



Economic and Social Commission for Western Asia (ESCWA)

Committee on Water Resources
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**ACTIONS TAKEN IN THE FIELD OF WATER RESOURCES SINCE
THE NINTH SESSION OF THE COMMITTEE ON WATER RESOURCES
IMPLEMENTATION OF WATER RESOURCES-RELATED ACTIVITIES
UNDER ESCWA PROGRAMME OF WORK**

Summary

Since the ninth session of the Committee on Water Resources, the Economic and Social Commission for Western Asia (ESCWA) has implemented a set of activities under subprogramme 1, “Integrated management of natural resources for sustainable development”, for the bienniums 2010-2011 and 2012-2013.

Capacity-building activities, advisory services, technical studies and field projects on water resources aimed to assist member countries in formulating appropriate water policies and strategies in order to improve the integrated management of water resources, support the management of shared water resources, assist countries in achieving the Millennium Development Goals and address climate change challenges.

This document contains a review of the progress achieved in implementing water resources-related activities since 2011. The activities are presented according to the expected accomplishments set out in the strategic frameworks for each biennium that were supported by water-related activities. Member country representatives participating in the tenth session of the Committee on Water Resources are invited to review those activities and give their comments and suggestions.

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ACRONYMS AND ABBREVIATIONS

ACSAD	Arab Center for the Studies of Arid Zones and Dry Lands
ACCWaM	Adaptation to Climate Change in the Water Sector in the MENA Region
AMWC	Arab Ministerial Water Council
BGR	Bundesanstalt für Geowissenschaften und Rohstoffe (Federal Institute for Geosciences and Natural Resources)
BMZ	German Federal Ministry for Economic Cooperation and Development
CAMRE	Council of Arab Ministers Responsible for the Environment
CEDARE	Centre for Environment and Development for the Arab Region and Europe
COP18	Eighteenth Conference of the Parties to the United Nations Framework Convention on Climate Change
DESA	Department of Economic and Social Affairs
ECE	Economic Commission for Europe
EGM	Expert Group Meeting
EPR	Environmental Performance Review
ESCAP	Economic and Social Commission for Asia and the Pacific
ESCWA	Economic and Social Commission for Western Asia
GIZ	Deutsche Gesellschaft für Internationale Zusammenarbeit (German Agency for International Cooperation)
IWRM	Integrated Water Resources Management
JCEDAR	Joint Committee on Environment and Development in the Arab Region
MDGs	Millennium Development Goals
MENA	Middle East and North Africa
RICCAR	Regional Initiative for the Assessment of the Impact of Climate Change on Water Resources and Socio-Economic Vulnerability in the Arab Region
Rio+20	United Nations Conference on Sustainable Development
SDPD	Sustainable Development and Productivity Division
SIDA	Swedish International Development Cooperation Agency
UNEP	United Nations Environment Programme
UNEP/ROWA	UNEP Regional Office for West Asia
UNIC	United Nations Information Centre
UNISDR	United Nations Office for Disaster Risk Reduction
WMO	World Meteorological Organization

Introduction

1. The Sustainable Development and Productivity Division (SDPD) is responsible for implementing subprogramme 1, “Integrated management of natural resources for sustainable development”, of the strategic framework of the Economic and Social Commission for Western Asia (ESCWA). Within SDPD, the Water Resources Section is responsible for the expected accomplishments related to water resources.
2. The activities implemented by the Water Resources Section since the ninth session of the Committee on Water Resources (Beirut, 23-25 March 2011) covered part of the biennium 2010-2011 and part of the biennium 2012-2013. They support the achievement of expected accomplishments (a) and (c) of the 2010-2011 programme of work and expected accomplishments (a), (b) and (c) of the 2012-2013 programme of work.
3. The objective of subprogramme 1 for the biennium 2010-2011 was “to achieve integrated sustainable management of natural resources in the ESCWA region, with particular emphasis on water, energy and the production sectors and due consideration to the relevant climate change issues”. The objective for the biennium 2012-2013 is “to achieve integrated sustainable management of natural resources in the ESCWA region, with emphasis on water, energy and the production sectors, while incorporating climate change responses into sectoral strategies and plans”.
4. Capacity-building activities, advisory services, technical studies and field projects on water resources aimed to improve the integrated management of water resources, support the management of shared water resources, assist countries in achieving the Millennium Development Goals (MDGs) and address climate change challenges.

I. IMPLEMENTATION OF THE 2010-2011 PROGRAMME OF WORK IN THE FIELD OF WATER RESOURCES

5. The following are the main water resources-related activities undertaken by ESCWA in 2011 in support of the expected accomplishments of subprogramme 1 during the biennium 2010-2011.

A. EXPECTED ACCOMPLISHMENT (A)

Enhanced capacity of member countries to formulate, adopt and implement policies and measures to improve the sustainable management of natural resources, with particular emphasis on fulfilling MDGs and addressing climate change challenges

1. *Studies and reports*

Assessing the Impact of Climate Change on Water Resources and Socio-Economic Vulnerability in the Arab Region: A Methodological Framework for Pursuing an Integrated Assessment
(E/ESCWA/SDPD/2011/1)

6. The guidance document outlined the integrated assessment approach that ESCWA is implementing in support of 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 approach combined climate change impact assessment and vulnerability assessment tools into a five-step integrated assessment methodology based on global climate modelling, regional climate modelling, hydrological modelling, vulnerability analysis and integrated mapping tools. The document aimed to facilitate the understanding of the methodological framework that will generate findings for informing and fostering policy dialogue on the expected impacts and implications of climate change on sustainable development in the Arab region. The publication is available in Arabic and English.

Pamphlet: *Water for Cities: Responding to the Urban Challenge*
(E/ESCWA/SDPD/2011/Technical Paper.1)

7. The pamphlet was prepared for World Water Day 2011 and was disseminated at the ESCWA event to commemorate that day. It highlighted the status of water resources in Arab cities and listed the main water challenges they face. It also provided a summary of actions to achieve sustainability in cities.

2. *Meetings and workshops*

Seminar: *Water for Cities: Responding to the Urban Challenge*
(Beirut, 23 March 2011)

8. Under the patronage of the Lebanese Minister for Energy and Water, and with the cooperation of the Association of the Friends of Ibrahim Abd El Al and the German Federal Institute for Geosciences and Natural Resources (Bundesanstalt für Geowissenschaften und Rohstoffe (BGR)), ESCWA held a seminar to celebrate World Water Day, which focused on the theme “Water for Cities: Responding to the Urban Challenge”. During the event, speakers discussed the repercussions and implications of urban development on water resources in Lebanon and the Arab region. Participants included senior Arab officials, experts involved in water issues, including members of the ESCWA Committee on Water Resources, and representatives of the Arab and foreign diplomatic corps based in Lebanon. The seminar featured a panel discussion entitled “Understanding the Urban Water Supply and Water Resource Protection Challenge” and a stakeholder forum entitled “Your Water Supply and You – What Can You Do?” in addition to the first screening of the documentary “Beirut Waters: A Water Supply and Resource Protection Story”.

*Preparatory Meeting for the Assessment of the Impact of Climate Change on
Water Resources and Socio-Economic Vulnerability in the Arab Region*
(Beirut, 26-27 May 2011)

9. Within the framework of the project supported by the Swedish International Development Cooperation Agency (SIDA) under RICCAR, ESCWA hosted a meeting of the SIDA project partners. The meeting reviewed the integrated assessment methodological framework, identified data needs and discussed how to collect national and local data. The Arab Centre for the Studies of Arid Zones and Dry Lands (ACSAD) provided an update on the request for funding that they submitted to the International Development Research Centre for the vulnerability assessment to support the regional initiative. Ultimately, funding was not approved.

Expert group meeting: *Assessing Climate Change Impacts on Water Resources
and Socio-Economic Development in the Arab Region*
(Beirut, 6-7 July 2011)
(E/ESCWA/SDPD/2011/WG.3/Report)

10. The meeting was the third in the series of annual expert group meetings (EGMs) organized in support of RICCAR. Previous meetings consolidated the approach and partnerships for the implementation of the initiative. The third EGM aimed to exchange information on current climate change modelling activities in the region and select emissions scenarios to generate climate change projections. It also set up a task force to frame the limiting boundary conditions for regional climate modelling in the Arab region. Participants also discussed preliminary criteria for developing a regional knowledge hub to disseminate the outcomes of the project and experiences gained at the national level on climate change assessment and adaptation. The meeting was organized by ESCWA, the League of Arab States and the United Nations Environment Program/Regional Office for West Asia (UNEP/ROWA).

*Press conference to launch the Arabic edition of the
2011 Global Assessment Report on Disaster Risk Reduction
(Beirut, 6 July 2011)*

11. The United Nations Office for Disaster Risk Reduction (UNISDR), which collaborates closely with the League of Arab States, ESCWA and other regional partners to advance disaster risk reduction efforts in the Arab region, issued its second global assessment report in 2011. The release of the Arabic version of the 2011 report was organized by UNISDR, ESCWA and the United Nations Information Centre (UNIC) as a side event to the third EGM in support of RICCAR. At the press conference, UNISDR presented an overview of its activities in English and ESCWA delivered a presentation on the report in Arabic. Both institutions then responded to questions posed by the local media and EGM participants.

*Arab Regional Preparatory Meeting for the United Nations
Conference on Sustainable Development
(Cairo, 16-17 October 2011)*

12. Pursuant to United Nations General Assembly resolution 64/236 of 24 December 2009, ESCWA collaborated with the League of Arab States and UNEP/ROWA to organize the Arab Regional Preparatory Meeting for the United Nations Conference on Sustainable Development (Rio+20). The meeting supported the coordination of Arab positions regarding the issues on the agenda of the conference, and resulted in a draft Arab position paper. Among the recommendations adopted during the meeting were the adherence to the principles of the 1992 Rio Declaration, the implementation of the outcomes of the United Nations summits and conferences on sustainable development, and the achievement of sustainable development by enhancing and integrating its economic, social and environmental pillars. Subsequently, ESCWA organized over a dozen regional consultations and national workshops to support Arab preparations for Rio+20 and published several regional reports including “A Regional Review of the Institutional Framework for Sustainable Development”, “A Regional Report on Green Economy in the Arab Region”, a quarterly newsletter and related technical materials. In addition, ESCWA supported the technical consultation with the Council of Arab Ministers Responsible for the Environment (CAMRE) and its Joint Committee on Environment and Development in the Arab Region (JCEDAR) to finalize the Arab position for Rio+20, including Arab perspectives related to a green economy and institutions for sustainable development.

Support to the Arab Ministerial Water Council

*Fourth meeting of the AMWC Technical, Scientific and Advisory Committee
(Cairo, 24-26 April 2011)*

13. The Arab Ministerial Water Council (AMWC) requested ESCWA to establish a regional mechanism and lead the preparation of a study on the progress made towards the achievement of the water and sanitation targets of the Millennium Development Goals (MDGs) in the Arab region, which has since been referred to as the MDG+ Initiative (for more information see *Progress achieved in implementing the Regional Initiative for the Development of a Mechanism to Monitor the Implementation of the Millennium Development Goals Related to Water and Sanitation in the Arab Region (MDG+ Initiative)* (E/ESCWA/SDPD/2013/IG.1/3)). At the meeting, ESCWA presented the progress made on the initiative.

*Third ministerial session of AMWC
(Cairo, 15-16 June 2011)*

14. During the session, AMWC adopted several resolutions that requested ESCWA to follow up on activities aimed at regional cooperation in the water sector, namely: (a) the implementation of the AMWC project on integrated water resources management (IWRM) for climate change impact assessment, which supports RICCAR; (b) the MDG+ Initiative; and (c) the preparation of a draft legal framework on shared water resources in the Arab region.

Support to United Nations coordination mechanisms, including UN-Water

*First Consultation Meeting of the
UN-Water Task Force on Regional-Level Coordination
(Bonn, 21 February 2011)*

15. ESCWA co-organized and participated in the first meeting of the UN-Water Task Force on Regional-Level Coordination. The purpose of the meeting was to support interregional consultation on the preparation of the methodology for mapping regional-level activities on water and to discuss the work of the task force with other United Nations regional commissions, including its work plan and budget. The meeting led to the drafting of a framework of cooperation between UN-Water Decade Programme on Capacity Development and the Economic and Social Commission for Asia and the Pacific (ESCAP) which was signed in 2012. The task force is co-chaired by ESCAP and ESCWA.

*UN-Water World Water Development Report Workshop
(Stockholm, 18 August 2011)
and
Fifteenth UN-Water Senior Programme Managers Meeting
(Stockholm, 19-21 August 2011)*

16. ESCWA participated in the one-day workshop on the preparation of the fourth edition of the World Water Development Report. At the workshop, it was agreed that the regional commissions would contribute to the report. Thus, ESCWA was tasked with leading the preparation of the regional report for Western Asia, which later became the Arab Region and Western Asia report (chapter 33). ESCWA also participated in the fifteenth meeting of UN-Water. Senior programme managers met for the first two days, and partner organizations joined the meeting on the third day. Progress was reported on various inter-agency activities, including work undertaken by the UN-Water Task Force on Regional-Level Coordination and on thematic priority areas that address water, climate and transboundary water resources, and the themes for upcoming World Water Days.

*Water in the Green Economy in Practice: Towards Rio+20
(Zaragoza, 3-5 October 2011)*

17. UN-Water Decade Programme on Advocacy and Communication led the meeting to exchange experiences on the shift towards a green economy within the context of global preparations for Rio+20. The meeting was co-organized with the Ebro River Basin Authority, ESCWA, the International Labour Organization, the Organisation for Economic Co-operation and Development, the United Nations Environment Programme (UNEP), the World Bank and the Economic Commission for Latin America and the Caribbean. During the meeting, ESCWA organized a session on water and the green economy in the ESCWA region, and prepared a background paper and moderated a panel discussion that focused on water supply and sanitation services. The aim of the session was to demonstrate how improved access to those services in the region could support progress towards a green economy within the context of sustainable development and poverty eradication. The meeting resulted in the preparation of a UN-Water water tool box, co-authored by ESCWA, that presents good practice and a guide for action based on experiences exchanged at the conference.

*Environmental Performance Review Mission
(Tirana, Albania, 15-16 June 2011)*

18. Lebanon, Morocco and Qatar have expressed interest in preparing Environmental Performance Reviews (EPRs) during the meetings of JCEDAR that support CAMRE, and have requested the assistance of the Economic Commission for Europe (ECE) and ESCWA to carry out the review. To prepare for the second cycle of EPR, ESCWA participated in a joint mission to Albania with ECE to draw lessons from that experience in view of potentially supporting the implementation of EPR activities in the Arab region. Morocco started the review in coordination with the Economic Commission for Africa and ECE, with

funding from the European Union. Upon the request of the Ministry of Environment of Qatar, ESCWA and ECE submitted a proposal to conduct EPR, funded by the Government of Qatar. The proposal is currently under discussion.

Sixth Meeting of the Issue Management Group on Green Economy
(New York, 9 March 2011)

19. The meeting aimed to coordinate the preparation of the inter-agency United Nations report on “Supporting the Transition to a Green Economy”. The meeting was organized by UNEP and other United Nations organizations following the Second Preparatory Committee meeting for Rio+20. The United Nations regional commissions, including ESCWA, drafted and delivered the “Joint Statement on behalf of the Five Regional Commissions of the United Nations” during the preparatory committee meeting. The statement emphasized the importance of strong and functional regional coordination mechanisms.

Participation in international and regional meetings on water resources

National Conference for Management and Development of Water Resources in Yemen
(Sana’a, 15-17 January 2011)

20. Upon request, ESCWA served on the scientific committee that supported the preparation of the national conference in Yemen. In that capacity, ESCWA helped to formulate the concept, objectives and themes of the conference; reviewed conference papers; and prepared various conference documents. Additionally, ESCWA prepared and presented one conference paper and chaired a working group session on the challenges and opportunities for community-based management of water resources.

Sixth Advisory Board Meeting of the IWRM German-Arab Master of Science Programme
(Amman, 22-24 January 2011)

21. As a member of the IWRM German-Arab Masters of Science programme advisory board, ESCWA participated in the board’s sixth meeting. The degree programme is implemented by the Cologne University of Applied Sciences and the University of Jordan, with funding from the German Federal Ministry for Economic Cooperation and Development (BMZ). The advisory board assists in the oversight and implementation of programme activities that aim to build the capacity to address water management challenges in the Arab region. The representative of ESCWA was elected vice-chair of the advisory board at the meeting.

Water and Energy – a Couple under Stress
(Abu Dhabi, 27-28 March 2011)

22. The Water and Energy Network for Development and Electricité de France organized the meeting and invited ESCWA to deliver a presentation on “Production and consumption of water and energy in the Middle East and North Africa (MENA) region” and contribute to a panel discussion. The meeting targeted local authorities, public institutions, private companies, academics and journalists.

*Regional Conference on Advancing Non-Conventional Water
Resource Management in the Mediterranean*
(Athens, 14-15 September 2011)

and
Workshop on the Sustainable Use of Non-Conventional Water Resources
(Athens, 16 September 2011)

23. To face the challenges of increasing water scarcity, increasing demand for water resources and desertification processes related to climate change, ESCWA attended a back-to-back regional conference and workshop on non-conventional water resources management. During the conference, organized by the

Global Water Partnership and other partners, ESCWA delivered a presentation on RICCAR. During the subsequent workshop, ESCWA provided input to the discussions. The workshop was organized by the Sustainable Water Integrated Management-Support Mechanism to support the identification and planning of its projects in the Mediterranean region.

Second Arab Water Forum
(Cairo, 20-23 November 2011)

24. The second Arab Water Forum was organized by the Arab Water Council as a preparatory meeting to the World Water Forum. ESCWA contributed to three sessions. One session, entitled “MDGs: Achievements and Challenges”, was coordinated by ESCWA and the Centre for Environment and Development for the Arab Region and Europe (CEDARE) and focused on the achievement of MDGs in the Arab region. During the session, ESCWA had the opportunity to present the concept and progress achieved in implementing the MDG+ Initiative, and announced the anticipated signing of the agreement between SIDA and ESCWA to support that initiative. The other two sessions focused on climate change. One was organized and chaired by the head of the World Meteorological Organization (WMO) during which ESCWA presented the concept and progress achieved in implementing RICCAR. Another was organized by the German Agency for International Cooperation (Deutsche Gesellschaft für Internationale Zusammenarbeit (GIZ)) within the context of their new project entitled Adaptation to Climate Change in the Water Sector in the MENA Region (ACCWaM), during which ESCWA presented coordination between RICCAR and that project.

*Sixth International Water Association Specialist Conference on the
Efficient Use and Management of Water: Water Demand
Management – Challenges and Opportunities*
(Dead Sea, 29 March-2 April 2011)

25. ESCWA attended and sponsored the participation of Government officials from Palestine and the Sudan in the conference, which focused on water demand management challenges and opportunities. The conference was organized by the International Water Association, the United States Agency for International Development and the Jordanian Ministry of Water and Irrigation. The conference addressed the key challenges of water use efficiency in the agricultural sector, climate change and population growth, and identified green building and landscaping as opportunities.

3. *Field projects*

*Regional Initiative for the Development of a Mechanism to Monitor the Implementation
of the Millennium Development Goals related to Water and Sanitation
in the Arab Region (MDG+ Initiative)*

26. For a summary of progress achieved in the implementation of the MDG+ Initiative, see *Progress achieved in implementing the Regional Initiative for the Development of a Mechanism to Monitor the Implementation of the Millennium Development Goals Related to Water and Sanitation in the Arab Region (MDG+ Initiative)* (E/ESCWA/SDPD/2013/IG.1/3).

Arab Integrated Water Resources Management Network

27. During 2011, ESCWA continued to serve as the secretariat of the Arab Integrated Water Resources Management Network (AWARENET). In that capacity, ESCWA disseminated information on the training programmes of the Arab Countries Water Utilities Association (ACWUA) that aim to build the capacity of utilities to deliver water supply and sanitation services in the region, and the training programmes of Cap-Net that focus on IWRM. In addition, ESCWA informed members of the network of research opportunities and professional positions in the water sector.

RICCAR

28. For a summary of progress achieved in the implementation of RICCAR, see *Progress achieved 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* (E/ESCWA/SDPD/2013/IG.1/4).

ACCWaM

29. The League of Arab States, ACSAD and ESCWA were invited to partner on a new climate change project, ACCWaM, launched by GIZ in August 2011. Project offices have been established in Cairo. The first phase of the project is expected to run from August 2011 to July 2014 and the first planning meeting was held in Cairo, 18-19 November 2011. The project aims to provide technical and advisory support on climate change adaptation related to the water sector. At the planning meeting, GIZ explained that it intends to cooperate with and complement existing regional initiatives on climate change in the Arab Region, including RICCAR. The GIZ funding agreement with BMZ includes ESCWA as a partner and the formalized project agreement between GIZ and ESCWA was completed in 2012.

4. *Advisory services*

30. The following table outlines advisory services rendered by ESCWA in 2011 to member countries upon their request, including a summary of the results and recommendations stemming from each mission. The services aimed to build national capacity in the areas of natural, environmental, water and land resources, and resulted in the implementation of key policy and programme recommendations related to improvement in the integrated and sustainable management of those resources, and the mainstreaming of the sustainable development approach in national development plans.

Country	Requesting institution	Services provided
Bahrain	Ministry of Municipalities Affairs and Urban Planning	ESCWA assisted in developing an appropriate national approach to the reuse of treated sewage effluent and managed aquifer recharge, by contributing to and supporting a national workshop on "Treated sewage effluent and its utilization in Bahrain".
	Electricity and Water Authority	ESCWA reviewed a draft of the terms of reference for consultancy services related to non-revenue water. Desk work.
Egypt	Ministry of Environment/ Egyptian Environmental Affairs Agency	ESCWA assessed and analysed the draft national adaptation strategy and investigated options for assisting in the implementation of the national strategy. Support was also rendered in the development of the workplan for the capacity-building programme, with priority given to the negotiation skills on global climate issue training workshops.
	Ministry of Water Resources and Irrigation	ESCWA investigated the means of integrating climate change adaptation into the water resources sector and consulted on key issues related to the development of adaptation strategies such as climate change scenarios, models and databases. Moreover, ESCWA supported the knowledge mapping of existing capacity on climate change and explored linkages and cooperation with related sectors.
Lebanon	Ministry of Energy and Water	ESCWA participated in and contributed to three meetings of the Water Sector Coordination Group and commented on the National Water Sector Strategy.

Country	Requesting institution	Services provided
Oman	Ministry of Regional Municipalities and Water Resources	ESCWA presented “Water Scarcity, Climate Change in the Middle East: Challenges to Water Management” to the international workshop “Hydrology: Nature & Engineering” at the Sultan Qaboos University in connection to the World Water Day celebration. Mission 18-22 March 2011.
	Ministry of Regional Municipalities and Water Resources	ESCWA developed a draft outline for the assessment and reestimation of the overall national water budget with a focus on the total deficit estimate. ESCWA intervention resulted in the launch of a comprehensive consultancy study. Desk work and mission 5-8 June 2011.
	Public Authority of Electricity and Water	ESCWA completed a desk study and review of appropriate guideline values for boron in drinking water which contributed to the revision of national water quality guidelines. ESCWA presented the outcome in a national meeting between stakeholders and at a regional water safety plan conference for the MENA region. Desk work and missions 18-22 March 2011, 9-13 October 2011.
Palestine	Palestinian Water Authority	ESCWA reviewed the status of data and information management in the water sector and contributed to the development of an action plan for an integrated management of geo-spatial water-related information and database. An intergovernmental workshop on water management information systems and geographic information system applications resulted in a call to establish the current technical coordination body with regular meetings between the respective Government institutions under the lead of the Palestinian Water Authority. Desk work and mission 19-25 February 2011.
Saudi Arabia	Ministry of Economy and Planning	ESCWA organized the “National Workshop on Strengthening Integration of Sustainable Development into National Development Planning for Saudi Arabia” with contributions from UNEP/ROWA and the Presidency of Meteorology and Environment. The workshop addressed the water and sanitation sector. Desk work and missions 3-5 July 2011 and 20-23 November 2011.
The Sudan	Ministry of Irrigation and Water Resources, now Ministry of Water Resources and Electricity	ESCWA supported the development of a national approach to water harvesting assessments for future investments in local water infrastructure. As part of its support action, ESCWA provided a final review of the activities undertaken by the Water Harvesting Unit and commended their support for regional and national water harvesting efforts. Desk work and mission, 11-15 April 2011.
Syrian Arab Republic	Ministry of State for Environmental Affairs	ESCWA commented on “The National Strategy Framework for Sustainable Development in the Syrian Arab Republic”. The comments addressed water resources, water supply and sanitation. Desk work.

B. EXPECTED ACCOMPLISHMENT (C)

Strengthened South-South cooperation in the integrated management of natural resources, with a focus on challenges related to water, energy and climate change

1. *Studies and reports*

ESCWA Water Development Report 4: National Capacities for the Management of Shared Water Resources in ESCWA Member Countries
(E/ESCWA/SDPD/2011/4)

31. The report focused on national and regional capacity for the management of shared water resources in ESCWA member countries. Specific attention was paid to the legal framework for shared water resources management and the ways in which legal instruments and agreements can support IWRM in shared river basins and shared aquifers. Analysis was provided on the state of shared water resources management in the region, including current drivers, pressures, constraints and challenges facing shared water resources in the ESCWA region related to water security, water scarcity, food security, climate change and water and energy linkages. The report is available in Arabic and English.

Working Paper on the Joint Management of Shared Water Resources within an Integrated Water Resources Management Context: Fostering a Legal Framework for the Arab Region
(E/ESCWA/SDPD/2011/WP.2)

32. The working paper highlighted the relevancy of international and regional legal instruments for the management, cooperation, allocation and protection of shared water resources. It mapped the regional specificities and justifications for a legal framework for the Arab region, and attempted to clarify the scope of application and the subject matter of such a legal framework. Based on the identified regional specificities and current international developments in the area of shared water resources, the working paper examined the directions that would identify appropriate guiding principles for a legal framework in the Arab region. Finally, the paper presented possible formats for a legal instrument for the Arab region.

Brochure: Regional Initiative for the Assessment of the Impact of Climate Change on Water Resources and Socio-Economic Vulnerability in the Arab Region
(E/ESCWA/SDPD/2011/Brochure.1)

33. The brochure highlighted the mandates, objective and methodology adopted to support the implementation of RICCAR, and listed the partners involved in its implementation. The brochure explained the aim of the initiative. It also introduced the SIDA-funded project that supports RICCAR and incorporates the analysis of extreme weather events as a core component of the integrated assessment and associated capacity-building activities.

2. *Meetings and workshops*

Meeting: "Promoting of South-South Cooperation in Technology Transfer"
Amman, 20-21 April 2011

34. In collaboration with the Royal Scientific Society of Jordan, the ESCWA Technology Centre coordinated the meeting that aimed to discuss priority areas of cooperation in technology transfer; sharing good practice for cooperation based on successful technology transfer case studies related to the water, energy, agriculture and information and communication technology sectors; and formulating a collaboration framework for critical technology development, management, maintenance and services. During the meeting, two presentations related to the water and agricultural sectors were delivered by the Sustainable Development and Productivity Division of ESCWA; "Water Saving Technologies" and "Technologies for Sustainable Land Management".

*Intergovernmental Consultative Meeting on the Draft Legal Framework
for Shared Water Resources in the Arab Region
(Beirut, 24-26 May 2011)*

and

*Second Intergovernmental Consultative Meeting on the Draft Legal Framework
for Shared Water Resources in the Arab Region
(Beirut, 13-14 December 2011)*

35. For a detailed summary of the process of developing a regional legal framework for shared water resources, see *Progress achieved in the development of a legal framework for shared water resources in the Arab region* (E/ESCWA/SDPD/2013/IG.1/5(Part I)).

Support to the Arab Ministerial Water Council

*Fourth meeting of the AMWC Technical, Scientific and Advisory Committee
(Cairo, 24-26 April 2011)*

36. Among other contributions to the meeting, ESCWA presented the progress made in the implementation of AMWC resolution 20 on the preparation of the legal framework for shared water resources. The progress report included the outcome of a round-table meeting held by ESCWA and BGR in December 2010. The meeting set the direction and scope of the regional legal framework, based on regional specificities. The committee recommended that ESCWA and the League of Arab States Center of Water Studies and Arab Water Security prepare a draft legal framework to be discussed in a special consultative meeting of country representatives.

*Third Ministerial Session of AMWC
(Cairo, 15-16 June 2011)*

37. Several resolutions were adopted during the session requesting ESCWA to follow-up on regional cooperation activities in the water sector. One resolution called for the revision of the draft legal framework to cover only shared groundwater resources in the Arab region, the distribution of the revised draft to the Arab countries for comments, and a request to the League of Arab States Center of Water Studies and Arab Water Security and ESCWA to organize a second consultative meeting to consolidate the comments of countries and reach a final draft. During the session, ACSAD delivered a presentation on the progress of the AMWC-endorsed IWRM project on climate change impact assessment and the role of RICCAR in supporting the implementation of the project. ESCWA contributed to the preparation of the presentation.

*Expert meeting on the Programme of Action of the Arab Strategy
for Disaster Risk Reduction 2020
(Cairo, 15-16 November 2011)*

38. In coordination with the League of Arab States, UNISDR organized a meeting to support the preparation of a Programme of Action (2011-2015) for the Implementation of the Arab Strategy for Disaster Risk Reduction 2020, to follow up on the strategy that was approved by CAMRE in December 2010. Prior to and during the meeting, participating agencies of the United Nations and the League of Arab States contributed to a draft implementation matrix. It was agreed that the matrix would then be further reviewed by countries and regional stakeholders for comments and input. To ensure complementarity with existing work on climate change and extreme events, ESCWA agreed to contribute to activities to link disaster risk to climate change assessment and adaptation in the Arab region. In addition, ESCWA agreed to assist in providing technical and financial resources for activities conducted in conjunction with existing climate change activities under implementation. Participants discussed several proposals to build the capacity of Arab countries to work with funding institutions, as many funding instruments are available to countries only and not to regional organizations.

Participation in international and regional meetings on water resources

GIZ International Conference “Water and Climate Change in the MENA-Region” (Berlin, 28-29 April 2011)

39. The conference gathered information on issues and activities undertaken on climate change in the MENA region. ESCWA delivered a presentation on “Water Scarcity and Climate Change in the Middle East: Challenges to Water Management” during the conference.

Water Diplomacy Program (Module 3) (Abu Dhabi, 27 February-3 March 2011)

40. The training module was part of a capacity-building programme that was launched by the Arab Water Academy in partnership with the League of Arab States Center of Water Studies and Arab Water Security. The programme sought to bring together senior experts and practitioners from the water sector and in the diplomatic corps to inform them about water issues of concern regionally and globally. ESCWA participated in the high-level panel discussion on a “Vision for the Future of Water and Diplomacy in the Arab Region in 2013”, as part of the closing session.

Global Platform for Disaster Risk Reduction (Geneva, 8-13 May 2011)

41. The meeting was organized by UNISDR and presented its vision on climate change adaptation in the Arab region and its linkage to disaster risk reduction. With the support of ESCWA, the Cairo Office of UNISDR and the League of Arab States organized a side event on Disaster Risk Reduction in the Arab Region. During the side event, ESCWA proposed conducting an inventory of available funding sources and noted the need for a plan to generate financial resources to support the implementation of the regional Arab Strategy on Disaster Risk Reduction 2020. In addition, ESCWA emphasized the importance of dealing with key threats such as floods, drought and sea water intrusion into coastal groundwater aquifers.

Workshop on Climate Change and Sustainable Land-Water Management (Abu Dhabi, 2-6 October 2011)

42. The Arab Water Academy and World Bank Institute organized the training, which aimed to discuss issues related to climate change, impact assessment tools, building climate change resilience in land-water management, policies and institutions, integrating climate adaptation with mitigation and climate change negotiations. ESCWA delivered a presentation on a “Conceptual Framework for Climate Change Vulnerability Assessment on Water Resources and Agriculture in the Arab Region”. In addition, ACSAD presented their role in RICCAR and partnerships forged with other institutions.

3. Field projects

ESCWA-BGR Cooperation

43. During 2011, ESCWA-BGR Cooperation was extended to allow for further collaboration and assistance to ESCWA member countries on the management of water resources in the region. High-level commitment to the project was demonstrated with the participation of the president of BGR and Deputy Executive Secretary of ESCWA in the opening session of the first Intergovernmental Consultative Meeting on the Draft Legal Framework for Shared Water Resources in the Arab Region (Beirut, 24-26 May 2011). ESCWA and BGR organized a seminar for World Water Day 2011 which included the production of a documentary entitled “Beirut Waters: A Water Supply and Resource Protection Story”. The documentary was launched at the World Water Day event attended by some 200 people. It was also presented to Lebanese high schools and was included during a special water day supported by UNIC and BGR on 27 May 2011.

44. Upon the request of the Government of Jordan to support groundwater monitoring on the Disi aquifer, ESCWA-BGR Cooperation procured water monitoring equipment which was installed in May 2011. Upon the request of Lebanon and the Syrian Arab Republic, efforts were undertaken to support the procurement and installation of water monitoring equipment for them, but local conditions prevented the implementation of those activities.

45. The preparation of the ESCWA-BGR *Inventory of Shared Water Resources in Western Asia* continued in 2011. A summary of efforts is provided in the *Final report on the preparation of the Inventory of Shared Water Resources in Western Asia* (E/ESCWA/SDPD/2013/IG.1/5(Part II)).

*Assessment of the Impact of Climate Change on Water Resources and
Socio-Economic Vulnerability in the Arab Region*

46. In December 2010, ESCWA and SIDA signed a project agreement for the implementation of the project through a partnership with the League of Arab States, ACSAD, the Swedish Meteorological and Hydrological Institute and WMO. A “Preparatory Meeting for the Assessment of the Impact of Climate Change on Water Resources and Socio-Economic Vulnerability in the Arab Region” for the project partner organizations was convened to review the SIDA project document, work plan and technical issues related to the integrated assessment methodology within the context of RICCAR (Beirut, 26-27 May 2011). Subsequently, a follow-up meeting of SIDA project partners was held (Beirut, 4 and 8 July 2011).

47. Based on the deliberations undertaken at those meetings, it became evident that an extreme events component of the project was needed. ESCWA and partner organizations subsequently prepared a project proposal and submitted it to SIDA, requesting additional funding to incorporate an extreme events component into the project. The proposal was approved and signed as an addendum to the existing SIDA-ESCWA project agreement in December 2011. It allows for the running of additional regional climate projections at a smaller scale, the preparation of case studies, additional assistance to Arab meteorological offices, and support for the development of a national disaster loss inventory in selected Arab countries.

4. *Advisory services*

48. In 2011, ESCWA provided advisory services to member countries upon their request. In Oman, ESCWA provided support to the Public Authority for Electricity and Water by assessing laboratory quality assurance processes.

**II. IMPLEMENTATION OF THE 2012-2013 PROGRAMME OF WORK
IN THE FIELD OF WATER RESOURCES**

49. The following are the main water resources-related activities undertaken by ESCWA in support of the expected accomplishments of subprogramme 1 for biennium 2012-2013.

A. EXPECTED ACCOMPLISHMENT (A)

Enhanced technical, human and institutional capacities of member countries to develop and implement national, subregional and regional policies, strategies and action plans for the sustainable management of energy and water resources in line with the Johannesburg Plan of Implementation

1. *Studies and reports*

*“Glossary of Shared Water Resources, Technical, Socioeconomic and Legal Terminology”
(E/ESCWA/SDPD/2012/Glossary)*

50. The Arabic-English glossary was prepared within the framework of the ESCWA-BGR Cooperation and includes technical, socioeconomic and legal institutional terms. It is intended for specialists, decision makers and negotiators from ESCWA member countries. Adopting unified terminology is crucial to

harmonize the understanding of the technical, socioeconomic, environmental, institutional and legal issues related to the joint management of shared water resources.

Pamphlet: *World Water Day 2012: Water and Food Security*
(E/ESCWA/SDPD/2012/Technical Paper.1)

51. This pamphlet highlighted the role of water as a major determinant of food security and listed the main water challenges facing cities. It described a pilot initiative undertaken to increase food security in selected ESCWA member countries. The pamphlet was disseminated at a press conference organized to commemorate World Water Day 2012.

2. *Meetings and workshops*

“World Water Day 2012: Challenges of Water and Food Security in the Arab Region”
(Beirut, 22 March 2012)

52. ESCWA, the Food and Agriculture Organization of the United Nations and UNIC organized a joint World Water Day event held under the patronage of the Lebanese Minister of Agriculture Mr. Hussein Al Hajj Hassan and the Lebanese Minister of Energy and Water Mr. Gebran Bassil, who delivered opening statements. The message of the United Nations Secretary-General Mr. Ban Ki-moon was also read. The event was attended by students from Lebanese universities, diplomats and a host of United Nations and Lebanese officials and included a panel discussion on the “Challenges of Water and Food Security in the Arab Region”.

*Intergovernmental Consultative Meeting on the Water and Energy Nexus
in the ESCWA Region*
(Beirut, 25 June 2012)

53. Members of the ESCWA Committee on Water Resources and ESCWA Committee on Energy or their delegated representatives from 11 ESCWA member countries attended the meeting. The meeting identified priority issues for examination on the water-energy nexus, and explored possible mechanisms and institutional arrangements to coordinate joint policy efforts between the two committees. An overview of the water-energy linkages in the region was presented during the meeting, along with a regional mapping of water-energy linkages based on a questionnaire distributed to and completed by members of both committees. The meeting also tackled key regional and national issues related to the water and energy sectors in ESCWA member countries.

*Third Intergovernmental Consultative Meeting on the Draft Legal Framework
for Shared Water Resources in the Arab Region*
(Cairo, 10-11 December 2012)

54. For a summary of the process of developing a regional legal framework for shared water resources see *Progress achieved in the development of a legal framework for shared water resources in the Arab region* (E/ESCWA/SDPD/2013/IG.1/5(Part I)).

Support to the Arab Ministerial Water Council

First Meeting of the Arab Water Security Strategy Action Plan Working Group
(Beirut, 22 March 2012)

55. The meeting was organized by ACSAD in collaboration with ESCWA. The working group was established to draft the action plan that will support the implementation of the Water Security Strategy for the Arab Region to Meet the Challenges and Future needs for Sustainable Development 2010-2030, which

was adopted by AMWC in 2011. The working group is led by ACSAD and comprises the current country chair of AMWC (Iraq), the League of Arab States Center of Water Studies and Arab Water Security, the Arab Water Council, CEDARE, ESCWA, GIZ and UNEP/ROWA.

Fifth session of the AMWC Technical, Scientific and Advisory Committee
(Cairo, 15-17 January 2012)

and

Fifth session of the AMWC Executive Bureau
(Cairo, 18 January 2012)

and

Seventh session of the AMWC Technical, Scientific and Advisory Committee
(Cairo, 13-15 January 2013)

and

Seventh session of the AMWC Executive Bureau
(Cairo, 16 January 2013)

56. As member of the AMWC Technical, Scientific and Advisory Committee, ESCWA attended the aforementioned meetings. During the Committee meetings, ESCWA presented the progress made in the implementation of AMWC resolutions on the IWRM project on climate change and the MDG+ Initiative. In addition, ESCWA contributed to the presentation on progress achieved in the preparation of the legal framework on shared water in the Arab region. Moreover, ESCWA presented the technical and legal implications of developing separate legal instruments for shared groundwater and shared surface water for the Arab region to the AMWC Executive Bureau in January 2012.

Participation in international and regional meetings on water resources

Seventh Advisory Board Meeting of the IWRM German-Arab Masters of Science Programme
(Amman, 22-23 January 2012)

and

Eighth Advisory Board Meeting of the IWRM German-Arab Masters of Science Programme
(Amman, 26 January 2013)

57. In the capacity of vice-chair of the advisory board of the IWRM German-Arab Masters of Science programme, ESCWA participated in annual board meetings. While serving on the advisory board, ESCWA proposes research topics to students, contributes to research supervision and participates in programme assessments and thesis evaluations.

Bahrain International Green Tech Expo and Forum 2012
(Manama, 12-15 March 2012)

58. ESCWA delivered a presentation on the “Green Economy in the ESCWA Region: Examples of Opportunities”, at a forum that was organized by the United Nations Industrial Development Organization in Bahrain. The presentation highlighted how moving toward green economy can provide opportunities for advancing the sustainable development of the ESCWA region in terms of technology transfer and policy, particularly in the water, energy and agricultural sectors. It proposed that the water footprint should be considered when examining trade flows and policies.

Tenth Gulf Water Conference on “Water in the GCC States: The Water – Energy – Food Nexus”
(Doha, 22-24 April 2012)

59. The conference was organized by the Water Science and Technology Association in cooperation with Qatar General Electricity and Water Corporation (Kahramaa). ESCWA was invited to deliver a presentation on the prospects and challenges of promoting water and energy linkages in the region. Several topics were

discussed during the conference including sustainable planning and management of water and energy resources, water security and food sustainability, management of groundwater and surface water resources, management of the municipal water sector and desalination technologies.

Third Preparatory Committee Meeting
(Rio de Janeiro, 13-15 June 2012)
and
United Nations Conference on Sustainable Development (Rio+20)
(Rio de Janeiro, 20-22 June 2012)

60. ESCWA participated in and convened three side events at Rio+20. The first event, entitled “Food Security and Safety for Development in a Changing Arab World”, was jointly organized by ESCWA, the League of Arab States and GIZ, and included the presentation of a short video reflecting the perspectives of youth on food security. The second event was entitled “Advancing Sustainable Development in Post-Conflict Countries” and was co-organized with the Governments of Lebanon and Liberia, in cooperation with the Department of Economic and Social Affairs (DESA). Lastly, ESCWA and the four other United Nations regional commissions organized a joint side event on “Green Growth and Sustainable Development: Regional Perspectives”, which was chaired by the Executive Secretary of ESCWA and included a keynote statement by the Prime Minister of Lebanon Mr. Najib Mikati. Each regional commission focused on a specific topic, with ESCWA highlighting the topic “Youth Employment: Opportunities and Challenges Posed by a Transition to a Green Economy in the Arab Region”.

61. Rio+20 resulted in the endorsement of a final outcome document called “The Future We Want”, which was adopted by the United Nations General Assembly as resolution 66/288 on 19 September 2012. The outcome document makes reference to the water sector within the context of food security and nutrition and sustainable agriculture; water and sanitation; sustainable cities and human settlements; biodiversity; desertification, land degradation and drought; and mountain ecosystems.

Seventeenth UN-Water Meeting
(Stockholm, 23-25 August 2012)

62. The meeting included senior programme managers of UN-Water member institutions and sessions involving UN-Water partner organizations in order to support coordination, coherence and cooperation between United Nations agencies working on water, as well as partnerships with relevant non-United Nations organizations working at the global level. In the meeting the budget was approved for the UN-Water Task Force on Regional-level Coordination, which is co-chaired by ESCWA and ESCAP.

Stockholm World Water Week
(Stockholm, 26-28 August 2012)

63. The theme of the conference was “Water and Food Security”. ESCWA and BGR organized a joint side event to pre-release the main structure and findings of the *Inventory of Shared Water Resources in Western Asia*. For more information about the pre-release of the Inventory, see the *Final report on the preparation of the Inventory of Shared Water Resources in Western Asia* (E/ESCWA/SDPD/2013/IG.1/5(Part II)).

*“Groundwater Governance: A Global Framework for Country Action –
Regional Consultation for Arab States”*
(Amman, 8-10 October 2012)

64. The meeting was the third regional consultation undertaken by the United Nations Educational, Scientific and Cultural Organization as part of its global groundwater governance project, implemented with the support of BGR. ESCWA was invited to deliver an opening statement which highlighted activities under RICCAR to assess the impact of climate and extreme events on surface and groundwater resources in the

Arab region. In addition, ESCWA presented an overview of regional experiences in managed aquifer recharge and related governance challenges using examples from member countries. ESCWA-BGR Cooperation presented ongoing work to prepare the *Inventory of Shared Water Resources in Western Asia*. The meeting aimed to contribute to a global framework for action that would consist of a set of effective governance tools including guidelines for policies, legislation and regulations.

3. Field projects

ESCWA-BGR Cooperation

65. ESCWA-BGR Cooperation was expected to end on 31 March 2012. Based on the requests of the Committee on Water Resources, ESCWA and BGR, BMZ extended the project phase twice. The first extension was granted until 30 September 2012, based on a 22 November 2011 request. The second extension was granted until 30 June 2013, based on a second request dated 5 June 2012. No further extension of ESCWA-BGR Cooperation is expected. All activities related to the implementation of joint projects are targeted for completion by April 2013 to allow time for final reviews, reporting and settlements prior to the close of the project.

66. The ESCWA-BGR project team continued to work on finalizing the *Inventory of Shared Water Resources in Western Asia* during 2012 with the aim of releasing the publication during the first quarter of 2013. A detailed account of the process of preparing the Inventory is available in the *Final report on the preparation of the Inventory of Shared Water Resources in Western Asia* (E/ESCWA/SDPD/2013/IG.1/5(Part II)). The final version of the full Inventory was sent to members of the Committee on Water Resources, Inventory focal points and national experts on 22 February 2013 for final comments. National counterparts were invited to provide their comments on the final draft by 10 March 2013, with the aim of presenting the Committee of Water Resources with the finalized Inventory during its tenth session in March 2013.

4. Advisory services

67. The Regular Programme of Technical Cooperation of ESCWA continued in 2012 and early 2013 on issues related to building capacity on the sustainable management of water resources in the ESCWA region. The requests and action taken are as follows:

Country	Requesting institution	Services provided
Bahrain	Ministry of Works	ESCWA provided support for the finalization of the terms of reference for a consultancy on the reuse of treated sewage effluent in managed aquifer recharge.
	Electricity and Water Authority	ESCWA reviewed national water conservation and demand management activities. Desk work and mission, 03-08 November 2011.
Kuwait	Environment Public Authority	ESCWA contributed to the organization of a workshop on "Environmental Indicators and Environmental Performance Index" which also addressed water/related indicators. ESCWA presented the zero-draft outcome document of Rio+20 and the position of the various political groups and countries on the document. Assistance was also rendered to develop a matrix of implementation of the national environmental strategy with set targets and indicators.

Country	Requesting institution	Services provided
Lebanon	Presidency of the Council of Ministers	ESCWA supported the technical review of the Economic and Social Reform Action Plan in March 2012. The comments of ESCWA addressed water resources, water supply and sanitation-related issues.
	Ministry of Energy and Water	ESCWA participated in and contributed to four meetings of the Water Sector Coordination Group.
	American University of Beirut	ESCWA reviewed a research proposal related to “An Integrated Solution to the Solid Waste, Quarry Rehabilitation and Excavation and Construction Debris Problem in Lebanon”.
	American University of Technology	ESCWA presented “Challenges to Water Resources Management in the Middle East” to the water seminar lecture series.
Oman	Ministry of Environment and Climate Affairs Ministry of Commerce and Industry	Advisory service was provided in preparation for Rio+20 and to support SME development notably in the development of green production sectors.
Palestine	Palestinian Water Authority	ESCWA helped to set up the Palestinian Water Information Centre to contribute to better internal coordination of water data and information management within the water authority and between different Palestinian stakeholders. Desk work and a mission were undertaken in support of the request.
Saudi Arabia	Ministry of Water and Electricity	ESCWA provided assistance towards the future implementation of a System of Environmental-Economic Accounting for Water, which included contributions to a draft terms of reference for a consultancy and a draft agenda for a national training workshop on the system. Desk work and mission undertaken.
	Ministry of Economy and Planning	ESCWA drafted a manual/guidance note for the development and application of indicators for the environmental pillar of sustainable development in the example sectors of environment and water, entitled “Water and Environment Indicators for Sustainable Development in National Development Planning, Saudi Arabia”.
	Ministry of Economy and Planning	ESCWA prepared first drafts of policy papers for the environment and water sector as part of a multi-disciplinary contribution to the preparations of the Tenth Development Plan. The papers are entitled: “The Future We Want – Water and Sanitation in Saudi Arabia” and “The Future We Want– Environmental Management in Saudi Arabia”. Desk work and a mission were undertaken in 2012 and early 2013.

Country	Requesting institution	Services provided
The Sudan	Ministry of Water Resources and Electricity, formerly Ministry of Irrigation and Water Resources	ESCWA supported the development of a national approach to water harvesting assessments for future investments in local water infrastructure. ESCWA supported an exchange visit from staff from the Ministry of Water Resources in the Sudan to the Ministry of Regional Municipalities and Water Resources in Oman. During the visit the Sudanese developed further their knowledge on the water harvesting techniques and groundwater recharge dams used in Oman. Desk work and mission, 08-12 January 2012.
Syrian Arab Republic	Ministry of Irrigation, now Ministry of Water Resources	ESCWA supported an internal revision of the ministry's organizational structure and name through the development of a questionnaire for senior staff. In 2012 the ministry was renamed as Ministry of Water Resources.
United Arab Emirates	Ministry of Environment and Water	ESCWA prepared a short review of laws and legislation in member countries concerning water and energy conservation.

B. EXPECTED ACCOMPLISHMENT (B)

Enhanced capacity of Governments and other public and private stakeholders to incorporate climate change responses into sectoral strategies and plans, and to stimulate financial and technical support for the inclusion of climate change issues into plans and strategies

1. Meetings and workshops

*Expert Group Meeting on Regional Cooperation for Climate Change
Impact Assessment on Water Resources in the Arab Region
(Beirut 5-6 July 2012)
(E/ESCWA/SDPD/2012/WG.5/Report)*

68. The meeting was organized by ESCWA in cooperation with the League of Arab States and UNEP/ROWA and accomplished the following: (i) reviewed the progress achieved on the regional initiative; (ii) discussed approaches for moving forward with the integrated socioeconomic vulnerability assessment; (iii) presented the approved Arab domain and discussed the climate models that would generate projections for the region; (iv) agreed upon criteria for establishing the regional knowledge hub; (v) discussed approaches for moving forward with the integrated assessment; and (vi) established working groups to follow up on the establishment of the regional knowledge hub and the formulation and implementation of the vulnerability assessment methodologies. Representatives from the water ministries of Arab countries attended the meeting in addition to representatives of regional and international organizations engaged in the study of the impact of climate on the water sector.

*Regional Coordination Mechanism Thematic Working Group on Climate Change
(Beirut, 6 July 2012)*

69. The Thematic Working Group on Climate Change of the Regional Coordination Mechanism was established in 2008 and is chaired by UNEP/ROWA. The working group met on the sidelines of the fourth RICCAR EGM in Beirut to discuss its work programme. The meeting resulted in an agreement to prepare a joint Arab side event for the eighteenth Conference of the Parties to the United Nations Framework Convention on Climate Change (COP18) (the side event is described in *Progress achieved 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 (E/ESCWA/SDPD/2013/IG.1/4)). The working group also took note of the need to pursue activities in support of the Arab Framework of Action on Climate Change, which was prepared by Arab Governments, the League of Arab States, United Nations and regional organizations under the auspices of CAMRE.

Support to the Arab Ministerial Water Council

Fifth meeting of the AMWC Technical, Scientific, Advisory Committee
(Cairo, 15-17 January 2012)

and

Fifth meeting of the AMWC Executive Bureau
(Cairo, 18 January 2012)

and

Seventh meeting of the AMWC Technical, Scientific, Advisory Committee
(Cairo, 13-15 January 2013)

and

Seventh meeting of the AMWC Executive Bureau
(16 January 2013)

70. In 2012 and 2013, ESCWA attended the meetings of the Technical, Scientific and Advisory Committee and the AMWC Executive Bureau. During the meetings, ESCWA presented the progress made in implementing RICCAR as a follow-up to the IWRM project on climate change impact assessment, and the coordination of initiatives with the ACCWaM project led by GIZ to ensure complementarity between programmes. At its seventh meeting, the Committee requested ESCWA to provide a progress report on RICCAR at its eighth meeting.

Participation in international and regional meetings on water resources

Seventeenth meeting of the League of Arab States Committee on Climate Change
(Cairo, 10-12 January 2012)

71. During the meeting, ESCWA delivered a presentation on RICCAR to the representatives of Arab meteorological offices. Arab countries were invited to support the initiative through their meteorological offices and to partner with the United Nations and League of Arab States in sharing data and exchanging information to support the implementation of the integrated assessment under RICCAR.

High-Level Ministerial Meeting
and twenty-eighth Meeting of the Arab Permanent Committee on Meteorology
(Jeddah, 25-29 March 2012)

72. At the meeting, ESCWA delivered a presentation to inform participants about RICCAR, including the outcomes of the Regional Workshop on Climate Change Prediction/Projection and Extreme Events Indices in the Arab Region, (Casablanca, 13-16 March 2012) under the SIDA-funded project supporting RICCAR. The Arab Permanent Committee on Meteorology endorsed the regional initiative, mandated their respective meteorological offices to support its implementation and recognized the results achieved at the workshop in Casablanca.

Eighteenth Meeting of the Sub-committee on Climate and Climate Change
(Cairo, 8-9 October 2012)

73. ESCWA delivered a presentation on the progress made with partner organizations in the implementation of RICCAR. A side meeting involving ESCWA, the League of Arab States, UNEP/ROWA,

UNISDR and United Nations University representatives was organized to discuss joint activities related to RICCAR and preparations for the proposed side event on climate change at COP18. The League of Arab States followed up with the Government of Qatar regarding the inclusion of the proposed side event.

*Eighteenth Conference of the Parties to the
United Nations Framework Convention on Climate Change (COP18)
(Doha, 26 November-7 December 2012)*

74. At the conference, ESCWA attended negotiation sessions and participated in side events. Notably, ESCWA and the League of Arab States co-chaired a joint side event entitled “Climate Change Vulnerability and Impact Assessment: Initiatives for Adaptation in the Arab Region” that introduced complementary regional initiatives of the League of Arab States and United Nations that aim to assess climate change impacts and vulnerability, enhance resilience and frame regional and national action for climate change adaptation in the Arab region. The side event was a joint activity of the Thematic Working Group on Climate Change, and involved UNDP, UNEP/ROWA and the World Health Organization.

2. Field projects

RICCAR

75. ESCWA is working closely with organizations and institutions supporting RICCAR to ensure the continued implementation of the workplan during 2012. Activities associated with the SIDA-funded project are detailed in *Progress achieved 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 (E/ESCWA/SDPD/2013/IG.1/4)*.

*SIDA Project Partners Meeting
(Beirut, 4 July 2012)*

76. During the meeting, all SIDA project partners supporting RICCAR discussed the progress of project activities, the workplan and next steps. The meeting included SIDA and UNISDR, a new member of the project partner team. The meeting was organized on the sidelines of the fourth EGM in support of RICCAR.

*Workshop on Climate Prediction/Projection and Extreme Events Indices in the Arab Region
(Casablanca, 13-16 March 2012)*

77. The meeting was organized by WMO and ESCWA, in collaboration with the League of Arab States and Direction de la Météorologie Nationale of Morocco under the SIDA project supporting RICCAR. It was technically supported by the Commission for Climatology Expert Team on Climate Change Detection and Indices of WMO. The purpose of the training workshop was to build the capacity of experts from national meteorological offices in the Arab region in the field of climate monitoring, assessment, prediction and projection and knowledge management of regional climate conditions and climate indices, including those representing extreme events. The workshop discussed the past, present and future climates of the Arab region, climate data availability, quality control of daily data and tools for deriving climate indices from daily datasets. The workshop included hands-on training aimed at analysing climatic data from one station in each Arab country and resulted in the compilation of climate indices using standardized software based on the guidance provided. Participants presented the outputs of the country reports which showed changes in trends of temperature and precipitation climate indices and highlighted problems associated with data quality and homogeneity. The last day of the workshop was devoted to climate prediction and projection for the Arab region including the delineation of the Arab domain for climate modelling, the latest developments in climate change projections for the Arab region and the analysis of extreme indices in climate model simulations. An expert from the Commission for Climatology Expert Team on Climate Change Detection

and Indices invited participants from Arab Governments to contribute to a journal article that was preliminarily approved for publication by the Journal for Climatology in February 2013.

Establishment of the Arab domain
(June 2012)

78. Activities related to establishing the Arab domain within the Coordinated Regional Downscaling Experiment (CORDEX) are presented in *Progress achieved 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* (E/ESCWA/SDPD/2013/IG.1/4).

Workshop on Regional Climate Modelling Applications and Analysis
(Beirut, 2-4 July 2012)

79. The workshop was the second in a series that supports the capacity-building and institutional strengthening pillar of the regional initiative. It aimed to strengthen the capacity of water experts to understand and analyse regional climate models, particularly inputs, outputs and applications in the Arab region. It introduced global climate models and regional climate model downscaling techniques, and discussed the findings of the sensitivity analysis undertaken to establish the Arab domain and methods to reduce uncertainty associated with climate modelling, particularly the development of an ensemble average for the Arab region. Country representatives presented national climate modelling efforts, while regional and international climate modellers presented regional applications and case studies that contributed to the development of the ensemble average for the Arab region. Hands-on training exercises helped workshop participants to access and define the types of tools needed to support regional climate model applications and the analysis of climate change projections in the Arab region.

ACCWaM

80. GIZ invited the League of Arab States Technical Secretariat of AMWC, ACSAD and ESCWA to a strategic planning workshop (5-7 May 2012) to support the formulation of the first phase of the ACCWaM programme of work. The participants agreed that RICCAR would be the primary regional mechanism through which ACCWaM activities on climate change impact assessment and vulnerability assessment would be implemented and reported upon to AMWC. Other areas of collaboration on climate change adaptation related to the water sector were also discussed, including support for the Development Account project entitled “Developing the capacities of the Arab countries for climate change adaptation by applying integrated water resource management tools”, which is being led by ESCWA and will be implemented in 2013. A cooperation agreement between GIZ and ESCWA was signed on 12 October 2012, stipulating that GIZ will provide ESCWA with financial and technical support for the implementation of RICCAR and the aforementioned Development Account project. Thus, ACCWaM is helping to scale up and complement the two initiatives in the Arab region on climate change impact assessment and vulnerability assessment, and climate change adaptation related to the water sector.

81. ESCWA organized two RICCAR working group meetings with funding provided by the GIZ-ESCWA cooperation project. The first was a meeting of the Vulnerability Assessment Working Group (Beirut, 29-30 January 2013), and the second was the first meeting of the Regional Knowledge Hub Working Group (Beirut, 31 January to 1 February 2013). Participant in previous RICCAR meetings were requested to nominate themselves or someone else to serve on the working groups. The Vulnerability Assessment Working Group is composed of 15 members representing Arab Governments, Arab organizations, the League of Arab States, the United Nations and other international experts. The Regional Knowledge Hub Working Group is composed of 10 members representing the same types of institutions. In addition, GIZ initiated a long-term contract with “adelphi”, a consultancy group based in Berlin, to provide advisory support to the working groups and associated training support under RICCAR.

*Development Account:
Developing the capacities of the Arab countries for climate change adaptation by
applying integrated water resource management tools*

82. In December 2011, the Fifth Committee of the United Nations General Assembly approved the concept note for the project under the eighth tranche of the United Nations Development Account. The project is led by ESCWA and implemented jointly with UNEP and other partners, namely the Arab Countries Water Utilities Association, ACSAD and the World Health Organization. A project document was subsequently elaborated by ESCWA in consultation with the partners based on the approved concept note. During this consultation process, GIZ was also invited to partner on the project and to provide additional resources to support the scaling up of the project and its dissemination in the region. The resulting project document was submitted, commented upon, revised and resubmitted to DESA in November 2012 for final approval. The project will build on the findings of the integrated assessment of climate change under RICCAR and help Government decision makers and their advisers to understand the linkages between climate change adaptation and the water sector. In particular the project will show how IWRM tools can support climate change adaptation in key sectors, namely agriculture, economic development, environment, health and human settlements. It is anticipated that the funding and approval to begin the project will be received during the first half of 2013.

*Development Account:
Strengthening national capacities to manage water scarcity
and drought in West Asia and North Africa*

83. In June 2012, DESA requested ESCWA to support the implementation of the project, for which funding had been secured under the eighth tranche of the United Nations Development Account. The aim of the project was to enhance the effectiveness of previous drought planning, monitoring and implementation of conflict-sensitive drought management plans and coping capacities in selected water scarce countries affected by conflict. The project document was prepared by DESA and approved in October 2012. A letter of agreement was subsequently drafted and signed by ESCWA on 19 February 2013, which allows ESCWA to formally start implementing the project in cooperation with DESA. ESCWA will coordinate the initial consultative meeting of the project and also pursue complementarity between the project and other regional initiatives and projects it is undertaking on climate change and the water sector in the Arab region.

3. Advisory services

84. In 2012, the technical cooperation programme emphasized capacity-building on the sustainable management of water resources in the ESCWA region. The requests and action taken are as follows:

Country	Requesting institution	Services provided
Iraq	Ministry of Environment	ESCWA provided support and contributions to a national consensus-building and awareness workshop for the Iraq Drought Risk Management Project. ESCWA addressed water management challenges under drought conditions and provided an overview of drought management initiatives in the region.
Qatar	Ministry of Environment	ESCWA organized national workshops to involve ministries and non-governmental organizations in the consultative process for Rio+20. ESCWA contributed to the “National Workshop in preparation for Rio+20” for developing national positions towards Rio+20 and developing a road map for mainstreaming sustainable development in national development strategies. Assistance was also rendered to organize side events during Rio+20 in the field of climate change and green economy which could serve as regional side events in COP18.

C. EXPECTED ACCOMPLISHMENT (c)

Strengthened capacity in member countries to develop and apply best practice and plans for improving sustainable agriculture and rural livelihood and increasing the productivity and competitiveness of small and medium-sized enterprises, in support of achieving MDGs

1. *Studies and reports*

ESCWA Water Development Report 5
(Forthcoming in 2013)

85. The report will review issues in sustainable water resources management and water services and examine regional developments in the area of monitoring water and sanitation services in the Arab region in the light of global and regional preparations for the post-2015 development agenda. It will examine the challenges and progress achieved in meeting MDG targets on water supply and sanitation and expound on a new intergovernmental MDG+ Initiative that is launched to establish a regional mechanism for monitoring access to water supply and sanitation services within the regional context.

2. *Meetings and workshops*

Workshop on Water Safety Plans
(Beirut, 10-13 January 2012)

86. In cooperation with UN-Habitat, the ESCWA-BGR Cooperation tailored the workshop to representatives of utilities from Arab countries. Its objective was to enable participants to lead the process of developing and applying a water safety plan in their home institution. By the end of the course, participants were able to identify the scope and requirements of a water safety plan and understand how to set up a programme, and knew how to manage a team to develop a water safety plan that is feasible within the constraints and specificities of the utility. In doing so, the participants learned how such a plan can safeguard customers, optimize operations and positively impact the environment.

Support to the Arab Ministerial Water Council

Fifth meeting of the AMWC Technical, Scientific, Advisory Committee
(Cairo, 15-17 January 2012)

and

Fifth meeting of the AMWC Executive Bureau
(Cairo, 18 January 2012)

and

Seventh meeting of the AMWC Technical, Scientific, Advisory Committee
(Cairo, 13-15 January 2013)

and

Seventh meeting of the AMWC Executive Bureau
(16 January 2013)

87. ESCWA, as a member of the Committee, presented the progress made in the implementation of the AMWC resolution on the MDG+ Initiative. The Committee adopted recommendations and resolutions calling on countries to nominate their focal points to follow up on the implementation of the initiative. As of January 2013, 13 Arab countries had nominated national focal points.

Participation in international and regional meetings on water resources

Sixth World Water Forum
(Marseille, 12-17 March 2012)

88. In support of AMWC, the League of Arab States organized sessions on the five targets of the strategy for water security in the Arab region at the Forum. ESCWA made a presentation on the second of the five targets, specifically “Adoption, in the short term (by 2015), of integrated water policies which secure water for all sectors to achieve a maximum socioeconomic benefit and insure the implementation of the millennium development goals”. The presentation highlighted the process of target coordination and identification, the preparation of its action plan and the compilation of solutions and commitments connected to the second target. ESCWA also supported the preparation for the regional target session on climate change. In addition, ESCWA participated as a panellist in the launching of the chapter on the Arab Region and Western Asia of the Fourth World Water Development Report during a session organized by the World Water Assessment Programme of the United Nations Educational, Scientific and Cultural Organization. The Jordanian Ministry of Water and Irrigation, which co-organized the event, invited ESCWA to participate in the high-level round-table meeting on “Adaptation to climate change”.

3. *Field projects*

MDG+ Initiative

89. The efforts of the Commission to implement the Initiative are reported in *Progress achieved in implementing the Regional Initiative for the Development of a Mechanism to Monitor the Implementation of the Millennium Development Goals Related to Water and Sanitation in the Arab Region (MDG+ Initiative)* (E/ESCWA/SDPD/2013/IG.1/3).

4. *Advisory services*

90. The Technical Cooperation Programme continued in 2012 and provided capacity-building on the sustainable management of water resources in the ESCWA region. Upon the request of the Speaker of the Lebanese Parliament in December 2012, ESCWA provided technical assistance to the Ministry of Environment, the National Council for Scientific Research and the Litani River Authority. ESCWA supported the preparation of a consolidated action plan to support the restoration of the Litani River along with other partners. The action plan was presented and discussed at a seminar convened on 21 February 2013 at the Lebanese Parliament. Six ministers attended the meeting in addition to the Executive Secretary of ESCWA and senior representatives of relevant Government institutions and municipalities along the upper Litani River.
