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**Department of Economic and Social Affairs (DESA)
Economic and Social Commission for Western Asia (ESCWA)**

Strengthening National Capacities to Manage Water Scarcity and Drought in West Asia and North Africa

PROJECT INCEPTION AND EXPERT GROUP MEETING REPORT

**THE ANALYSIS, MAPPING AND IDENTIFICATION OF CRITICAL GAPS IN PRE-IMPACT AND PREPAREDNESS
DROUGHT MANAGEMENT PLANNING IN WATER-SCARCE AND IN-TRANSITIONING-SETTINGS COUNTRIES
IN WEST AISA/NORTH AFRICA**

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PROJECT INCEPTION AND EXPERT GROUP MEETING REPORT

Strengthening National Capacities to Manage Water Scarcity and Drought in West Asia and North Africa (Beirut, 24-25 June 2013)

Meeting Report

The expert Group Meeting took place at ESCWA offices in Beirut through the period from 24 to 25 June. The meeting attended by the following participants (List of participants are in Annex1).

- Countries representatives and policy makers engaged in drought management from water-scarce countries in transition located in Western Asia and North Africa, namely: Jordan, Lebanon, Yemen, Egypt, Sudan, Tunisia, Libya, Algeria.
- Experts from regional and international institutions involved in drought management in the region, including the International Centre for Agricultural Research in the Dry Areas (ICARDA), the Network on Drought Management for the Near East, the Mediterranean and Central Asia (NEMEDCA) Drought Network and the Arab Center for the Studies of Arid Zones and Dry Lands (ACSAD), and Centre International de Hautes Etudes Agronomiques Méditerranéennes (CIHEAM).
- Experts from UN partner agencies with regional/national offices serving Western Asia and North Africa, including the ESCWA, FAO, WMO, UNCCD, UNISDR, and UNDESA.

The EGM aimed to:

1. Provide expert advice on the existing knowledge, practices and critical gaps in pre-impact and preparedness drought management in water-scarce countries in transition settings in Western Asia and North Africa. The discussion focused on the following key elements in national drought management policies and the gaps and challenges preventing the effective integration of these elements in the region:
 - Standard approaches to vulnerability and impact assessment.
 - Effective drought monitoring and early warning systems which couple multiple climate, water, soil and crop parameters, socio-economic and environmental indicators.
 - Drought preparedness and risk management.
 - Emergency Response and Relief Measures that reinforce National Drought Management Policy Goals
 - Water scarcity and drought conflict prevention measures.
2. Establish an Expert Advisory Group to guide the methodological work and key elements of project implementation during 2013-2015.
3. Develop criteria and recommendations for selecting the pilot countries that will be targeted for assistance under the project; and

4. Discussion on the project work plan and identify next steps.

Day 1: 24 June

The presentations in the first day can be grouped into three parts;

1. Welcoming and project overview presentations by Ms Carol Chouchani from ESCWA and Mr Sami Areikat from UNDESA. In this part Ms Carol gave an overview of the EGM two day meeting while Mr Sami gave an overview for the project.
2. Presentation on the report on examining existing knowledge, practices and critical gaps in pre impact and preparedness drought management in water-scarce countries in transition settings in Western Asia and North Africa by Dr. Loay Froukh from consultant to UNDESA. In this part Dr Loay Froukh presented the report finding on existing knowledge, practices and gaps in the covered countries. The presentation described the following topics;
 - Drought Importance and Impact
 - Elements of the Drought Management System
 - Countries Drought Management Status
 - Movement to Proactive Approach
 - Adoption of Standard Procedures
 - Early Warning and Monitoring Systems
 - Regional and International Cooperation to Minimize Risk and Conflict
 - Capacity Needs Assessment of National Policy Makers in the Region
 - Study Action Plan

The above topics aimed at showing where the countries stand in terms of each topic and what are the strengths and gaps. This is an important step in the project to identify what is needed for each country and to plan for the next steps. Mr Froukh presented a summary preliminary summary matrix on the status of drought management in the countries with and overall assessment on drought condition in each country. He clarified that this assessment will be changed once there are updated information through the meeting.

The matrix showed that all countries are still dealing with drought in reactive approach with exception of Tunis and Morocco who has partial proactive measures to manage drought and be ready for it. The matrix also showed that all countries have the following gaps;

- Unit or governmental body to be responsible on drought management
- Standard management approach
- Monitoring and Early warning systems
- Database for drought data collection on national scale
- Drought projection
- Mitigation Plan
- link between desertification, and migration and conflicts
- Integration of drought action plan with IWRM/National Development Plan
- Regional sharing of drought information

At the end of the presentation the door opened for questions and comments. The raised comments on the report were as follows;

Ms Luna Abu Swuair from UNISDR : there are outdated data; we can give hints, but through the matrix it would be incomplete; we would need some time to discuss it. She added the unit responsible of drought management is the key for the solution; you will find some countries who don't want to work with such unit or with such task teams. In addition, on the linkages to previous studies, it has to be clearly reflected here ; on recommendations. The study is still very preliminary, we cannot base recommendations on it, then on the drought management unit, there is in some countries a risk management unit, not specialized on drought: in that case there is no need of additional unit.

Ms Luna added;

- Report should draw upon existing work on the subject, such as IPCC Special Report on Extreme Events and GAR 2013 report, which talk about drought risk
- We should know how countries are being ranked in the paper based on what criteria.
- Disaster Losses Database: The paper should take account the presence of these databases at the national level; analysis can't be based on global datasets (which only go up to 2004, or 2008 per the paper and PPT presentation on the paper).
- Making recommendations from the outset will not serve the project; the study lacks analysis and is not sufficient to serve as a basis for organizing the project.
- Several Agricultural Ministries have "Disaster Risk Management" Units, which take care of drought, but if plan is to have integrated approaches, a drought unit in one ministry may not impede that. Thus we need to look at DRR plans at national level, and not only look at drought management plans.
- Need to look at other sectors which might cover drought management.

Mr Faysal Chenini from FAO: no data analysis in the report, there is a need to updates, for example on the available publication; I hope that this meeting will be an occasion to do this. He said the water scarcity initiative project can be used to get more information on the countries and FAO has reports on drought in the region. It is Dangerous that the assessment matrix ranking countries provides recommendations before the assessment is made. We should avoid these types of recommendations. Final declaration of the Drought Management Policies should be looked at (15 March 2013), which provide enough recommendations to draw upon.

Fouad Abou Samra from UNEP: the report didn't mention the link between climate change and drought enough, and didn't address this issue accordingly. He added;

- What is time table for the study? And how does it link with other steps related to the project.
- Need to make linkages between drought and climate change; drought and IWRM linkage insufficient as cause.

Dr Wadid Erian from ACSAD: there is nothing called "normal rainfall" for every area, because it is changing; everything known about meteorology is changing and data are too recent ; all data on rain are shifting towards north ; I just want to highlight that we have to focus also on evapotranspiration in the definition of drought, which has increased even more because of the higher temperatures; if we look to many trees in the region, the productivity is declining, and the summers are becoming longer ; the "normal rainfall" should be taken out of the agenda : drought is an ongoing process, and the region is continuously under pressure ; evapotranspiration is the main issue now ; the study should report on these many definitions of drought.

Carol from ESCWA: on the establishment of the drought unit, I am not ready to adopt this as a recommendation ; I hope that our discussions help identify opportunities for working together in the region, we are not working on separate national projects but should work together.

Ms Carol added;

- It is not necessary to have a stand-alone drought unit in a ministry in order to respond to drought; a coordination mechanism is needed that can coordinate across ministries.
- Project should look at a regional approach that supports national interventions, so that this does not only become a national level project.

Mr Wael Saif from ACSAD, It is important to identify the stakeholders for each situation and country: each country has its specificities ; on the scientific element, when you talk about the drought, you have to address also the linked events, like the sand storms or in the contrary the frost periods in Lebanon and Jordan ;

Mr Wadid Erian from ACSAD: Need to be clear regarding the definition of drought to be applied and how we are going to look at Drought in the project. Paper should consider IPCC Definition of Drought and be clear regarding what type of drought is being addressed within the framework of the project.

- No such thing as "Normal rainfall." Everything known about meteorology is changing now within context of climate change: "Standard Precipitation Index" is no longer appropriate to use; we need to think about evapotranspiration now as well and incorporate ET in an integrated concept of Precipitation.
- New definition of drought now: rainfall, temperature and evapotranspiration.
- Rangelands have changed dramatically in this region (1.6% of rangeland lost annually; 1.6%+ of forestry resources have been lost and shifted to the North in some countries in North Africa). Summer seasons have changed (extended 3 years).
- Drought is changing in intensity, frequency and duration

Mr Jaser from WMO

Each country has their own specificities in terms of their national stakeholders (*national drought stakeholder analysis needed*) and national conditions.

Further to the comments raised below from the participants on the report Dr. Froukh stressed that the draft report was based on the collected information from the literature, and this information will be revised and adjusted based on the presentations from the countries and active international organizations on drought management in the region. He added that the EGM meeting is a good chance to discuss all elements in the report, exchange information, get updated information and to get feedback from the participants. Dr Froukh added we are not going to do master plans for droughts or research: that's the job of the countries; the project is to identify gaps and areas to build upon for capacity building in the region :

3. Countries presentations on interventions on country level initiatives, programs, experiences, challenges, and lessons learned in the formulation, implementation, and monitoring of pre-impact and national drought preparedness drought management plans.

The countries presentations have focused on country base information in terms of location, population and water resources. Almost little information on drought management systems was given in the countries presentations as shown below;

LEBANON/Maya Mahanna

Drought is covered on project basis but not as country strategy. The Ministry of Agriculture Projects includes:

- HASSAD Project: Mountain Hill Lakes in areas characterized by drought and water scarcity (Akkar and South): project is for 18 lakes in these regions.
- Aim is to provide more water to the farmers: problem is that the water is collected in the reservoir, but irrigation network might not help get the water to the farmers.
- Saima Project:
- MoAg have LARI and GreenPlan; GreenPlan provides subsidies & support to farmers in terms of hill lakes and agricultural roads. LARI supports all research-oriented activities.
- Wastewater reuse: in 2012: treated wastewater reuse is not included in the national water balance, but coordination with Ministry of Water still week to determine how to use this treated wastewater.
 - o Baalbak: project with FAO to use treated wastewater for irrigation: one is tertiary wastewater treatment (for 6 farmers)
 - o Marjeyoun: Min of Ag engaged in use of treated wastewater with farmers.
- Use of solar energy: Use of solar energy to support Min of Ag nurseries to generate electricity to irrigate these nurseries – this is being implemented without donor assistance by MoAg.
- LARI: Has an SMS early warning system with weather stations notifications to advise farmers about when to irrigate and other issues.

Seeking to establish an “Irrigation Committee” to help advise when irrigation should be pursued

- Drought Unit might be able to help with this coordination, as even within the institution it is hard to coordinate.

Mr Sami commented that Lebanon is the only middle-income country (as classified by UN) that does not have a ‘national development plan.’

ICARDA: Problem is more of a water resources management in Lebanon than climate change.

FAO: Believes that awareness about drought is very high in Lebanon compared to other countries.

Loay: suggested that countries identify what countries are doing per his slide.

ALGERIA/ Mousa Yalaoui

Algeria needs to know how to assess drought. It has 19 desalination plants, and treated wastewater used for irrigation and agricultural purposes. Warm winds affect Algeria and contribute to drought and desertification. Green Dam: Forest cover that extends along Highlands – is a way to combat the winds coming Soil production is very limited in some areas.

FAO: There is over 180,000 hectares that they call the small irrigated areas, and there is a significant effort to combat desertification. Bridges have been built and local offices established to support the process.

ACSAD/Erian: North Western Algeria hit with drought at the same time the Darfur, Sudan was hit. However, since Algeria was able to protect its highlands with forest cover, it was able to combat desertification effectively. With effective natural resources management, we can reduce conflict.

Algeria’s ability to address and prevent drought and desertification helped to reduce water scarcity and the risk of conflict.

EGYPT/ Mohamed Abd-El-Moneem

Ministry of Water and Irrigation is responsible on water issues. Water reuse rates in Egypt are high in terms of turnover: water is reused before releases to sea. Seasonality of water use, as water demand increases at the end of the summer, when quantities are most limited. Desalination being considered/pursued and Brackish water use on the rise. Ministry has a disaster unit, but doesn't deal with drought

ACSAD/Wael: Joint project underway with Ministry of Agriculture to mix saline water with freshwater due to water scarcity, which is still suitable for irrigation.

ACSAD/Erian: ACSAD prepared transboundary resources assessment report. Ethiopia is not suffering from drought at a level worse than Egypt; but it does suffer from poor land use management. Supporting Egypt on the Delta, the areas around the Delta are thus suffering from drought. Egypt is most prone to conflict arising from Drought.

UNISDR / Luna ABU-SWAIREH

Arab Disaster Risk Reduction (DRR) Strategy was adopted in Bagdad 2010. Aqaba Meeting was first Arab DRR meeting (March 2013): Focused on Governance, Institutional framework for DRR, urban planning, climate change and DRR. Climate Change and DRR is a priority. DRR means that we need a inter-sectoral approach that deals with all the institutions (finance, planning, met services, agriculture, development planning, etc.). Drought DRR: strong experience in Africa (more than in Arab region), but all stakeholders needs to be linked. Made note that this is a regional project, not a country-by-country project, and thus could be linked to RICCAR so that projects can build upon each other. Consolidation and cooperation across ministries is better so that we can go to ministries with a more coordinated/consolidated approach.

WMO Global Framework for Climate Services has 4 pillars (Agriculture, Water, Health and DRR): UNISDR works with WMO on DRR at country level, including strategy development. UNISDR works on a regional scope for Arab region to support policy-making process and institutional and financial framework to support policy processes. Also develops biannual GAR report with assessment and maps to support this process. Assist countries with National Disaster Losses Databases, which links to projections and vulnerability assessments. DRR at National Level: Agriculture, Environment, etc.

FAO: Morocco had to import over US\$500,000 of grain to offset loss of production associated with drought there, and same import costs were suffered by Tunisia as well.

ACSAD/Erian: Working with LAS could be beneficial for the project, including UN-LAS coordination meeting. Highlighted that conflict reduction is the purpose of addressing water scarcity and drought. Made reference to Syrian case with drought and resulting migration.

Sami Commented: wanted to see if Luna would be on the Advisory Group

ESCWA/CAROL suggested there are at least 3 regional strategies (4 with Met Offices) and Project could do a mapping of how drought is addressed in all three (or more) Arab level strategies, to support a regional guidance document on how to improve drought preparedness.

Drought is more than an event in Libiya. We are living under drought continuously. When we talk about water scarcity we talk about drought, it is an ongoing situation. There is water council responsible on water strategy issues. There are water strategy since 1998. General Water Authority established in 1972.

96% of Libya receives less than 100 mm of rainfall/year, with selected areas in North with some intensive rainfall events. Jabal Akhdar, Nafouza and Bengazi are the greener areas. Surface water represent less than 5% of total water supply (wadis), but even this we don't want to look thus dams built to collect (61 MCM/year) from this harvesting effort.

Groundwater: more than 80% of demand from 6 groundwater basins, including fossil water. Matrix provided with characterization of groundwater basins in Libya. Major decrease in water levels in groundwater basins evident, because decrease in groundwater levels is evidence of drought.

Seawater intrusion line increasing, and is reaching exploitation and agricultural regions in the north of Libya, and is leading to the pollution of groundwater. Salinity in Tripoli is high now. Sabka water has a similar chemical composition to seawater.

Over-exploitation challenge is a manifestation of drought.

- Farmers are consistently deepening the wells to exploit water from deeper depths.
- Household networks are deteriorating because of this (?? Check slides)
- Industrial river project: also looking to serve water to coastal cities. Before the quantities were able to meet demands

New Water Law: Prevents digging new wells, unless for potable water and to maintain existing water. Law 3 of 1982 – addresses groundwater pollution as well.

Adopted *National Strategy for Water Resources Management in Libya (1998 – 2025)*, in place plus has Action Plan for some measures with some efforts to implement it.

Sami commented: Makes emphasis that there is a difference between Water Scarcity and Drought. But Drought happens when there is a further decline in the water scarcity levels. Water scarcity is part of the reality of living in the Arab region.

FAO: There is a large-scale FAO / UTF water project about to be launched in Libya on natural resource conservation (water, forests, etc.).

ACSAD/Wadid commented: the level of information available and the existing maps that are supporting work. ACSAD is working in Libya to develop the land use map.

Libya has groundwater transboundary issue: there are Joint groundwater basins management commission for Libya-Tunisia-Algeria (OSS Observatory, based in Tunis) and Libya-Chad and Sudan basin authorities. This could be part of the assessment as it shows good Arab-Arab cooperation to showcase cooperation on joint aquifers.

TUNISIA – HABIB HELLALI

Tunisia and Algeria agreement signed on shared water resources for groundwater. Tunisia-Algeria-Libya are members of OSS which do joint management and monitoring of the shared groundwater. In Libiya 10% improvement in water use efficiency.

Zerba Desalination Plant study initiated and for 4 other plants are planned. Several Dams linked to provide irrigation water and improve water quality in areas with high salinity. Treated wastewater reuse initiated (225 MCM produced) and used for irrigation, and working to expand this project.

Generated 2030 projections for forecasting and addressing drought, and developed a plan with a time horizon of up to 2050, which will be finalized by 2014.

- The study will focus on how to link the different dams and how to direct water to the middle of the Tunisia where there is severe drought being experienced.
- Plan is to build another 11 plans to harvest other water resources: goal of strategy is: (a) reduce demand; (b) develop non-conventional water resources (4%) with goal of 7%); (c) combat climate change;
- 1% of annual government budget is allocated to scientific research, and for water sector will focus on water use efficiency and identify species that are most resilient to water scarcity.

SUDAN / Hassan Abu Albashar Ali Hamdoun

- More than 77% of water resources in Sudan originate from outside the country (unclear if that is for Sudan or Sudan and South Sudan).
- Temporal and spatial variability in rainfall
- Sedimentation and weed growth in canals a problem.
- Several institutions management water resource: Agriculture, Ministry of Water and Electricity, Meteorological services, etc.. No single body to deal with water issues.
- Population growth at 2.8%

How to develop a drought management system in Sudan is the question posed, no solution present.

Sudan is a member of Joint aquifer management commission with Libya, but needs strengthening

JORDAN / Adel Obeiaat

Jordan considered one of the four poorest countries in water resources in the world (*Carol: fact needs to be checked*)

Demand exceeds supplies.

- Says that there is over 1 million Syrian refugees in Jordan right now.
- Low cost recovery ratio
- Non-conventional water resources require a high capital investment, which is not sufficiently available in Jordan.

Yarmouk and Jordan Basin are main sources of water for Jordan, although Jordan does not control the headwaters of these basins.

Fossil waters will be exhausted within 100 years.

Non-revenue water (due to administrative and physical losses within the water supply system) estimated at 44% nation-wide. Table provided to show decrease in NRW since 2009.

Water Management Plan includes:

- replacing agriculture use of freshwater with treated wastewater and that freshwater is used then for potable use;
- increasing awareness and reducing demand
- improving rainwater harvesting
- reducing arbitrary pumping
- improving scientific research
- involving private sector

Water Demand Management Unit established at Ministry of Water and Irrigation in Jordan. Hopes that a Drought Unit may be established at ministry to develop/prepare a drought strategy.

YEMEN/Musaed Mohammad Aklan

Under traditional water resources management, Yemenis have adapted to water scarcity using flood irrigation and terraces. Water customs and water rights acknowledged. Rainwater harvesting in mountainous regions was common.

- Rainfall only source of water for a long time in Yemen, but after 1970s the digging of wells increased (also thanks to the subsidization of diesel to be able to pump water from the ground).
- 70% of Yemenis from rural areas, but now there was a migration and more demand for water in urban areas now.

-Decline in groundwater levels by 2-8 meter with decline per year; in Sana'a groundwater levels are falling 7 meters per year.

Responses:

- Rehabilitation of agricultural terraces: Fund supporting this, which has also helped with reverse migration to bring people back to the rural areas.
- National Irrigation Project
- Green belt projects implemented using treated sewage water.
- Water Law issued in 2002
- National Water Strategy (and Action Plan) adopted in 2005
 - o There is not a specific strategy adopted yet on managing or preparing for drought.
- Only one authority is currently responsible for digging wells (?check info)

Yemen has high risk for drought impacts given extreme water scarcity.

UNCCD/ Emmanuel Chinyamakobvu

- UNCCD set up in 1994
- Discussed high level meeting on drought management b/w WMO, FAO and UNCCD

Sami asked if Arab region will be included in follow-up to high level meeting on national drought management held in March 2013.

Emmanuel: Says that global project is still working on how to deal with North Africa, and there is a question on languages.

ICARDA/Hassan Machlab

- One of 15 CIGAR Centers across the works working on rural livelihoods.
- Works on drylands thus always associated with drought.
- Conservation agriculture not being aggressively pursued in Syria and Iraq with ICARDA support.
- Non-conventional resources being pursued, including non-conventional feed for livestock, which can be promoted during drought conditions.
- Micro-catchments and contour planting (with laser guidance system for plows)
- Capacity building program in place at graduate level and internships.
- Over 200 projects being implemented by ICARDA across the region.

In Lebanon and region:

- Water and Livelihood initiative with LARI and AUB with USAID support
- Hill lakes (with Housade project with MoAg of Lebanon) with IFAD funds.
- Wheat/legume water systems (LARI)
- Small scale dairy sheep farmers in western Asia Lebanon and Syria)

DAY 2, 25 June

The second day covered presentations from UN organizations (UNEP, FAO, WMO, ESCWA), ACSAD, and CIHAEM. Then the presentations followed by a planning session as shown below.

UNEP/ROWA/ Fouad Abousamra

UNEP working within an ecosystem approach

Project on Rehabilitation of degraded Rangelands in West Asia Countries and Sustainable Use of Natural Resources – being implemented with ACSAD (Wadid Erian)

- Project is to support implementation of UNCCD convention in the region.
- Working with local communities in rangeland areas, and providing training courses for local stakeholders and staff

Drought management has to go beyond water management. Also drought preparedness needs to address ecosystem management (and land management). Other projects:

- Improving UNCCD implementation in Palestine
- Sand Dunes Stabilization for combating desertification in Oman
- KSA and Hammad Basin

FAO/ Faysal Chenini

- FAO NENA Region covers 19 countries
- FAO SOLAW (2011) report findings indicates: Loss of soil quality, biodiversity loss and increasing water scarcity are key warning signs that combined with drought are major threats to socio-economic development.
- Drought is a recurrent feature in our region.
- FAO is a main partner supporting the UNCCD (set up in 1994)
- FAO has adopted Drought as a “Priority Area for Interdisciplinary Action” at the global level.
- 1998: FAO-UNCCD MoU signed

- 2nd Session of the FAO ALAWUC Commission on sidelines of 26th FAO Regional Conference for the NENA Region
- March 2000: Countries asked FAO to support implementation of long-term action plans
- 2001: FAO-ICARDA-CIHEAM and EU set up NEMEDCA Mediterranean drought network

Working on drought preparedness, early warning systems and network for drought preparedness, including drought mitigation and drought risk reduction are key projects. National Action Programs for managing drought risk: Project launched b/w FAO and NDMC (Nebraska, USA) in 2008. Water Scarcity Initiative launched in 2013. Main lessons

- Occurrence and impact of drought could change due to changing climate and vulnerabilities caused by climate change.
- Better understanding of drought hazards needed
- Need to engage governmental and non-governmental organizations in processes to respond prepare and reduce drought risks.
- Talks about 'natural hazards'
- Recent droughts in the region have prompted greater action by some countries in area of drought.

Tangible recommendations needed. Actions and recommendations may differ from country to country, and need better picture of situation in the region in order to respond to the challenge.

WMO/Jaser Rabadi

IPCC Report on Managing Risks for Extreme Events and Disasters to Advance Climate Change Adaptation (SREX) – makes specific reference to Drought.

GPCs: Global Producing Centers for Long Range Forecasts

- About 12 produce products relate to climate modeling: Surface T, P, Sea-surface T, etc.
- Climate prediction centers generate predictions (e.g., CPC run by NOAA)
- Highest tier for analysis: NOAA, UK Met Office, Japanese, etc.

RCC: Regional Climate Centers

- RCCs are centers of excellence and provide certain services
- Jeddah and Tehran proposing to be RCCs
- North African countries proposing to work together to become a joint RCC
- RCC weather bulletins can be issued.

RCOFs: Regional Climate Outlook Forums

- Started in Southern Africa in 1997 due to El Nino episode, and introduced this RCOF idea.
- Produce regional climate outputs that take global (and national products) to generate a regional outlook.
- Has a good map showing the RCOFs.
- RCOF does not issue an outlook unless it is AGREED to throughout the network through consensus, so that is why they work and meeting together to generate this outlook.
- MedCOF just launched in June 2013, led by Spain for Med Region.
- SEECOF for South East Europe

ESCWA: PRESANORD RCOF, which can provide a good opportunity for synergy and complementary with this DA project. WMO Representatives in each country set in all countries set at national met services.

Per Sudan: Need to think about drought risk management and migration resulting from these pressures, and more assistance is needed to address these crises and situations.

ESCWA/ Wadid Erian

ACSAD developed Drought action plan as part of the Arab water strategy. The plan includes 6 themes .
Hey developed an integrated model to estimate the agriculture drought hazard and drought intensity maps for Arab countries. The model can be used to define the level of aridity and change in vegetation cover and drought vulnerability in Arabic countries.

ESCWA/ Carol Chouchani Cherfane

ESCWA is working with several UN organizations on development of a regional initiative impact of climate change on water.

CIHAEM/ Dunixi Gabina

Drought management guidelines are one of the main publications since 2010. Guidelines are in English and Arabic. Both hard and electronic copies are available.

CIHAEM initiated the MEDROPLAN, network for Mediterranean countries. They implemented several training courses on drought management for Tunisia and Morocco.

Planning Session/ Sami Aierkat and Loay Froukh

Sami/UNDESA presented the list of criteria to be used to identify the 5 pilot countries to be covered in this study. The criteria are as follows;

- Drought impact
- Water resource availability
- Existence of institutions and their capacity
- Level of poverty
- Essential Elements for National Drought
- Management Plans
- Different types of water scarcity/droughts
- Regional representation
- National ownership and official
- Willingness to cooperate

Dr Froukh suggested that to go through criterion one by one and to give it score against each country compared to all other countries. Several participants raised concerns on using the criteria. To resolve this issue Dr froukh proposed to start list the countries and mark the ones identified by FAO under the water scarcity initiative and the vulnerable countries from ACSAD assessment study. Accordingly the following countries have two marks ; Jordan, Lebanon, Egypt, Tunisia, Yemen, and Morocco.

Other members suggested to consider all countries as potential pilot countries and to send request and based on the interested ones the pilot ones will be selected. Sami confirmed that at this stage all countries will be considered.

The second issue is the project advisory group, the question raised here is if the countries representatives are authorized to be members in the advisory group. ESCWA confirmed that letters of invitation sent to Water Ministries requested nomination of an expert to the meeting and indicated the participating expert should be the designated focal point who would follow-up on the project.

All participants at the EGM are thus their ministry's designated focal point to follow-up on the project. However, letter did not indicate that that water-related ministry was the lead national coordinator of the project. The ministries responsible for water, agriculture and meteorology have already been consulted on the project and it is not clear which sector would be the lead focal point in charge of coordinating the project at the national level. Accordingly, it was agreed to send letters to the ministries of water and agriculture to identify focal points for this project.

Several organizations asked for copy of the project document. Sami said that he would share it them.

Meeting Recommendations or next steps

1-Given that there was no consensus on criteria or selection of pilot countries, it was agreed that all participating countries will be invited to nominate their country focal points and propose their country to be among the pilot projects targeted by the project. The requests will be sent through countries representatives at the UN Mission. The pilot countries will be selected from the interested ones who respond positively to the invitation.

2- On the advisory group, it was agreed that all participated organizations will be members of the advisory group. The countries will be included once the focal points identified officially.

3- The collected information on countries status on drought will be compiled in a summary matrix for drought management gaps. This will help in selecting the pilot countries and identify their needs under the project. The summary matrix is shown below;

4- It was suggested to use CIHAEM training modules, guidelines and facilities in any proposed future training for countries.

5- FAO suggested that MEDROPLAN guidelines could be updated via the DA project, so that after 3 months the tools will be available to support capacity building. ACSAD suggested that small group who could review and consolidate the various manuals that already exist on drought preparedness to update/prepare a guidance note. Accordingly, a task force has been established to review literature on drought preparedness and preparation of Guidance from ICARDA, FAO, CIHEAM, ACSAD, UNEP, WMO, UNCCD, Egypt/Mohamed with UN DESA as coordinator. DESA would advise on which consultant would be recruited to support this review. The review should draw upon the scientific paper prepared for the UNCCD/WMO/FAO for the High Level Meeting on Drought and the resulting declaration from adopted in March 2013.

6- On the project implementation side the following steps will be implemented in the future;

- Finalizing the report on Examining Existing Knowledge, Practices and Critical Gaps.
- Plan and conduct visits to 5 pilot selected countries to refine and detail their needs in drought management
- Define the areas to be developed and training needs to be covered in each country
- Prepare implementation and capacity development plan for each country.
- Review proposed plans by advisory group and consider ongoing related projects.
- Hire consultant to develop and conduct training in an international institut

Countries Summary Table

Region	Country	Drought Responsibility which Organization	Drought Strategy	Drought Action Plan	Drought Standards	Drought Monitoring & Early Warning System	Drought Mitigation Plan	IWRM	Transboundary Water
West Asia	Jordan	Ministry of Environment	exist	exist	none	none	none	exist	surface water with Syria and Palestine , GW with SA
	Lebanon	Ministry of Agriculture Ministry of Energy & Water	none	none	none	projects	projects	none	surface and Gw with Syria and Palestine
	Syria								
	Yemen	Ministry of Water and Environment	none	none	none	projects	exist	exist	GW with SA and Oman
North Africa	Egypt	Disasters Unit/Prime Minister Office	none	project basis	none	none	project basis	exist	Nile basin/GW with Libya
	Sudan	Ministry of Agriculture	none	none	none	none	none	exist	Nile basin/GW with Libya
	Libya	Ministry of Water Resources	none	exist	none	none	none	exist	OSS/ GW with Sudan
	Tunisia	Prime Minister & Ministry of Agriculture	exist	none	exist	exist	exist	exist	SW with Algeria and OSS with Libya
	Algeria	Ministry of Environment	none	exist	none	none	exist but not active	exist	OSS with Tunis and Morocco
	Morocco								

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