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Economic and Social Commission for Western Asia (ESCWA)

REPORT

SCOPING MEETING FOR THE ESTABLISHMENT OF THE ARAB CLIMATE OUTLOOK FORUM AMMAN, 14-16 OCTOBER 2014

Summary

The Economic and Social Commission for Western Asia (ESCWA), in collaboration with the League of Arab States, the World Meteorological Organization and the Jordan Meteorological Department, organized the Scoping Meeting for the Establishment of the Arab Climate Outlook Forum, held in Amman from 14 to 16 October 2014, pursuant to the resolutions adopted at the thirtieth meeting of the Arab Permanent Committee on Meteorology, held in Kuwait in March 2014. The Scoping Meeting forms part of the activities implemented under the United Nations-League of Arab States Regional Initiative for the Assessment of the Impact of Climate Change on Water Resources and Socio-Economic Vulnerability in the Arab Region (RICCAR).

The Scoping Meeting was aimed at discussing the establishment, functions, outputs and institutionalization process of an Arab climate outlook forum, including data needs and capacity development requirements, to identify potential partners and liaise with existing initiatives at the regional and subregional levels; to review and synthesize available Arab region climate change information; and to discuss how to utilize the RICCAR regional knowledge hub to support the management and archiving of climate data forecast generation by the forum and act as a regional base for consolidating future projections and predictions for updating existing climate modelling ensembles.

The Scoping Meeting supported the proposal to establish an Arab climate outlook forum to generate consensus outputs on seasonal forecasts (1-2 per year); carry out regional climate change assessments; facilitate knowledge sharing and exchange for seasonal forecasting and climate change in a common language; build the capacity of the Arab meteorological offices to generate a common approach to forum outputs; and identify climate information needed by end users and try to respond to those user needs. The League of Arab States secretariat was requested to prepare the draft terms of reference for the forum, on the basis of consultations undertaken at the Scoping Meeting. It was agreed to establish an interim steering committee to follow up on the development of the forum, coordinated by the League of Arab States secretariat; and a scientific committee to assist in all technical and scientific aspects related to the work of the interim steering committee for the establishment of the forum.

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Introduction

1. The Economic and Social Commission for Western Asia (ESCWA), in partnership with the League of Arab States, the World Meteorological Organization (WMO) and the Jordan Meteorological Department, organized the Scoping Meeting for the Establishment of the Arab Climate Outlook Forum, held in Amman from 14 to 16 October 2014, pursuant to the resolutions adopted at the thirtieth meeting of the Arab Permanent Committee on Meteorology (APCM), held in Kuwait in March 2014. A joint WMO-ESCWA proposal on the establishment of an Arab climate outlook forum was presented at the APCM meeting for its consideration and implementation. The offer of the Jordan Meteorological Department to host the Scoping Meeting in Amman was welcomed by the Committee.

2. The Scoping Meeting forms part of the activities under the United Nations-League of Arab States Regional Initiative for the Assessment of the Impact of Climate Change on Water Resources and Socio-Economic Vulnerability in the Arab Region (RICCAR), implemented through a collaborative interagency partnership involving 11 institutions, namely the League of Arab States, ESCWA, the Regional Office for West Asia of the United Nations Environment Programme (UNEP/ROWA), WMO, the Arab Center for the Studies of Arid Zones and Dry Lands (ACSAD), the United Nations International Strategy for Disaster Reduction (UNISDR), Deutsche Gesellschaft für Internationale Zusammenarbeit (GIZ), the Swedish Meteorological and Hydrological Institute (SMHI), the Food and Agriculture Organization (FAO), the Cairo Office of the United Nations Educational, Scientific and Cultural Organization (UNESCO), the United Nations University Institute for Water, Environment and Health (UNU-INWEH) and three affiliated climate research centres. Funding for RICCAR is provided by the Swedish International Development Cooperation Agency (Sida), the Federal Ministry of Economic Cooperation and Development of Germany (BMZ) and in-kind contributions by partner organizations. RICCAR is founded on the following four pillars: building a regional knowledge base; conducting an integrated regional climate change assessment; strengthening institutional capacities; and raising awareness. RICCAR aims to improve capacity and institution networking for climate change and water resource monitoring and adaptation and support the strengthening and networking of Arab meteorological institutions. More information on RICCAR is available from www.escwa.un.org/RICCAR.

3. The following were the main objectives of the Scoping Meeting:

(a) To discuss the establishment, functions, outputs and institutionalization process of an Arab climate outlook forum, including data needs and capacity development requirements;

(b) To identify potential partners and liaise with existing initiatives at the regional and subregional levels;

(c) To review and synthesize available Arab region climate change information, including analysis of regional climate model simulations performed under RICCAR and the findings of the fifth Assessment Report of the Intergovernmental Panel on Climate Change (IPCC AR5) relevant to the Arab Region;

(d) To discuss how to utilize the RICCAR regional knowledge hub to support the management and archiving of climate data for forecast generation by the forum, and act as a regional base for consolidating future projections and predictions for updating existing climate modelling ensembles.

4. The Scoping Meeting comprised eight sessions, held over three days. Chapter I of the present report highlights the main conclusions and recommendations of the meeting, chapter II provides a summary of the presentations and the main topics of discussions held at each session and chapter III reviews the organization of work, including information regarding the meeting agenda, participants and evaluation. Meeting documents are available from www.escwa.un.org/information/meetingdetails.asp?referenceNum=3520E.

I. CONCLUSIONS AND RECOMMENDATIONS

5. Heads of Arab meteorological offices or their representatives, the League of Arab States secretariat, RICCAR partner organizations and experts from regional and international institutions engaged in climate modelling and outlook forums at the Arab regional level held informed and interactive discussions on the way forward for the establishment of an Arab climate outlook forum. The Meeting resulted in the following findings and recommendations proposed by participants:

(a) The Scoping Meeting supports the proposal to establish an Arab climate outlook forum;
(b) The objectives of the forum are:

(i) To generate consensus outputs on seasonal forecasts (1-2 per year) and to carry out regional climate change assessments;

(ii) To facilitate knowledge sharing and exchange for seasonal forecasting and climate change in a common language;

(iii) To build the capacity of Arab meteorological offices to generate a common approach to forum outputs;

(iv) To identify climate information needed by end users and try to respond to those user needs, taking into consideration that the data provided by the Arab meteorological offices to inform the discussions remains the property of these offices;

(c) To work towards the organization of the inaugural session of the forum in 2015, focusing on the climate change activity pillar; subsequent sessions of the forum will be organized on a rotating basis among Arab countries:

(d) To ask the League of Arab States secretariat to prepare the draft terms of reference for the forum based on consultations undertaken at the Scoping Meeting;

(e) To ensure that the forum facilitates the organization and provision of capacity-building for Arab meteorological offices on seasonal forecasting and regional climate change assessment;

(f) To establish an interim steering committee to follow up on the development of the forum, coordinated by the League of Arab States secretariat;

(g) To form a scientific committee to assist in all the technical and scientific aspects related to the work of the interim steering committee for the establishment of the forum;

(h) To ensure that the work of the forum and the associated responsibilities of countries shall in no way contradict national policies and laws of member States.

II. MAIN TOPICS OF DISCUSSION

6. The Meeting presentations and discussions are presented in the following sections, organized by Meeting session.

A. BACKGROUND AND MEETING OBJECTIVES

7. The WMO representative presented the Meeting's objectives and structure, and the ESCWA representative reviewed the agenda of the meeting. The WMO representative illustrated the objectives and components of the Global Framework for Climate Services (GFCS), the vision of the GFCS High-Level Task Force and its sectoral priorities, the expected benefits for member States and the road map for

implementing activities and projects. The interactions required for GFCS and the role of various actors at the national level were also discussed. He said that GFCS was a major step forward in systematically providing climate information for decision-making at various levels of climate-sensitive sectors. A greater focus on enhancing national capacities was required to efficiently incorporate global and regional inputs into climate information products for local communities.

8. The ESCWA representative gave an overview of RICCAR to show the progress made on various pillars related to climate and hydrological modelling, vulnerability assessment and integrated mapping, capacity-building and institutional strengthening activities, and the preparatory actions for the establishment of the RICCAR regional knowledge hub. The WMO representative presented the characteristic features of climate variability and climate change in Jordan as an example that included the spatial and temporal distribution of rainfall over Jordan, inter-annual variability, temperature fluctuation, anomalies of inert-annual mean temperatures, meteorological water balance and some climate indicators reflecting water scarcity conditions.

B. CONCEPT, STATUS AND ASSOCIATED MECHANISMS OF REGIONAL CLIMATE OUTLOOK FORUMS

9. The representative of WMO reviewed the concept and operation of regional climate outlook forums (RCOFs), which were developed as a major component of the project activities of the WMO Climate Information and Prediction Services. He said that they provided, among other things, platforms for climate experts to collaboratively develop consensus-based regional climate outlooks that fed into national climate outlooks produced by national meteorological and hydrological services (NMHSs), and to interact with climate information users. There were many regional climate outlook forums worldwide and those operating within the Arab region included the Mediterranean Climate Outlook Forum (MedCOF), the Climate Outlook Forum for Northern Africa (PRESANORD) and the Southeastern Europe Climate Outlook Forum (SEECOF). WMO had also developed the concept of climate watches aimed at enabling end users to take action to minimize the effects of expected adverse climate impacts. Regional climate watches were an operational activity closely aligned to regional climate outlook forums. Those forums could also be utilized for the interpretation of regional climate modelling results and climate change assessments. The Arab region could potentially benefit from the suitable implementation of a regional climate outlook forum.

10. The representative of Algeria presented the salient features of PRESANORD. He said that the first meeting of PRESANORD had been held in 2002 to discuss seasonal forecasting in North Africa, but had not been able to sustain its operations until its revival in 2012 through the concerted efforts of the African Centre of Meteorological Application for Development (ACMAD), WMO and the five Arab countries in North Africa. PRESANORD sessions were now being successfully held on a rotational basis in those Arab countries, under the technical coordination of ACMAD. PRESANORD had been extended to cover the Mediterranean region through MedCOF, which had held its first meeting in 2013. MedCOF was aimed at developing a consensus-based seasonal outlook for the Mediterranean region, strengthening the existing capabilities of national meteorological and hydrological services in seasonal forecasting, and promoting inter-regional cooperation and partnerships. The representative of Egypt reviewed the history and development of MedCOF and a sample of its products, such as seasonal forecast outputs, timescale issues, production of consensus outlooks, analysis of temperature and precipitation anomalies in historical records and verification methods and assessment of the produced results.

11. The representative of WMO gave a presentation on the South-East European Climate Outlook Forum (SEECOF), launched in 2008. He said that SEECOF was coordinated by the Southeast European Virtual Climate Change Centre hosted by the Republic Hydrometeorological Service of Serbia, in close collaboration with member States in the subregion. It focused on seasonal outlooks and occasionally on climate change issues, and applied the following three-step approach: qualitative verification of previous SEECOF outlooks; assessment of the current state of the climate, including large-scale climate patterns and its likely evolution; and building the consensus statement.

12. The representatives of Egypt and Morocco introduced the Regional Climate Centre Network for Northern Africa, established in 2012 with five nodes in Algeria, Egypt, Libya, Morocco and Tunisia. They said that a Network website had been developed that included the activities of the nodes and climate data and information, such as monthly temperature and precipitation, precipitation anomaly interactive maps that users could choose to display from certain parameters, monthly outlook bulletins, seasonal forecast maps for North Africa, the Arab region and Africa as well as future changes and projections for mean temperatures and precipitation.

13. The WMO representative presented the relationship between regional climate outlook forums, early warning systems and climate watch systems. He said that the climate watch system was based on the continuous monitoring and forecasting of climate anomalies and was an efficient extreme weather and climate warning system. It also provided advisories and statements to inform users (especially those involved in natural hazards preparedness, mitigation and response) about evolving or foreseen climate anomalies. Climate watch systems in the Arab region would aim at the identification of hazards and climate variables to be targeted on sand and dust storms, precipitation, temperature, strong winds, visibility, humidity and other meteorological variables. He added that regional climate outlook forums were elements that could provide inputs to the WMO climate watch systems at the regional and national levels, which formed a component of the national early warning systems.

14. The representative of SMHI gave a presentation on the establishment of the MENA/Arab domain under the Coordinated Regional Climate Downscaling Experiment (CORDEX) of the WMO cosponsored World Climate Research Programme (WCRP), and the development of an ensemble of regional climate projections for the MENA/Arab domain from 13 future climate projections with the other eight projections under preparation. He said that additional potential contributors to the CORDEX-MENA/Arab ensemble were mainly from the Karlsruhe Institute for Technology, Germany; the Centro Euro-Mediterraneo Sui Cambienti Climatici, Italy; the Cyprus Institute, Cyprus; Bogazici University, Istanbul; and CSIR/CSIRO South Africa/Australia combined efforts. The CORDEX-MENA/Arab projections had been published on the Earth System Grid Federation (ESGF) website in November 2013, available from http://esg-dn1.nsc.liu.se.

C. CLIMATE MONITORING AND ASSESSMENT

15. The representative of WMO presented the climate data rescue (DARE) activities, also promoted by GFCS, and the typical approach to a climate data rescue mission, tackling various components such as conducting inventories, selecting imaging technologies, assessing local human capacities and infrastructure, and training and developing an implementation plan for data recovery and digitization. He also introduced success stories of climate data rescue and WMO guidelines and standards on climate data management to ensure compatibility of data and products. He added that several missions had been conducted in the Arab region under the DARE initiative.

16. The ESCWA representative presented the activities on climate data rescue under RICCAR, including the Subregional Training Workshop on Climate Data Rescue and Digitization (held in Amman from 11 to 13 July 2013, in coordination with the Jordan Meteorological Department, and attended by 22 participants from the Jordan Meteorological Department, Palestine, Saudi Arabia and Yemen), the development of a climate data rescue implementation plan for the Jordan Meteorological Department and the Palestinian Meteorological Department and future activities to rescue the climate data of the West Bank stations at the Jordan Meteorological Department, based on recommendations from the Amman and Casablanca workshops under RICCAR. He also said that climate data rescue had been requested by many countries and could be a core activity of the proposed Arab climate outlook forum.

17. The representative of Morocco presented the WMO Commission for Climatology approaches on climate monitoring and assessment and listed the various working groups and task teams established to achieve the numerous activities and tasks related to the topic. She said that inconsistencies must be avoided

to allow comparisons and help the production of summary reports on global climate. For this purpose, a short list of national climate products had been developed for key climate parameters and extreme indices. A regular production and update of climate indices should allow a better monitoring and assessment of climate and climate change in the Arab region and facilitate model evaluation. Moreover, quality controlled and homogeneous data was required for climate and climate change monitoring and assessment. Using remote sensing data for climate monitoring in the Arab region could help improve climate monitoring. She added that there was a pressing need to develop national datasets to support research and services related to climate extremes and to better use observational data to evaluate model outputs.

18. The representative from the Climate Change Research Centre at the University of New South Wales, Australia, gave a presentation on the observed changes in climate extremes in the Arab region and at the global level, and on the activities of the WMO Expert Team on Climate Change Detection and Indices (ETCCDI) to design a set of indices based on daily temperature and precipitation that measured some climate extreme attributes. He said that ETCCDI recommended simple climate indices based on temperature and precipitation data. The Team had produced standardized and freely available software to calculate consistently derived indices for exchange between researchers. It also ran workshops in targeted regions on capacity-building and on obtaining data from data sparse regions. He also presented the results of the ETCCDI workshop for the Arab region that had taken place in Casablanca, in March 2012, under the RICCAR activities, which had been published in the International Journal of Climatology and contributed to the fifth Assessment Report of the Inter-governmental Panel on Climate Change.

D. COUNTRY PRESENTATIONS ON CLIMATE DATA AND MONITORING CAPACITIES

19. The representative of Palestine presented the climate variability monitoring and assessment in Palestine. He gave some background information on the climate in general and its effects on some sectors, such as water resources and agriculture. He said that climate variability showed a decrease in total precipitation, but for some seasons extremes in rainfall events had been observed, mainly showing an increase in intensity. There had also been a shift in rainfall seasons, and an increase in summer temperatures and the number of heat waves. There was still a limited amount of quantifiable and modelled knowledge on climate change impacts in Palestine, with social and economic consequences. The last 20 years had showed that the frequency of drought was increasing but remained near normal to moderate except for 1998 and1999, which had witnessed severe drought, and 2008 and 2009 that indicated moderate to severe drought. Exceptionally, 1991 and 1992 had been very wet.

20. The representative of Yemen presented the national meteorological observation network. He introduced a case study on tropical depression and its impact on Hadhramout governorate in October 2008 and the established weather and climate alert system. He said that, over the coming two years, the agreed governance structure at the national level for GFCS would be implemented. Development of national and regional capacities to enable the implementation of new meteorological projects and the scaling-up of initial activities would be a priority. There was also an intention to engage the user community globally and demonstrate the value of climate services at the regional and national levels in Yemen.

21. The representative of Kuwait gave a presentation on investigating the impact of climate change on dust storms over Kuwait by the middle of the century, simulated by the Weather Research and Forecasting Model dynamical downscaling model. Maps showing differences in monthly average maximum temperature between the present (2006-2010) and the future (2056-2060) were shown for different grid cell resolutions. Other parameters analysed were wind speed, wind speed threshold and number of dust days.

22. The representative of the Sudan gave a presentation on the challenges and lessons learned from seasonal forecasting in the Sudan, where the climate varied between desert to subhumid. He introduced the Sudan Meteorological Authority experience in the RCOFs work, including the seasonal forecasting outputs carried out from 1999 to 2014, and addressed the results of the monthly climate outlook for 2014 based on

sea surface temperature for various identified climatic zones. He said that the key challenges faced were forecasting the dry spell during the season and the automation of the seasonal forecasting process in general.

23. The representative of Oman made a presentation on Omani meteorological and hydrological data and monitoring capabilities. He said that the aim was to establish 76 meteorological stations, evenly distributed across the country. The network of coastal sea level gauges and the weather radar network were shown on the maps. The Ministry of Regional Municipalities and Water Resource was responsible for design, installation and operating a systematic hydrometric network. Currently, there were over 4,000 monitoring stations for climate, rainfall, wadi flow, sediments, aflaj, groundwater levels and groundwater quality. Rainfall telemetry stations were also operational within the national monitoring network. The results of climate extremes in Oman and the Arabian Peninsula had been published and were reviewed in the presentation.

E. REGIONAL CLIMATE PROJECTIONS

24. The representative of SMHI presented the RICCAR regional climate modelling and hydrological modelling outputs on the MENA/Arab domain. He said that the results included the observed and simulated temperature and precipitation and future climate projections till 2100, using the IPCC AR5 climate scenarios for representative concentration pathways (RCPs) 4.5 and 8.5. The projections were mapped for subregions, such as the Atlas Mountains, the Jordan River and the Nile Basin, as well as ETCCDI extreme climate indices, such as maximum dry spells, wet days, warm spell duration and warm nights. The hydrological modelling outputs for biased corrected RCM outputs were shown using Hype and VIC models, and HEC-HMS tested by ACSAD.

25. The representative of the Centre of Excellence for Climate Change Research (CECCR) gave a presentation on the observed and modelled projected climate change diagnostics for the Arab region, which included background on the centre activities and the setting of GCM using the new supercomputers in the Centre. Seasonal forecasting and regional climate modelling and validation results for the Arab region were also shown in terms of annual cycles of rainfall for selected river basins over the CORDEX-MENA/Arab domain. He said that the utilization of the IPCC AR5 data precipitation analysis for the Arabian Peninsula (CMIP3) showed that some CMIP3 models indicated similar distribution of wet season rainfall compared to observed data, but some were showing different patterns. Most CMIP3 models showed a similar distribution of dry season rainfall patterns compared to observed data.

26. The representative of the Abu Dhabi Global Environmental Data Initiative (AGEDI) presented an overview of the project, including the vision and objectives to achieve enhanced environmental data collection and assessment and improve national and international mechanisms of information processing and exchange. She reviewed AGEDI projects for 2014 and beyond, including the Abu Dhabi Blue Carbon Demonstration Project, Eye on Earth and the launching of an activity aimed at establishing a climate change work programme that could expand understanding of vulnerability to the impacts of climate change and identify practical adaptive responses at the local, national and regional levels. She said that the Initiative had 12 subprojects, including regional climate change as one thematic area that included atmospheric modelling and Arabian Gulf modelling.

27. The representative of AGEDI presented the high resolution regional climate modelling over the Arabian Gulf with the Weather Research and Forecasting model for dynamical downscaling for three nested domains (36 kilometres, 12 kilometres and 4 kilometres). He introduced the results from various case studies based on local observations from the United Arab Emirates National Center for Meteorology and Seismology and the model validation and future projections for the region using RCP8.5 for rainfall and temperature.

F. USER REQUIREMENTS OF REGIONAL CLIMATE INFORMATION

28. The representative of the Centre for Environmental Health Activities of the World Health Organization (WHO/CEHA) gave a presentation on regional climate change information for the health sector, illustrating health concerns arising from climate change, water and weather, public health response to climate change within member States, climate meteorological data requirements for health and Arab climate outlook forum potential products and services for health sector action on climate change. He said that building health resilience required meteorological data for assessing health vulnerability to climate change and defining health contributions to climate plans of action in the health-determining sectors, including water, agriculture and energy. WHO regional climate actions supporting member States included developing evidence-based policies, strategies and recommendations and disseminating tools, guidance, information and training packages to support national awareness and advocacy campaigns on health vulnerability and adaptation to climate change. He gave several examples of health sector requirements for climate information.

29. The representative of the Jordan University of Science and Technology reviewed the regional climate change information for the water sector and the need for climate modelling outputs, and addressed the regional impacts of climate change on water resources, the type of water information needed for climate modelling and the type of data sources available. The Yarmouk River basin water resources assessment and use case study, the Single Event Watershed Model for simulating runoff hydrograph in desert areas and development of climate change scenarios for Jordan were among the case studies presented. He said that, according to those projections, precipitation in Jordan tended to decrease over the period from November to February and increase between March and May.

G. PROPOSALS AND PERSPECTIVES FOR THE ESTABLISHMENT OF AN ARAB CLIMATE OUTLOOK FORUM

30. The WMO representative reviewed the concepts of the Arab climate outlook forum, such as its establishment, functions, outputs and institutionalization process, including data needs and capacity development requirements; identifying potential partners; reviewing and synthesizing available regional climate change information for the Arab region; and discussing how to utilize the RICCAR regional knowledge hub for forum operations.

31. The heads of the Arab meteorological offices provided their views during a high level panel discussion on the establishment of an Arab climate outlook forum. The following key issues were raised:

(a) To establish an Arab climate outlook forum for the whole Arab region under the auspices of the League of Arab States and WMO;

(b) To identify beneficiaries, responsible parties, mandates, structure and financial resources;

(c) To base the forum on user needs and requirements and adapt consensus-based seasonal forecasting services accordingly;

(d) To ensure that the forum strengthens Arab-Arab cooperation within the region and enhances the role of the Arab meteorological offices at the national and regional levels;

(e) To ensure that capacity development is a key component of forum functions and mandates, especially on consensus-based seasonal forecasting and climate predictions;

(f) To host the technical secretariat of the forum in an Arab country and establish a website in Arabic and other languages; (it was also discussed that the forum could be hosted on a rotating basis by Arab countries);

(g) To establish the tools and mechanisms for data and information exchange at the national, regional and global levels when the forum is fully operational;

(h) To support the establishment of the GFCS focal units at the national level and link it to NMHSs in the region;

(i) To ensure that expected outputs from the forum are reliable seasonal climate outlooks that could save lives and assets from climate related disasters, incorporating advanced predictions on precipitation and temperature over seasonal and longer timescales, including their spatial and temporal distributions, sandstorms and heat wave warnings, strengthening the means of dissemination of forum products through a wide range of media channels.

32. The representative of the United Arab Emirates offered to host the Arab climate outlook forum following a review of its terms of references, including the required budget, when finalized by the League of Arab States.

H. Recommendations for establishing an Arab climate outlook forum or related mechanism

33. In the concluding session of the Scoping Meeting, a plenary discussion was held on the Arab climate outlook forum terms of reference, its relationship to related initiatives at the regional, subregional and national levels, and its governance structure and capacity development. The findings and recommendations of the session are presented in the above section entitled "Conclusions and recommendations" of the present report.

III. ORGANIZATION OF WORK

A. Venue and date

34. The Scoping Meeting for the Establishment of the Arab Climate Outlook Forum was held in Amman, from14 to16 October 2014.

B. Opening

35. The Meeting was formally opened by Ms. Lina Shbeeb, Minister of Transport, and Mr. Taher El-Shakhsheer, Minister of Environment of Jordan. Opening statements were also delivered by Mr. Mohamed Semawi, Director-General of the Jordan Meteorological Department, Ministry of Transport and the Permanent Representative of Jordan to WMO; Ms. Carol Chouchani Cherfane, Chief of the Water Resources Section, ESCWA Sustainable Development and Productivity Division, on behalf of Ms. Roula Majdalani, Director of the ESCWA Sustainable Development and Productivity Division; Mr. Hocine Souidi, Head of Climate and Meteorology Division, Environment, Housing, Water Resources and Sustainable Development Department, Economic Sector, League of Arab States; and Mr. Rupa Kumar Kolli, Chief of the World Climate Applications and Services Division, WMO.

C. Participants

36. The meeting was attended by 43 participants, including heads of the Arab meteorological offices or their designated representatives, experts from RICCAR partner organizations and regional and international climate experts on RCOFs. The list of participants is set out in the annex to the present report.

D. AGENDA

37. Presentations and discussions were conducted over eight sessions. The agenda of the meeting is summarized below:

(a) Opening statements.

(b) Background and meeting objectives.

(c) RCOF concept, status and associated mechanisms.

(d) Climate monitoring and assessment.

(e) Country presentations on climate data and monitoring capacities.

(f) Regional climate projections.

(g) User requirements of regional climate information.

(h) Proposals and perspectives for the establishment of an ArabCOF.

(i) Recommendations for establishing an ArabCOF or related mechanism.

(j) Closing session.

E. EVALUATION

38. An evaluation questionnaire was distributed to all participants to assess the relevance, effectiveness and impact of the Scoping Meeting. The feedback received was positive. The majority of participants (91 per cent) found that it had met its objectives and their expectations. The organization was found to be very good and the presentations were deemed to be of good quality by most participants. Almost all submitted questionnaires indicated that participants found their expertise very well suited to the meeting, which had provided them with an excellent opportunity to exchange information with other experts.

39. The majority of participants (82 per cent) indicated that they would like follow-up activities on the establishment of the Arab climate outlook forum and on information exchange between all stakeholders. Many countries showed interest in contributing to future activities related to the forum.

40. Some participants made recommendations, including the following: to be regularly informed of the evolution of the forum process; to put in place a governance structure, organize management arrangements and nominate the scientific committee; to maintain communication with ESCWA and WMO to benefit from developments on climate change nationally and regionally; to ensure follow-up on the establishment and future operation of the forum; to address the needs of climate data and services and review of national circumstances; and to disseminate results of climate modelling simulations.

F. DOCUMENTATION

41. Meeting documents are available from www.escwa.un.org/information/meetingdetails.asp?referenceNum=3520E.

Annex*

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