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Item 7 (b) of the provisional agenda

**Actions taken in the field of water resources since the eleventh session
of the Committee on Water Resources****Implementation of activities under the ESCWA programme of work****Summary**

Since the eleventh session of the Committee on Water Resources which was held in March 2015, the Economic and Social Commission for Western Asia (ESCWA) has carried out a series of activities related to water resources under subprogramme 1 on the integrated management of natural resources for sustainable development, during 2015 and 2016. These activities include publications, expert group meetings, capacity-building, advisory services, technical assistance and field projects. They were implemented to assist member States in developing appropriate water policies in three main areas of work, namely integrated water resources management in support of sustainable development goals; regional cooperation on transboundary water resources and the food-water-energy nexus; and climate change and disaster risk reduction.

The present document provides an overview of these activities, presented under the relevant expected accomplishments set out in the ESCWA strategic framework. Participants at the twelfth session of the Committee on Water Resources are invited to take note of these activities and provide their comments and suggestions on future areas of work.

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ACRONYMS AND ABBREVIATIONS

ACCWaM	Adaptation to Climate Change in the Water Sector in the MENA Region
ACSAD	Arab Center for the Studies of Arid Zones and Dry Lands
ACWUA	Arab Countries Water Utilities Association
AMWC	Arab Ministerial Water Council
AWARENET	Arab Integrated Water Resources Management Network
BMZ	German Federal Ministry for Economic Cooperation and Development
COP	Conference of the Parties to the United Nations Framework Convention on Climate Change
ESCWA	Economic and Social Commission for Western Asia
GIZ	Deutsche Gesellschaft für Internationale Zusammenarbeit (German Agency for International Cooperation)
IWRM	integrated water resources management
MDGs	Millennium Development Goals
MDG+ Initiative	Regional Mechanism for Improved Monitoring and Reporting on Access to Water Supply and Sanitation Services in the Arab Region
MENA	Middle East and North Africa
RAED	Arab Network for Environment and Development
RICCAR	Regional Initiative for the Assessment of the Impact of Climate Change on Water Resources and Socio-Economic Vulnerability in the Arab Region
SDGs	Sustainable Development Goals
SDPD	Sustainable Development Policies Division
Sida	Swedish International Development Cooperation Agency
SMHI	Swedish Meteorological and Hydrological Institute
UNDP	United Nations Development Programme
UNECE	United Nations Economic Commission for Europe
UNEP	United Nations Environment Programme
UNEP/ROWA	UNEP Regional Office for West Asia
UNESCO	United Nations Educational, Scientific and Cultural Organization
UNESCO/WWAP	UNESCO/World Water Assessment Programme
UNFCCC	United Nations Framework Convention on Climate Change
WHO/CEHA	World Health Organization/Centre for Environmental Health Action
WMO	World Meteorological Organization

Introduction

1. The Sustainable Development Policies Division (SDPD) of the Economic and Social Commission for Western Asia (ESCWA) is responsible for implementing subprogramme 1 on the integrated management of natural resources for sustainable development of the ESCWA strategic framework. Within SDPD, the Water Resources Section is responsible for the expected accomplishments related to water resources and climate change.
2. The activities implemented by the Water Resources Section since the eleventh session of the Committee on Water Resources (Amman, 26-27 March 2015) covered part of the biennium 2014-2015 and part of the biennium 2016-2017. These activities support the achievement of expected accomplishments (b), (c) and (d) of the ESCWA programme of work for the biennium 2014-2015, and expected accomplishments (a), (b) and (c) of the ESCWA programme of work for the biennium 2016-2017.
3. The objective of subprogramme 1 for the biennium 2014-2015 was to achieve sustainable development in the region through integrated natural resource management. The objective for the biennium 2016-2017 is to achieve the integrated management of natural resources leading to improved food, water and energy security and enhanced resilience to climate change, and to mainstream sustainable development goals into regional and national policy processes.
4. Publications, expert group meetings, capacity-building activities, advisory services, technical studies and field projects on water resources and climate change have been implemented to assist member States in developing policies and exchanging experiences at the regional level. The overall objectives are to strengthen integrated water resources management (IWRM) in the light of sustainable development goals; foster regional cooperation through transboundary water issues and a water-energy-food security nexus approach; and develop coordinated responses to address climate change challenges and disaster risk reduction.

I. IMPLEMENTATION OF THE PROGRAMME OF WORK FOR THE BIENNIUM 2014-2015 IN THE FIELD OF WATER RESOURCES

5. The following are the main water resources and climate change-related activities undertaken by ESCWA since March 2015 in support of the expected accomplishments of subprogramme 1 for the biennium 2014-2015.

A. EXPECTED ACCOMPLISHMENT (b)

Enhanced capacity of member countries to develop and implement national, subregional and regional policies, strategies and action plans for the sustainable management of water, energy and land.

1. Studies and reports

*ESCWA Water Development Report 6: The Water, Energy and Food Security Nexus
in the Arab Region
(E/ESCWA/SDPD/2015/2)*

6. The sixth issue of the Water Development Report introduces an analytical framework that explains the water, energy and food security nexus and demonstrates that achieving security in one natural resource can have implications on the sustainability and security of the others. The report examines the nexus from the perspective of the Arab region and considers the linkages that affect water, energy and food security in the context of achieving sustainable development. In doing so, it reveals how the Sustainable Development Goals (SDGs), aimed at ensuring access to water, food and sustainable energy for all, can be pursued within the context of climate change and a human-rights based approach to development.

Water supply and sanitation: beyond 2015 (Booklet)
(E/ESCWA/SDPD/2015/Booklet.1)

7. The booklet reports on progress in achieving access to water and sanitation in the Arab region. It sheds light on the proposed water-related SDGs and targets from an Arab perspective and analyses the negotiations undertaken by the Open Working Group on the adoption of a dedicated water goal. It concludes by presenting the MDG+ Initiative as a regional success story for informing future monitoring and reporting on water indicators, and by showcasing efforts by Arab countries to strengthen water policies for the achievement of common water goals. The booklet is available from www.unescwa.org/sites/www.unescwa.org/files/page_attachments/escwa-water-supply-sanitation-final-may2015.pdf.

Regional Initiative for Establishing a Regional Mechanism for Improved Monitoring and Reporting on Access to Water Supply and Sanitation Services in the Arab Region (MDG+): Supporting the move from MDGs to SDGs in the Arab region (Booklet)
(E/ESCWA/SDPD/2015/Booklet.4)

8. The booklet was issued within the context of the World Water Day 2015 thematic focus on water and sustainable development. It provides background information on the Millennium Development Goals (MDGs), presents the region-specific set of MDG+ Initiative indicators on water supply, sanitation and wastewater adopted by the Arab Ministerial Water Council (AMWC) and their associated findings, and identifies the potential interconnection between the MDG+ indicators and the water-related SDG6 targets. The booklet is available from www.unescwa.org/sites/www.unescwa.org/files/page_attachments/brochure-mdgs_to_sdgs-nov2015.pdf.

2. *Meetings and workshops*

Expert Group Meeting on the Water, Energy, Food Security Nexus in the Arab Region
(Amman, 24-25 March 2015)

9. The expert group meeting was organized by ESCWA in partnership with the League of Arab States to build understanding of the overall scope of the water-energy-food security nexus as a conceptual framework for advancing sustainable development. Members of the ESCWA Committee on Water Resources and Committee on Energy and regional experts exchanged information on regional initiatives, projects and partnerships supporting Arab countries on the water-energy-food nexus. They discussed the benefits, opportunities and challenges of adopting a nexus approach for strengthening integrated natural resource management within existing governance structures at the national and regional levels. They stressed the importance of identifying priorities regarding natural resource scarcity in the Arab region. Information on the meeting is available from www.unescwa.org/events/expert-group-meeting-water-energy-food-security-nexus-arab-region.

3. *Substantive input to regional and global outputs/forums on water issues*

World Water Development Report 2016

10. ESCWA wrote the chapter on the Arab region of the *World Water Development Report 2016: Water and Jobs*, prepared by the United Nations Educational, Scientific and Cultural Organization World Water Assessment Programme (UNESCO/WWAP) within the framework of UN-Water interagency cooperation. The ESCWA contribution focuses on key concerns for the Arab region regarding the water-energy nexus, water and development, water and jobs, and climate change. It highlights the need to build further the capacity of water practitioners and policymakers, and the importance of pursuing integrated water resources management and investments in water and sanitation to support job creation. The report was launched on World Water Day 2016, which focused on the same theme.

World Water Week
(Stockholm, 23-28 August 2015)

11. The theme of World Water Week 2015 was “Water for development”. During this week, ESCWA organized a seminar on the topic “Climate change impacts on water for development in the Arab region” in collaboration with partner institutions assisting ESCWA in implementing the Regional Initiative for the Assessment of the Impact of Climate Change on Water Resources and Socio-Economic Vulnerability in the Arab Region (RICCAR). The seminar demonstrated how the science-policy interface has been institutionalized to support climate change assessment, adaptation, disaster risk reduction and sustainable development planning in the Arab region by showcasing methodologies, findings and knowledge tools generated to inform climate change adaptation, vulnerability assessment and sustainable development policy under RICCAR. The seminar presented regional climate modelling and hydrological modelling projections for the Arab region, including analysis of extreme weather events that could affect shared water basins in the region, and the potential effects of climate change on agriculture and human health in Arab countries.

12. ESCWA also gave a presentation at World Water Week on the chapter on the Arab region of the World Water Development Report 2015 at a seminar organized by UNESCO/WWAP, and contributed to discussions on the formulation of the SDGs that centred on the linkages between climate change, water and sustainable development in the Arab region.

Water and Development Congress and Exhibition
(Dead Sea, Jordan, 18-20 October 2015)

13. At the Water and Development Congress and Exhibition, organized by the International Water Association, ESCWA led two sessions on the SDGs during the Young Water Professionals Forum; served on the first panel of the West Asia-North Africa Water Summit; gave a presentation entitled “Lessons learned from fostering regional water cooperation among Arab States” during a seminar organized by the Swedish International Development Cooperation Agency (Sida) on the theme “Learning from regional water cooperation in the MENA region”; and delivered presentations on groundwater as a working group facilitator.

4. *Field projects*

MDG+ Initiative

14. ESCWA continued to support AMWC in implementing the MDG+ Initiative in the Arab region. This regional initiative is led by ESCWA and implemented in partnership with the Arab Countries Water Utilities Association (ACWUA) and the League of Arab States with funding provided by Sida.

Water Supply and Sanitation Services in the Arab Region:
MDG+ Initiative First Report 2015

15. The first draft report of the MDG+ Initiative was reviewed and vetted by the heads of the MDG+ national monitoring teams at the Second Regional Workshop of the MDG+ Initiative (Dead Sea, Jordan, 13-14 January 2015), convened on the sidelines of the Arab Water Week. The draft report contained country-level data on water supply and sanitation received from Bahrain, Egypt, Iraq, Jordan, Kuwait, Libya, Oman, Palestine, Qatar, Tunisia and the United Arab Emirates. It was submitted to AMWC for review in April 2015, and was formally issued and endorsed in an AMWC resolution at its seventh session (Cairo, 27 May 2015). The 2015 Report of the MDG+ Initiative is available in Arabic and English from www.acwua.org/mdg+/library.

Pilot field surveys

16. In accordance with an agreement signed between ESCWA and the Arab Network for Environment and Development (RAED) to conduct pilot consumer field surveys under the MDG+ Initiative project, RAED submitted to ESCWA in February 2015 the results of the phase I pilot consumer field surveys. The surveys focused on access to water supply and sanitation services in rural parts of Mauritania, Palestine, the Sudan and Yemen, which was decided based on discussions undertaken at the AMWC Technical Scientific Advisory Committee in 2014 to focus the pilot surveys on some of the region's least developed countries. The results were incorporated into the 2015 Report of the MDG+ Initiative. The country datasets were reviewed and summarized by ESCWA and vetted by the National Monitoring Teams before finalizing the draft report.

17. The phase II pilot consumer surveys were conducted in the summer of 2015. They focused on countries facing conflict-related pressures, as identified by a resolution issued at the seventh ministerial session of AMWC (item 7, resolution K 108 of 27 May 2015). Based on the feasibility of conducting these pilot field surveys, the countries selected for inclusion in phase II were Iraq, Jordan, Lebanon and the Syrian Arab Republic. In June 2015, training workshops on the questionnaire were conducted for survey team leaders in Cairo and Beirut. The survey results were submitted to ESCWA in December 2015. They were reviewed, summarized and incorporated into the draft 2016 report of the MDG+ Initiative. Following a request by the Ministry of Water Resources of Iraq, the survey results covering parts of Iraq were removed from the report prior to finalization.

Third Workshop of the MDG+ Initiative
(Amman, 18-19 November 2015)

18. This workshop was organized by ACWUA and ESCWA, in cooperation with the League of Arab States. Regional stakeholders participated in the workshop, and ESCWA presented the findings of the first MDG+ report, shared experiences gained during twinning activities, and prepared for the issuance of the second MDG+ report and online database in 2016. It also introduced the new water-related SDGs of the 2030 Agenda for Sustainable Development.

Technical cooperation and national workshops of the MDG+ Initiative

19. Three twinning exercises, completed in October and November 2015, allowed the MDG+ national focal points in Iraq, Mauritania and Yemen to shadow counterparts in Jordan and learn from the Jordanian experience in compiling and completing the MDG+ indicator datasets. Four national workshops were also organized to train national monitoring teams on the collection, calculation and validation of national datasets related to a set of regionally specific water and sanitation indicators, based on the training manual prepared by ESCWA (E/ESCWA/SDPD/2014/1/Manual). ACWUA and ESCWA held these workshops in Rabat (2-3 June 2015), Beirut (6-8 August 2015), Nouakchott (1-3 September 2015) and Khartoum (8-14 September 2015).

**Developing the Capacity of ESCWA Member Countries to Address
the Water-Energy Nexus for Achieving Sustainable Development Goals**
(United Nations Development Account project)

20. This project was launched at the Expert Group Meeting on the Water-Energy-Food Security Nexus in the Arab Region (Amman, 24-25 March 2015). Participants were introduced to the project's objectives, activities and work plan. The project implementation period extends from 2015 to 2017. It aims to build the capacity of ministries and public service providers responsible for water and energy in Arab countries, to adopt an integrated approach in addressing water and energy issues.

21. A regional policy toolkit was initiated in 2015 and published in 2016. It comprises seven modules on the themes prioritized by the ESCWA Committee on Water Resources and Committee on Energy during

previous consultations, namely knowledge and awareness; policy coherence; the water-energy security nexus; resource efficiency; technology; renewable energy; and climate change and natural disasters.

B. EXPECTED ACCOMPLISHMENT (c)

Enhanced food, water and energy security of the Arab region to sustain long-term development and preserve the achievements in poverty alleviation and human development by promoting regional cooperation on shared water resources, energy networks and land management.

1. Substantive support to regional forums on water issues

*Twelfth session of the AMWC Technical Scientific Advisory Committee
(Cairo, 24-26 May 2015)
and seventh session of the Arab Ministerial Water Council
(Cairo, 27 May 2015)*

22. Progress reports were submitted at the twelfth session of the AMWC Technical Scientific Advisory Committee on the implementation of AMWC resolutions related to water resources in the Arab region requesting ESCWA support. In response, the AMWC issued resolutions at its seventh ministerial session that: (a) recognize the substantive support provided by ESCWA to the fifth intergovernmental consultations on the draft convention on shared water resources in the Arab region (Cairo, 28-29 April 2015, and reconvened on 23 May 2015); (b) recognize the work conducted under RICCAR and coordinated by ESCWA; (c) express appreciation for ESCWA and ACUWA efforts on the MDG+ Initiative, culminating in the Council's endorsement of the First Report of the MDG+; and (d) welcome the launch of the new ESCWA project entitled "Promoting food and water security through cooperation and capacity development in the Arab region" with Sida funding, to be implemented in consultation with the League of Arab States in support of the Arab Initiative on the Energy-Water-Food Nexus.

23. Also at its seventh ministerial session, the AMWC requested ESCWA to: (a) continue coordinating RICCAR, including the implementation of the integrated vulnerability assessment of climate change and water resources, and the establishment of an Arab climate outlook forum and of a regional knowledge hub; (b) provide capacity-building activities for climate change negotiators, water ministries and meteorological offices; (c) prepare the second MDG+ Initiative report; (d) support activities on shared water resources; and (e) contribute to the implementation of the Arab Initiative on the Energy-Water-Food Nexus.

24. The aforementioned assistance to AMWC is also part of the work undertaken by ESCWA to implement expected accomplishment (d) during the biennium 2014-2015.

2. Field projects

AWARENET

25. ESCWA continued to host the secretariat of the Arab Integrated Water Resources Management Network (AWARENET) in 2015. Work included coordination with the Capacity Development in Sustainable Water Management (Cap-Net) programme of the United Nations Development Programme (UNDP) and AWARENET members to conduct various activities, including the first Cap-Net Virtual Training. A regional training course on Water Footprint Assessments for GCC and Arab Countries (Manama, 20-22 April 2015) was jointly organized and supported by AWARENET, the Water, Science and Technology Association, the Arabian Gulf University, the Middle East and North Africa Network of Water Centers of Excellence, ESCWA and Cap-Net. The workshop was attended by 30 government officials and civil society representatives from nine Arab countries (Bahrain, Jordan, Morocco, Oman, Palestine, Saudi Arabia, Sudan, Tunisia, and United Arab Emirates), and provided training on the water footprint assessment concept and methodology.

3. *Advisory services and technical cooperation*

26. Based on an expression of interest submitted by Lebanese stakeholders, and with the financial support of the Regular Programme on Technical Cooperation, ESCWA organized an expert workshop on the Jordan River Basin with the Ibrahim Abd El Al Foundation for Sustainable Development (Beirut, 14-15 December 2015). The workshop enhanced mutual understanding and exchange of knowledge on the management of the Jordan River Basin as it relates to institutional and policy frameworks existing in Jordan, Lebanon, Palestine and the Syrian Arab Republic. The Inventory of Shared Water Resources in Western Asia, published by ESCWA, served as a basis for the discussions.

C. EXPECTED ACCOMPLISHMENT (d)

Enhanced resilience and crisis management capacity of member countries to absorb and respond to the impact of crises, including the development of subregional and regional mechanisms for a coordinated response to climate change and natural crises.

1. *Studies and reports*

Training Manual on the Integrated Vulnerability Assessment Methodology
(E/ESCWA/SDPD/2015/Manual.1)

27. Under the framework of RICCAR and the project on Adaptation to Climate Change in the Water Sector in the MENA Region (ACCWaM) that supports RICCAR, the manual outlines the integrated vulnerability assessment methodology developed for application in the Arab region, provides step-by-step guidance for understanding the various components of preparing a regional vulnerability assessment, drawing on regional climate and hydrological modelling outputs, and on geospatial and statistical tools through an integrated mapping approach. The manual is available from www.unescwa.org/sites/www.unescwa.org/files/page_attachments/riccar_training_manual.pdf.

2. *Substantive support to regional and international forums on water issues*

Thirty-first meeting of the Arab Permanent Committee for Meteorology
(Jeddah, Saudi Arabia, 26-30 April 2015)

28. ESCWA participated in the meeting and reported on the implementation of resolutions requesting ESCWA to support regional coordination on climate change assessment and negotiations. The draft terms of reference of the Arab Climate Outlook Forum, prepared by ESCWA in consultation with the League of Arab States, were approved at the meeting.

*Twenty-first Conference of the Parties to the United Nations Framework Convention
on Climate Change (UNFCCC/COP-21)*
(Paris, 30 November-11 December 2015)

29. ESCWA and the League of Arab States organized a side event on the theme “Climate change and vulnerability assessment in the Arab region” at the UNFCCC/COP-21. The session provided insights into regional and national initiatives and national case studies on climate change impact and vulnerability assessment and resilience towards the development of adaptation strategies in the Arab region.

30. ESCWA also supported the UN-Water Thematic Working Group on Climate Change to organize a side event at UNFCCC/COP-21 entitled “The pivotal role of water in climate change adaptation and mitigation”.

3. *Field projects*

RICCAR

31. ESCWA coordinates the implementation of RICCAR in partnership with 11 United Nations, League of Arab States and expert institutions. The initiative is financed by projects funded by Sida and the German Federal Ministry for Economic Cooperation and Development (BMZ) through the ACCWaM project led by German Agency for International Cooperation (GIZ), as well as by in-kind contributions from RICCAR implementing partners.

32. In 2015, ESCWA developed a set of e-questionnaires to solicit the views of regional stakeholders and experts on the selection and weighting of indicators that would contribute to the vulnerability assessment (VA). The e-questionnaire covered five sectors and 10 sub-sectors identified for inclusion in the vulnerability assessment, and generated over 360 responses from regional stakeholders and experts. ESCWA analysed the questionnaire responses utilizing various statistical packages to finalize the set of indicators used to support the sector-based vulnerability assessments and their respective weights in the VA aggregation methodology. ESCWA and the Arab Center for the Studies of Arid Zones and Dry Lands (ACSAD) regularly coordinated the preparation of the vulnerability assessment, which included finalizing the methodology and preparing maps using ArcGIS tools. Coordination was realized through a series of meetings between ACSAD and ESCWA, as well as counterparts at GIZ and in other ESCWA divisions.

33. ESCWA organized a consultative meeting on establishing a regional knowledge hub (Beirut, 19-20 April 2015) with ACSAD, the Food and Agriculture Organization of the United Nations (FAO) and GIZ. Based on the outcomes of this meeting and further consultations with RICCAR partners, ESCWA prepared a proposal on hosting the regional knowledge hub on the FAO FENIX IT Platform, which was approved by the AMWC Technical Scientific Advisory Committee at its twelfth session (Cairo, 24 May 2015).

34. The Swedish Meteorological and Hydrological Institute (SMHI) completed the 11 regional climate-modelling projections for the Arab Domain under RICCAR, and ensured their bias correction for use in hydrological models. SMHI then completed the generated regional hydrological outputs based on those projections using HYPE and VIC, and produced a series of extreme climate indicator outputs based on the bias corrected projections of 2015. These outputs were submitted to ESCWA in its December 2015 report. The outputs were then sent as NetCDF e-files, which had to be transferred into ArcGIS by ESCWA to prepare the integrated vulnerability assessment.

35. ESCWA issued a RICCAR technical booklet entitled “Climate projections and extreme climate indices for the Arab region” (E/ESCWA/SDPD/2015/Booklet.2) summarizing the results of the regional climate modelling projections for temperature and precipitation and presenting a set of region-specific extreme climate indices until the year 2100. The booklet was disseminated at regional meetings and at UNFCCC/COP-21.

36. ESCWA signed an agreement with the United Nations University-Institute for Water, Environment and Health to prepare a case study on assessing the impact of climate change on water resources and human health in the Arab region. A case study report was prepared in 2015 based on the unbiased corrected regional climate modelling projections made available by SMHI at that time.

37. ESCWA organized the fourth regional RICCAR training workshop for water ministries and regional stakeholders and experts on the theme “Moving from climate change impact assessment to socioeconomic VA in the Arab region” (Beirut, 8-10 June 2015). The workshop discussed key elements related to accessing and understanding regional climate modelling and hydrological modelling outputs, the key components of VA and its associated indicators, data quality, indicator aggregation methods, and the use of geographic information system (GIS) tools to support the integrated mapping of components of the assessment. It was followed by the fourth meeting of the RICCAR Vulnerability Assessment Working Group to review the working group’s tasks and discuss quality management processes.

**Developing the Capacities of the Arab Countries for Climate Change Adaptation
by Applying IWRM Tools**

(United Nations Development Account project)

38. ESCWA led the implementation of this project in coordination with the United Nations Environment Programme's Regional Office for West Asia (UNEP/ROWA), and in partnership with ACSAD, ACWUA, GIZ and the World Health Organization Centre for Environmental Health Action (WHO/CEHA). The project builds on RICCAR results. In 2015, the project duration was extended to 30 June 2016.

39. In 2015, the terms of reference for the five sector modules were formulated to examine climate change impacts on freshwater resources as they relate to agriculture, economic development, environment, health and human settlements. An agreement with ACSAD was signed within this context to prepare the training module on climate change adaptation related to the agriculture sector. ESCWA hired four consultants to develop the other training modules, in coordination with the relevant partner agency, namely UNEP/ROWA on environment, WHO/CEHA on health, ACWUA on human settlements, and ESCWA on economic development. The five draft modules were reviewed at the Expert Group Meeting to Review the Draft Modules on Climate Change Adaptation Using IWRM Tools (Beirut, 11-12 June 2015). Experts at the meeting presented an overview of the training materials for each module and discussed how the RICCAR modelling outputs could contribute to each module.

ACCWaM

40. The field project on Adaptation to Climate Change in the Water Sector in the MENA Region (ACCWaM) is led by GIZ with funding from BMZ and implemented in partnership with the League of Arab States, ACSAD and ESCWA. It supports the implementation of RICCAR and the UNDA project on Developing the Capacities of the Arab Countries for Climate Change Adaptation by Applying IWRM Tools.

41. In addition to the vulnerability assessment activities listed under RICCAR, and jointly supported by ACCWaM, ESCWA participated in the GIZ/ACCWaM Planning Workshop and the fifth and sixth meetings of the Steering Committee (Cairo, 31 January-1 February 2015; and 28 May 2015). GIZ also provided technical advisory support for the preparation of the agricultural module led by ACSAD under the aforementioned UNDA project on climate change adaptation.

4. Advisory services and technical cooperation

42. ESCWA, in collaboration with the League of Arab States, organized the fourth and fifth regional training workshops on Capacity Development for Climate Change Negotiations for the Arab Countries (Doha, 19-21 May 2015; and Cairo, 17-19 November 2015). The fourth workshop presented the outcomes and implications of the latest *ad hoc* working group sessions that took place in 2015 following the UNFCCC/COP-20 (Lima, 1-12 December 2014). It also presented factors contributing to successful negotiations on climate change, including methods to bring in new proposals and build partnerships to achieve common goals. The fifth workshop addressed issues related to climate change mitigation and adaptation in preparation for the UNFCCC/COP-21 negotiations.

**II. IMPLEMENTATION OF THE PROGRAMME OF WORK FOR THE
BIENNIUM 2016-2017 IN THE FIELD OF WATER RESOURCES**

43. The following are the main water resource-related activities undertaken by ESCWA in 2016 and early 2017 in support of the expected accomplishments of subprogramme 1 for the biennium 2016-2017.

A. EXPECTED ACCOMPLISHMENT (a)

Member States mainstream appropriate goals related to sustainable development into national multisectoral strategies and action plans for the integrated management of natural resources, including tools for measuring, monitoring and reporting.

1. *Studies and reports*

*Drawing on the MDG+ Initiative for informing the water-related
SDGs in the Arab region (Working Paper)
(E/ESCWA/SDPD/2016/WP.1)*

44. This paper reviews the MDG+ Initiative and discusses the water-related SDGs and their linkages with MDG+ Initiative indicators. It also identifies key issues for consideration in the regional monitoring and reporting of the water-related SDGs. The paper was presented at the Expert Group Meeting on Water-related Sustainable Development Goals (Beirut, 12-13 April 2016), and was used to inform discussions undertaken at the MDG+ Initiative High Level Meeting on the Water-related Sustainable Development Goals (Amman, 1-2 November 2016) and the Expert Consultation on the SDG6 Indicators (Beirut, 21 December 2016). The paper is available from www.unescwa.org/sites/www.unescwa.org/files/events/files/working_paper_on_mdg_for_informing_water-related_sdgs-31march16.pdf.

*Moving towards the SDGs in the Arab region (Booklet)
(E/ESCWA/SDPD/2016/Booklet.5)*

45. The booklet presents opportunities in the water and sanitation sectors in the Arab region, and highlights gaps in access to drinking water and sanitation in Arab States. It can also inform decision-making related to investments and job creation in the water sector. It provides an overview of the outcomes of the MDG+ Initiative second report in terms of water supply and sanitation indicators for 18 Arab countries. Moreover, it sets out the main findings of the consumer field surveys conducted in remote villages in four selected member States, shedding light on regional disparities at the country level.

2. *Substantive input to global and regional forums on water issues*

*World Water Week
(Stockholm, 28 August-1 September 2016)*

46. The theme of World Water Week 2016 was “Water for Sustainable Growth”. During this week, ESCWA organized an event on the topic “Informing the SDGs through the Arab MDG+ Initiative” as part of the dedicated MENA Focus programme. The session was organized with MDG+ Initiative partners and showed how the regional and national experience gained from implementing the Initiative had positioned Arab countries for effective monitoring and follow-up on the water-related SDGs. ESCWA also moderated the “UN-Water Stakeholder Dialogue – Interlinked implementation of SDG 6”.

*Twelfth Kovacs Colloquium of UNESCO
(Paris, 15 June 2016)*

47. Following an invitation by the UNESCO International Hydrological Programme, ESCWA participated in the Colloquium by delivering a presentation on the concerns of water-scarce countries regarding water-related SDGs, and serving as a panellist on the theme “Water-related SDGs implementation: Knowledge, data, indicators, tools and innovations”.

3. *Field projects*

MDG+ Initiative

48. On 31 December 2016, ESCWA, in partnership with ACWUA and the League of Arab States, completed the implementation of the Sida-funded project supporting the MDG+ Initiative entitled “Establishing a regional mechanism for improved monitoring and reporting on access to water supply and sanitation services in the Arab region”. The project was implemented between 2011 and 2016, and supported the Initiative as mandated by AMWC resolutions issued from 2009 onwards. The MDG+ national focal points have committed themselves to continuing the collection and submission of national data on the MDG+ indicators beyond the life of the project.

49. The project concluded with the issuance of 2015 and 2016 reports of the MDG+ Initiative in Arabic and English, presenting data on the AMWC-vetted MDG+ indicators for 18 Arab countries. The indicators build upon the two water indicators adopted under the MDGs, but add indicators related to intermittency, water quality, wastewater treatment and reuse, and affordability that are relevant to the Arab region. These indicators are now largely incorporated under the SDG6 targets. The two reports were submitted to AMWC, which recognized the MDG+ Initiative as an important achievement for the region and a basis for informing follow-up on the water-related SDGs.

Expert Group Meeting on the Water-related Sustainable Development Goals (Beirut, 12-13 April 2016)

50. The meeting brought together regional experts, United Nations regional offices and expert organizations engaged in the collection, monitoring and reporting of water-related indicators in the Arab region. The chairs of the ESCWA Committee on Water Resources and Committee on Energy, and a UN-Water representative also attended the meeting. Participants held a discussion on the work completed with respect to the MDGs and work anticipated with respect to the SDGs by various organizations, with the aim of enhancing understanding and exchange to coordinate future work on the water-related SDGs.

MDG+ Initiative High Level Meeting on the Water-related SDGs (Amman, 1-2 November 2016)

51. The high-level meeting was attended by senior officials representing ministries responsible for water; the heads of water, sanitation and wastewater utilities; water regulators; and statistical offices in Arab countries. It concluded with a set of recommendations for moving forward with the water-related SDGs and identified lessons learned from implementing the MDG+ Initiative. In doing so, it proposed ways to prepare and position Arab countries for monitoring and reporting on the water-related SDGs, including SDG6, at the country, regional and global levels. The MDG+ national focal points and national monitoring team members participating in the meeting confirmed their commitment to continue collecting and submitting data on the regional MDG+ indicators. The online database developed by ACWUA was presented at the meeting to facilitate the continued collection, review and dissemination of the MDG+ indicator datasets.

Expert consultation on the SDG6 Indicators (Beirut, 21 December 2016)

52. To follow-up on the recommendations adopted at the MDG+ Initiative High Level Meeting on the Water-related Sustainable Development Goals (Amman, 1-2 November 2016), ESCWA organized an expert consultation on the SDG6 indicators with official representatives of Arab countries participating in the Inter-Agency and Expert Group on the Sustainable Development Goal Indicators (IAEG-SDGs) and the High-level Group for Partnership, Coordination and Capacity-Building for statistics for the 2030 Agenda for Sustainable Development. The meeting identified Arab countries' priorities, including achieving consensus on a set of

additional indicators and issues that should be included in SDG6 monitoring and reporting at the country, regional and global levels.

External evaluation

53. An external evaluation of the project was completed in December 2016 and issued the following 10 findings and conclusions:

(a) “The initiative is a direct response to priorities of the Arab region and to the priorities of the AMWC within the LAS; during implementation, the initiative’s objectives, indicators and monitoring remained valid with regards to the new 2030 Agenda for Sustainable Development;

(b) The participation of women and national women machineries in the project’s activities were limited at the beginning but grew laudably over time;

(c) The evaluation finds strong evidence that regional and national monitoring capacity was effectively enhanced through the MDG+ Initiative. A regional and national monitoring mechanism was established and capacities in monitoring and data management of water and sanitation services were increased;

(d) The establishment of a regional data management platform was progressively realized;

(e) The initiative effectively institutionalized the regional monitoring mechanism. A national and regional monitoring programme was established and institutionalized for the duration of the project and 18 Arab countries engaged in the monitoring programme;

(f) The initiative contributed to strengthened regional and national dialogue regarding the formulation and findings of its indicators within the Arab regional context;

(g) The initiative contributed to informing the 2030 Agenda while also supporting Arab countries in their preparation towards water-related SDG targets;

(h) The initiative made efficient utilization of resources;

(i) Project activities and outputs were largely achieved on time; the time extension proved to be a valuable opportunity for stronger regional conceptualization and consultation regarding the potential linkages between the MDG+ Initiative and the water-related SDGs;

(j) The initiative achieved several sustainable results and benefits; it increased the region’s capacity to monitor its indicators, and established a regional institutional framework that is regionally owned”.

4. Advisory services and technical cooperation

54. Following a request by the Ministry of Environment and Health of Iraq to provide assistance on the 2030 Agenda for Sustainable Development, ESCWA supported the participation of a Ministry official in the Expert Workshop on Developing the Capacities of the Health Sector for Climate Change Adaptation to Protect Health from the Climate Change Effects on Freshwater Resources (Amman, 19-21 April 2016), which was organized in collaboration with WHO/CEHA.

B. EXPECTED ACCOMPLISHMENT (b)

Member States adopt platforms and resolutions on regional cooperation on shared water resources, energy networks and environmental sustainability to improve food, water and energy security.

1. *Studies and reports*

*ESCWA Water Development Report 7: Climate Change and Disaster Risk Reduction
in the Arab Region
(Forthcoming)*

55. The seventh issue of the *ESCWA Water Development Report* will be released in 2017. It focuses on linking the climate change and disaster risk reduction so as to formulate integrated policies with respect to natural disasters, particularly water-related disasters, which are being exacerbated by climate change. The report draws upon RICCAR outputs generated through regional climate modelling and disaster loss databases, including work undertaken with the League of Arab States and the United Nations Office for Disaster Risk Reduction (UNISDR) on Arab regional strategies and action plans related to climate change and disasters risk reduction. Regional concerns are also examined in the light of the SDGs, the UNFCCC Paris Agreement and the Sendai Framework on Disaster Risk Reduction.

2. *Substantive support to regional and international forums on water issues*

*Thirteenth and fourteenth sessions of the AMWC Technical Scientific Advisory Committee
(Cairo, 24-26 January 2016; Cairo, 23-25 October 2016)*

*and eighth session of the Arab Ministerial Water Council
(Cairo, 26 October 2016)*

56. ESCWA contributed to the thirteenth and fourteenth sessions of the AMWC Technical, Scientific Advisory Committee, and delivered presentations related to RICCAR, the water-related SDGs, and the water and food nexus. The resolutions adopted at the sessions recognized the substantive support offered by ESCWA, and requested continued and additional support from ESCWA on issues related to climate change assessment, climate change negotiations, the MDG+ Initiative, the water-related SDGs, shared water resources, the water-energy-food nexus and water diplomacy. As articulated in the resolutions, ESCWA invited member States to designate experts to contribute to the peer review of the RICCAR draft report. ESCWA and ACWUA also submitted the *2016 Report of the MDG+ Initiative* at the eighth session of the Arab Ministerial Water Council.

57. In implementation of the AMWC resolutions of January 2016, ESCWA undertook the following activities: contracted a legal expert to provide a written opinion on the draft convention on shared water resources in the Arab region (as per resolution IV and its sub-items), which was presented during the seventh intergovernmental consultation on the draft convention (Cairo, 14-15 March 2016), and provided technical support to the meeting; convened an expert group meeting on the water-related SDGs (Beirut, 12-13 April 2016) in partnership with the League of Arab States and ACWUA within the framework of the MDG+ Initiative (as per resolution VI-b); conducted discussions with counterparts in Beirut (April 2016) and Amman (May 2016) to discuss follow-up related to the MDG+ Initiative (as per resolution V); and organized the sixth and seventh regional training workshops on Capacity Development for Climate Change Negotiations for the Arab Countries (Cairo, 3-6 April 2016; and Rabat, 25-29 September 2016) in partnership with the League, UNEP and UNESCO (as per resolution III-3)

*Intergovernmental Consultative Meeting on the Draft Convention on Shared
Water Resources in the Arab Region
(Cairo, 14-15 March 2016)*

58. ESCWA participated in the Seventh Intergovernmental Consultative Meeting on the Draft Convention on Shared Water Resources in the Arab Region (Cairo, 14-15 March 2016), organized by the League of Arab States at the request of AMWC.

High-Level Meeting on the Water-Energy-Food Security Nexus
(Cairo, 16-17 March 2016)

59. This High-Level Meeting was convened under the auspices of AMWC by the League of Arab States with the support of GIZ within the framework of the League's Water-Energy-Food Nexus Initiative in the Arab Region. ESCWA contributions included delivering presentations on the ESCWA *Water Development Report 6: Water-Energy-Food Security Nexus in the Arab Region*, ESCWA-led projects on water and food security in the Arab region, and the UNDA project on Developing the Capacity of ESCWA Member Countries to Address the Water-Energy Nexus for Achieving Sustainable Development Goals.

Arab Conference on Water under Occupation
(Cairo, 26-28 October)

60. ESCWA delivered an opening statement at the high-level opening ceremony of the Arab Conference on Water under Occupation, held at the headquarters of the League of Arab States. ESCWA also served as a panellist, moderated a session, and supported preparations for the Conference. The League convened the Conference, which was supported by the Palestinian Water Authority based on resolutions adopted by the Arab Ministerial Water Council.

Arab Permanent Committee for Meteorology

61. ESCWA contributed to meetings organized by the Arab Permanent Committee on Meteorology (APCM). At the APCM Sub-Committee Meeting on Weather and Climate Hazard Information Management (Amman, 28-29 February 2016), ESCWA reported on RICCAR outputs to date. ESCWA also participated in the first meeting of the Arab Forum for Meteorology and Climate (Abu Dhabi, 8-9 May 2016), the thirty-second session of APCM (Abu Dhabi, 10-11 May 2016), and the first ministerial session of the newly established Arab Council of Ministers Responsible for Meteorology and Climate (Abu Dhabi, 12-13 May 2016). At these meetings, ESCWA expressed its commitment to supporting a climate data rescue initiative involving the Jordanian and Palestinian meteorological services. Terms of reference and contracting for conducting that work were finalized in February 2017.

UN-Water

62. ESCWA was elected to serve on the UN-Water Joint Steering Group. It also co-chairs the UN-Water Regional Level Coordination Task Force with ESCAP. The Task Force was mandated to prepare the External Review of UN-Water/Africa. ESCWA coordinated with counterparts, drafted the terms of reference for the Review, provided guidance to the external consultant, and reviewed the draft and final report issued in May 2016. ESCWA is also a member of the UN-Water Expert Group on Climate Change: it contributed to a joint side event and video on the subject at the UNFCCC/COP22 in Marrakesh, Morocco, in November 2016.

63. ESCWA participated in the UN-Water GEMI Inception Workshop (Amman, 22-23 May 2016) to provide technical input on how water and sanitation indicators used in the Arab Region can inform work being undertaken by the Global Expanded Water Monitoring Initiative (GEMI). GEMI is an interagency initiative launched by UN-Water to support integrated monitoring and reporting on SDG6 by United Nations agencies. ESCWA was subsequently invited to participate in the opening session of the second GEMI Steering Committee meeting (Geneva, 8 February 2017). To support interagency coordination on the water-related SDGs, ESCWA had also invited UN-Water and GEMI counterparts to participate in the MDG+ Initiative expert group meeting and high-level meeting, held in Beirut (12-13 April 2016) and Amman (1-2 November 2016), respectively.

64. ESCWA participated in the twenty-fifth meeting of the UN-Water Senior Programme Managers (SPM) (Stockholm, 26-27 August 2016) and delivered a summary of the findings and recommendations of the External Review of UN-Water/Africa. SPM found that UN-Water/Africa was no longer functioning and

recommended strengthening the role of United Nations regional commissions as a means to coordinate the work of UN-Water at the regional level. ESCWA also participated in the twenty-sixth meeting of the UN-Water SPM (Geneva, 6-7 February 2017). Based on the concept note submitted to SPM by the UN-Water Regional Level Coordination Task Force, SPM endorsed a proposal to conduct a mapping exercise and organize three consultations on how to improve regional-level coordination on water in 2017.

*Workshop on the Role of Meteorological Information and Services in Support
of Decision-Making in the Context of Climate Change and Regional Consultation
on Meteorological Services in Arab countries
(Casablanca, Morocco, 4-6 October 2016)*

65. ESCWA contributed to this workshop, organized by the Moroccan Meteorological Office and the World Meteorological Organization (WMO), through a presentation entitled “Projected climate and extreme indices and meteorological services in the Arab region”. ESCWA also sponsored the participation of national and international experts at the meeting.

*From practitioner to practitioner: training on how to use the two global water
conventions to promote cooperation on the ground
(Geneva, 20-21 October 2016)*

66. ESCWA participated in this workshop, organized by the United Nations Economic Commission for Europe (UNECE). It delivered a presentation entitled “Model provisions on transboundary groundwaters”.

*Second GCC Specialized Conference for Weather Technologies
(Abu Dhabi, United Arab Emirates, 1-2 November)*

67. ESCWA participated in this conference by delivering a keynote presentation on “Optimizing next generation technologies to revolutionize the collection, analysis and distribution of weather forecasting data in the GCC”. The presentation focused on linking strategy, policy and climate-change modelling to create an adaptive strategy for mitigating current and future climate risk. ESCWA also served as panellist in two sessions.

3. Field projects

**Developing the Capacity of ESCWA Member Countries to Address
the Water-Energy Nexus for Achieving Sustainable Development Goals
(United Nations Development Account project)**

68. ESCWA continued to implement activities related to this project in 2016. The *Regional Policy Toolkit* (E/ESCWA/SDPD/2016/Manual) was issued in October 2016 and targets senior government officials and policymakers from the Arab region. This policy toolkit addresses seven topics identified by members of the ESCWA Committee on Water Resources and Committee on Energy, namely issues related to knowledge and awareness-raising, increasing policy coherence, examining the water-energy security nexus, increasing efficiency, informing technology choices, promoting renewable energy, and addressing climate change and natural disasters. The toolkit is available from www.unescwa.org/publications/water-energy-nexus-regional-policy-toolkit.

69. The toolkit was used as a basis for conducting the Regional Policy Workshop on the Water-Energy Nexus (Amman, 30-31 October 2016), which provided training to senior government officials engaged in the water and energy sectors. The workshop concluded with an invitation to submit proposals for pilot projects for implementation within the framework of this UNDA project. Several proposals were received from ESCWA member States in January 2017.

70. The Resource Efficiency Module (E/ESCWA/SDPD/2016/TOOLKIT.1), the first of three operational modules planned for preparation under the project, was issued in January 2017. It is available from www.unescwa.org/sites/www.unescwa.org/files/publications/files/water-energy-nexus-sustainable-development-goals-english_0.pdf. The module serves as a basis for informing the first of three operational workshops conducted under the project. The National Oil and Gas Authority of Bahrain hosted the first workshop on the theme “Regional capacity-building on the Water-Energy Nexus Operational Toolkit: Resource Efficiency” (Manama, 20-21 February 2017), organized under the patronage of the Minister of Oil and Gas of Bahrain.

AWARENET

71. The AWARENET website became operational in 2016. Administrative follow-up on the website was organized with the Society for the Protection of Nature in Lebanon. The secretariat also continued to provide capacity-building for members through an e-learning series on the theme “Water integrity for Arab countries” through the Cap-Net Virtual Campus and in cooperation with the UNDP Water Governance Facility. AWARENET also organized, in collaboration with the Global Water Partnership–Mediterranean (GWP-Med) and the Stockholm International Water Institute, the third Regional Training Course on Water Integrity (Tunis, 7-8 December 2016) to build the capacity of water managers in applying water integrity tools.

72. AWARENET members were invited to submit expressions of interest to participate in one of the five training workshops organized under the UNDA project on Building the Capacity of the Arab Countries for Climate Change Adaptation through Integrated Water Resource Management Tools. The workshops were well attended by AWARENET members from across the region, with a focus on ensuring gender parity. Each training workshop focused on a particular sector, namely agriculture, environment, health, human settlements and economic development. In total, 33 AWARENET members participated in the five workshops and contributed case studies and material for incorporation in the resulting climate change manual.

4. Advisory services and technical cooperation

73. Following a request by the Arab Ministerial Water Council and the League of Arab States, ESCWA recruited an international water expert to prepare a technical paper to inform the seventh intergovernmental consultation on the draft convention on shared water resources in the Arab region (Cairo, 14-15 March 2016). ESCWA also contributed substantively to those deliberations.

74. At the request of the Ministry of Regional Municipalities and Water Resources of Oman, a national workshop was held on the theme “Advanced geostatistical analysis for geospatially mapping hydrogeological data” (Muscat, 24-26 April 2016). The training focused on the use of geostatistics in hydrogeology, evaluating advanced options for geospatial analysis, and map and data interpolation using ArcGIS tools. ESCWA also provided advisory services to the Ministry on the review of terms of reference related to the development of a decision-support system, drawing on water resources data and a methodology for updating the water balance of Oman in January 2016. At the request of the Ministry and the Water Research Centre at Sultan Qaboos University, ESCWA also delivered a keynote address and interventions at the Water Conference in Arid Areas: The Way Forward (13 March 2016).

75. Based on the request of the Palestinian Water Authority, ESCWA supported the participation of senior officials in the MENA Focus days at World Water Week 2016 (Stockholm, 30-31 August 2016); assisted with preparations for and contributed to the Conference on Arab Water under Occupation (Cairo, 26-28 October 2016); and provided advice on the development of the Authority’s new website in English and Arabic (February 2016).

C. EXPECTED ACCOMPLISHMENT (c)

Member States develop coordinated policies, strategies and frameworks for climate change mitigation and adaptation and for disaster risk reduction to enhance resilience and respond to the impact of natural and human-induced disasters.

1. *Studies and reports*

*Arab Climate Change Assessment Report
(Forthcoming)*

76. The *Arab Climate Change Assessment Report* will set out the findings of the integrated assessment conducted within the framework of RICCAR. It will present the results of dynamically downscaled regional climate projections for the Arab/MENA Domain and associated regional hydrological modelling results for assessing the impact of climate change on freshwater resources in the region until 2100. Vulnerability hotspots related to water availability, ecosystems, agriculture, human settlements and people will also be illustrated. Detailed analysis focusing on shared surface water basins and disaster loss inventories will also be presented, as well as a series of case studies focused on extreme weather events, health and the agricultural sector.

2. *Substantive input to global and regional forums on water issues*

*Twenty-second Conference of the Parties to the United Nations Framework Convention
on Climate Change (UNFCCC/COP-22)
(Marrakech, Morocco, 7-18 November 2016)*

77. ESCWA assisted UN-Water to convene a side event on the theme “Hydro-climate services for all” (9 November 2016) in collaboration UNESCO, UNECE and WMO. This event aimed to bridge the gap between the producers and users of hydro-climate services and resulted in the preparation of a video. Officials from Jordan, the Sudan and ESCWA contributed to the session and were included in the video, which is available from www.unwater.org/news-events/news-details/ru/c/450769/.

78. ESCWA contributed to the side event on the theme “Women advancing climate and climate change sciences” (14 November 2016) by presenting the experience of the Arab region on women’s participation in the fields of climate science and on how to incorporate gender issues in climate assessments.

79. ESCWA moderated a full-day session for high-level speakers on the topic “Climate change impacts on the Arab region and adaptation and mitigation initiatives” at the GCC Pavilion (15 November 2016), organized by the Arab Negotiations Group, the League of Arab States and ESCWA. The event discussed regional initiatives and national efforts on climate change impacts, adaptation strategies and measures, and mitigation actions to achieve sustainable development in the Arab region.

80. ESCWA co-organized with the four other United Nations regional commissions two side events held on 15 November 2016. The first was on the theme “SDG17: Building capacity for the 2030 Agenda through climate action solutions for regional implementation”, and explored the linkages and synergies between intended nationally determined contributions and the SDGs: common goals, co-benefits, trade-offs, prioritization and sequencing. The second was on the topic “Economics of climate change: regional perspectives programme”, and discussed the economic impacts of climate change in each region and the investments needed at the regional and national levels for climate change adaptation and mitigation. The head of the Palestinian Environmental Quality Authority addressed the second event.

81. The Executive Secretary of ESCWA delivered a speech at a side event on the theme “Palestinian main achievements between accession on 17 March 2016 and COP22 and future ambition” (18 November 2016), convened by the head of the Palestinian Environmental Quality Authority. The session focused on the

preparation of the nationally determined contribution of Palestine and on plans for combating climate change in the face of challenges and obstacles caused by occupation.

3. Field projects

Developing the Capacities of the Arab Countries for Climate Change Adaptation by Applying IWRM Tools

(United Nations Development Account project)

82. In 2016, ESCWA finalized the implementation of this project (see details in paras. 38-39). It organized five regional workshops on climate change adaptation using IWRM tools: in the agricultural sector (Beirut, 15-17 February 2016) with ACSAD and GIZ; in the environment sector (Beirut, 22-24 March 2016) with UNEP/ROWA; in the health sector to protect it from the climate change effects on freshwater resources (Amman, 19-21 April 2016) with WHO/CEHA; in human settlements (Amman, 22-24 May 2016) with ACWUA; and in the economic development sector (Amman, 25-27 May 2016). While the workshops targeted officials in the related ministries and agencies, they were also attended by 33 AWARENET members.

83. An external evaluation of the project was completed in October 2016 and found that it “has brought to the forefront regionally specific, cutting-edge research on climate change, and has converted this material into user-friendly knowledge products... sufficiently developed to be useful at a country level”. The project’s final output is currently under implementation, with a planned launching in the second quarter of 2017.

RICCAR

84. ESCWA continued to coordinate RICCAR in partnership with 11 United Nations and League of Arab States organizations and expert institutions. The Sida-funded project supporting RICCAR contributed to the finalization and peer review of the RICCAR integrated assessment findings, and to preparations for a regional knowledge hub.

85. A series of RICCAR publications will be issued with the support of Sida project funds. The drafting of these publications is underway and will include the regional climate-change assessment report, technical notes on the various components of the integrated assessment methodology, and technical reports to present the full case studies summarized in the regional assessment report..

86. ESCWA delivered presentations on RICCAR and its preliminary findings at the International Conference on Regional Climate -CORDEX 2016 (Stockholm, 17-20 May 2016), WeatherTech GCC (Abu Dhabi, 1-2 November 2016), the AMWC Technical Scientific Advisory Committee sessions, and a COP22 side event.

ACCWaM

87. In 2016, ESCWA convened an expert group meeting to review the climate change integrated vulnerability assessment (Beirut, 27-28 April 2016), with funding from the ACCWaM project. Experts discussed the vulnerability assessment indicators, applied methodology and aggregated integrated mapping outputs. ESCWA subsequently organized a four-day expert peer review (Beirut, 6-9 December 2016), which vetted the findings of the regional climate modelling, hydrological modelling and vulnerability assessment components of the integrated assessment. The peer review was financed by the ACCWaM and Sida projects supporting RICCAR. The outcomes of these expert reviews allowed for the finalization of the integrated assessment outputs and the identification of the vulnerability hotspots in February 2017.

88. ESCWA participated in two ACCWaM Steering Committee meetings in Cairo on 28 January 2016 and 22 October 2016. The meetings reviewed the operational plan for the project, progress achieved and next steps.

ESCWA reported on progress in preparing the regional assessment report and establishing a regional knowledge hub.

4. *Advisory services and technical cooperation*

89. In cooperation with the League of Arab States, UNEP and UNESCO, ESCWA organized the sixth and seventh regional training workshops on Capacity Development for Climate Change Negotiations for the Arab Countries (Cairo, 3-6 April 2016; and Rabat, 25-29 September 2016). The sixth workshop focused on the means of implementation of the Paris Agreement and the nationally determined contributions submitted by Arab countries. The seventh workshop was organized within the framework of regional preparatory activities convened by the Moroccan Presidency of COP22. It prepared Arab States for COP22 and discussed the ratification status of the Paris Agreement, reporting on nationally determined contributions and on how to access means of implementation, such as technology and finance.
