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

Joint Presentation to the Capacity Development Workshop in Advancing Water and Sustainable Development

New York, 24-25 Feb 2015
Session 3: Regional Contexts
Water and Sustainable Development
Challenges and Opportunities in ESCWA region

Joint ESCWA-DESA presentation (Carol Chouchani Cherfane-ESCWA and Sami Areikat – DSD)
Presentation Outline

1. Water Scarcity and Drought Management in West Asia and North Africa

2. Water and Sustainable Development in the ESCWA Region: Moving from the MDGs to the SDGs

3. Case Study: UN-DESA Capacity Building project on Water Scarcity and Drought Management in West Asia/North Africa
1. Water Scarcity and Drought Management in West Asia and North Africa
Global Freshwater Availability, 2007

Freshwater availability (m³ per person per year, 2007)

Per Capita Renewable Water Resources in the Arab Region

Renewable water resources in the Arab region per capita

Note: *Area covering South Sudan and Sudan.
Source: Based on FAO AQUASTAT data (2011).
2. Water and Sustainable Development in the ESCWA Region: Moving from the MDGs to the SDGs
Access to Improved Water Supply (2012) Arab Region

Access to Improved Sanitation (2012) Arab Region

Sub-regional distribution of Arab people without access to improved water and sanitation at the national level (2012)

Out of a total Arab population estimated at 363 million people (2012):
- 17% (60.5 million people) do not have access to improved drinking water sources
- 20% (72.6 million people) do not have access to improved sanitation facilities


Based on ESCWA, Water Issues Brief for the “Arab Sustainable Development Report” (forthcoming 2015)
3. Overview of Capacity Building Project on Water Scarcity and Drought Management in West Africa (Equipping regional countries to achieve the SDG on Water)
This project is a response to Rio + 20’s:

• Call for urgent action to address water scarcity, desertification, land degradation, drought

• Call for disaster risk reduction and the building of community resilience to disasters
Gaps in Current national drought management Plans in West Asia/North Africa

- Ex-post (reactive)
- Emergency relief that take effect after or during a drought event.
Strengthening National Capacities to Manage Water Scarcity and Drought in West Asia and North Africa

Main objective:

Capacity building in the formulation, implementation and monitoring of proactive and preparedness drought management strategies.
Pilot Countries

Current Pilot Countries:

West Asia
• Yemen
• Jordan
• State of Palestine

North Africa
• Tunisia
• Morocco
Pilot Countries

Countries with Interest in Water Scarcity and Drought management:

- Egypt
- Sudan
- Mauritania
Fundamental Steps in developing and implementing National Water Scarcity and Drought Plan:

- Creating Political Momentum and Authority
- Strategic Planning and Coordination
- Fostering Involvement and Developing Common Understandings
- Investigating Drought Monitoring, Risk, and Management Options
- Writing a Drought Plan
- Implementing a Drought Plan

Ref: The Near East Drought Planning Manual: Guidelines for Drought Mitigation and Preparedness Planning (By FAO and University of Nebraska)

- Standard approaches to vulnerability and impact assessment
- Effective drought monitoring and early warning systems
- Enhancing preparedness and mitigation actions
- Including water scarcity and drought conflict prevention measures
Enhancing preparedness and mitigation actions

Supply Side Measures

- Increase Storage Capacities
- Use of marginal resources (groundwater)
- Aquifer Artificial recharge
- Improved efficiency of water distribution networks
- Rainwater Harvesting
- Brackish and Sea Water Desalination
- Reuse of treated wastewater
- Import of water
- Other measures
Enhancing preparedness and mitigation actions

Demand Side Measures

• Adoption of techniques oriented to water saving
• Enhance economic incentives for water savings
• Improving distribution system
• Using techniques to control point-source and non-point source pollution
• Adoption of resilient agricultural practice/ Drought-resistant crops
• Adoption of water recycling in industries
• Promoting of renewable energy projects
Enhancing preparedness and mitigation actions:

**Impact Minimization**

- Development of early warning systems
- Stakeholders participation in the implementation of drought management plan
- Education and training activities for reducing negative impacts of draught
- Reallocation of water resources based on water quality requirements
- Adoption of insurance programmes
Regional/National Stakeholders, Counterparts and Institutions

- Government Ministries
- National and local water authorities & water suppliers
- Farmer communities
- Water consumers and users
- Meteorological Departments and Research Institutions
- National and International NGOs
- Development Agencies and International Organizations
Establishing a Regional Mechanism for Improved Monitoring and Reporting on Access to Water Supply and Sanitation Services in the Arab Region (MDG+ Initiative)

Implemented under the auspices of the Arab Ministerial Water Council since 2009 by ESCWA and ACWUA with funding provided by Sida

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The MDG+ Initiative builds upon the MDG-7 indicators on WSS so as to measure the availability, accessibility, affordability and reliability (intermittency) and quality of water supply and sanitation services in the Arab region.

ACWUA is the Arab Countries Water Utilities Association based in Amman, Jordan
See: www.acwua.org/mdg+
MDG indicator

Access to improved drinking water source (Urban and Rural)

MDG+ indicators

Water Consumption (Water Supply)
Distance to Source
Continuity of Supply
Water Quality (Quality of Water Supplied)
Tariff Structure
Affordability

Universal and Equitable Access
Drinking Water for All

Increased Water-Use Efficiency
Reduce Number of Persons suffering from freshwater scarcity
Access to Safe Drinking Water
Increase participation of local communities for improving water management
Access to Affordable Drinking Water

SDG ‘indicators’
Access to improved sanitation (Urban and Rural)

**MDG indicator**
- Access to Sanitation Network
- Quantity of Treated Wastewater
- Reuse Utilization
- Tariff Structure
- Affordability

**MDG+ indicators**
- Type of Treatment
- Reuse Type

**SDG ‘indicators’**
- Access to Adequate and Equitable Sanitation and Hygiene For All
- Improve water quality by halving number of untreated wastewater
- Increasing wastewater recycling & safe reuse
- Increase participation of local communities in improved sanitation management
Additional SDG ‘indicators’ proposed SDG 6 (Water Goal)

Sustainable Water Management for All

- Reduce Number of Persons suffering from **freshwater scarcity**
- Increase Water-Use Efficiency
- Integrated Water Resources management
- Enhance capacity building support to developing countries
- Protect and Restore water-related Ecosystems (wetlands, rivers, aquifers & lakes)
- Transboundary cooperation
  - Water harvesting, desalination, water efficiency, **wastewater treatment**, recycling and reuse technologies
Project Activities in Pilot Countries

1. Support the planning and coordination process.

2. Provide technical advisory and supervisory services (national experts)

3. Assist with fostering involvement and developing common understandings through field visits to drought affected areas.
Activities in Pilot Countries

4. Conduct training seminars and training of trainers workshops to the national stakeholders and national experts.

5. Assist with developing country-specific preparedness and mitigation water scarcity national drought management plan.
Access address

http://sustainabledevelopment.un.org

Introduction

Droughts are complex events generally associated with greatly reduced precipitation, dry soil that impairs agricultural production, and reduced water levels in reservoirs and other bodies of water that can compromise drinking supplies and natural resources. Drought is a contributing factor to conflict, and conflict also makes drought situations worse, in turn causing famine and economic hardship. Many areas affected by drought are arid to semi-arid which tend to be under substantial ecological pressure and low in resources. When drought occurs in such areas, the living conditions of the local people become very difficult; the land yields no crops and the quantity of water is insufficient. People often compete for the availability of scarce water resources which can lead to tension and violent conflict.
Thank you

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