).

The speaker then highlighted Oman's efforts in putting these trends into practice through:

- > Developing the curricula and programmes;
- > Employing modern technology and advanced computer programmes;
- > Concentrating on in-class and out-of-class activities;
- > Working in groups;

Integrating programmes related to the environment in the teaching plan such as the following:

- > Environmental tourism which has nothing to do with normal materials;
- > Field visits to exhibitions and museums as part of the study plan;
- > Adopting developed teaching techniques such as cooperative learning, role play, use of pictures and posters, and adopting comprehensive method of teaching courses (STSE - Science, Technology, Society and Environment);
- > Reconsideration of the elements of planning, practising and evaluation

Then the speaker presented some issues and explained how decisions are taken with regard to the environmental issues. He also stressed on the role of the teacher as a facilitator or a catalyst, and on the role of colleges in incorporating the concepts of sustainable development as basic compulsory course, as is the case in the Scandinavian and Baltic countries.

Dr. Ambusaidi spoke about Oman's effort in:

- > Giving both genders equal opportunities for education and employment;
- > Developing curricula and introducing economic concepts in mathematics courses;
- > Encouraging learning through individual and group projects;
- > Expansion in teaching information technology and English language;
- > Continuing to teach life skills for the first ten levels to cover the social, intellectual and Vocational aspects, time management, managing home affairs and acquaintance with citizenship and globalization.

The presenter then highlighted the educational development in some of the Gulf States. The first examples were from Bahrain, the implementation of the project of his Majesty King Hamad "The Electronic Schools", the development of the Technical Education and the project of "School stock Exchange and Investment Challenges" in Commercial Education. The second example was "the Teacher Development" in the United Arab Emirates through the implementation of a diploma programme in education, which is oriented towards the achievement of sustainable development. Then he made a comparison between the above mentioned efforts and those of Baltic countries and Finland and the tendency in Scotland and Denmark to train teachers on how to orient teaching towards sustainable development. He concluded the impact of training on the three aspects of sustainable development. The speaker then emphasized the necessity for partnership between the educational sectors and the social associations to achieve sustainable development and the strategies which might enhance this tendency. Dr. Abdulla ended his presentation with the following recommendations:

- > Concepts of Sustainable development should be adopted by decision makers;
- > Incorporating concepts of sustainable development in the curricula;

- > Enhancing the role of the national, social and voluntary organizations, and strengthening their link with the educational and economic sectors;
- > Inculcating values of voluntary work to be in parallel with, and supportive to governmental work. An example on this was "Environment Youth Organization in Angola".

Ms. Manar Alshawareb, started with a review of the situation in Jordan, focusing on the high percentage of unemployment. However, despite shortage in natural resources and the increase in population growth, the government spares no effort to overcome this problem through collaborative work of governmental and non-governmental institutions interested in human resources development, who work hard on providing training opportunities, financial support and loans for trainees of both sexes to start their own business. The speaker gave an example on these projects which was "Developing Education for Economic Knowledge" adopted by the Ministry of Education in Jordan.

Then Ms. Shawareb talked about the development of Vocational Education, which was implemented with international support from Canada, Germany and Japan, and aimed at qualifying the youth for work. Examples given on such projects were the:

- > National Training Project;
- > National Employment Project;
- > Clothes Making Project.

Then the presenter highlighted the efforts of the Vocational Training institution, which adopted the implementation of the Classification and Job Description System. She also spoke about the role of the non-governmental institutions and organizations such as the "River Jordan Establishment", which is concerned with providing training and job opportunities for females to promote the economic and social standard of families. Finally Ms. Shawareb presented her vision on:

- > The techniques of enhancing the role of educational and training institutions to achieve sustainable development, and the mechanisms that should be used to achieve that;
- > Proposed suggestions of implementation through the link between the prospective vision and the labour market needs.
- > Training the trainers;
- > Trying hard to accomplish economic and social stability;
- > Keeping educational and training programmes in line with the latest development in the technology used in the labour market;
- > Adoption of medium term planning by the Ministries and institutions concerned with human resources development.

Mrs. Ebnat Bint Alkhales, Mauritania, talked about the National and Educational Reform plan in Mauritania, which was aimed at supporting national achievements and developing the educational system. She mentioned that the development of education is very essential to achieve social development. For this reason the government spared no effort to :

- > Increase the number of students, especially girls, who join schools and continue with their study programmes;
- > Improve the quality of education and the administrative structure;

- > Decrease the gap between both sexes with regard to their right in education and employment;
- > Inculcate the values of citizenship and loyalty to the country;
- > Promote scientific research;
- > Work hard on providing the necessary requirements of sustainable development. This requires carrying out a comprehensive study to diagnose the appropriateness of both basic and higher education, identify the resources required for developing the educational system, emphasize on the suitability of the curricula used, encourage partners in development to work hard towards the achievement of objectives and reinforcing what has been achieved such as unifying the educational system, and continue with the meetings for discussing similar issues;

The speaker then presented the structure of education (basic -Intermediate -Technical and Vocational), and the role of teacher training schools and the different vocational institution and the availability of school buildings. He highlighted the role of the non-governmental organizations and private education in training programmes, which aim at qualifying and assimilating certificate holders and giving employment to the labour force. At last she talked about the financial needs and social requirements.

## Second Session (10:30 - 12:00)

Chairperson: Dr. Alarabi Boulhane

Rapporteur: Eng. Hasan Saleh Mubarak

Three papers from Egypt, Saudi Arabia and Bahrain were presented.

The first speaker was *Mrs. Mirvat Alhabrouk*, Consultant, Technical Education and Training/MOE - Egypt. She spoke about the mechanism of cooperation and coordination between the educational and training institutions and the sectors of development and production, especially in the light of transfer towards market economy. She explained that it was not possible for the educational sector to provide the skills required by the field of work without the actual responsible participation of the institutions in the labour market, especially the big private companies. These institutions can support the sector of education through their participation in identifying skills according to their priority, providing technical information, taking part in managing the governmental training centers, giving students the opportunity for training on developed technology and funding educational activities.

Then *Mrs. Alhabrouk* talked about the efforts made with the support of the European Union to develop the policies and techniques used in preparing the labour force. She added that the process of development started with training the trainers, finding the proper well equipped training institutions, formulating curricula with adequate flexibility to allow for regular review as per criteria and standards which can be easily measured and evaluated.

The speaker then presented the strategies by which the quality of training can be improved, based on specific criteria and away from centralization. She added that to achieve good results, the following elements should be available:

- > Comprehensibility and flexibility;
- > Availability of proper evaluation and follow up tools.

*Mrs. Alhabrouk* then elaborated on the concept of training under decentralization, the requirements for implementing such training programmes, the importance of linking training with social participation, which includes associations (unions), the media, parties and local councils and businessmen.

The speaker ended her presentation with a real experience on training in the light of decentralization, which was implemented in Qina district and with actual social participation. She finally mentioned those who participated in the training programmes, the measures taken for funding, the relationship between this new system and the centralization system, and finally the tools of evaluation and follow up.

The second speaker was *Dr. Bader Bin Nasser Aloliwi*, the General Manager of Curricula Design and Development, GOTEVOT, who spoke about the experience of the Kingdom of Saudi Arabia in the field of Technical Education and Vocational Training. He presented the objectives of the organization, its sites which are more than 450 institutes and centers located all over the country. Dr. Bader then spoke about the link between Technical and Vocational Education Training and the educational ladder, how National Vocational Standards are prepared, the development of training programmes, and the importance of using effective methods and procedures, which are not costly and giving quick result, to equip trainees with real skills to enable them to succeed in their future career.

The speaker then presented what has been accomplished with regard to the preparation of Vocational Standards which have become 220, in addition to 1000 training packages. He then explained how members participating in the specialized committees and in the groups identifying skills are selected, the procedural steps followed in preparing the National Vocational criteria, the role of institutions and companies in preparing training programmes, how training programmes are carried out through technical colleges and Vocational Training institutions and their role in developing the working force, and providing the requirements of the training units to meet the needs of trainees.

Dr. Bader then presented the joint training programmes which are, in addition to the GOTEVOT, implemented by the Chamber of Commerce, the private sector and Human Resources Development Fund. Then he highlighted the programmes carried out by the Military Vocational Training Programme and the participants in the implementation of those programmes. At last, Dr. Bader acquainted the audience with the general structure of the National Framework for Vocational Qualifications and the routes leading to obtaining those qualifications, and the role of GOTEVOT in designing and developing the curricula within the Vocational Training System.

The third speaker was Mrs. Suzan Ajawi, the Senior Environment Specialist at the Environment Assessment and Planning Directorate, Kingdom of Bahrain Public Commission for the Protection of Marine Resources, Environment and Wild Life. She presented aspects of the international concern with regard to sustainable development, through the commitment of the world leaders in 2005 to work hard in order to achieve the eight objectives of the 3rd millennium, which have been linked to fixed deadlines. Countries all over the world will try their best to achieve these objectives by 2015. The speaker added that Education for sustainable development is one of these objectives, because education has a direct role to play in realizing sustainable development. Students spend 12 years in education, which is the first source from which they acquire the necessary skills and knowledge that help them to face the changes in the world around them. She said that Technical Education and Vocational Training is also a cornerstone for each of the development objectives of the 3rd millennium. Therefore, all parties concerned with Technical Education and Vocational Training should include the following concepts in their curricula to realize the required environmental aspects, and hence realize the principle of orienting education towards sustainable development:

- > Enriching the curricula, practically and theoretically, with the environmental aspect of sustainable development;
- > Encouraging students to adopt the concept "Cleaner Production" in their field of specialization and when preparing their graduation projects;

- > Enhancing awareness of the value of consumable resources, the importance of recycling waste and getting rid of it in a safe environmentally sound method;
- > Helping students to acquire the skills, knowledge, competencies and the values which make them aware of their responsibility in realizing sustainability to their societies; Encouraging critical thinking in the programmes and the curricula used. Awareness of the importance of partnership. It is crucial for the different social sectors to reorient education and Technical and Vocational Training towards sustainable development.

## Working Groups

Participants were split into three working groups according to the workshop programme. A Coordinator and a Rapporteur were nominated for each Group. Groups discussed the specified topic (the Role of Education and Training in Sustainable Development) and listed the main issues according to their priority and their importance with regard to the economic, social and environmental aspects of sustainable development. Then they suggested proposed programmes to achieve sustainable development.

## Field Visits

The field visits were part of sharing technical and cultural experiences, which included:

- > Shaikh Khalifa Bin Salman Institute of Technology;
- > King Fahad Causeway;
- > The National Museum of Bahrain.

On the second day (Tuesday, 20/09/2005) and in response to the invitation from Engineer Hasan Saleh Mubarak, a field visit was conducted (from 11:30 to 12:30) to the theoretical and practical section at Shaikh Khalifa Bin Salman Institute of Technology, where the workshop was held. The institute which is a landmark of Technical and Vocational Education Training was officially opened in April 2005. Participants had the chance to visit the Mechanical, Electrical and Electronics Engineering workshops, in addition to the Printing Technology Section and the Computer Technology Section. The tour also included the Centre of Excellence, which was established at the institute with the technical support from the UNESCO. It aims at strengthening links with the Bahraini society and the industrial sector through the implementation of many community services programmes in different fields of practical applications, and carrying out some of their proposed training programmes. The center will host many local, regional and international conferences, seminars and workshops related to Technical and Vocational Education Training, in coordination with the UNESCO and other similar centers of excellence. This workshop on "The role of Education and Training in Sustainable Development" is the first activity of the center at the regional level. At the end of the visit the delegates were impressed and expressed their appreciation of the outstanding prospects and the latest in machines, simulators and technological laboratories available at the institute.

On Thursday 22nd September 2005, the Public Relations Section at the Ministry of Education organized a tour around Bahrain, where delegates visited some of the famous places in Bahrain including King Fahad Causeway and the National Museum of Bahrain.

## Results and Recommendations

### Results of Working Groups

The outcomes of the meetings and discussions of the three Working Groups (A, B, C) are indicated in the following table: **Main issues, Priorities, Proposed Programmes, and Mechanism of Cooperation and Coordination**

Elements		Working Groups			Extent of importance with regard to the three aspects of sustainable Development		
Nr.		A	B	C	Economic	Social	Environmental
	<b>Main Issues</b>						
1.	Linking educational curricula to the labour market needs	✓	✓	✓	***	**	**
2.	Finding fundamental solutions for the problem of unemployment	✓		✓	***	***	*
3.	Starting Technical Education and Vocational Training for Females	✓		✓	***	***	*
4.	Changing the prospective of the society towards Vocational Training		✓		**	***	*
5.	Environmental pollution and excess consumption of natural resources		✓		***	***	*
6.	Life skills		✓		***	***	**
7.	Increasing interest in the standards of training and qualifying technical teachers and trainers			✓	**	**	
	<b>Priorities</b>						
1.	Study of the labour market and needs	✓			***		**
2.	Representation of all sectors when setting a development plan	✓			**	**	***
3.	Spread of the social and environmental culture	✓	✓			***	
4.	Concentration on practical aspects	✓			**	**	
5.	Availability of flexibility in the curricula	✓			***		**
6.	Regular review of the curricula.	✓			**	**	
7.	Concentration on innovation and creativity	✓			***	***	**
8.	Interest in vocational health and safety.		✓		***	***	**
9.	Enhancing everlasting self learning	✓			*	*	*

Elements		Working Groups			Extent of importance with regard to the three aspects of sustainable Development		
Nr.		A	B	C	Economic	Social	Environmental
10.	Originating continuous training plans for trainers to cope with development.		✓	✓	**	**	*
11.	Activating the role of females in Technical Education and Vocational Training			✓	**	**	*
<b>Proposed Programmes</b>							
1.	Study and analysis of the available data, making a comparison to provide specific information on the labour market.	✓					
2.	Producing criteria for regular evaluation of curricula			✓	**	**	*
3.	Setting a distinguished financial cadre for trainers of Vocational Education				**	**	**
4.	Setting criteria to firmly control the process of selecting the trainers for Vocational Education				***		
5.	Designing programmes to enhance self learning	✓			***	**	*
6.	Giving incentives to innovators		✓	✓	**	**	
7.	Expansion in specializations for females				***	***	
8.	Introducing courses on "small Entrepreneur Projects" in the curricula and plans of both Tech. Education and General Education.		✓		***	**	*
9.	Keeping and providing the necessary data on the national labour force and incoming labour force.				***	**	
10.	Designing training units on the skills of incoming labour force in the labour market.				**	**	*
<b>Mechanism of Coordination and Cooperation</b>							
1.	Carrying out a field survey and establishing data base on labour market requirements	✓	✓	✓	***		
2.	Generating criteria to evaluate curricula through specialized committees		✓	✓	**		



Elements		Working Groups			Extent of importance with regard to the three aspects of sustainable Development		
Nr.		A	B	C	Economic	Social	Environmental
3.	Enhancing participation of the private sector in setting the standards of skills and training, identifying priorities, establishing training centres and providing technical information and funding	✓		✓	***	***	
4.	Setting criteria for evaluating trainers			✓	**	**	
5.	Giving regular incentives to reward trainers.		✓	✓	**	**	
6.	Holding practical and theoretical tests and personal interviews when selecting trainers			✓	**	**	
7.	Expansion in using electronic learning			✓	**	**	
8.	Holding Vocational Contests to encourage innovators.			✓			
9.	Establishing nurseries at the training sites to encourage mothers to join training programmes.			✓	***	**	
10.	Developing and activating cooperation with Arab, regional and international organizations.	✓	✓	✓	**	**	**
11.	Giving loan facilities for the youth (both genders) to start their own business.		✓	✓	***	**	
12.	Finding practical solutions to environmental problems		✓	✓	**	**	***
13.	Support of the media and supply of information on prospective professions for the youth		✓		**	**	*
14.	Establishing national agencies to solve the problems of unemployment.		✓		**	**	*

## General Recommendations

1. Adoption of the concept "Learning for Sustainable Development" by the Ministries of Education and Higher Education and the working force in the Arab states, and incorporating the skills and competencies stated in the UNESCO documents in the contents of the curricula and educational programmes.
2. Establishing a semi regional Supreme Council for the policies of education and Vocational Training to undertake the role of revising the current educational policies and setting new policies, developing curricula, qualifying teachers and trainers and giving females a fundamental role in this council.
3. Producing unified standardized criteria for occupational classification and job description, and working on unifying the procedures of certification and evaluation system.
4. Developing and activating cooperation and coordination among the institutions and the national, regional and international organizations with regard to the aspects of sustainable development.
5. Establishing real partnership between educational sectors and social institutions to work together on achieving the three aspects of sustainable development.
6. Reviewing teacher training on how to orient education towards sustainable development. Teacher training should be handled at two parallel levels, on job training and prior recruitment training.
7. Commitments to continuous with the promotion of the technical prospects, which enable Technical and Vocational Education Training establishments to work efficiently on equipping graduates with the suitable vocational skills required by the labour market, and hence support the economic, social and environmental aspects.
8. Using curricula and training packages with adequate flexibility to enable trainers to adapt with the ever changing requirements of the labour market.
9. Relating educational curricula and training programmes to the requirements of the labour market.
10. Equipping trainees with the basic vocational skills to prepare them for smooth transition to the labour market. This requires acquainting trainees with health and safety rules, problem solving techniques and how to work with others and within groups.
11. Establishing environment clubs and associations (environment friends) in the educational and social establishments.

## Evaluation and Follow-up

The following points represent the participants' overall view on the Workshop according to the distributed evaluation questionnaires/Forms) 25 forms:

### A. Advantages

1. Distinguished organization of the workshop activities.
2. Holding the workshop at the institute instead of a hotel.
3. Good choice of coordinators and rapporteurs for the meetings.
4. Distinguished hospitality
5. Acquaintance with the different experiences of the Arab countries.
6. Exchanging points of view and acquisition of new experiences.
7. Acquaintance with people and spread cultures.

8. Familiarity with new ideas and sites one can benefit from.
9. Raising points concerning technical education, which are not usually raised and discussed at the national level.
10. Compared with other Arab activities with other organizations, the workshop was a real success with regard to the high standard of the presentation and the number of working papers presented.
11. Participants' valuable contributions and queries and the positive atmosphere during the discussions.
12. The benefit obtained from the working papers presented in the workshop.
13. Good atmosphere for discussion and generating ideas.
14. An important technical and intellectual assembly.
15. Chance for correcting and adjusting some of the ideas and conceptions.
16. Having representatives from more than one of the UNESCO offices

## B. Disadvantages

1. Lack of criteria and inequity of time allowed for speakers to present their papers. Time allocation was subject to availability of the remaining time of each session.
2. Shortage of time allocated for speakers and for discussions.
3. Absence of concentration on sustainable development in some of the papers, which were merely territorial or regional reports.
4. The tendency of some speakers to read their papers instead of presenting them.
5. Absence of participation of some Arab countries in the workshop.
6. Unfamiliarity with the contents of the working papers, which should have been delivered to participants beforehand to study before being presented by speakers.
7. Low temperature in the meeting hall.

## C. Suggestions for Development

1. Holding a workshop on national standards which are based on competencies to develop Technical Education and Vocational Training.
2. Circulation of successful experiences in the field of sustainable development among all participating countries.
3. Holding a workshop on centralization and decentralization in Technical Education and Vocational Training.
4. Holding a workshop on environment preservation in the field of Technical Education and Vocational Training.
5. Identifying the topics of future workshop through a questionnaire sent to the participating countries.
6. Continuous communication between the members of the committees.
7. Follow up of the workshop outcomes.
8. Preparing a booklet including all workshop documents and sending it to all participants.
9. Extending the period of such workshops to give ample time for the presentation of papers and discussions.
10. To contact participants in good time before the workshop to give them enough time to prepare their papers properly using the PowerPoint.

## I: Speakers of the Opening

The speakers in the opening ceremony of the Workshop were:

1. H.E. Dr. Hussain Ben Abdallah Al-Sada  
Secretary General  
Ministry of Education  
Kingdom of Bahrain
2. Dr. Sulieman A. Sulieman  
Programme Specialist  
UNESCO Regional Office - Beirut
3. Ms. Karina Veal  
Consultant UNESCO - UNEVOC International Centre for  
Technical and Vocational Education and Training - Bonn

## Regional Workshop on The Role of Education and Training in Sustainable Development Manama – Kingdom of Bahrain, 19 – 21 September, 2005

### II: Programme – Agenda

Day & Date	First Session, 8:00 – 10:00	Second Session, 10:30 – 12:30	Third Session, 13:00 – 14:30	
Tuesday 20/9/2005	<ul style="list-style-type: none"> <li>&gt; Registration</li> <li>&gt; Opening under the patronage of his Excellency Dr. Majed Al-Nuaimi, the Minister of Education, Head of the UNESCO National Committee</li> <li>&gt; Short Reception</li> <li>&gt; Introduction of Participants</li> <li>&gt; Nomination of session chairs, rapporteurs and general rapporteur</li> <li>&gt; Adoption of the programme</li> <li>&gt; Presentation on the activities of UN World Decade of Education for Sustainable Development (2005-2014) national, regional and international levels.</li> <li>&gt; General discussion</li> </ul>	<ul style="list-style-type: none"> <li>&gt; Main Working Paper on "The Role of Education and Training in Sustainable Development" – (The Social Dimension)</li> <li>&gt; The experience of the Kingdom of Bahrain in "Developing Education and Training to Support Issues of Sustainable Development"</li> <li>&gt; General discussion</li> </ul>	<ul style="list-style-type: none"> <li>&gt; Round table meetings / working in groups to identify main issues, priorities, suggested development programmes and mechanism of work in the Arab area.</li> <li>&gt; Theme: "The Role of Education and Training in Sustainable Development", the Social, Economic and Environmental dimensions.</li> <li>&gt; Participants will be split into three groups (A, B and C). At the beginning of the session, groups will be briefed on procedure of work.</li> </ul>	
	Morning Break : 10:00 – 10:30		Noon Break: 12:30 – 13:00	
	<p>Chairperson: Mr. Nasser Al-Shaikh Rapporteur: Eng. Hasan Saleh Mubarak</p> <p>Speakers :</p> <ol style="list-style-type: none"> <li>1. Ms. Karina Veal</li> <li>2. Dr. Sulieman Sulieman</li> <li>3. Tayseer Abdul Aziz</li> </ol>	<p>Chairperson: Dr. Jilani Lamloumi Rapporteur: Ms Manar Alshawareb</p> <p>Speakers :</p> <ol style="list-style-type: none"> <li>1. Dr. Mohammed Jaber Ali</li> <li>2. Eng. Hasan Saleh</li> </ol>	<p>Groups coordinators : (A, B and C) Rapporteurs : (A, B and C)</p> <p>Participants</p>	

<b>Day &amp; Date</b>	Tuesday 20/9/2005		
<b>First Session, 8:00 – 10:00</b>	<ul style="list-style-type: none"> <li>&gt; Presentation of a main Working Paper on "The Role of Education and Training in Sustainable Development" (The Economic Dimension)</li> <li>&gt; Country reports from : Algeria – Sudan – Syria</li> <li>&gt; General discussion</li> </ul>	Chairperson: Dr. Bader Al-Aloliwi Rapporteur : Dr. Alsheikh, Almajzoub Moh'd	Speaker : 1. Dr. Jilani Lamloumi
<b>Morning Break : 10:00 – 10:30</b>			
<b>Second Session, 10:30 – 12:30</b>	<ul style="list-style-type: none"> <li>&gt; Continue round table meetings / working i in groups on the main issues, priorities, suggested development programmes and mechanism of work in the Arab area.</li> <li>&gt; Theme: The Social, Economic and Environmental dimensions of education, training and development.</li> </ul>	Groups coordinators : (A, B and C) Rapporteurs : (A, B and C)	Participants
<b>Noon Break: 12:30 – 13:00</b>			
<b>Third Session, 13:00 – 14:30</b>	<ul style="list-style-type: none"> <li>&gt; Joint projects for the development of education and technical and vocational training in the Arab countries.</li> <li>&gt; Role of private educational and training establishments in sustainable development. (The Lebanese experience)</li> <li>&gt; General discussion</li> </ul>	Chairperson: Ms. Mirvat Alhabrouk	Rapporteur : Eng. Mazin Najeeb Speakers : 1. Eng. Munthir Alkayyali 2. Dr. Mohammed Krisht

Day & Date	First Session, 8:00 – 10:00	Second Session, 10:30 – 12:30	Third Session, 13:00 – 14:30
Wednesday 20/9/2005	<p>&gt; Presentation of a main Working Paper on "The Role of Education and Training in Sustainable Development" (The Environmental Dimension)</p> <p>&gt; Country reports from : Jordan and Mauritania</p> <p>&gt; General discussion</p>	<p>&gt; Mechanism of cooperation and coordination between the educational and training establishments and the sectors of development and production.</p> <p>&gt; General discussion</p>	<p>&gt; Presentation of the rapporteurs of the three working groups on the results of round table meetings</p> <p>&gt; Presentation of the results of the round table meetings and discussions. (Groups A, B and C)</p> <p>&gt; Presentation of the workshop results and recommendations.</p> <p>&gt; Workshop evaluation and follow up.</p> <p>&gt; Closing of the workshop.</p>
	<p>Chairperson: Dr. Mohammed Jaber Ali Rapporteur : Dr. Mohammed Arabawi</p> <p>Speaker : 1. Dr. Abdulla Ambusaid</p>	<p>Chairperson: Dr. Alarabi Boulhane Rapporteur: Ms. Fareeda Esmail</p> <p>Speakers: 1. Ms. Mirvat Alhabrouk 2. Dr. Bader Al-Aloliwi 3. Ms. Suzan Ajjawi</p>	<p>Chairperson: Sulaiman Sulaiman Rapporteur: Eng. Hasan Saleh</p> <p>Speakers: 1. Group rapporteurs 2. The general Rapporteur 3. Ms. Karina Veal 4. Dr. Sulaiman Sulaiman</p>
Morning Break : 10:00 – 10:30			
Noon Break: 12:30 – 13:00			

**Notes:**

1. Session management was assigned to participants in turn.
2. Plenary sessions included reports which reflected the different experiences of the participating countries.
3. Coordinators of the three groups (A, B and C) were : Dr. Mohammed Krishit / Mrs. Latifa Al-Bunutha / Dr. Bader Aloliwi.
4. Rapporteurs of the three groups (A, B and C) were : Ms. Manar Alshawareb / Dr. Mohammed Arabawi / Ms. Mirvat Alhabrouk.
5. Second day programme included a field visit to different sections and units at Shaikh Khalifa Bin Salman Institute of Technology (12:00 – 13:00) .

## Regional Workshop on The Role of Education and Training in Sustainable Development

### III: List of Participants\*

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\* order of countries is according to Arabic alphabatics.



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