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**Economic and Social Commission for Western Asia (ESCWA)** 

#### **REPORT**

# EXPERT CONSULTATION MEETING ON PRIORITY SCIENCE AND TECHNOLOGY DOMAINS: ESTABLISHMENT OF THE ESCWA TECHNOLOGY CENTRE AMMAN, 6-7 NOVEMBER 2007

#### **Summary**

Science and technology have been addressed as priority domains for development in the member countries of the Economic and Social Commission for Western Asia (ESCWA). They have come to realize the need to couple science, technology and innovation (STI) policies with practical applications in order to gain tangible benefits, particularly with the advent of globalization. Additionally, the need for regional cooperation and integration in STI domains for socio-economic development has been recognized and addressed in numerous forums and conferences over the past decade.

The Expert Consultation Meeting on Priority Science and Technology Domains: Establishment of the ESCWA Technology Centre was held in Amman on 6 and 7 November 2007, and organized by ESCWA in collaboration with the Royal Scientific Society, the host institution.

The overall objective of the Meeting was to advance the ongoing process of designing, launching and, ultimately, establishing the ESCWA Technology Centre for Development. However, the immediate objective was to review and enhance a proposed report entitled "Detailed Assessment of Regional Needs and Priorities and Identification of Implementation Mechanisms", the improved draft of which will serve as input for discussion at the fourth meeting of the ESCWA Consultative Committee on Scientific and Technological Development and Technological Innovation (ESTIC), scheduled to take place in early 2008, prior to being submitted for endorsement at the twenty-fifth ministerial session in 2008. The Meeting was attended by a total of 25 participants, mainly experts in STI domains.

The Meeting recommended a number of enhancements and modifications to the body of the draft Report, particularly regarding the mission and objectives, technology priority domains and financing scheme of the Technology Centre. It concluded with a general consensus that establishing the ESCWA Technology Centre is relevant and necessary for the socio-economic development of the ESCWA region.

## CONTENTS

			Paragraphs	Page
Intro	ducti	on	1-4	3
Chap	oter			
I.	RE	COMMENDATIONS	5-6	3
II.	PR	ESENTATIONS AND DISCUSSION SESSIONS	7-22	4
	A.	The Report	8-10	4
	В.	Overview of regional needs and demands		5
	C.	Discussion and brainstorming sessions		6
III.	OR	GANIZATION OF WORK	23-31	6
	A.	Venue and date	23	6
	В.	Opening	24-26	6
	C.	Participants	27	7
	D.	Agenda	28	7
	E.	Evaluation	29	7
	F.	Documents	30-31	7
		ANNEXES		
I.	List	of participants		8
II.		of documents		11

#### Introduction

- 1. Member countries of the Economic and Social Commission for Western Asia (ESCWA) have been concerned with science and technology in development for a considerable length of time. They have come to realize the need to couple science, technology and innovation (STI) policies with practical applications in order to gain tangible benefits, particularly within globalization and knowledge management endeavours. That falls in line with a report by the Secretary General of the United Nations on promoting the application of science and technology in order to meet the Millennium Development Goals (MDGs), which particularly emphasized the role of technology in achieving those Goals. Additionally, the need for regional cooperation and integration in STI domains for socio-economic development has been repeatedly stressed in various forums and conferences over the past decade. That need was reflected by the adoption of resolution 254 (XXIII) on the establishing of the ESCWA Technology Centre (ESCWA TC) during the twenty-third ESCWA ministerial session in May 2005.
- 2. Resolution 254 (XXIII) was formalized on the basis of a pre-feasibility study on the establishment of a technology centre in the ESCWA region. The first draft of the Study was reviewed online by a virtual panel of experts (VPE) in 2006. The second draft was submitted for discussion at the third meeting of the Consultative Committee on Scientific and Technological Development and Technological Innovation (ESTIC), which took place at the UN House in Beirut on 6 and 7 March 2006. The enhanced Study was accordingly issued by ESCWA on 27 March 2006 and resulted in approval for the establishing of the ESCWA TC, as indicated in Resolution 274 (XXIV) adopted at the twenty-fourth ESCWA ministerial session held on 11 May 2006.
- 3. Following that, implementation of the special activities listed in annex II of the "Pre-feasibility Study: Establishment of the ESCWA Technology Centre for Development" was initiated as the work plan of the establishment process and, accordingly, Special Activity C was undertaken to produce a report entitled "Detailed assessment of regional needs and priorities and identification of implementation mechanisms". A second VPE was organized by ESCWA from 3 to 24 September 2007 to review and enhance the initial draft of that Report, and discussions took place by means of an online forum², leading to the formulating of a second draft.
- 4. On 6 and 7 November 2007, the Expert Consultation Meeting on Priority Science and Technology Domains: Establishment of the ESCWA Technology Centre was held in Amman. The Meeting aimed to advance activities towards designing, launching and establishing the ESCWA TC. However, the immediate objective was to review and enhance the second draft of the aforementioned Report with a view to present a final draft to serve as input for discussion at the fourth ESTIC meeting, scheduled to take place in early 2008. The final draft of the report will subsequently be submitted for endorsement at the twenty-fifth ESCWA ministerial session in 2008.

#### I. RECOMMENDATIONS

- 5. At the conclusion of the Meeting, the participants issued a number of recommendations regarding the content of the draft Report on the assessment of regional needs and priorities and identification of implementation mechanisms. They are set forth as follows:
  - (a) A mission statement should be included at the beginning of the Report;
- (b) Sectors to be addressed by the ESCWA TC should be clearly separated from the selected modalities of operation. On that point, the list of technology domains mentioned in the Report should be expanded to include information and communications technology (ICT) and energy, in addition to new and emerging technologies;

<sup>&</sup>lt;sup>1</sup> ESCWA, Pre-feasibility Study: Establishment of the ESCWA Technology Centre for Development (E/ESCWA/ICTD/2006/WP.1) (United Nations, New York, 2006).

<sup>&</sup>lt;sup>2</sup> The forum is available at: <a href="http://www.escwa.org.lb/divisions/ictd/etc/main.asp">http://www.escwa.org.lb/divisions/ictd/etc/main.asp</a>.

- (c) Lists and examples included for illustration purposes should be clearly indicated as such in the report so as not to be taken as exclusive indicators;
- (d) Action plans should, in due course, include realistic timelines, taking into consideration the actual status of the member countries;
  - (e) Division names should be modified within the organizational structure of the ESCWA TC;
- (f) Various financing schemes should be elaborated, as well as a backup plan in case full funding is not forthcoming. Accordingly, annual operational expenses should be separated from initial set-up costs in order to present donors with a more accurate estimation of the required budget;
- (g) Attention should be directed to the fact that the budget represents an average estimation, and that budget estimates will vary according to the cost of living in the host country and the overall proposed work programme;
- (h) ESCWA member countries should assist the Centre, which, in turn, should aid the member countries, particularly those in need of poverty alleviation and socio-economic development initiatives in order to achieve MDGs;
- (i) Once the ESCWA TC is launched, the start-up modality should take a holistic approach towards all proposed tracks versus a more specified set of services. However, whether fully or partially adopted, the holistic approach should be phased out over time, vertically and/or horizontally;
- (j) Though the focus of the Report on sectors where funding sources are available was deemed adequate, the ICT sector and latent needs should not be ignored when additional funding becomes available;
- (k) Efforts should be exerted in enhancing the marketing and promotional aspects of the ESCWA TC;
- (l) The amended Report should be translated into Arabic the soonest in order to distribute it to all participants and ensure a wider circulation.
- 6. It should be emphasized that all the recommendations stated above have since been taken into consideration by ESCWA in the finalizing of the Report.

#### II. PRESENTATIONS AND DISCUSSION SESSIONS

7. The Expert Consultation Meeting was essentially taken up by brainstorming and discussion sessions, allowing participants to contribute comments and suggestions on the content of the proposed Report.

#### A. THE REPORT

8. The proposed Report "Detailed assessment of regional needs and priorities and identification of implementation mechanisms" analyses the current status of the ESCWA region in terms of socio-economic needs and opportunities. It presents an overview of practices and modes of operation adopted by ESCWA member countries in such sectors as construction, agriculture and education. Although Arab countries in general, and ESCWA member countries in particular, have made considerable progress in those and similar sectors during the past fifty years, they have not yet achieved all their goals. In view that other developing countries with fewer resources and less opportunities have been more successful in their efforts, intervention is deemed needed.

- 9. Part of the mission of the ESCWA TC is to assist member countries and their public and private organizations in acquiring the necessary tools and capabilities to accelerate socio-economic development in order to attain technological parity with other nations and regions. The Centre will thus build upon the resources and human capital available through educational and welfare social policies in force during the past few decades. It will also highlight latent technological resources now embodied in industry that can be tapped through such applied methods as outsourcing and subcontracting. The ultimate objectives of the ESCWA TC can be listed as follows:
- (a) To increase employment, eradicate poverty and further the development of such technology sectors as agriculture, construction, energy and ICT;
  - (b) To contribute to the strengthening of national STI systems;
- (c) To develop capabilities in problem solving and policy formation with a view to accelerating the modernization of a number of sectors;
  - (d) To foster synergy and complementarity at the regional level in the application of technology;
  - (e) To support the attainment of MDGs through the transfer and acquisition of technology.
- 10. The Report covers a multitude of aspects and phases relating to the set-up and operation of the ESCWA TC in terms of administrative, organizational and financial needs. It sets forth the design of the Centre, its staff and scope of work. Attention is given to the importance of partnerships and collaboration with officials in the region to identify major systemic obstacles to technological development, and to design and disseminate policies and procedures whose adoption would contribute to overcoming those obstacles. Furthermore, benefits to the host country are also highlighted.

#### B. OVERVIEW OF REGIONAL NEEDS AND DEMANDS

- 11. The first session of the Meeting included an overview of the Report through four presentations. Mr. Hratch Kouyoumjian, ESCWA Information and Communication Technology Division (ICTD) consultant, explained the background and efforts exerted thus far in realizing the endeavour of launching the ESCWA TC, in addition to highlighting forthcoming activities and future plans.
- 12. Mr. Antoine Zahlan, ESCWA consultant, presented the basic concept and objectives of the ESCWA TC and the envisaged benefits for the region. Such sectors as the construction industry, agriculture and water, which are characterized with mostly basic and mature technologies, are often the focus of billion-dollar projects. It is thus suggested to tap into the possibilities and potentials of such domains to raise productivity and the gross domestic product (GDP) of the region as a whole. Once operational to its full potential, the ESCWA TC would yield immediate benefits and tangible results. To that end, experts and professionals with relevant experience should be hired.
- 13. Mr. Krishna Subramanian, consultant with the Asian and Pacific Centre for Transfer of Technology (APCTT), gave an overview of APCTT. Established in India by the Economic and Social Commission for Asia and the Pacific (ESCAP), APCTT has accumulated experience which can give a clear indication on what is to be avoided as much as what is to be pursued in establishing such a institution. One of the main concerns is the appointing of an executive director.
- 14. Mr. Sayfeddine Muaz, executive vice-president of the Royal Scientific Society (RSS), gave a presentation on cooperation and collaborative action in the ESCWA region, stressing the need of learning to work together as a recipe for success. He briefed the Meeting on the centres of excellence in the ESCWA member countries that could act as partners, or satellites, to the ESCWA TC. In addition, he presented the relevant activities RSS and its affiliated institutions are engaged in.

15. Following the first session, an in-depth PowerPoint presentation on RSS and the affiliated El Hassan Science City, which incorporates the RSS, Princess Sumaya University of Technology and the Higher Council for Science and Technology, was given by HRH Princess Sumaya Bint el-Hassan, RSS president.

#### C. DISCUSSION AND BRAINSTORMING SESSIONS

- 16. Prior to the technical sessions, the provisional agenda for the Meeting was presented and approved.
- 17. The four technical sessions of the Meeting were moderated concurrently by Mr. Yousef Nusseir, chief of ICTD, and Mr. Kouyoumjian, and were open for discussion and input by attending experts, with comments and suggestions recorded for subsequent consideration by ESCWA.
- 18. Most discussions evolved around the various sectors and domains, with recommendations being made to introduce suggested changes in order to clarify distinctions between modalities, domains and latent needs. Numerous discussions focused on the necessity of having an enabling environment to ensure the sustainability of the ESCWA TC, as proposed in the Report.
- 19. The importance of the host country/countries was brought up by many participants. In that regard, participants thought it was opportune to dedicate a section in the Report to that aspect.
- 20. In terms of financing, the importance of having a realistic budget from the outset, reflecting set-up costs and administrative and operational expenses could not be overemphasized, as seen from experiences of similar entities in other regions. The type of financing was also discussed, with suggestions including the setting-up of a trust or endowment fund, or opting for a participatory approach based on set activities. Part-financing could also be based on revenues from services to the private sector. It was noted, however, that the budget would be subject to in-depth analysis within Special Activity F of the Pre-feasibility Study, which calls for a detailed business plan to be elaborated.
- 21. Inquiries were made with regard to the link of the ESCWA TC to the United Nations. Explications were given and references were also made to the Pre-feasibility Study, in which the parameters of the relationship were presented.
- 22. Consensus was reached on the part of participants that establishing the ESCWA TC is relevant and necessary for the socio-economic development of the ESCWA member countries and the region in a globalized and competitive world. The participants noted that the Report is well structured and the objectives are feasible and viable, and they commended the efforts of ESCWA in spearheading the initiative.

#### III. ORGANIZATION OF WORK

#### A. VENUE AND DATE

23. The Expert Consultation Meeting on Priority Science and Technology Domains: Establishment of the ESCWA Technology Centre took place on 6 and 7 November 2007, and was hosted by RSS at its headquarters in Amman.

#### B. OPENING

- 24. The opening statement was delivered by Mr. Yousef Nusseir, chief of ICTD, on behalf of Mr. Bader al-Dafa, Executive Secretary of ESCWA, welcoming the participants and introducing the objectives of the Meeting. He thanked RSS for hosting the Meeting at their premises in Amman.
- 25. The Meeting was inaugurated by HRH Princess Sumaya Bint el-Hassan, president of RSS. In her statement, she acknowledged past and ongoing development efforts in STI domains within the Arab world. Though the region is still lagging behind, with poverty and unemployment prevailing in many countries, concerted efforts should allow the Arab region to catch up. She added that the proposed ESCWA TC should assist the member countries and the region as a whole, and by extrapolation the rest of the Arab world, in filling an important vacuum in that respect by identifying the systemic issues that obstruct national and

regional development, and providing insight and assistance to the member countries on effective mechanisms of technology acquisition and accumulation.

26. HRH Princess Sumaya Bint el-Hassan asked the Meeting and ESCWA to keep her informed about the results of the Meeting and future developments.

#### C. PARTICIPANTS

27. The Meeting was attended by 22 participants from eight ESCWA member countries; namely, Bahrain, Egypt, Jordan, Lebanon, Qatar, Oman, the Syrian Arab Republic and Yemen, in addition to one expert from India. Two ICTD staff members and one consultant participated on behalf of ESCWA. A list of participants is attached in annex I.

#### D. AGENDA

- 28. Presentations and discussions were held over four sessions. The agenda of the Meeting is summarized and set forth below:
  - 1. Opening.
  - 2. Regional needs and demands; background to the process of establishing the ESCWA TC; presentation of the report "Detailed assessment of regional needs and priorities and identification of implementation mechanisms"; presentation on similar structures and experiences; and presentation on cooperative arrangements and partnerships in the ESCWA region.
  - 3. Discussion on regional needs, demands and domains.
  - 4. Discussion on design features and initial scope of the ESCWA TC.
  - 5. Discussion on hosting and funding arrangements.
  - 6. Concluding remarks and recommendations.
  - 7. Closing session.

#### E. EVALUATION

29. An evaluation form was distributed to the participants on the second day of the Meeting in order for assessment to be made in both organizational and substantive terms. On organizational aspects, 77 per cent of the participants thought that the issues discussed were significantly relevant, whereas 23 per cent thought they were relevant only to a fair extent. 62 per cent believed the discussions were of good quality and 15 per cent rated them as excellent. Regarding the ESCWA TC itself, all participants believed it may face financial obstacles, whereas 69 per cent viewed major obstacles as political, 38 per cent as administrative and 15 per cent as technical.

#### F. DOCUMENTS

- 30. The draft Report "Detailed assessment of regional needs and priorities and identification of implementation mechanisms" was presented to the Meeting as Draft-2. Analysis of discussions and recommendations made during the Meeting will be incorporated and consolidated in Draft-3 of the Report, to be submitted for review and endorsement at the twenty-fifth ESCWA ministerial session to be held during the first quarter of 2008.
- 31. A list of documents submitted to the Meeting is contained in annex II. Other documents and information of the ESCWA TC are available at: http://www.escwa.org.lb/divisions/ictd/etc/main.asp.

#### Annex I\*

#### LIST OF PARTICIPANTS

#### A. PARTICIPATING COUNTRIES

#### Bahrain

Mr. Fouad al-Rumaihi

Advisor to the Royal Court and CEO,

Xpand Advisory Tel: 973-1-7583171 Fax: 973-1-71583181

E-mail: fouad@xpand.com.bh

#### **Egypt**

Ms. Nadia Hegazy Senior Expert

Ministry of Communication and Information

Technology

Tel: 20-23-5345151/ 20-23-5341300 E-mail: <a href="mailto:nhegazy@mcit.gov.eg">nhegazy@mcit.gov.eg</a> nadia@eri.sci.eg

Mr. Tarek Khalil President Nile University and

International Association of Management

of Technology Tel: 20-10-3922456

E-mail: <a href="mailto:tkhalil@comcast.net">tkhalil@comcast.net</a>

tkhalil@nileuniversity.edu.eg

#### India

Mr. Krishna Subramanian

Consultant APCTT/ESCWA Tel: 91-4424485164

E-mail: skmal77@hotmail.com

#### <u>Jordan</u>

HRH Princess Sumaya Bint El-Hassan

President

Royal Scientific Society Tel: 962-6-5344701 Fax: 962-6-5344806 Mr. Sayfeddine Mouaz Executive Vice-President Royal Scientific Society Tel: 962-6-5344701 Fax: 962-6-5344806 E-mail: sayf@rss.gov.jo

Ms. Abeer Arafat

Head of R&D Bureau, Technology Transfer

Centre

Royal Scientific Society Tel: 962-6-5344701 Fax: 962-6-5344806 E-mail: arafat@rss.gov.jo

Mr. Nizar al-Halasah

Manager of Innovation Bureau, Technology

Transfer Centre Royal Scientific Society Tel: 962-6-5344701 Fax: 962-6-5344806 E-mail: halasah@rss.gov.jo

Mr. Nael Almulki

Head of Business Development Bureau

Technology Transfer Centre Royal Scientific Society Tel: 962-6-5344701 Fax: 962-6-5344806 E-mail: info@rss.gov.jo

Mr. Isam Mustafa

Manager of Science and Technology Resources

**Development Department** 

Higher Council for Science and Technology

Tel: 962-6-5340401 Fax: 962-6-5340589 E-mail: isam@hcst.gov.jo

Ms. Majeda al Assaf

Engineer

General Secretariat

Higher Council for Science and Technology

Tel: 962-6-5340401 Fax: 962-6-5340589 E-mail: majeda@hcst.gov.jo

<sup>\*</sup> Issued as submitted.

#### Jordan (continued)

Ms. Falak Sarraf Manager

R&D Projects Management Department Higher Council for Science and Technology

Tel: 962-6-5340401 Fax: 962-6-5340589 E-mail: falak@hcst.gov.jo

#### Lebanon

Mr. Ahmad Nasri Professor American University of Beirut and Member of the Board Lebanese National Council for Scientific Research

Tel: 961-1-840260 Fax: 961-1822639

E-mail: anasri@aub.edu.lb

Mr. Rabih Talhouk Professor, Faculty of Agriculture American University of Beirut Tel: 961-1-350000

E-mail: rtalhouk@aub.edu.lb

#### Qatar

Mr. Said Alathba Database Administrator, IT Department Qatar University Tel: 974-4852542

E-mail: s.alathba@qu.edu.qa

#### Oman

Mr. Ahmad al-Naamany Assistant Professor Head of ICT Sector Research Council Sultan Qaboos University Tel: 968-24141363

E-mail: naamany@squ.edu.om

#### Syrian Arab Republic

Mr. Amr Armanazi General Director Scientific Studies and Research Centre

Tel: 963-11-2234932 Fax: 963-11-2237809 E-mail: amrarm@gmail.com

Mr. Mohamed Bachir al Mounajed Former Minister of Communications and Technology Professor

Damascus University Tel: 963-94-279666

E-mail: softcad@wanadoo.fr

Mr. Assef Diab General Manager Higher Commission for Scientific Research

Tel: 963-11-3341451/3341864

Fax: 963-11-3342998

E-mail: manager@hcsr.gov.sy

#### Yemen

Mr. Gamal Hazza Noman Vice Dean Engineering Department Sana'a University Tel: 967-1-404606

E-mail: warethg@yahoo.com

#### B. UNITED NATIONS ORGANIZATION

#### **ESCWA**

Mr. Yousef Nusseir Chief, ICT Division ESCWA

Tel: 961-1-981301 Fax: 961-1-981510 E-mail: nusseir@un.org Mr. Omar Bizri Senior Project Advisor, ECRI Unit

**ESCWA** 

Tel: 961-1-981301 Fax: 961-1-981510 E-mail: bizri@un.org

### ESCWA (continued)

Mr. Hratch Kouyoumjian Consultant, ICT Division ESCWA

Tel: 961-1-981301 Fax: 961-1-981510

E-mail: kouyoumjianh@un.org

Mr. Antoine Zahlan Consultant ESCWA

E-mail: <u>abzahlan@btinternet.com</u>

Ms. Hania Sabbidin Dimassi Research Assistant, ICT Division ESCWA

Tel: 961-1-981301 Fax: 961-1-981510 E-mail: dimassi@un.org

# Annex II

## LIST OF DOCUMENTS

	Title
1.	Documents:
	Agenda
	Information Note
	Detailed Assessment of Regional Needs and Priorities and Identification of Implementation Mechanisms
2.	Presentations:
	The ESCWA Technology Centre
	Cooperative Arrangements and Partnerships in the ESCWA Region
	El-Hassan Science City