



The Regional Initiative on Water Scarcity in the Near East

A collaborative strategy and partnership to address the water-food security nexus



The Near East and North Africa Region (NENA) faces the challenges of addressing a wide range of complex and intertwined issues associated with the management of natural resources, particularly land and water, and securing food supply for a growing population. To address these challenges, FAO has launched a Regional Initiative on Water Scarcity in the Near East. The overall goal of the initiative is to support member countries in identifying and streamlining policies and best practices in agriculture water management, and beyond, that can significantly contribute to boosting agriculture productivity, improving food security and sustaining water resources. The initiative will identify critical areas that require action, assist in the formulation of a regional collaborative strategy and build broad partnerships to support its implementation.

Based on FAO's publication *Coping with Water Scarcity: an Action Framework for Agriculture and Food Security*, the initiative will inject fresh thinking into the process of finding sustainable solutions to water scarcity and food security problems through promoting the implementation of cost-effective water investments and management practices and through addressing issues of national food security and trade, and reduction of food losses.



The initiative will enhance cooperation among member countries and between countries and international and regional partners. It will focus on policies, investments, approaches and practices that are necessary to ensure sustainable intensification of agricultural production under water scarce conditions and utilize innovative assessment methodologies in the accounting of the availability and use of fresh water resources, and to analyse the costs associated with options to ensure national food supply.

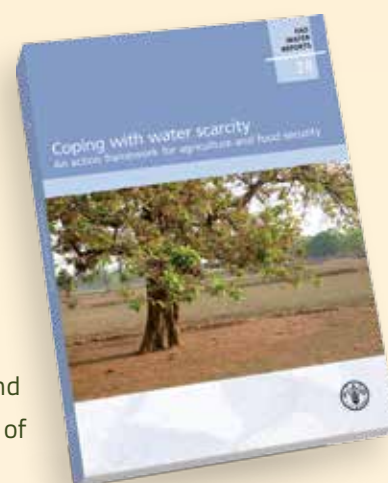
The initiative will have two major outcomes: (i) a Regional Collaborative Strategy on sustainable agriculture water management for increasing the level of food security, and (ii) a Regional Partnership to support countries in the implementation of the collaborative strategy. The findings and recommendations will be presented to the 32nd FAO Regional Conference for the Near East in February 2014.



Background and rationale

The Regional Water Scarcity Initiative is aligned with the Regional Priority Framework of the Near East and North Africa and comes in support of FAO Member Countries in identifying priority areas of action in agriculture water management that can significantly contribute to boosting agricultural productivity, improving food security and using water resources in a more sustainable way.

The rationale behind the initiative is described in FAO's Water Report 38: *Coping with Water Scarcity: an Action Framework for Agriculture and Food Security*. The proposed approach helps guiding decision-makers' choices among the range of available food supply options associated with water management. It distinguishes between 'supply-side' options, aiming at increasing the volumes of water available for food production, and 'demand-side' options that focus on efficient use of water for food production. It also acknowledges that options to cope with water scarcity lie both inside and outside the water domain, and extends the discussion beyond water to issues of national food security and trade, as well as reduction of food losses.



Defining water scarcity

Water scarcity occurs when demand for freshwater exceeds supply. This condition arises as consequence of a high rate of demand from all water-using sectors compared with available supply, under given institutional arrangements and infrastructural conditions. It is manifested by partial or no satisfaction of expressed demand, economic competition for water quantity or quality, disputes between users, depletion of groundwater, and negative impacts on the environment. Water scarcity is both a relative and dynamic concept, and can occur at any level of supply or demand, but it is also a social construct: its causes are all related to human interference with the water cycle. Water scarcity usually intensifies with economic development, but, if correctly identified, many of its causes can be predicted, avoided or mitigated. The three main dimensions that characterize water scarcity are related to: the physical availability of water to satisfy demand; the level of infrastructure development that controls storage, distribution and access; and the institutional capacity to provide the necessary water services.



The range of possible options to ensure food security under water scarce conditions will be assessed in terms of their effectiveness, cost, and technical, social and environmental feasibility. A rapid 'water accounting' will review the current status of water availability and use and the potential for further agricultural production, while a 'water audit' will review the policy and institutional environment that sustain water resources management. The 'food supply cost curve', a simple but powerful tool for identifying options for future food supply and assessing their cost, will be utilised. These analyses will be complemented with a gap analysis which will assess the performances of agriculture water management, through a benchmarking approach, in order to provide insight in the way the region and individual countries can bridge their food supply gaps in a cost-effective way.

Approach and expected results



The water scarcity initiative will review technical response options, and adopt a strategic and policy perspective to address them. To achieve this, it is planned to undertake reviews at regional and national levels and a wider review and knowledge sharing of experiences, within the framework of a regional Land and Water Days event.

A **Regional Review** will first assess the state of the art and knowledge gaps on water management for agriculture, placing it in the broader context of food security, water governance and major milestones in policies over the past 10-15 years in the countries of the region. It will identify major constraints and challenges, their causes, and possible remedial actions, and will be used to guide gap analysis at national level.

A series of **National Assessments** will be performed, based on three pillars:

- A **water accounting/water auditing** that will review the country's water resources, their use and the potential for improvement in its efficient use for agriculture; combined with a review of the policy and institutional environment that sustain water resources management;
- The development of a **water and food supply cost curve** that will review and compare agricultural water management and food supply options in terms of costs and expected benefits;
- A **knowledge gap analysis**, focusing on evidence-based findings, of the causes of successes or failures of past policies, strategies and programmes dealing with water management for agriculture. Benchmarking will be used extensively to assess performance gaps and the potential for improvement.



The Land and Water Days will take place in Egypt, from 16 to 19 September 2013 and will feed into the process by offering a space for knowledge sharing of relevant country and regional projects and case studies highlighting past experiences. Twelve technical themes have been selected in cooperation with most of the regional partners acting in the field of water resources management, in order to further analyse and learn from relevant experiences. The format is a knowledge sharing fair.

The Regional Review and the National Assessment will constitute the basis for the development of a **Regional Collaborative Strategy** on sustainable agriculture water management for increasing the level of food security in the countries of the Region.

Implementation modalities

The Initiative is a joint effort by FAO, member countries and their partners in the region.

National multidisciplinary teams (NMDT) are being established in each country to support and implement the initiative. The National Assessments will be performed through a series of national level studies, combined with national and regional workshops for the exchange of experiences and findings among the countries of the region. FAO will encourage the establishment of a network of focal points during the project implementation. The workshop will offer the opportunity for extensive exchanges of opinions.

Throughout 2013, the initiative will facilitate the development of a **Regional Partnership**¹ to support countries in the implementation of the collaborative strategy. The Partnership will gather representatives from member countries and international and regional organizations associated with the initiative who will meet at key stages of its implementation.

The findings and recommendations will be presented for endorsement to the 32nd FAO Regional Conference for the Near East in February 2014.

The FAO Regional Initiatives: a new way to operate



The Regional Initiative on Water Scarcity is part of a wider reform process in which FAO is embarking for the development and implementation of its programme of work and collaboration. A result-based approach to planning has identified five major strategic objectives that will guide efforts by FAO and its partners in the forthcoming years. They cover food security; sustainable agriculture; poverty reduction; efficient food systems; and resilience to shocks.

Regional initiatives reflect the priorities expressed by the member countries. They are based on the principles of country ownership, participation and partnership. They focus on innovations and enhanced collaboration between the countries of the region. They stress the needs for multidisciplinary approaches to addressing problems, both within the member countries, at FAO, and with international and regional partners. At FAO, regional initiatives rely on a strengthened collaboration between decentralized offices and headquarters in order to better serve member countries.

The Regional Initiative on Water Scarcity in the Near East is part of Strategic Objective 2 of FAO's new Strategic Framework entitled 'Increase and improve provision of goods and services from agriculture, forestry and fisheries in a sustainable manner' (SO2). The Initiative is being implemented by a multidisciplinary team lead by the Regional Office for the Near East (RNE) and the Land and Water Division (NRL). The FAO team in charge of the initiative is coordinated by Abdessalam Ould Ahmed (Assistant Director General, Regional Office for the Near East, RNE) and Pasquale Steduto (Deputy Director, Land and Water Division, NRL), Focal points in charge of the implementation of the Initiative are Chifa Tekaya (RNE), and Mohamed Bazza, Jean-Marc Faurès and Jippe Hoogeveen (NRL).

Strategic Objective 2 is coordinated by Clayton Campanhola (Director, Plant Production and Protection Division).

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¹ Potential partner institutions include International and regional financing institutions (World Bank, IFAD, AfDB, IsDB), International research centers/institutes (CIHEAM, ICARDA, IFPRI, IWMI), UN and other development organizations (ESCWA, UNDP, WFP, UNESCO, UNEP, IDRC, USAID, GTZ) and Regional organizations (Arab League, AOAD, Gulf Cooperation Council (GCC), UMA; Arab Water Council and CEDARE).