

**ECONOMIC AND SOCIAL
COUNCIL**

Distr.
LIMITED
E/ESCWA/23/5(Part I)/Add.2/Supp.7
30 March 2005
ENGLISH
ORIGINAL: ARABIC

Economic and Social Commission for Western Asia

Twenty-third session
Damascus, 9-12 May 2005

Item 7 (a-ii) of the provisional agenda

**REPORT OF THE EXECUTIVE SECRETARY
ON THE ACTIVITIES OF THE COMMISSION****FOLLOW-UP TO IMPLEMENTATION OF THE RESOLUTIONS ADOPTED
BY THE COMMISSION AT ITS TWENTY-SECOND SESSION**

*The ESCWA initiative for activating the role of science, technology and technological
innovation in achieving the Millennium Goals:
resolution 245 (XXII)*

Summary

At its twenty-second session, the Economic and Social Commission for Western Asia (ESCWA) adopted resolution 245 (XXII), dated 17 April 2003, concerning the ESCWA initiative for activating the role of science, technology and technological innovation in achieving the Millennium Development Goals (MDGs). As part of that initiative, in the 2004-2005 biennium ESCWA undertook a set of activities that included a number of studies, expert group meetings, the provision of consultancy services to member countries, the formulation of field project documents and the launching of pilot projects aimed at building and strengthening the national capacities of member countries to harness science, technology and related innovation in order to achieve sustainable development goals in particular and MDGs in general, and with a view to creating new employment opportunities, reducing poverty and promoting the profitability of companies and their competitive capabilities. The secretariat also carried out activities aimed at following up scientific and technological developments in several priority sustainable development fields in member countries.

This report contains a brief review of the activities that have been undertaken by ESCWA in the 2004-2005 biennium pursuant to the various paragraphs of the above-mentioned resolution. Reference is also made to the complementary procedures that will be taken in order to further initiative-related action.

**I. A VARIETY OF ACTIVITIES UNDERTAKEN IN THE CONTEXT
OF THE ESCWA INITIATIVE FOR ACTIVATING THE ROLE
OF SCIENCE, TECHNOLOGY AND TECHNOLOGICAL
INNOVATION IN ACHIEVING THE MILLENNIUM
DEVELOPMENT GOALS**

1. ESCWA is undertaking a set of activities related to the building of independent scientific and technological capacities in member countries. Those activities are classified under the heading of the ESCWA initiative for activating the role of science, technology and technological innovation in achieving MDGs. The initiative is a response to a number of issues raised at the first meeting of the Consultative Committee on Scientific and Technological Development and Technological Innovation, which was held in Beirut in July 2002. It also takes into consideration a number of issues that were raised at the twenty-second ESCWA session concerning accelerated scientific and technological innovation and ways in which member countries could profit from the opportunities afforded by such development and avoid the risks they will encounter in their endeavours to achieve MDGs in particular and comprehensive development in general. The activities included in the initiative are carried out with the resources available to ESCWA under the regular programme of work and with the funds available from the regular budget with support from what extrabudgetary resources it has been possible to obtain, from regional and international donor bodies in particular.
2. The aim of the activities undertaken as part of this initiative is to achieve MDGs in general and, in particular, those related to poverty and employment creation. In formulating plans for the implementation of those activities, ESCWA is especially mindful of the needs of youth and women, as well as of the need to implement pilot and field projects that have observable success and the studies and related expert group meetings of the regular programme of work. Examples of such projects are the multi-purpose technology centres in local communities, three of which have been established in villages in Akkar, in the north of Lebanon, where opportunities are very limited, and projects for local smart communities, which ESCWA has begun to carry out in selected areas in the Syrian Arab Republic and Yemen.
3. A further aspect of ESCWA activities is the provision to member countries of consultancy services in formulating national policies on science and technology and the building of new types of institution that make it possible to establish more effective cooperation between economic and service establishments on the one hand, and institutions of higher education and academic research on the other hand, thereby enabling national economies to become more productive and competitive, create new employment opportunities and achieve higher levels of education and training.

**II. THE FORMULATION OF A NEW VISION FOR SCIENCE, TECHNOLOGY
AND TECHNOLOGICAL INNOVATION AND OF NATIONAL POLICIES
AND RELATED IMPLEMENTATION STRATEGIES**

A. A NEW VISION FOR SCIENCE, TECHNOLOGY AND TECHNOLOGICAL INNOVATION

4. ESCWA has prepared a study that summarizes the experience of several developing and developed countries in building their capacities with respect to science and technology, and reviews the success of member countries in building capacities in those fields. In the light of that analysis, the study drew up the main outlines of a desirable future for science, technology and technological innovation in member countries, taking into consideration the views and comments of a group of experts and decision makers in the field of science and technology. The final text of that study was sent to the relevant parties in member countries for use in the formulation of their science and technology development plans and in the design of national initiatives and projects aimed at advancing their capacities in such fields.

**B. THE FORMULATION OF NATIONAL POLICIES AND RELATED
IMPLEMENTATION STRATEGIES**

5. ESCWA follows developments in science and technology and continues to raise awareness thereof and put forward proposals in that regard for the formulation of national policies and implementation strategies.

It undertakes the activities included in the regular programme of work, either alone or in cooperation with several relevant regional and international organizations. In the 2004-2005 biennium, ESCWA efforts concentrated on monitoring development trends and impacts in many of the new technologies and, most importantly, information and communication technologies (ICT) and bio-technologies, and on exploiting them for economic and social development.

6. ESCWA held several meetings in preparation for the second phase of the World Summit on the Information Society (WSIS), to be held in Tunis in November 2005. Those meetings considered the challenges posed and opportunities for economic and social development in the countries of the region offered by the new technologies, and ways of dealing with them in national policies and as part of regional cooperation.

7. One such meeting was the round table on strategies and plans of action for building the information society in Western Asia,¹ of which the aim was to consider ways of devising regional strategies and work plans for building the information society (IS), which basically depends on ICT. The meeting concluded by drawing up the broad outlines of a regional work plan, identifying the main actions to be taken, and regional programmes and plans, the implementation of which would build a firm basis for IS and a knowledge-based economy in the region. That plan contributed to the proposed Regional Plan of Action for Building IS² that was presented by ESCWA at the Second Regional Preparatory Conference for WSIS, which was held in Damascus on 22 and 23 November 2004 and attended by representatives of most Arab countries. The Plan takes into consideration the Arab Strategy for Communications and Information that was adopted at the Arab Summit in Amman on 28 March 2001, and the global Plan of Action (PoA) that was adopted in Geneva in 2003. The Conference contributed to the Regional PoA, which contains 10 programmes comprising 38 projects, all of which have national and regional dimensions, and a mechanism for implementation through partnerships between the public and private sectors and cooperation with regional and international organizations.

8. With the aim of establishing strategic support for the implementation of projects and securing the foundations on which to build an Arab IS, the Conference issued the Damascus Call: Towards Partnership for Building the Arab IS, which urges all stakeholders to make every possible effort to successfully implement the regional PoA, maintain partnerships for the implementation of regional projects, and to establish funds to finance those projects, which will contribute to building a productive ICT sector. ESCWA is following up implementation of the regional PoA in coordination with the League of Arab States and, in particular, the Arab task force entrusted with preparations for WSIS, the Arab strategy team and other United Nations regional organizations. ESCWA is attempting to ensure that the necessary funding is available for the main projects, which have priority for member countries, and to begin those projects as soon as possible. That will help to accelerate national endeavours aimed at building IS and a knowledge-based economy, and will contribute to progress in the economic and social development fields and commensurate progress towards regional integration.

9. In view of the importance of Arab digital content on the Internet in disseminating ICT applications, at the end of 2003 ESCWA launched the Arab Content Initiative, which it is seeking to activate through a number of projects that have been incorporated into the regional PoA for IS building. It is also conducting studies on the formulation of an Arab strategy for developing a content industry in Arab countries. Additionally, the secretariat has launched an operation to develop standards for Arab language Internet domains, and disseminated a preliminary formulation of those standards, that were adopted by the task force for an Arabic domain name system, with which ESCWA is cooperating in order to complete the work on those standards and make regionally and internationally available an Arabic domain names service on the Internet.

¹ ESCWA, *Report of the round table on strategies and plans of action for building the information society in Western Asia* (E/ESCWA/ICTD/2004/2).

² ESCWA, *Regional Plan of Action for Building the Information Society* (E/ESCWA/ICTD/2004/4).

10. With a view to assisting decision makers in member countries in formulating national and regional policies and taking appropriate procedures to move towards IS, ESCWA held the Round Table on ICT as an Enabler for Economic Development,³ of which the aim was to measure the extent of progress in exploiting ICT for economic and social development. In cooperation with regional and international organizations, ESCWA is endeavouring to reach a global standard for those basic indicators which could be adopted by the national statistics offices of member countries and widely used in measuring the digital divide. It will also provide technical support for the building of capacities in this field in national statistics institutions and statistical units in the relevant ministries.

11. Against this background, ESCWA provided technical assistance to many member countries through consultancy services in the formulation and activation of their national ICT strategies. It will follow up those services, particularly with respect to IS building, the development of a productive ICT sector and progress towards a knowledge-based economy.

12. ESCWA endeavours also included activities aimed at assisting member countries in formulating policies and strategies for using biotechnology applications to generate employment opportunities and reduce poverty, provided such applications had no adverse environmental, economic or social impact. ESCWA will undertake national capacity-building in the fields of the agricultural applications of biotechnology, by following up action to establish and manage a virtual network for research and development (R&D) in biotechnology and its agricultural applications in member countries.

III. A NEW INSTITUTIONAL INFRASTRUCTURE IN ESCWA MEMBER COUNTRIES, WITH EMPHASIS ON CENTRES OF EXCELLENCE, TECHNOLOGY PARKS AND INCUBATORS AND HIGH TECHNOLOGY PRODUCTION AND SERVICE CLUSTERS

13. The actions that ESCWA is undertaking in this respect are based on a study that was carried out in 2001 on new institutional infrastructure⁴ using new or high technologies. In the 2004-2005 biennium, ESCWA undertook a variety of concerns.

A. CENTRES OF EXCELLENCE

14. ESCWA has produced a draft document on the establishment of centres of excellence in areas to which member countries give priority. Currently, comments are being gathered on that document, with a view to establishing some of those centres, based on the institutional possibilities available in member countries. Some of the fields that could constitute a basis for the work of such centres include the following:

- (a) New materials technologies;
- (b) Biotechnologies and, in particular, their agricultural applications;
- (c) ICT, with the focus on its applications for human development and increasing the productivity and competitive capacities of productive institutions.

B. TECHNOLOGY PARKS AND INCUBATORS AND MANUFACTURING AND SERVICE INDUSTRY CLUSTERS

15. Through consultancy services to member countries, ESCWA also provided technical assistance to a number of those countries that were attempting to establish such new institutional forms as technology incubators and factories and technology parks.

³ ESCWA, *Report of the Round Table on ICT as an Enabler for Economic Development* (E/ESCWA/ICTD/2004/WG.1/20).

⁴ ESCWA, *Technology capacity-building initiatives for the twenty-first century in the ESCWA member countries* (E/ESCWA/TECH/2001/1).

16. In that framework, ESCWA produced a pilot study on production clusters in one area of Lebanon, in the textile and clothing sector. The study provided a model for studies on other regions and sectors in member countries, with a view to establishing production clusters that employ new technologies and provide opportunities to achieve higher levels of productivity and quality, making those enterprises internationally competitive, safeguarding employment opportunities in the sector involved and expanding their scope, thereby impacting positively on efforts aimed at eradicating unemployment and poverty.

IV. STRENGTHENING AND COORDINATING RESEARCH AND DEVELOPMENT ENDEAVOURS AND INCREASING THEIR BENEFITS AND APPLICATIONS IN ESCWA MEMBER COUNTRIES

RESEARCH AND DEVELOPMENT NETWORKS

17. ESCWA has continued work to promote and support cooperation with respect to R&D, with endeavours aimed at forming special R&D networks each of which host a pilot research institution that is active in the relevant special field. ESCWA is currently working on a study on R&D networks and technological renewal that includes international experiences, initiatives for forming networks in member countries and the establishment and management of networks.⁵

18. A Letter of Intent has been signed by ESCWA and the Ministry for Scientific Research and Technological Innovation in the Region of Campania in Italy, establishing long-term cooperation in the provision of support to institutions in member countries that are involved in the development of scientific and technological capacities and, in particular, the relevant universities and research centres. In view of the possible benefits to member countries of that type of cooperation, ESCWA will expand its scope to include other European regions that use technology as the basis for local development programmes.

19. Furthermore, ESCWA devoted part of the Second Meeting of the ESCWA Consultative Committee on Science, Technology and Innovation, which was held in Damascus on 24 November 2004, to the discussion of support for R&D efforts through the establishment of specialized networks at the regional level. The relevant recommendations of the Committee dealt with the need to promote updated mechanisms that would assist in activating regional cooperation and, in particular, with respect to the establishment of specialized networks for R&D into a number of the fields to which member countries have given priority, and to benefiting from the opportunities afforded by open-source computer programs in support of cooperation in the aforementioned fields and, in particular, the development of specialized programs to support and improve the quality of all levels of education; exploit biotechnology and its agricultural, health and industrial applications in the service of economic development, and direct attention towards the environmental, health and social consequences of using such technologies; and use the opportunities afforded by the new materials technologies to provide an entry for member countries into modern production and service fields that will increase their competitiveness at the international level.

20. With a view to facilitating communication between the relevant institutions in member countries, ESCWA established Internet sites, including the ESCWA Research and Development Portal and the Network of Technology Parks and Incubation Schemes, and is working to upgrade the content of those two sites and respond to any queries that have arisen in regard to that content.

V. DEVELOPMENT OF NATIONAL EDUCATION AND PROFESSIONAL TRAINING SYSTEMS WITH A VIEW TO ERADICATING CONVENTIONAL AND TECHNOLOGICAL ILLITERACY

21. In 2004, in cooperation with the United Nations Educational, Scientific and Cultural Organization Regional Office for Education in the Arab States, ESCWA produced a study on ICT-based educational systems.

⁵ That study is currently being prepared and will be distributed to the relevant parties in member countries in the next few months, as soon as it has been issued.

22. That study examines the opportunities afforded by ICT for disseminating basic education and improving the performance of national organizations in all fields. It also looks into the feasibility of employing that technology in eradicating illiteracy and in professional training. It further deals with the equipment and programs required in order to establish incubators for new institutions that aim to develop programs used for computer- and Internet-assisted education. The establishment of such incubators in universities and institutions of higher education will create new employment opportunities for the graduates of those establishments with the relevant qualifications, reduce the brain-drain and help to raise educational levels in member countries.

23. ESCWA has established pilot centres in some member countries as a means of disseminating practices that are appropriate to local conditions and needs. Some activities in that field have been carried out in cooperation with the International Labour Organization, the Arab Fund for Economic and Social Development and several other organizations involved in economic and social development. The Akkar region in north Lebanon was selected as the centre for a preliminary cluster of pilot units that use ICT as the basis for professional training activities and in order to link local communities to their surroundings. At the same time, using extrabudgetary resources, preparations are being made to establish pilot units in the Syrian Arab Republic and Yemen, in cooperation with civil society organizations in each of those countries and with the parties responsible for economic and social development at the national and local levels. The activities that ESCWA is attempting to establish in the Syrian Arab Republic and Yemen are based on a number of new technologies, including ICT, technologies for dealing with agricultural produce and food, purifying water and treating waste, and have the aim of providing profitable employment opportunities and, at the same time, professional training, through involvement in manufacturing and service operations.

**VI. THE POSITION OF THE COUNTRIES OF THE REGION WITH RESPECT
TO BIOTECHNOLOGY IN THE FIELDS OF AGRICULTURE AND THE
PRODUCTION OF FOOD AND MEDICINES, AND PROPOSED
EXECUTIVE INITIATIVES TO ASSIST THE COUNTRIES OF
THE REGION IN CONFRONTING THE CHALLENGES
ARISING FROM INTERNATIONAL TRENDS THAT
IMPACT ON THE FUTURE OF THE SECTOR**

24. In recent years, ESCWA has produced a number of studies on biotechnology and its applications, with special emphasis on agriculture. Those studies considered existing possibilities and plans for developing them in several member countries. Currently, in cooperation with the Food and Agriculture Organization of the United Nations and some of the relevant organizations in member countries, ESCWA is making preparations to hold a meeting on biotechnology and genetic engineering, with the focus on the agricultural applications. In 2004, ESCWA also carried out two studies on biotechnology, using resources from the regular technical cooperation programme.

25. With respect to the uses of new technologies in specific sectors, ESCWA produced two studies on the status and future of the pharmaceutical industries in Egypt and the Syrian Arab Republic. The two studies considered the consequences of the establishment of the Greater Arab Free Trade Area and the challenges posed to producers and consumers of pharmaceutical products in member countries by the rules of the World Trade Organization and the Agreement on Trade-Related Aspects of Intellectual Property Rights. Those challenges include a possible rise in the price of certain medicines, particularly modern medicines, that will put them out of the price range of many citizens.

26. Through its programme of work and its cooperation with United Nations agencies that are concerned with biotechnology and its various applications and, in particular, with respect to the production of food and medicines, ESCWA will endeavour to follow up action in that regard.

VII. CONCLUSION

27. In the 2004-2005 biennium, ESCWA established many activities aimed at building capacities in science and technology and promoting technological renewal. Extrabudgetary support was provided for its

endeavours in relation to using technology to eradicate unemployment and poverty. ESCWA plans to follow up work in those fields and to include activities related to several new technologies that have an impact on economic and social development efforts, including biotechnology, new materials technology and ICT, thereby integrating its endeavours at various levels. Its contributions include the formulation of national policies and new institutional infrastructure and the creation of pilot activities that will help to develop and disseminate new technologies. Work on all those levels requires both ESCWA and member countries to allocate more resources. With the aim of ensuring the necessary funding, ESCWA has therefore prepared a number of project documents.
