



**ECONOMIC AND SOCIAL  
COUNCIL**

Distr.  
LIMITED  
E/ESCWA/C.4/2023/3  
8 May 2023  
ORIGINAL: ENGLISH

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

Committee on Water Resources  
Fifteenth session  
Beirut, 19–20 June 2023



Item 4 of the provisional agenda

**Implementation of activities under the ESCWA programme plan  
and of recommendations made by the Committee on Water  
Resources at its fourteenth session to the ESCWA secretariat**

**Summary**

Following the fourteenth session of the Committee on Water Resources of the Economic and Social Commission for Western Asia (ESCWA), held virtually on 29 and 30 September 2021, ESCWA has undertaken various activities under its programme plan in the field of water resources and pursuant to recommendations made by the Committee at that session.

The present document reviews those activities. The Committee is invited to take note of the present document and provide comments thereon.

## Contents

|  | <i>Paragraphs</i> | <i>Page</i> |
|--|-------------------|-------------|
| Introduction .....   | 1-3               | 3           |
| <i>Chapter</i>   |                   |             |
| <b>I. Implementation of activities under the ESCWA programme plan .....</b>  | <b>4-61</b>       | <b>3</b>    |
| A. Accelerating work towards the achievement of Sustainable Development Goal 6.....                                  | 4-13              | 3           |
| B. Groundwater analysis towards enhanced water security in the Arab region .....                                     | 14-25             | 5           |
| C. Support to member States over the management of transboundary water resources .....                               | 26                | 7           |
| D. Advancing a water-energy-food nexus approach at the Arab regional level .....                                     | 27-30             | 8           |
| E. Supporting the generation of Arab regional climate analysis and access thereto .....                              | 31-50             | 8           |
| F. Advancing disaster risk reduction in the Arab region.....   | 51-52             | 12          |
| G. Supporting mobilization and access to climate finance in the Arab region ...                                      |                   | 12          |
| H. Enhancing Arab regional capacity for progress on the Paris Agreement and towards the achievement of SDG 13.....   | 53-61             | 14          |
| <b>II. Implementation of recommendations made by the Committee on Water Resources at its fourteenth session.....</b> | <b>62</b>         | <b>15</b>   |

## Introduction

1. Following the fourteenth session of the Committee on Water Resources, held virtually on 29 and 30 September 2021, the Economic and Social Commission for Western Asia (ESCWA) has implemented various activities under its programme plan in the field of water resources and pursuant to recommendations made by the Committee at that session.
2. Those activities included providing support to member States in implementing major United Nations global agreements, resolutions and initiatives; conducting studies and issuing publications; and convening expert group meetings and capacity-building workshops.
3. The present document reviews those activities, mostly carried out in the areas of water resources management, groundwater and transboundary water governance and developing response to climate change challenges.

## I. Implementation of activities under the ESCWA programme plan

### A. Accelerating work towards the achievement of Sustainable Development Goal 6

#### 1. *Transboundary cooperation in Arab States: Second regional report on SDG indicator 6.5.2* ([E/ESCWA/CL1.CCS/2021/TP.10](#))

4. This report is the second assessment report on progress towards the implementation of Sustainable Development Goal (SDG) 6.5.2 in the Arab region. In 2018, ESCWA collaborated with the Economic Commission for Europe (ECE) and the United Nations Educational, Scientific and Cultural Organization (UNESCO) as SDG 6.5.2 co-custodian agencies on the preparation of the first Arab regional report on SDG 6.5.2. The collaboration continued during the second reporting exercise, which took place in 2020, and for which 15 countries submitted responses, compared with 10 countries during the first reporting exercise in 2017. This resulted in a significant amount of new data. The second regional report draws upon datasets collected during the second round of global reporting, highlights the importance of cooperation on transboundary water management and addresses some of the data gaps previously identified.

#### 2. *The 2021 Status Report on the Implementation of Integrated Water Resources Management in the Arab Region* ([E/ESCWA/CL1.CCS/2021/TP.7](#))

5. The report builds on the first SDG 6.5.1 assessment report for the Arab region and provides an analysis of progress achieved towards 6.5.1 target implementation at the regional level in 2020, compared with implementation levels reported in 2017 and based on responses collected from 15 countries.

6. The outcomes highlighted the need to double integrated water resources management (IWRM) implementation rates to reach SDG target 6.5 by 2030. It was found that the highest gains were achieved for the “Institutions and participation,” “Enabling environment” and “Management instruments” constituents, whereas implementation of “Financing for IWRM” still lagged behind.

#### 3. *High-level segment on policy dialogues in water-scarce countries* (Cairo, 24 October 2021)

7. ESCWA participated in the high-level segment on policy dialogues in water-scarce countries for achieving the SDGs, which highlighted that the Arab region was not on track to ensure water security for all, with over 49 million people lacking access to drinking water and 74 million still deprived of sanitation services.

Decision makers were called upon to intensify transboundary water cooperation to prevent future conflicts and support 90 per cent of the Arab population living in water-scarce countries.

4. *Arab Regional Preparatory Meeting for the Midterm Comprehensive Review of the Water Action Decade*  
(Beirut, 18–19 May 2022)

8. The meeting was convened as part of the regional preparatory process for the midterm comprehensive review of the Water Action Decade and built on three previous regional consultations organized by ESCWA for that purpose in February, April and September 2021. The aim was to assess regional progress towards the Water Action Decade objectives and discuss related challenges, opportunities and ways to accelerate achievement. The meeting outcomes were used to inform the global process, including the United Nations Secretary-General's report for the midterm comprehensive review of the Water Action Decade.

5. *Towards stronger implementation of integrated water resources management in the Arab region*  
(Virtual, 26 July 2022)

9. The webinar was organized in collaboration between ESCWA and the United Nations Environment Programme (UNEP) to present the outcomes and findings of the [2021 Status Report on the Implementation of Integrated Water Resources Management in the Arab Region](#). The meeting deliberations discussed key enablers for accelerating IWRM implementation at the Arab regional level and encouraged the initiation of robust national consultations in preparation for the next reporting rounds on SDG indicator 6.5.1 in 2023. Participants were also informed of the [SDG6 IWRM Support Programme](#) on reporting, developing action plans and implementing SDG 6.5.1.

6. *Arab region coordination meeting for the participation of Arab States in the United Nations 2023 Water Conference*  
(Virtual, 4 January 2023)

10. The coordination meeting was held pursuant to a resolution of the Arab Ministerial Water Council (AMWC) adopted at its fourteenth session, which called its Technical Scientific Advisory Committee to organize a coordination meeting for Arab States' participation in the United Nations 2023 Water Conference, in collaboration with ESCWA. The meeting covered Arab States' representation in the conference and inquired about the willingness of member States to participate in the organization of a side event organized in coordination between the AMWC and ESCWA on the mechanisms to accelerate water-related SDG implementation in the Arab region. The meeting also discussed the possibility to organize other side events as part of the 2023 Water Conference.

7. *2023 Arab Forum for Sustainable Development*  
(Hybrid, 14–16 March 2023)

11. The 2023 Arab Forum for Sustainable Development (AFSD) included a session dedicated to the review of SDG 6 implementation across the Arab region. The session entitled "Water security and accelerating action on SDG 6" considered the impact of recent crises, and presented innovative policy and financing solutions to accelerate the provision of clean water and sanitation for all. The session also represented the last stop on the regional road map towards the United Nations 2023 Water Conference for the midterm comprehensive review of the Water Action Decade, and hence provided an opportunity to take stock of regional priorities towards the consolidation of a unified Arab position. Furthermore, two sessions were organized on "Climate security in Arab States: lessons learned and scaling up" and "Inclusive climate adaptation and mitigation of human settlements in the Arab region". During these sessions, good practices and lessons learned were shared among practitioners to scale-up innovative and integrated approaches to accelerate climate action and work across the

SDGs. Relevant options for inclusive policy and practice were also presented, highlighting integrated forward-looking approaches.

8. *ESCWA participation in the United Nations 2023 Water Conference*  
(New York, 22–24 March 2023)

12. On 23 March 2023, ESCWA moderated an interactive dialogue during the United Nations 2023 Water Conference, entitled “[Water for Cooperation: Transboundary and International Water Cooperation, Cross Sectoral Cooperation, including Scientific Cooperation, and Water Across the 2030 Agenda](#)”. The intervention highlighted the importance of transboundary cooperation for the Arab region where more than two thirds of all water resources cross one or more political boundary.

13. Furthermore, ESCWA participated in the organization of many side events, which included the session organized in collaboration with the Palestinian Water Authority, the World Bank, the United Nations Children’s Fund (UNICEF) and the Netherlands representative office on “[The importance of Goal 6 within the Palestinian context](#)”. ESCWA also collaborated with other United Nations regional commissions, concerned ministries from selected countries and global and regional organizations on a “[Regional dialogue on accelerating the implementation of the Water Action Agenda](#)”, which informed dialogues on accelerating the implementation of the Water Action Agenda. ESCWA also co-organized with the Technical Secretariat of the AMWC of the League of Arab States and the Islamic Development Bank (IsDB) a session on the [Arab region joint commitment to accelerate achievement of water security for sustainable development](#).

**B. Groundwater analysis towards enhanced water security in the Arab region**

1. *ESCWA Water Development Report 9: Groundwater in the Arab region*  
([E/ESCWA/CL1.CCS/2021/2](#))

14. ESCWA issues Water Development Reports on a regular basis to provide in-depth analysis and policy recommendations related to the most salient water-related issues facing the Arab region. This edition focused on groundwater in the Arab region and the main challenges facing its sustainable development. Opportunities to leverage advances in management, cooperation and technologies towards the preservation and protection of these valuable resources were discussed in the perspective of achieving water security.

2. *AWARENET webinar series on the Assessment of Climate Change Impacts on Groundwater*  
(Virtual; 2, 4, 9 and 11 November 2021)

15. The online webinar series was implemented through AWARENET,<sup>1</sup> drawing upon regional climate and hydrological projections generated under the Regional Initiative for the Assessment of Climate Change Impacts on Water Resources and Socio-Economic Vulnerability in the Arab Region (RICCAR). The overarching goal of the training was to demonstrate how geographic information technologies could be implemented for the assessment of climate change impacts on groundwater. The training consisted of four interlinked modules delivered in English to consolidate members’ capacities in applying hydrogeological modelling to groundwater analysis under changing climate conditions.

3. *Arab regional perspective on the United Nations World Water Development Report 2022: “Groundwater: Making the invisible visible”*

16. ESCWA contributed the Arab regional analysis to the 2022 World Water Development Report and discussed groundwater-related challenges, providing examples of innovative approaches implemented in localized areas of the Arab region to preserve groundwater resources and enhance the resilience of

---

<sup>1</sup> AWARENET is a network affiliated to the International Capacity Development Network for Sustainable Water Management (Cap-Net) and which secretariat is hosted at ESCWA.

groundwater-dependent sectors and populations. ESCWA is also a member of the UN-Water task force that organized the 2022 World Water Day campaign on groundwater, during which the report was launched.

*4. Series of Regional Dialogues on Groundwater*  
(Virtual, 18–19 May; Virtual, 12 October; Cairo, 12 November 2022)

17. In May 2022, ESCWA launched the Regional Dialogues on Groundwater during the Arab Regional Preparatory Meeting for the Midterm Comprehensive Review of the Water Action Decade (United Nations 2023 Water Conference). The Arab region’s groundwater priority issues were identified to include the following: strengthened groundwater governance; improved knowledge and information on groundwater systems; cooperation for the sustainable management of transboundary aquifers; the managed aquifer recharge (MAR); groundwater for climate change adaptation in the region; and monitoring solar-powered groundwater pumping to limit over-abstraction.

18. The second Regional Dialogue on Groundwater, held in October 2022, focused on groundwater governance. Controlling over-abstraction was identified as the groundwater governance priority in the Arab region. Available regional tools and experiences to guide and support policymakers in reviewing or developing local groundwater regulations were re-emphasized and covered the regional guidelines for groundwater abstraction. The third regional dialogue was convened on the sidelines of the 27th Conference of the Parties to the United Nations Framework Convention on Climate Change (COP27): Adaptation and Agriculture Day, in November 2022, during a session organized collaboratively between UNESCO, ESCWA, the League of Arab States and the United Nations Food and Agriculture Organization (FAO).

*5. Webinar on the Impacts of Climate Change on Surface and Groundwater Resources*  
(Virtual, 23 June 2022)

19. The webinar was implemented through AWARENET to present and discuss case studies developed to analyse the impacts of climate change on selected aquifers in Africa and the region. Information and data generated under such case studies would help bridge gaps in data and understanding of climate science toward integrated management. The webinar was organized by the International Commission on Irrigation and Drainage (ICID) of the African Regional Working Group (AFRWG), in partnership with ESCWA and the Arab Centre for the Studies of Arid Zones and Dry Lands (ACSAD).

*6. UN-Water Summit on Groundwater*  
(Paris, 7–8 December 2022)

20. The session within the UN-Water Summit on Groundwater was organized by representatives of the five United Nations regional commissions to deliberate and exchange on common groundwater resources management challenges and the promotion of related sustainable solutions. Regional commission representatives drew upon the outcomes of their respective regional preparatory meetings for the United Nations 2023 Water Conference, regional dialogues on groundwater and regional preparatory meetings for the High-level Political Forum on Sustainable Development. Their aim was to shift discussions from a global to a regional focus and inform exchange of experiences and lessons learned in advancing sustainable groundwater solutions at the regional and local levels.

*7. Improved Water Security in Arab States Project Inception Meeting*  
(Beirut, 20 December 2022)

21. The United Nations Development Account project on “Improved Water Security in Arab States” is implemented by ESCWA to enhance water security at the Arab regional level through the sustainable management of groundwater resources, among others. The project activities include capacity-building activities, tailored technical assistance and the establishment of the Arab Groundwater Knowledge Platform to support groundwater analysis, which complements other regional knowledge platforms and networks that

ESCWA has built on climate change and IWRM. The project activities also aim to assess climate change impacts on groundwater resources in at least two pilot case studies, and the use of innovative technologies for the management of groundwater resources in up to three pilot case studies.

22. In that context, the inception meeting introduced and discussed the Arab Groundwater Knowledge Platform and fostered exchange among the project national focal points on the capabilities, features and structure of the platform.

8. *AWARENET webinar series on Disruptive Technology Knowledge*  
(Virtual, 24 January and 17 March, 2022)

23. A webinar series was organized by AWARENET on disruptive technology knowledge, in collaboration with ESCWA, the World Bank and Cap-Net. The first webinar of the series, entitled “Disrupting Water: An Overview”, was convened in January 2022 to provide an overview of evolving technologies deployed to help “disrupt” the data value chain, the way systems operate, and the way stakeholders interact with each other. The second webinar of the series, convened in March 2022, focused on interactive water dashboards to showcase how available data, analytics, visualization and knowledge services related to water, climate, environment or other themes of interest could be e-packaged into modern engaging interactive dashboards. Furthermore, a demonstration of the way users could make their own customized dashboards took place during the webinar.

9. *Contribution to the project on “Implementing the 2030 Agenda for water efficiency/productivity and water sustainability in NENA countries”*

24. ESCWA contributed to the implementation of this FAO Regional Office for Near East and North Africa project that ran from 2022 with financial support from the Government of Sweden. The project supported progress on SDG target 6.4 by seeking to enhance water use efficiency and address water scarcity concerns in the region. The ESCWA component, implemented in collaboration with ACSAD, developed climate-proof watershed management plans and resilience packages for specific watersheds, namely the Algérois watershed in Algeria and the Nahr el Kabir and Nahr el Kalb watersheds in Lebanon.

25. The packages included actionable interventions identified with national and basin-level stakeholders, such as investing in rainwater harvesting infrastructure in the Algérois watershed; increasing water storage through hill lakes in Nahr el Kabir; and promoting tourism projects in Nahr el Kalb to diversify local incomes and livelihoods away from agriculture. A synthesis report provides an overview of the methodology used in the project and a summary of the results for the climate change impacts and vulnerability assessments conducted in the three watersheds.<sup>2</sup> The process and considerations for developing intervention recommendations and key lessons learned are also covered in the synthesis report.

**C. Support to member States over the management of transboundary water resources**

*Webinar on advancing transboundary water cooperation through commitments to the United Nations 2023 Water Conference*  
(Virtual, 27 February 2023)

26. ESCWA joined the Transboundary Water Cooperation Coalition and hosted a webinar, in partnership with the ECE and other coalition partners, to advise Governments, basin organizations and civil society organizations on ways to submit commitments on transboundary water cooperation. ESCWA also participated in a side event organized by the coalition during the conference and continues to support the coalition’s work.

---

<sup>2</sup> ACSAD and ESCWA, 2022. Climate-proof Watershed Management Design and Resilience Synthesis Report. E/ESCWA/CL1.CCS/2022/RICCAR/Technical Report.17.

#### **D. Advancing a water-energy-food nexus approach at the Arab regional level**

##### **1. *Technical meeting on the allocation of water resources for agriculture pilot projects*** (Cairo, 26–27 September 2022)

27. The technical meeting builds on the Guidelines on Improved Water Allocation for Agriculture (2019),<sup>3</sup> which were endorsed by the Ministers of Water and Agriculture during the second meeting of the Joint Water-Agriculture Ministerial Council of the League of Arab States, on 27 January 2022. The meeting also encouraged the implementation of these guidelines in pilot countries on a voluntary basis. Four countries officially expressed their interest in applying the guidelines at a pilot scale: Egypt, Jordan, State of Palestine and Tunisia. Qatar, since then, has also expressed interest.

28. In that context, the workshop was co-organized by the Joint Technical Secretariat, FAO and ESCWA to provide support to pilot countries in implementing the guidelines. It brought together representatives from the four candidate countries to work collaboratively on the planning and design of their respective pilot projects. Based on the outcomes of the workshop, pilot countries are envisaged to develop their initial concept notes into preliminary action plans, which will be consolidated and formulated into a single project proposal for financing and implementation. FAO and ESCWA consultants are providing continuous guidance and support to country teams, in coordination with the League of Arab States and the Arab Organization for Agricultural Development throughout the entire process.

##### **2. *Allocation of water resources for agriculture workshop*** (Virtual, 3–4 October 2022)

29. The workshop was convened to further disseminate and promote the [Guidelines on Improved Water Allocation for Agriculture](#), and their associated water allocation approaches and tools. It aimed to share lessons learned from international experiences on water allocation in agriculture.

##### **3. *Fourth meeting of the High-Level Joint Water-Agriculture Technical Committee*** (Cairo, 18 October 2022)

30. On the sidelines of the fourth edition of the Cairo Water Week, the High-Level Joint Water-Agriculture Technical Committee, which is the technical arm of the Joint Water-Agriculture Ministerial Council of the League of Arab States, organized its fourth meeting with support from ESCWA and FAO Regional Office for Near East and North Africa. The meeting reviewed progress made towards implementing the Guidelines on Improved Water Allocation for Agriculture in identified pilot countries. Furthermore, the meeting discussed a proposal to implement the action plan for the operationalization of the Cairo Declaration and reviewed progress on a report on non-conventional water resources.

#### **E. Supporting the generation of Arab regional climate analysis and access thereto**

31. Through its Arab Centre for Climate Change Policies (ACCCP), ESCWA continued to address requests for climate data and analyses from various groups of stakeholders in Arab countries, which included the Red Cross Climate Change Center and the United Nations Human Settlements Programme (UN-Habitat) in Yemen; the Ministry of Environment, the United Nations Development Programme (UNDP) and independent researchers from Lebanon; as well as concerned ministries from the United Arab Emirates.

---

<sup>3</sup> In 2019, the High-Level Joint Water-Agriculture Technical Committee of the League of Arab States commissioned the Joint Technical Secretariat of the Arab Ministerial Water Council and partner organizations, FAO and ESCWA, to collaborate on the development of Guidelines on Improved Water Allocation for Agriculture.



### 1. RICCAR Mashreq domain projections

32. In collaboration with the Swedish Meteorological and Hydrological Institute (SMHI) and with the continued support of the Government of Sweden for RICCAR, a Mashreq domain was set up to generate a new set of higher-resolution regional climate projections produced at a grid size of 10 x 10 km (see the [Mashreq Data Portal](#)). The modelling outputs for scenario SSP2-4.5 will be completed at the end of this year.

33. The outputs facilitate more detailed analyses across the Mashreq domain, which includes the entire Arabian Peninsula, the headwaters of the Tigris and Euphrates, and parts of East Africa. Two reports, reviewing the methodology<sup>4</sup> and summary<sup>5</sup> outcomes from the projections, were issued as part of RICCAR publication series.

34. The projections informed the preparation of a series of demand-driven case studies on water, agriculture and climate change being prepared under three extrabudgetary projects: “Advancing water and food security in a climate-change context”, funded by the Swedish Government; “Increasing watershed resilience to climate change”, led by the FAO and also funded by the Swedish Government; and “Increasing the resilience of both displaced persons and host communities to climate change-related water challenges in Jordan and Lebanon”, led by UN-Habitat with funding from the Adaptation Fund.

### 2. RICCAR case studies

35. Three case studies were developed by ESCWA, in collaboration with ACSAD and concerned national authorities, drawing upon regional climate projections for the newly released Mashreq domain produced by the SMHI. The case studies assessed climate change impacts on groundwater resource use and availability, and the productivity of selected crops in localized regions, such as the Dibdibba aquifer<sup>6</sup> in Iraq, the Eocene aquifer<sup>7</sup> in the State of Palestine, the shared water resources of the Euphrates basin<sup>8</sup> in Iraq and the Syrian Arab Republic, and Nahr el Kabir el Janoubi<sup>9</sup> in Lebanon and the Syrian Arab Republic.

### 3. Technical report on “Vulnerability assessment of the water sector to climate change in Jordan” (E/ESCWA/CL1.CCS/2022/RICCAR/Technical Report.16)

36. The technical report was prepared by ESCWA in consultation with the Vulnerability Assessment Task Force of Jordan. It seeks to identify geographic areas of climate-related water vulnerability and the resulting adaptation challenges facing the delivery of water supply, sanitation and wastewater services for different user groups under changing climate.

---

<sup>4</sup> ESCWA, 2021. [Future climate projections for the Mashreq region: methodology](#). E/ESCWA/CL1.CCS/2021/RICCAR/TECHNICAL NOTE.5.

<sup>5</sup> ESCWA, 2021. [Future climate projections for the Mashreq region: Summary Outcomes](#). E/ESCWA/CL1.CCS/2021/RICCAR/TECHNICAL REPORT.7.

<sup>6</sup> ESCWA, 2021. [Impact of climate change on groundwater resources in the Dibdibba aquifer system, Iraq](#). E/ESCWA/CL1.CCS/2021/RICCAR/TECHNICAL REPORT.9.

<sup>7</sup> ESCWA, 2021. [Impact of climate change on groundwater resources in the Eocene aquifer system](#). E/ESCWA/CL1.CCS/2021/RICCAR/TECHNICAL REPORT.8.

<sup>8</sup> ESCWA, 2021. [Impact of climate change on shared water resources in the Euphrates basin](#). E/ESCWA/CL1.CCS/2021/RICCAR/TECHNICAL REPORT.11.

<sup>9</sup> ESCWA, 2021. [Impact of climate change on shared water resources in the Nahr el Kabir el Janoubi basin](#). E/ESCWA/CL1.CCS/2021/RICCAR/TECHNICAL REPORT.10.

4. *National and regional training workshops on the application and use of RICCAR methodologies*

37. Tailored training and capacity-building activities were implemented through the ACCCP, drawing upon RICCAR projection outcomes for the Arab domain and the newly released Mashreq domain. These were delivered in response to individual country requests, organized as part of regional and subregional water and climate forms and/or tailored to target groups of decision makers and policymakers, as well as climate analysts. Activities included a short training workshop organized by ESCWA as part of the [14th Gulf Water Conference](#) (13–15 February 2022) to simplify regional climate modelling outputs and their applications in the Gulf Cooperation Council (GCC) countries and beyond towards bridging the science-climate policy interface.

38. On 23 June 2022, a webinar on the “[Impacts of Climate Change on Surface and Groundwater Resources](#)” was delivered through AWARENET in cooperation with the ICID, the AFRWG and the African Young Water Professionals Forum (Af-YWPF). The webinar presented and discussed case studies developed to analyse the impacts of climate change on selected aquifers in Africa and the region. On 28 July 2022, another webinar was conducted online for climate data operators on the use of climate data operators software to facilitate the manipulation and analysis of climate data generated from regional climate models in NetCDF format.

39. Two one-day workshops on the integration of climate data in hydrological modelling were organized in collaboration with universities in Morocco. The first workshop, convened on 5 October 2022, was on climate data analysis and applications in surface and groundwater modelling, and the second took place on 6 October 2022 and focused on climate modelling data and usage in hydrological, groundwater and agricultural models.

5. *Fourth and fifth sessions of the African Young Water Professionals Forum*  
(Virtual, 25–27 October 2021; Hybrid, 17–18 October 2022)

40. ESCWA collaborated with the ICID on the organization of the fourth and fifth sessions of the Af-YWPF during the Cairo Water Week. The fourth forum was implemented in collaboration with the AFRWG, ACSAD, the IsDB and the Global Water Partnership-Mediterranean (GWP-MED). The newly generated Mashreq datasets were presented during the workshop and a training on their applicability was deployed for more detailed climate projection outcomes.

41. ESCWA also engaged in the organization of the fifth session of the Af-YWPF in hybrid mode, in collaboration with the Ministry of Water Resources and Irrigation of Egypt, ACSAD, GWP-MED/GWP Africa Coordination Unit, the International Center for Agricultural Research in the Dry Areas (ICARDA) and FAO. The forum focused on smart irrigation water management for improved agricultural productivity towards a transformative approach to water, climate and development in Africa.

6. *Guidelines on the use of climate data for improving agricultural productivity*  
([E/ESCWA/CL1.CCS/2021/RICCAR/Technical Note.4](#))

42. ESCWA prepared a technical note to support the applicability of climate data in the agricultural sector by highlighting the importance of projected forecasts in developing appropriate climate adaptation plans. The document highlights the use and role of climate data and information in decision-making for climate adaptation, notably in the agricultural sector.

7. *A training manual for agricultural extension agents: The use of RICCAR climate data in a crop model (APSIM) to identify context-based climate adaptation and mitigation options*  
([E/ESCWA/CL1.CCS/2021/RICCAR/MANUAL.3](#))

43. Within the context of Lima Adaptation Knowledge Initiative (LAKI), ESCWA collaborated with ICARDA on the development of a training material to support agricultural extension agents on the

incorporation of RICCAR data and projection outcomes in commonly used crop models, such as the Agricultural Production Systems Simulator (APSIM), for the identification of context-based climate adaptation options. Three test cases were implemented in rainfed, irrigated and semi-arid Mediterranean agroecosystems to provide a scenario-based approach in exploring climate vulnerabilities and their associated climate adaptation options.

8. *Contribution to the project on “Increasing the resilience of displaced persons and host communities to climate change-related water challenges in Jordan and Lebanon”*

44. The project is implemented by UN-Habitat in partnership with ESCWA, UNICEF and the Governments of Jordan and Lebanon, through their Ministries of Environment, and it is funded by the [Adaptation Fund](#). The project aims to provide a series of adaptation measures for the host communities and displaced persons to respond to water challenges related to climate change.

45. The role of ESCWA in this project is to implement the regional knowledge management component and communication strategy, drawing upon its RICCAR Regional Knowledge Hub. This component includes the establishment of a community of practice as well as a platform/working space to bridge knowledge gaps through the dissemination of good practices and lessons learned regarding innovative climate adaptation measures and to ensure these knowledge products are accessible to stakeholders in Arabic and English. ESCWA also oversees the organization of regional and national steering committee meetings to monitor project activities. Meetings were organized for the steering committees on 3 and 14 October 2022 in Jordan and Lebanon, respectively, in coordination with the Ministries of Environment. In Jordan, the meeting resulted in the signature of two memoranda of understanding with the Government and academic entities to support the implementation of urban observatories.

46. ESCWA also supports knowledge exchange through the participation of steering committee members in regional and international events. Together with representatives from UN-Habitat and national representatives from Jordan, Lebanon and the Syrian Arab Republic, ESCWA organized a side event, “Increasing the resilience of displaced persons and host communities to climate change-related water challenges,” at the World Urban Forum in Katowice, Poland from 26 to 30 June 2022. ESCWA also organized the participation of a representative from the Irbid municipality in Jordan (a target area of the project) in a side event on inclusive climate adaptation in human settlements, at the Arab Forum for Sustainable Development from 14 to 16 March 2023.

9. *Contribution to the MENA Climate Week*  
(United Arab Emirates, 28–31 March 2022)

47. ESCWA contributed to the organization of the first [Middle East and North Africa \(MENA\) Climate Week](#) hosted by the United Arab Emirates Ministry of Climate Change and Environment, the World Green Economy Organization (WGEO) and the Dubai Electricity and Water Authority. The event was organized in collaboration with core partners of the United Nations Framework Convention on Climate Change (UNFCCC), the UNDP, the UNEP and the World Bank Group. In addition to ESCWA, partners based in the MENA region included the International Renewable Energy Agency, the IsDB and the League of Arab States Secretariat.

48. ESCWA contributed to the high-level segments including the high-level panel discussion on accelerating implementation of climate action in this critical decade and ministerial roundtables. ESCWA also contributed to the organization of affiliate events such as the *Consultation on the Needs-Based Finance Strategy for Arab States* in partnership with the League of Arab States and the UNFCCC and *Building Momentum to Close Adaptation Knowledge Gaps in the MENA* in partnership with the UNEP Regional Office for West Asia (ROWA), UNFCCC, WGEO and the Regional Collaboration Centre for the Middle East, North Africa and South Asia. ESCWA was also the co-convener of seven sessions organized under three tracks: national actions and economy-wide approaches; integrated approaches for climate resilience; and seizing transformation opportunities.

10. *Consultation on the Needs-Based Finance Strategy for Arab States*  
(United Arab Emirates, 28 March 2022)

49. The regional consultation supported the preparation of the Arab Climate Finance Access and Mobilization Strategy, which was developed based on a region-wide consultative process coordinated by ESCWA with the UNFCCC and the League of Arab States. The process engaged regional stakeholders in the identification of priority climate finance needs and interventions to support access of Arab countries to financial instruments, including those provided by international climate finance mechanisms, with a special focus on financing adaptation as a regional priority. The meeting highlighted shortages in quality and quantity of climate financing for the Arab region and hence the need for innovative financing strategies that would prioritize adaptation needs without burdening the countries with heavy public debts. Private sector engagement supported by an enabling environment should be encouraged in addressing these challenges.

11. *Building Momentum to Close Adaptation Knowledge Gaps in the MENA*  
(United Arab Emirates, 29 March 2022)

50. In the context of LAKI, ESCWA convened this meeting in partnership with the UNFCCC, the UNEP-ROWA, the WGEO and the Regional Collaboration Centre for the Middle East, North Africa and South Asia. The meeting gathered government representatives, adaptation experts and practitioners, institutions, implementing agencies and networks in the MENA region, bilateral and multilateral donors and the Arab Group of climate change negotiators to discuss ongoing and new LAKI collaborative actions on climate-smart agriculture and nature-based solutions to scale up adaptation actions in the North African and GCC subregions.

**F. Advancing disaster risk reduction in the Arab region**

*Eighth Arab Climate Outlook Forum and workshop on meteorological services supporting agriculture*  
(Virtual, 6–7 December 2021)

51. Pursuant to a resolution by the League of Arab States, ESCWA has been engaged in the coordination of the Arab Climate Outlook Forum (ArabCOF) since its inception in 2017. The ArabCOF seeks to generate consensus on biannual seasonal forecasting across the Arab region, conduct climate change assessments of extreme events and undertake regular assessments of previous forecasts to evaluate and validate the efficiency of models used. The eighth session of the ArabCOF and the fifth session of the GCC Climate Outlook Forum were held virtually from 6 to 7 December 2021.

52. In the framework of the eighth ArabCOF, a workshop on enhancing the capacity of meteorological services to meet the needs of the agriculture sector was also organized by ESCWA and its partners, the World Meteorological Organization and the League of Arab States. In preparation to the meeting, ESCWA produced a paper identifying local climate data gaps and [Guidelines on the use of climate data for improving agricultural productivity](#) for selected agricultural communities. Issues related to the need for climate-related knowledge and data at the farm level, verification of the accuracy of climate information sources, integration of sub-seasonal climatic forecasts into agricultural decision-making, the increase in the number of weather forecasts and an early warning centre for Arab countries were all discussed during the meeting. The guidelines were issued as part of RICCAR publication series within the framework of the project on water and food security in a changing climate context, implemented by ESCWA with support from the Government of Sweden.

**G. Supporting mobilization and access to climate finance in the Arab region**

1. *ESCWA Climate/SDGs Debt Swap Initiative*

53. The Climate/SDGs Debt Swap Mechanism was launched by ESCWA in December 2020 to support member States in bridging their climate finance gaps and addressing high debt burdens and fiscal pressures. It

proposes an arrangement between debtors, creditors and donors to convert foreign debt service payments into domestic investments for implementing climate-resilient projects. Several projects identified for debt swaps are focused on the water and wastewater sectors in view of jointly supporting adaptation and SDG 6 targets.

54. Following the preparation of an information material on the [Climate/SDGs debt swap mechanism](#), current endeavours are pursued to develop a regional standardized framework of key performance indicators (KPIs) on climate action/SDGs progress to evaluate projects and programmes eligible for the use of debt swaps proceeds. Jordan was selected as a pilot case, and a national task force was established with support from ESCWA to operationalize the mechanism. The task force mapped out projects and programmes that were earmarked for funding through the debt swap, particularly those pertaining to adaptation in the water sector. Discussions are also underway with concerned authorities in Egypt and Tunisia to initiate the Climate/SDGs Debt Swap Mechanism following expression of interest by these countries.

2. *Mashreq Waters Knowledge Series: Climate Finance*  
(Beirut, 21–22 June 2022)

55. The workshop is the fourth of a series of workshops organized jointly by ESCWA and the World Bank within the framework of the Mashreq Waters Knowledge Series. The objective of the workshop was to discuss current trends in climate finance for the Mashreq region, challenges and opportunities in accessing various financial mechanisms, innovative approaches to climate finance and building a regional pathway to increase climate finance in the water sector. The meeting also presented an overview of the current state of climate finance for the water sector in the Mashreq region, including current finance flows and unmet needs.

3. *Towards COP27: Arab Regional Forum on Climate Finance*  
(Beirut, 15 September 2022)

56. ESCWA organized the forum in response to a request by the Council of Arab Ministers Responsible for the Environment to support regional preparations and engagement towards UNFCCC COP27, including on climate finance. The forum was convened as one of five regional forums organized by the Egyptian presidency of COP27, the United Nations Climate Change High-Level Champions and the five United Nations Regional Commissions under the leadership of the United Nations Deputy Secretary General, as part of the preparations leading up to COP27. The forum explored the climate finance needs of Arab States for ensuring water, energy and food security under changing climate conditions. It provided a platform for exchange among regional stakeholders, partners and country representatives to accelerate public and private investment mobilization and blended finance opportunities around projects addressing climate change; identify synergies for climate finance; and connect institutional investors, private sector financiers and development partners with Governments around co-creating investment opportunities in support of regional priority actions.

4. *The final workshop of the interregional project “Catalysing investments and actions to enhance resilience against sand and dust storms in agriculture”*  
(Hybrid, 3–5 October 2022)

57. In the context of its role as a member of the working group on regional collaboration of the United Nations Coalition on Combating Sand and Dust Storms (SDS), ESCWA contributed to the final workshop of the interregional project. Progress achieved under the project, including the SDS Compendium, was presented. The meeting discussions resulted in the finalization of a draft large-scale SDS project proposal in agriculture titled: “Greening Landscapes: Combatting SDS to enhance agrifood systems, livelihood resilience and ecosystem restoration”. The coalition members were invited to review and contribute to the draft proposal.

## **H. Enhancing Arab regional capacity for progress on the Paris Agreement and towards the achievement of SDG 13**

### *1. Regional capacity-building workshop to support the transition to the Enhanced Transparency Framework under the Paris Agreement (Virtual, 4–6 October 2021)*

58. In response to requests by the Arab Group of climate change negotiators for technical support through more focused thematic workshops, ESCWA in coordination with the UNEP and the UNFCCC Secretariat jointly convened the regional capacity-building workshop to enhance the capacities of national experts and negotiators from the Arab region in transitioning from the existing monitoring, reporting and verification (MRV) arrangements to the Enhanced Transparency Framework (ETF) under the Paris Agreement.

### *2. Arab group meetings on climate change (United Arab Emirates, 29 to 30 March 2022 and Oman, 4 to 6 October 2022)*

59. In coordination with the League of Arab States, the Arab Group of climate change negotiators, the UNEP-ROWA and UNESCO Cairo Office, the [Fourteenth Regional Training Workshop on Capacity Development for Climate Change Negotiations](#) was convened in the United Arab Emirates, on 29 and 30 March 2022, as part of the first MENA Climate Week. The [Fifteenth Regional Training Workshop on Capacity Development for Climate Change Negotiations](#) was hosted by the Civil Aviation Authority in Oman, from 4 to 6 October 2022. The key outcomes of COP26 were discussed, particularly complex issues such as market and non-market mechanisms and the ETF. The meetings also provided an avenue to deliberate on regional positions and priorities in preparation for COP27 and emphasized the need for technical support to assess the national capacity-building requirements, conduct climate finance and technology needs assessment, and improve access to available climate funds. Another area where technical support was needed focused on the economic impacts assessment of climate change to better inform policymaking. The deliberations also recommended the organization of focused thematic workshops on priority topics for the Arab region.

### *3. ESCWA at COP27 (Egypt, 6–18 November 2022)*

60. Within the framework of COP27, ESCWA collaborated with United Nations specialized agencies, member State representatives and global initiatives on the organization of thematic sessions on climate solutions, finance and adaptation, decarbonization, agriculture, water, gender, energy and biodiversity. The sessions advanced issues related to bridging the science-policy interface and enhancing cooperation towards low-carbon transitions for enhanced climate resilience.

### *4. Technical note on the Implementation of the Paris Agreement and Enhanced Climate Action in the Arab region: Working Paper for the Fifteenth Regional Training Workshop on Capacity Development for Climate Change Negotiations for the Arab Countries (E/ESCWA/CL1.CCS/2022/WP.3)*

61. The paper aims to provide an overview of the progress achieved towards the implementation of the Paris Agreement since COP25 across the Arab region. It discusses major climate negotiations issues namely, common timeframes for nationally determined contributions, cooperative market and non-market approaches, transparency, loss and damage, climate finance, response measures and the global goal on adaptation. It provides an overview on the status of reporting by Arab States under the Paris Agreement and covers the discourse on post-pandemic recovery, highlighting existing gaps and needs for capacity development for a sustainable recovery in the Arab region. The note concludes with a set of policy recommendations to enhance technical understanding and capacities on outstanding issues in climate negotiations and to engage with other regional negotiation groups to mobilize support for common Arab positions.

## II. Implementation of recommendations made by the Committee on Water Resources at its fourteenth session

62. At its fourteenth session, held virtually on 29 and 30 September 2021, the Committee on Water Resources made a number of recommendations, including 10 to the ESCWA secretariat. In implementation of these recommendations, ESCWA undertook various activities as shown in the table below. Paragraph numbers refer to each activity as described in the present document.

| Recommendation  | Measures taken  |
|---|---|
| <p>(a) Continue to provide technical support to Arab States, particularly least developed countries (LDCs) and countries affected by conflict and disaster, to promote integrated management of water resources and related goals, and to strengthen groundwater resource management interlinkage with the water, food and energy security nexus, taking into account regional and national specificities and needs, particularly those associated with capacity-building, technology transfer and finance;</p> | <p>The 2021 Status Report on the Implementation of Integrated Water Resources Management in the Arab Region (paras. 5–6)</p> <p>Transboundary cooperation in Arab States: Second regional report on SDG indicator 6.5.2 (para. 4)</p> <p>Webinar entitled “Towards stronger implementation of integrated water resources management in the Arab region” (para. 9)</p> <p>AWARENET webinar series on the Assessment of Climate Change Impacts on Groundwater (para. 15)</p> <p>Allocation of water resources for agriculture workshop (para. 29)</p> <p><i>Fourth meeting of the High-Level Joint Water-Agriculture Technical Committee</i> (para. 30)</p> <p><i>Technical meeting on the allocation of water resources for agriculture pilot projects</i> (paras. 27–28)</p> <p>Generation of climate projections for the Mashreq domain (paras. 32–34)</p> <p>Generation of case studies based on the newly generated Mashreq domain projections to showcase impacts of climate change on groundwater resources (para. 35)</p> <p>National and regional training workshops on the application and use of RICCAR methodologies (paras. 37–39)</p> <p>Arab Group meetings on climate change (para. 59)</p> <p>Regional capacity-building workshop to support the transition to the Enhanced Transparency Framework under the Paris Agreement (para. 58)</p> <p>Three extrabudgetary projects on water and climate change (para. 34)</p> <p>Second regional report on SDG indicator 6.5.2 (para. 4)</p> <p>ESCWA Climate/SDGs Debt Swap Initiative (paras. 53–54)</p> |
| <p>(b) Provide technical support to activate Arab participation in international water conferences and forums to highlight the challenges</p>   | <p>Contributing Arab and Mashreq domain climate data and analysis to inform the fourth edition of Cairo Water Week (paras. 32–34)</p>   |

| Recommendation   | Measures taken   |
|--|--|
| <p>faced by Arab countries, including those related to the follow-up and implementation of the 2030 Agenda for Sustainable Development, the Paris Agreement, the Sendai Framework for Disaster Risk Reduction and the Addis Ababa Action Agenda of the Third International Conference on Financing for Development;</p>  | <p>Contributing Arab and Mashreq domain climate data and analysis to inform sessions of the MENA Climate Week (paras. 47–48)</p> <p>Contributing to the review of SDG 6 and organization of special sessions as part of the 2022 and 2023 AFSD (paras. 11 and 60)</p> <p>AWARENET webinar series on the Assessment of Climate Change Impacts on Groundwater (para. 15)</p> <p>Guidelines on the Use of Climate Data for Improving Agricultural Productivity (para. 42)</p> <p>A training manual for agricultural extension agents: The use of RICCAR climate data in a crop model (APSIM) to identify context-based climate adaptation and mitigation options (para. 43)</p> <p>Contribution to the project on “Increasing the resilience of displaced persons and host communities to climate change-related water challenges in Jordan and Lebanon” (paras. 44–46)</p> <p>RICCAR Mashreq domain projections (paras. 32–34)</p> |
| <p>(c) Support member States in engaging with the International Decade for Action, “Water for Sustainable development,” 2018–2028 and coordinate regional preparations for the comprehensive midterm review of the implementation of the Decade by organizing an Arab preparatory meeting, and by participating in regional forums including Cairo Water Week;</p> | <p>Arab Regional Preparatory Meeting for the Midterm Comprehensive Review of the Water Action Decade (para. 8)</p> <p>Arab region coordination meeting for the participation of Arab States in the United Nations 2023 Water Conference (para. 10)</p> <p>ESCWA participation in the United Nations 2023 Water Conference (paras. 12–13)</p> <p>Technical note on the Implementation of the Paris Agreement and Enhanced Climate Action in the Arab Region: Working Paper for the Fifteenth Regional Training Workshop on Capacity Development for Climate Change Negotiations for the Arab Countries (para. 61)</p>   |
| <p>(d) Organize a regional dialogue in preparation for the Groundwater Summit to be held in Paris in December 2022;</p>  | <p>Series of Regional Dialogues on Groundwater (paras. 17–18)</p>  |
| <p>(e) Continue to deepen regional knowledge on transboundary/shared water issues and provide space for regional dialogue on water security challenges, including the impact of changes in water availability on achieving food, energy and climate development goals;</p>   | <p>Transboundary cooperation in Arab States: Second regional report on SDG indicator 6.5.2 (para. 4)</p> <p>Arab region coordination meeting for the participation of Arab States in the United Nations 2023 Water Conference (para. 10)</p> <p>ESCWA Participation in the United Nations 2023 Water Conference (paras. 12–13)</p> <p>Support to the High-Level Joint Water-Agriculture Technical Committee (para. 30)</p>   |



| Recommendation   | Measures taken   |
|--|--|
|  | <p>Webinar on advancing transboundary water cooperation through commitments to the United Nations 2023 Water Conference (para. 26)</p> <p>Three extrabudgetary projects on water, agriculture and climate resilience (para. 34)</p>  |
| <p>(f) Continue to support the efforts of the Arab Ministerial Water Council in issuing guidelines for Arab cooperation in the field of shared water resources;</p>  | <p>Transboundary cooperation in Arab States: Second regional report on SDG indicator 6.5.2 (para. 4)</p> <p>Webinar on advancing transboundary water cooperation through commitments to the United Nations 2023 Water Conference (para. 26)</p> <p>The 2023 Arab Forum for Sustainable Development (para. 11)</p>  |
| <p>(g) Develop a digital groundwater knowledge platform to help decision makers and stakeholders benefit from the latest studies, reports and tools in this area, including those related to the impacts of climate change on groundwater, the economic and social cost of overexploitation of groundwater resources, water harvesting technologies and artificial recharge of aquifers;</p> | <p>The establishment of a digital platform to support groundwater analysis in the region (para. 21)</p> <p>RICCAR Regional Knowledge Hub (para. 45)</p>  |
| <p>(h) Support regional action on climate change adaptation and disaster risk reduction, including transboundary challenges such as sand and dust storms, using RICCAR projections, and support efforts to enhance climate and water security in the Arab region;</p>  | <p>Preparation of three case studies on the impacts of climate change on groundwater resources in selected Arab countries (para. 35)</p> <p>New high-resolution climate modelling outputs for the Mashreq subdomain (paras. 32–34)</p> <p>Building Momentum to Close Adaptation Knowledge Gaps in the MENA (para. 50)</p> <p>Eighth ArabCOF meeting and workshop on meteorological services supporting agriculture (paras. 51–52)</p> <p>The final workshop of the interregional project “Catalysing investments and actions to enhance resilience against sand and dust storms in agriculture” (para. 58)</p> |
| <p>(i) Support member States in efforts to mobilize climate finance, particularly in transboundary projects, and to develop proposals for projects that can be supported through innovative climate finance tools;</p>   | <p>Coordination of regional climate forecasts through the ArabCOF (paras. 51–52)</p> <p>Consultation on the Needs-Based Finance Strategy for Arab States (paras. 48–49)</p> <p>Towards COP27: Arab Regional Forum on Climate Finance (para. 56)</p> <p>A regional framework for a Debt Swap Mechanism and KPIs on</p>  |

| <b>Recommendation</b>  | <b>Measures taken</b>   |
|--|---|
|  | climate action/SDGs progress in the Arab region (para. 53–54)<br>Mashreq Waters Knowledge Series: Climate Finance (para. 55)                                |
| (j) Provide information on the ESCWA secretariat's water activities quarterly. | Frequent emails were sent to member State representatives on relevant activities, whether on ESCWA water activities or relevant regional and global events. |

-----