E

UNITED NATIONS

<table>
<tr><td>

ECONOMIC AND SOCIAL COUNCIL

</td><td>

Distr.
LIMITED
E/ESCWA/C.8/2019/14/Report
28 March 2019
ENGLISH
ORIGINAL: ARABIC

</td></tr>
</table>

Economic and Social Commission for Western Asia (ESCWA)

Report

Second session of the Committee on Technology for Development
Beirut, 20-21 March 2019

Summary

The second session of the Committee on Technology for Development of the Economic and Social Commission for Western Asia (ESCWA) was held in Beirut on 20 and 21 March 2019. Its agenda contained several items on technology and innovation, including implementing the Beirut Consensus on Technology for Sustainable Development in the Arab Region; technology and innovation in the Arab region: current situation and policy frameworks; technology as a tool to make cities safe and combat violence against women; digital development in the Arab region and the 2030 Agenda for Sustainable Development; and strengthening Governments' role in Internet governance: the Arab process.

Participants took note of activities implemented by ESCWA under its regular programme of work and of technical cooperation activities since the Committee's first session. They also reviewed the activities of the ESCWA Technology Centre for the period 2017-2018, and the ESCWA programme plan for 2020 in the field of technology for development. A round-table discussion was held on strategic directions for ESCWA work on technology for development in the period 2020-2025.

The present report summarizes discussions under each agenda item, and the outcomes and recommendations reached by the Committee.

CONTENTS

Introduction

1.   The Committee on Technology for Development held its second session pursuant to ESCWA resolution 315 (XXVIII) of 18 September 2014 on establishing an intergovernmental committee on technology for development, adopted by the Economic and Social Council in resolution 2014/35 of 17 November 2014.

2.   The present report sets out the recommendations made by the Committee on Technology for Development at its second session. It also presents key issues discussed under each agenda item, summaries of opening statements, and details of the session's organization and participants.

I. RECOMMENDATIONS

3.   At its second session, the Committee on Technology for Development made recommendations to members States and to the ESCWA secretariat.

A. RECOMMENDATIONS TO MEMBER STATES

4.   The Committee made the following recommendations to member States:

(a)   Welcome activities implemented pursuant to recommendations made by the Committee on Technology for Development since its first session and to the ESCWA work programme in the field of technology for development, and take note of the proposed programme plan for 2020 in the field of technology for development as set out in document E/ESCWA/C.8/2019/13;

(b)   Take note of messages emanating from the second Arab High-level Forum on the World Summit on the Information Society and the 2030 Agenda for Sustainable Development, held in Beirut from 19 to 21 March 2019;

(c)   Develop national policies and plans that take into account all aspects of society's needs with regard to digital technologies, notably information and communications technologies (ICT) and new technologies, so as to support innovation, achieve national and global development goals, and benefit from ESCWA support in those areas;

(d)   Adopt national innovation frameworks and develop existing frameworks in line with best practices, collect and disseminate data to measure innovation development, and establish incentives to benefit from young people's capacity;

(e)   Develop national economies in line with global developments, create an enabling environment for future skills, and empower young people against unemployment;

(f)   Stress the importance of continuing the Arab Dialogue on Internet Governance while maintaining sovereignty over national policies, develop national action plans on Internet governance with reference to the second edition of the Arab Roadmap for Internet Governance and involve all stakeholders in their implementation, urge Governments to play a bigger role in the work of the Arab Internet Governance Forum and its structures, and nominate representatives to the Forum's new Strategic Committee;

(g)   Prepare national reports on digital development and increase collaboration between stakeholders in sectors involved in that field, and refer to the toolkit developed by ESCWA, with a view to using national reports to inform the forthcoming regional report on digital development;

(h)   Benefit from technical cooperation activities undertaken by ESCWA in technology and innovation fields of priority for achieving the Sustainable Development Goals (SDGs), including new and digital technologies, big data and open government data;

(i)   Encourage directors of e-government programmes to continue collaborating on e-government and digital transformation issues to exchange expertise and best practices, support the use of the Government Electronic and Mobile Services (GEMS) Maturity Index as an effective measurement tool as part of efforts towards digital transformation and open government, and benefit from ESCWA support in that regard;

(j)   Strengthen regional cooperation and investment in green and renewable energy technologies, such as solar and wind power, clean energy, desalination and biotechnology, and benefit from ESCWA services in that field;

(k)   Benefit from technology to advance women's issues, especially protecting them from harassment in public spaces and in cyberspace;

(l)   Participate in a technology management and transfer project under implementation by ESCWA to assess and meet national needs and strengthen technology transfer systems.

B. Recommendations to the ESCWA secretariat

5.   The Committee made the following recommendations to the ESCWA secretariat:

(a)   Prepare a regional report on digital development to review progress in implementing the outcomes of the World Summit on the Information Society in the Arab region, and present analyses on the current state of the information society in the Arab region from a development perspective;

(b)   Continue collaborating with the League of Arab States on the Arab Internet Governance Forum and its mechanisms in line with its development initiative, and on the periodic organization of the Arab High-level Forum on the World Summit on the Information Society and the 2030 Agenda for Sustainable Development, and consider new challenges raised by the Internet, such as privacy and access, when preparing for the two forums to develop regional positions thereon;

(c)   Continue implementing the Beirut Consensus on Technology for Sustainable Development in the Arab Region;

(d)   Continue providing support for policy development and implementation in the field of technology and innovation, and promote them in all development sectors to meet society's needs, especially those of young people, women and marginalized groups, and focus on the role of technology and innovation in reconstruction and recovery efforts in Arab countries affected by conflict;

(e)   Provide support on issues related to new technologies so as to optimize their benefits and mitigate resulting harm, especially regarding labour market issues, while focusing on legal, regulatory and policy frameworks that promote creativity and innovation in member States' economies;

(f)   Launch the third phase of the GEMS Maturity Index in Arab countries, and participate in integrating the Index into the global system as a tool for evaluating the performance of e-government services;

(g)   Continue implementing projects related to open government, open data and big data, and employ them in development work;

(h)   Provide support in transferring and localizing green technologies, especially agricultural technologies aimed at improving food security in the Arab region;

(i)   Strengthen partnerships and coordination in the field of technology for development with specialized United Nations organizations, the League of Arab States and its affiliated bodies, especially with regard to developing a joint Arab vision on technology, digital economy and cybersecurity that the Arab Information and Communication Technology Organization is undertaking, and to implementing the Arab Strategy for Scientific and Technical Research and Innovation;

(j)   Propose projects to support investments in technology and innovation, especially through an investment fund for technology and digital economy established at the fourth Arab Economic and Social Development Summit, held in Beirut on 20 January 2019; and work with member States and stakeholders to benefit from existing facilitations.

II.   TOPICS FOR DISCUSSION

A.   PROGRESS MADE SINCE THE FIRST SESSION OF THE COMMITTEE

1.   *Implementation of activities under the ESCWA programme of work and of recommendations made by the Committee on Technology for Development at its first session*
(Agenda item 4)

6.   With reference to document E/ESCWA/C.8/2019/3, the representative of the secretariat made a presentation in which he said that the ESCWA work programme in the field of technology for development covered issues related to the information society and bridging the digital divide; Internet governance; digital economy; smart, digital and open government; innovation for development; and new technologies. He highlighted that activities undertaken by ESCWA in those areas aimed to create and expand knowledge through studies, research and reports, build consensus between member States by holding conferences, forums and expert group meetings, and provide direct services through workshops and advisory activities to build capacity.

7.   He discussed in detail activities undertaken under each of those topics. He said that ESCWA, as part of efforts to support a shift towards the information society and to bridge the digital divide, had prepared a study on digital technology for development and organized the first and second sessions of the Arab High-level Forum on the World Summit on the Information Society and the 2030 Agenda for Sustainable Development, an Arab interregional consultation meeting on digital technologies, the Arab Ministerial Round Table on Technology for Development Horizon 2030, and an expert group meeting on national digital development reports. He added that a report would be published in 2019 on digital development in the Arab region. Regarding Internet governance, ESCWA had assisted in developing the Arab Internet Governance Forum, held open consultations and an Arab multi-stakeholder advisory group meeting to prepare for the Forum's fifth annual conference, and provided technical support for the establishment of an Internet governance forum in Lebanon. It had also published a study on the second edition of the Arab Roadmap for Internet Governance and organized an expert group meeting on the issue in collaboration with the League of Arab States. Regarding the digital economy, ESCWA had published studies on linkages between the World Summit on the Information Society and the SDGs, the next generation digital infrastructure, and perspectives of digital economy in the Arab region. ESCWA had also participated in the Arab Digital Economy Conference.

8.   He then reviewed ESCWA activities in the field of smart, digital and open government, including preparing a study on smart digital transformation in government and another on fostering open government in the Arab region, and implementing a project on fostering institutional development for participatory approaches towards the achievement of the SDGs in Western Asia. Regarding innovation for development, he said that ESCWA had published studies on innovation policy for inclusive sustainable development in the Arab region, and on the innovation landscape in Arab countries. It had also issued reports on community-based innovation for improved social well-being and on fostering innovation in small and medium enterprises in the Arab region, and had held an expert group meeting and two workshops in that context. Moreover, in the field of new technologies, ESCWA had participated in several regional conferences, and held a seminar and a meeting on the issue.

9.   In the ensuing discussion, participants welcomed ESCWA efforts, and took note of the programme and its activities. The representative of the State of Palestine considered the field of Internet governance and digital policies, stating that Arab countries exploited most digital services but were not active in their production, especially services provided by social networks and applications, which had caused several crises in the region, particularly during the so-called "Arab Spring". It was therefore vital to implement measures similar to the General Data Protection Regulation of the European Union. The representative of the Sudan said that ESCWA

work was dominated by research. Few projects were being implemented compared with other organizations working in technology in the region. He requested that ESCWA undertake more projects and measure the impact of activities in Arab countries. The representative of Jordan enquired whether focal points in the region had received the studies presented by the secretariat, so as to benefit from them.

10.   In response, the representative of the secretariat said that ESCWA published all its studies, reports and research on its website, where documents could be easily located and downloaded. It also involved stakeholders in the launch of flagship outputs; however, it only printed a limited number of hard copies. He added that ESCWA monitored the impact of activities as a method of evaluating its performance and kept a list of accomplishments in the region resulting from recommendations and studies issued by it, noting that their impact could be divided into two categories: the first related to policy development and decision-making, which concerned ESCWA; while the second entailed the impact on citizens, which was the responsibility of States.

2. *Technical cooperation activities*
(Agenda item 5)

11.   With reference to document E/ESCWA/C.8/2019/4, the representative of the secretariat made a presentation on technical cooperation activities provided by ESCWA to member States in various fields since the first session of the Committee on Technology for Development (over the period 2017-2019). Activities included 12 advisory services, 21 national workshops and two regional workshops. He reviewed examples of implemented activities, including developing technology incubators in the Sudan, a strategy on digital government and digital transformation in the Syrian Arab Republic, and technology to improve access for persons with disabilities in Morocco. He considered the achievements resulting from technical cooperation activities with the Sudan, such as establishing a technology transfer office and opening an entrepreneurship incubator in the ICT field. He also discussed proposed areas of technical cooperation, including developing digital government services, evaluating technological readiness, contributing to regional and international dialogues on Internet governance, promoting national innovation systems, strengthening technology transfer systems, and monitoring development indicators.

12.   In the ensuing discussion, participants welcomed the technical cooperation activities undertaken by ESCWA, and expressed their satisfaction with the achievements and their hope for further cooperation in the future. In response, the representative of the secretariat explained how to submit cooperation requests through official focal points in countries. He said that ESCWA was currently developing bilateral frameworks for technical cooperation activities with all countries to increase coordination, accountability and impact.

3. *Activities of the ESCWA Technology Centre*
(Agenda item 6)

13.   With reference to document E/ESCWA/C.8/2019/5, the representative of the secretariat made a presentation on the role of the ESCWA Technology Centre as a supporter and coordinator in the fields of technology development and transfer, technology for food security and green development, and strengthening regional cooperation in research and development. She reviewed the Centre's activities in those fields since the first session of the Committee on Technology for Development. In the field of technology development and transfer, the Centre had held the Regional Forum on National Knowledge and Technology Development and Transfer Systems, participated in organizing the Arab International Industrial Conference in Cairo, prepared a study on technology opportunities for sustainable development in Arab countries and a report on science and technology parks, and organized several workshops. In the field of technology for food security, the Centre had held an expert group meeting on advancing green technologies through a science-policy interface, and a specialized session on the theme "Technology and innovation for agricultural development". It had also participated in organizing the Arab Forum on Nanoscience and Technology Applications, and in preparing a study on promising opportunities for nanotechnology projects on water desalination and solar power in Arab countries and another on public policies supporting green technologies. Regarding

strengthening regional cooperation, the Centre had organized a regional consultation on the ethics of scientific research and technology applications in the Arab region, and held a consultative meeting to examine the overall strategic direction of the ESCWA Technology Centre for the coming years.

14.   The representative of the secretariat also reviewed technical cooperation activities and partnerships forged by the Centre. She said that the Centre, in collaboration with local partners, had worked on a project funded by the United Nations Development Account on operationalizing national systems for technology transfer in several Arab countries. It was also currently working on developing an interactive platform to build capacity in the Arab region. She reviewed the meetings of the Centre's Board of Governors and its Technical Committee and the resulting key recommendations. She also considered the Centre's programme of work for 2019, which included publishing a technical report on sustainable development to achieve SDG 12 on ensuring sustainable consumption and production patterns in Arab countries and a study on the importance of implementing international standards in operating science and technology parks, preparing a project proposal on an interactive platform for sustainable technology in Arab countries, organizing several regional meetings, and providing substantive and technical contributions to regional and national processes and events.

15.   In the ensuing discussion, participants welcomed the Centre's role and noted its activities in their countries. The representative of Oman thanked the Centre for its contribution to establishing the National Technology Transfer Network. She proposed including some emerging issues, such as biotechnology and the blue economy, in the Centre's work, and suggested employing technology to achieve SDG 14 on marine life. The representative of Tunisia expressed his hope to strengthen relations with the Centre and to expand the scope of technical cooperation activities, especially given that Tunisia had conducted research in several fields covered by the Centre. The representative of Jordan requested further information on the interactive platform.

16.   In response, the representative of the secretariat said that the Centre was highly interested in expanding the scope of cooperation activities and ensuring their success. Biotechnologies was a field covered by the Centre, but its research on using biotechnologies in the agricultural sector was still nascent; the Centre was working with academia to achieve progress in that area. She added that the Centre did not work on SDG 14, but rather focused on SDG 12 on ensuring sustainable consumption and production patterns, because it was more comprehensive and related to all SDGs. However, she expressed her hope that the Centre would work on SDG 14 in the future. She also noted that work would begin on the interactive platform in 2019, with content published in Arabic. The Centre would strive to forge partnerships with global institutions to facilitate the platform's development and launch, and it was considering ways to connect the platform to universities to optimize benefit.

4. *Meetings of directors of e-government programmes in Arab States*
(Agenda item 7)

17.   With reference to document E/ESCWA/C.8/2019/6, the representative of the secretariat made a presentation on the background of the periodic meetings of directors of e-government programmes in Arab States, which were launched based on an ESCWA initiative to strengthen regional coordination and dialogue on e-government policies and measures in Arab countries. He reviewed the objectives of the meetings, such as holding consultations on e-government challenges and proposing solutions, setting priorities in that regard, exchanging best practices or transferring them from other regions, developing joint positions, proposing projects and initiatives, and strengthening indicators. He also considered the previous six meetings that had resulted in several achievements, including launching the GEMS Maturity Index in 2014, reviewing the findings of a study on services that could be covered by the Index in selected Arab countries in 2016, and conducting the calculation process in 13 Arab countries in 2018. He made several proposals for the future, such as collaborating on digital government and digital transformation, fully applying the GEMS Maturity Index in all member States, strengthening regional cooperation to promote open data and open government, and developing guidelines for using new technologies in the Arab region.

18.   In the ensuing discussion, participants expressed their satisfaction with the meetings' outcomes and achievements. The representative of Jordan said that it was important to develop and standardize terminology, proposing that the term 'smart government' should be used instead of 'e-government'. The representative of Tunisia discussed the components of the GEMS Maturity Index and ways to link it to the e-Government Development Index (e-GDI), stating that e-GDI consisted of three dimensions, namely technology, human resources and services, whereas the GEMS Maturity Index only covered services. He enquired whether efforts were being made to cover the two other dimensions in the future. The representative of the Sudan asked whether it was possible to develop standards for measuring electronic services that showed the percentage of users in the population.

19.   In response, the representative of the secretariat said that standardizing terminology in Arabic was a continuing challenge facing technological research, and that ESCWA was continually striving to develop standard Arabic translations for terms. He added that the challenge did not apply only to terms but also to concepts. For example, smart phone applications came under 'smart government' services, but all previous concepts were included under the concept of 'digital government'. 'E-government' was the first concept to be coined in the field, so ESCWA had not changed it to ensure continuity. Regarding linking the GEMS Maturity Index to e-GDI, he said that the Maturity Index focused on technological services, which had come at the expense of the human development dimension. It was possible to add a user dimension for measuring the benefit of electronic services, but dimensions such as population size remained beyond the Index's measurement scope. Technical services had spread rapidly in some small counties, but that did not accurately reflect the level of technological development in those countries.

B. Technology and the 2030 Agenda for Sustainable Development

1. *Technology for sustainable development: creating decent jobs and empowering youth in Arab countries*
(Agenda item 8)

20.   With reference to document E/ESCWA/C.8/2019/7, the representative of the secretariat made a presentation on the impact of technologies of the Fourth Industrial Revolution on employment creation. He said that those technologies might make some job activities redundant, but not the jobs themselves. They might present an opportunity to develop new skills with the emergence of new fields, such as the Internet of things, artificial intelligence, biotechnology, nanotechnology and 3D printing. Organizations differed in defining the nature of those skills, but they would undoubtedly provide opportunities for human development. New technologies contributed to achieving inclusive economic growth, and could be employed in conflict recovery and reconstruction, women's empowerment and all other sustainable development fields. He considered ways of optimizing benefits from the Fourth Industrial Revolution, which required formulating national strategies and policies conducive to technology transfer, creating an enabling environment for research, development and innovation, encouraging investments that leave no one behind, and building skills and retraining. He reviewed the role of various stakeholders in the region, including Governments, the private sector, civil society and academia, in harnessing technology, affirming the role of ESCWA in conducting dialogue, building consensus and capacity, and bridging gaps.

21.   In the ensuing discussion, participants commended the document, stressed the risk posed by youth unemployment, and highlighted the importance of using technologies of the Fourth Industrial Revolution to create employment opportunities. The representative of Jordan enquired whether the Arab region was ready to develop skills for the future, especially universities and education institutions, and whether there was a political will to create an environment to benefit from those skills. The representative of the Syrian Arab Republic requested that the secretariat prepare a study that identified the specializations and skills that the region might need in the coming decade, especially since many jobs could become obsolete with technological progress. The representative of Tunisia said that it was vital for the region to shift towards producing technological innovations and develop effective strategies to combat youth unemployment.

22.   In response, the representative of the secretariat said that the region had no choice but to create an enabling environment to benefit from new technologies. Universities would go bankrupt if they did not keep pace with the Fourth Industrial Revolution, especially given that they no longer had sole authority over work credentials: many studies showed that the 10 biggest enterprises worldwide were hiring individuals with the right experience and skills rather than only university graduates. He stressed that all Arab countries were officially witnessing a shift towards new technology use. Only two years ago, national statistical offices in the region had refused to use big data, whereas many relied on them today. Moreover, Governments were now adopting new applications at a faster pace than universities; Governments were ready to transform because they recognized that keeping pace with technology resolved their challenges. He added that ESCWA was preparing a study on necessary specializations and skills for the coming period.

2. *Technology and innovation in the Arab region: current situation and policy frameworks*
(Agenda item 9)

23.   With reference to document E/ESCWA/C.8/2019/8, the representative of the secretariat made a presentation on the current situation of technology and innovation in the Arab region and related policy frameworks. She said that innovation was weak, but several efforts and plans were in place to ensure progress, resulting in some success stories. She said that ICT infrastructure in the region was relatively sophisticated, although the penetration of broadband services was low overall. Significant disparities existed between Arab countries in the Networked Readiness Index. She added that indicators and studies showed that the Arab region remained an ICT consumer, although some Arab countries were focusing on economic diversification through digital technology, indicating challenges such as weak knowledge production and the lack of cadres able to appropriately invest technology.

24.   She considered innovation in the region, and reviewed Arab countries' ranking in the Global Innovation Index and the challenges facing innovation, including the absence of a comprehensive vision, inadequate educational methods, weak interaction between the productive sector and the research sector, and a lack of support to innovators. She presented an ESCWA framework for innovation policies in the Arab region, highlighting the various dimensions that should be addressed by innovation policies, and reviewed success stories from various countries.

25.   In the ensuing discussion, participants expressed their significant interest in innovation, given its importance for achieving the SDGs. The representative of Jordan stressed the importance of moving from discussion to action, and enquired why there were differences between some Arab countries' ranking in the Global Innovation Index and their ranking in ESCWA analyses. The representative of the Syrian Arab Republic said that all proposals in the presentation were dependent on government decisions, and enquired whether the proposals took into consideration country specificities. The representative of Libya concurred, stressing the importance on involving high-level decision makers in ESCWA meetings on technology. The representative of Kuwait noted an initiative by her country to establish a national innovation centre, expressing her hope to collaborate with ESCWA in exchanging expertise and building capacity at the centre.

26.   In the ensuing discussion, the representative of the secretariat stressed the importance of action: policy frameworks were developed to guide countries, and ESCWA focused on practical steps at the national level if requested by countries. Regarding disparities between country rankings in the Global Innovation Indicator and ESCWA analyses, she said that it was because ESCWA took into account GDP, which allowed it to compare the performance of countries with comparable GDP. She added that country specificities should be studied on the ground, indicating collaboration activities between ESCWA and the Syrian Arab Republic in the field of digital government. She also mentioned initiatives by several institutions that encouraged innovation, such as the Central Bank of Lebanon's measure to facilitate loans for innovators.

3. *Implementation of the Beirut Consensus on Technology for Sustainable Development in the Arab Region*
(Agenda item 10)

27.   With reference to document E/ESCWA/C.8/2019/9, the representative of the secretariat made a presentation on the pillars of the Beirut Consensus, the recommendations made to the secretariat in that context, and the activities that it has undertaken or would undertake pursuant to those recommendations. Regarding recommendations to member States, he said that countries had committed to reporting on implementation at the thirty-first ESCWA session. He added that the secretariat was preparing a matrix to follow up on the implementation of the Beirut Consensus, which would be disseminated to participants. He invited member State representatives to comment thereon so as to inform the final draft of the matrix before its presentation to the ESCWA Executive Committee.

28.   In the ensuing discussion, member State representatives welcomed the activities implemented by the secretariat. The representative of the secretariat said that technology serviced all aspects of development, and that recommendations to the secretariat were the source of ESCWA mandates. He added that technology had been given priority in the Beirut Consensus, and that the secretariat would attempt to make technology a key pillar in the work of all ESCWA subsidiary bodies.

4. *Technology as a tool to make cities safe and combat violence against women*
(Agenda item 11)

29.   With reference to document E/ESCWA/C.8/2019/10, the representative of the secretariat made a presentation in which she mentioned Arab countries' commitment in the Beirut Consensus to using technology to empower women. She considered international frameworks on combatting violence against women, especially the 2030 Agenda and the New Urban Agenda. She said that urban expansion raised challenges for women's safety, especially in terms of violence and harassment in public spaces. She presented statistics from various developing and developed countries showing the persistence of such violence. She stressed the need to adopt a comprehensive approach to combatting violence against women, including enacting laws, raising awareness, providing services, coordinating with security apparatuses, and using technological applications. She reviewed laws on harassment in public spaces in Arab countries, and gave an overview on the use of technology in combatting violence against women. She also gave examples of applications used in Egypt, Morocco and Tunisia to raise awareness and monitor safety in public spaces and to report unsafe areas.

30.   She gave the example of Rotterdam in the Netherlands as a city that had adopted a comprehensive approach to combatting violence and harassment in public spaces, where sexual harassment had been criminalized. It had also begun issuing warnings on sexual harassment, developed a hotline for victims, appointed additional officers to enforce the new regulations, and launched a mobile application. She stressed the need to employ technology in combating violence against women, to use ICT in urban planning, to strengthen stakeholder collaboration in developing the required ICT infrastructure, and to increase ICT literacy rates among women and girls.

31.   In the ensuing discussion, the representative of Kuwait said that the Ministry of the Interior in her country had specialized units for combating harassment that monitored public spaces through technology, which had deterred such behaviour. However, cyber harassment was not covered by those methods, so Kuwait had developed monitoring tools on social networks to tackle the problem. The representative of Mauritania reviewed his country's efforts to develop legal frameworks for combatting harassment, protecting women and preserving their rights. The representative of Jordan enquired why his country's harassment law had been categorized as 'partial', indicating a law to combat e-crime that also tackled cyber harassment. The representative of the Syrian Arab Republic stressed the need to focus on combating harassment in cyberspace. He proposed that the issue be added to the list of activities, given that the secretariat's presentation had focused mainly on public spaces.

32.   The representative of Libya said that all societies had their specificities in defining harassment, and possessed disparate knowledge of technology and the capacity to use it, stressing the importance of raising awareness. The representative of Tunisia addressed the challenges facing women in accessing technology, especially in remote areas, and enquired whether ESCWA was considering using technology to assist persons with disabilities. The representative of Yemen requested that the secretariat conduct a study on using technology to assist displaced and refugee women. The representative of the Sudan said that it was necessary to develop programmes that combatted harassment culture through various technological methods. The representative of the State of Palestine concurred, highlighting the importance of well-planned awareness-raising campaigns.

33.   In response, the representative of the secretariat said that the issue of cybersecurity was a research priority for ESCWA, but the presentation was about combating violence against women in public spaces. She stressed that ESCWA had always worked to raise awareness, and that the comprehensive approach that it had reviewed covered that. Enacting laws must be complemented with raising awareness of their contents, and technology could help in that regard.

34.   The representative of the secretariat said that ESCWA activities also included using technology to empower women and their role in technological development. Regarding refugee and displaced women, many technologies could assist them, such as those that facilitated aid distribution. He added that the Beirut Consensus adopted by member States addressed technology use in helping displaced persons.

5. *Digital development in the Arab region and the 2030 Agenda for Sustainable Development*
(Agenda item 12)

35.   With reference to document E/ESCWA/C.8/2019/11, the representative of the secretariat reviewed ESCWA activities related to linking the World Summit on the Information Society (WSIS) with the 2030 Agenda, including the Arab High-level Forum on the World Summit on the Information Society, the 2030 Agenda for Sustainable Development and a study entitled "Arab Horizon 2030: Digital Technologies for Development", which discuss issues related to digital technologies where WSIS and the 2030 Agenda converged. He considered ESCWA work in the field of digital development, stating that the secretariat had developed a model framework that included a toolkit to support countries in preparing national reports on digital development. Those national reports would inform a regional report prepared by ESCWA, which would be the first of its kind to tackle the status of digital development in the Arab region and ways to improve it.

36.   The representative of the secretariat reviewed activities undertaken by ESCWA to support the evaluation of digital development, including a national workshop held in Dubai, the United Arab Emirates, on 5 February 2019, aimed at providing assistance to national focal points in the preparation of the national report and discussing related challenges; and two regional meetings to discuss the drafts and methodologies of national reports for collecting data and information as per the guiding toolkit, and to discuss the final drafts of the reports. She said that 10 countries were preparing national reports on digital development, and that three reports were almost ready. She gave an overview of future activities to be undertaken by the secretariat, including providing support to countries developing adaptable and updatable national plans on optimizing digital technology use for sustainable development, and applying the toolkit prepared by ESCWA to conduct national and regional evaluations. She discussed the challenges that countries could face in preparing national reports on digital development, such as data scarcity and the absence of digital economy indicators, collaboration difficulties between sectors in data collection, and a lack of awareness on the role of ICT in sustainable development. She mentioned the experience of the Sudan that had formed a national committee to prepare its report. She also proposed best practices for national bodies involved in preparing national reports on digital development.

37.   In the ensuing discussion, participants commended the secretariat's efforts to develop the toolkit for national reports, and its future efforts in that regard. The representative of the State of Palestine enquired about the linkages between ICT and the SDGs and their indicators, and about the basis for their development as

outlined in the secretariat's presentation. The representative of Saudi Arabia asked about the deadline for submitting reports. The representative of Jordan said that his country had submitted its report but had not received comments thereon, and requested that they be sent.

38. In response, the representative of the secretariat said that linking between ICT and the SDGs and their targets was an ongoing process that required further indicators, but the main idea was that ICT intersected with all areas of development and thus required special attention. He stressed the notion of integration in development because no sector was independent of others; it was therefore necessary to consider the desired outcome of indicator development rather than simply calculating them. Regarding the query by the representative of Jordan, the representative of the secretariat said that ESCWA was waiting to receive all reports, since other teams had not yet finalized them. The secretariat would inform countries that had submitted reports about any comments via national focal points.

6. *Strengthening Governments' role in Internet governance: the Arab process*
(Agenda item 13)

39. With reference to document E/ESCWA/C.8/2019/12, the representative of the secretariat made a presentation in which he stressed that Internet governance, even if Governments were involved, was an international issue that was not limited to Arab countries. He considered the Arab Dialogue on Internet Governance launched by ESCWA and the League of Arab States, reviewing its background and its related processes. He also discussed the four annual meetings of the Arab Internet Governance Forum held over the period 2012-2015, and an initiative to advance the Forum by proposing a new charter, updating the Arab Roadmap on Internet Governance and by beginning a new phase. He reviewed the Arab Roadmap on Internet Governance: Second Edition, which included issues related to ensuring meaningful access for inclusion; security and trust policies; institutional empowerment policies; policies on Internet innovations and emerging ecosystems; human development policies; policies on critical Internet resources and network infrastructure; and policies on cultural and linguistic diversity. He presented the Forum's charter, stressing that its objective was to ensure convergence in member States' perspectives and to present a common Arab position at international events, and to develop international mechanisms in line with Arab countries' interests. He reviewed the founding and supporting bodies of the Forum prior to and following the update, and methods to finance the Forum. He also considered the fifth annual conference of the Forum and its preparatory activities, including forming the Strategic Committee, holding three meetings of the Advisory Committee on the Forum's Annual Programme, and proposing key and joint issues for its programme of work such as meaningful Internet access, cybersecurity and digital transformation.

40. In the ensuing discussion, participants commended the Forum and the role of ESCWA in establishing and advancing it. The representative of the State of Palestine said that the outcomes of WSIS called for 'enhanced cooperation' that had not been implemented, and for the Internet Governance Forum that had remained a political issue affected by State interests. He considered the status of Internet governance in the region, stating that some voices were calling for the marginalization of Governments in governance, but that was not possible in Arab countries. Other voices were calling for the adoption of standards set by the Internet Corporation for Assigned Names and Numbers (ICANN), but those were also not applicable in Arab countries. He noted the role of ESCWA as a mediator between Arab countries and international bodies, and requested that the role of government bodies in monitoring and governing the Internet be stressed in that context.

C. PROGRAMMATIC ISSUES

1. *Proposed programme plan for 2020 in the field of technology for development*
(Agenda item 14)

41. With reference to document E/ESCWA/C.8/2019/13, the representative of the secretariat made a presentation in which he highlighted the institutional infrastructure of ESCWA work in the field of technology, and key issues related to the work and activities of the Technology for Development Division. He reviewed

what the programme plan would offer to member States, including providing technical guidance to link and integrate economic and social development challenges in national digital plans, and supporting member States in evaluating their digital development and in formulating policies on new technologies. He said that, according to performance indicators, at least three member States were expected to implement their national digital plans to expedite SDG achievement. He also reviewed digital development indicators, which covered policies, enabling environments and local capacity. He discussed the activities that the Division would undertake in 2020, and the various United Nations processes that the Division was either involved in or leading. He also stressed the interlinkages between technology and the SDGs, and clarified the 'regional public goods' provided by ESCWA, such as strengthening Arabic digital content, supporting the enactment of cyberlegislation, and supporting the transition towards digital government.

42.   The Chair of the session said that discussions under the present item would be incorporated under the next item, because of the links between ESCWA activities for 2020 in the field of technology and its strategic directions in the period 2020-2025.

2. *Round-table discussion: Strategic directions for ESCWA work on technology*
for development in the period 2020-2025
(Agenda item 15)

43.   The floor was opened to discussions on document E/ESCWA/C.8/2019/CRP.1, which presented the strategic directions for ESCWA work on technology for development in the period 2020-2025. The representative of Jordan indicated that the Arab Strategy for Scientific and Technical Research and Innovation adopted by countries under the League of Arab States covered many key sectors. He enquired whether there was coordination with the Arab League Educational, Cultural and Scientific Organization, which had overseen the strategy's formulation, to avoid duplication in work, especially since the Arab League Educational, Cultural and Scientific Organization was working in fields that greatly intersected with ESCWA work. The representative of the Sudan asked whether ESCWA was coordinating with other Arab organizations working in ICT. The representative of the State of Palestine considered the issue of terminology, indicating numerous translations and a lack of clarity. He also noted country assessments regarding the Internet of things, stating that Arab populations should increase their awareness of new technologies before moving on to application and evaluation.

44.   The representative of the Arab Information and Communication Technology Organization (AICTO) said that his organization's work and ESCWA work intersected on many levels, and called for increased coordination and collaboration given the decrease in resources available to regional and international organizations. He indicated a resolution emanating from the fourth session of the Arab Economic and Social Development Summit on developing a common Arab vision in the field of technology, economy and cybersecurity, enquiring why it had not been considered in the discussion on that topic. The representative of Tunisia called for greater collaboration between ESCWA and AICTO, especially given that AITCO was affiliated to the League of Arab States.

45.   In response, the representative of the secretariat said that ESCWA had been guided by the Arab Strategy for Scientific and Technical Research and Innovation when adopting technology as a key pillar of the Beirut Consensus. Some of the Strategy's provisions had also been adopted in ESCWA action plans, stressing the strength of collaboration between the League of Arab States and ESCWA. He also welcomed collaboration with AICTO. He said that terminology remained a challenge; ESCWA was attempting to develop specific translations to avoid a multiplicity of translations, and it had established a website for that purpose. However, the terminology website of the United Nations headquarters in New York was now the official reference in that regard, but ESCWA was contributing to feeding it.

46.   He said that ESCWA had held a workshop to gauge key scientific fields that could benefit the region. The workshop had revealed significant focus on nanotechnology for water desalination. He indicated ESCWA coordination with the Arab Industrial Development and Mining Organization, confirming the development of

a method to assess countries' readiness to benefit from big data and artificial intelligence, which would result in a road map to optimize those benefits.

D. Date and venue of the second session of the Committee on Technology for Development
(Agenda item 16)

47.   Participants agreed that the third meeting of the Committee on Technology for Development would be held at the United Nations House in Beirut in February 2021.

E. Other matters
(Agenda item 17)

48.   No issues were discussed under this item.

III. ADOPTION OF THE RECOMMENDATIONS MADE BY THE COMMITTEE ON TECHNOLOGY FOR DEVELOPMENT AT ITS SECOND SESSION

49.   At its closing meeting on 21 March 2019, the Committee on Technology for Development adopted the recommendations set out in paragraphs 4 and 5 of the present report.

IV. ORGANIZATION OF WORK

A. Date and venue

50.   The Committee on Technology for Development held its second meeting at the United Nations House in Beirut on 20 and 21 March 2019. The Committee' work was divided over four meetings.

B. Opening

51.   The Chair of the first session of the Committee on Technology for Development, the representative of the United Arab Emirates, Mr. Hamdan Al Hashimi, Chargé d'Affaires at the Embassy of the United Arab Emirates in Lebanon, made the opening statement at the second session of the Committee on Technology for Development. He welcomed participants and congratulated Ms. Rola Dashti on her appointment as Executive Secretary of ESCWA. He said that the issues covered in the first session of the Committee remained fundamental and urgent, noting that the Committee's sessions were an opportunity to exchange experiences and knowledge that assisted in identifying work priorities, and that opportunities were available to keep pace with rapid technological developments and benefit from them. He urged all member States to continue communicating intensely and effectively with the ESCWA secretariat, and to strengthen collaboration with it to serve the region and its peoples.

52.   Ms. Dashti, Executive Secretary of ESCWA, made a statement in which she welcomed participants. She stressed the importance of technology in achieving development, and the need to ensure the political will to employ technology for development, especially in view of the challenges facing the region, including conflicts resulting in de-development and massive displacement, the highest rates of unemployment globally among women and young people, and water scarcity. She considered technology's significant role in facing those challenges, implementing national development plans and achieving the SDGs. She invited countries to implement and build on the Beirut Consensus, noting the role of the Committee on Technology for Development as a regional forum to discuss and exchange successful experiences. She stressed the importance of developing technology infrastructure to attract private sector investments, and the need to mobilize funding in the field of technology and innovation, amend related legislation and develop local technological content. She indicated the digital transformation fund established by the Arab Economic and Social Development

Summit in Beirut. She confirmed that the time was now to transition from discussion on challenges to action in devising solutions for the region.

C. PARTICIPANTS

53.   Representatives of 16 ESCWA member States participated in the session. The list of participants is set out in annex I to the present report.

D. ELECTION OF OFFICERS

54.   Article 18 of the rules of procedure of ESCWA provides that member States shall assume the presidency of the subsidiary bodies of the Commission on a rotating basis, in Arabic alphabetical order, as established by the United Nations. The Syrian Arab Republic assumed the presidency of the second session of the committee on Technology for Development. Participants elected the representatives of the Sudan and the United Arab Emirates as vice-chairs, and the representative of Iraq as rapporteur.

E. PROVISIONAL AGENDA

55.   At its second session, the Committee on Technology for Development adopted the provisional agenda set out in document E/ESCWA/C.8/2019/L.1 and the organization of work contained in document E/ESCWA/C.8/2019/L.2.

F. DOCUMENTS

56.   Annex II to the present report contains the list of documents presented to the Committee on Technology for Development at its second session.

LIST OF PARTICIPANTS

A. ESCWA MEMBER STATES

Egypt

Mr. Tamer Hammad
Deputy Ambassador
Embassy of Egypt in Lebanon

Iraq

Ms. Bayda al-Aqby
Chief Engineer
Communications Ministry

Mr. Siranosh Abou Touma
Expert/engineer
Ministry of Communications

Jordan

Mr. Mohamed Mislim al-Majali
Assistant Secretary-General
Higher Council for Science and Technology

Mr. Abdulqader Ali Albataniya
Director of Policies and Strategies
Ministry of Information and Communications
  Technology

Kuwait

Ms. Dina Abdelkader Al Gharabally
Project Planning Director
Central Agency for Information Technology

Ms. Manal al-Mazid
Director of Public Sector Governance
General Authority for Communications
  and Information Technology

Mr. Mossaed Abdallah al-Dosari
Project Coordination Controller
Central Agency for Information Technology

Mr. Abderrazzak Mohammed Khaled
Administrative Coordinator
Central Agency for Information Technology

Lebanon

Mr. Mohamed Roumieh
Research Director
National Council for Scientific Research

Ms. Elise Njeim
Research Associate
National Council for Scientific Research

Libya

Mr. Hussein Hassan Hussein Oraibi
General Manager
Industrial Research Centre
Ministry of Economy and Industry

Mauritania

Mr. Mohamed Taqra
Director of Strategies and Policies
General Directorate for Development Policies
  and Strategies
Ministry of Economy and Finance

Oman

Ms. Kawthar bint Ibrahim al-Baloushi
First Research Analyst
Scientific Research Council

State of Palestine

Mr. Aalan Ghazi
Manager of Projects and Technical Development
Ministry of Communications and Information
  Technology

Ms. Hadeel Hamdan
Project Coordinator
Ministry of Communications and Information
  Technology

Qatar

Mr. Faysal Ali al-Shaibi
Director of the Public Relations
  and Communication Unit
Telecommunications Regulatory Authority

Saudi Arabia

Mr. Mohamed Majid al-Qahtani
Technology and Innovation Expert
Ministry of Economy and Planning

Sudan

Mr. Soudad Mahmoud Hussein Ismail
Director General of the Department of
  Coordination and External Relations
Council of Ministers
National Information Centre

Mr. Jamal Amin Alsayid Mohammed
Director of the Department of Management
Telecommunications Regulatory Authority
Ministry of Information and communications

Syrian Arab Republic

Mr. Ghassan Saba
Associate Minister
Ministry of Communication and Technology

Mr. Mohamed Ahmed Al Mahayiri
Associate Minister
Ministry of Communication and Technology

Tunisia

Mr. Khaled Sallami
Director General of the e-Management Unit
Ministry of Public Services and Modernization
  of Administration and Public Policies

United Arab Emirates

Mr. Hamdan Al Hashimi
Chargé d'Affaires
Embassy of the United Arab Emirates in Lebanon

Yemen

Ms. Ruba Abdullah Abed Rabbou Omar
Director of the Follow-up Department
Ministry of Planning and International Cooperation

B. INTERNATIONAL AND REGIONAL ORGANIZATIONS

Mr. Mohamed bin Omar
Secretary-General
Arab Information and Communication Technology Organization

LIST OF DOCUMENTS

Title	Item	Symbol
Information note		E/ESCWA/C.8/2019/INF.1
Provisional agenda and annotations	3	E/ESCWA/C.8/2019/L.1
Organization of work	3	E/ESCWA/C.8/2019/L.2
Implementation of activities under the ESCWA programme of work and of recommendations made by the Committee on Technology for Development at its first session	4	E/ESCWA/C.8/2019/3
Technical cooperation activities	5	E/ESCWA/C.8/2019/4
Activities of the ESCWA Technology Centre	6	E/ESCWA/C.8/2019/5
Meetings of directors of e-government programmes in Arab States	7	E/ESCWA/C.8/2019/6
Technology for sustainable development: creating decent jobs and empowering youth in Arab countries	8	E/ESCWA/30/17 E/ESCWA/C.8/2019/7
Technology and innovation in the Arab region: current situation and policy frameworks	9	E/ESCWA/C.8/2019/8
Implementation of the Beirut Consensus on Technology for Sustainable Development in the Arab Region	10	E/ESCWA/EC.5/2018/4/Rev.1 E/ESCWA/C.8/2019/9
Technology as a tool to make cities safe and combat violence against women	11	E/ESCWA/C.8/2019/10
Digital development in the Arab region and the 2030 Agenda for Sustainable Development	12	E/ESCWA/C.8/2019/11
Strengthening Governments' role in Internet governance: the Arab process	13	E/ESCWA/C.8/2019/12
Proposed programme plan for 2020 in the field of technology for development	14	E/ESCWA/C.8/2019/13
Round-table discussion: Strategic directions for ESCWA work on technology for development in the period 2020-2025	15	E/ESCWA/C.8/2019/CRP.1
List of documents		E/ESCWA/C.8/2019/INF.2