



# ADVANCING THE CLIMATE CHANGE AGENDA IN AGRICULTURE AND FOOD SECURITY IN THE NEAR EAST AND NORTH AFRICA

A FORUM TO BE HELD AT FAO HEADQUARTERS, ROME  
FROM 9 TO 10 NOVEMBER 2009

The **FAO Investment Centre**, in collaboration with the **World Bank** and the United Nations Rome-based agencies (the **International Fund for Agricultural Development [IFAD]** and the **World Food Programme [WFP]**), proposes to hold a forum centred on advancing the climate change agenda in the **Near East and North Africa (NENA)** region by analysing operational mechanisms and mobilizing the financial resources required to mainstream adaptation and mitigation measures into agriculture and rural development projects.

As climate change becomes a more serious threat to agricultural production worldwide, existing agricultural systems are being questioned and are facing greater challenges for the future, both from the mitigation side (as a greenhouse gas emitter) and from the adaptation side (ensuring food production for a steadily increasing world population). The ongoing negotiations under the United Nations Framework Convention on Climate Change (UNFCCC) for the post-2012 regime, which will culminate in December 2009 in Copenhagen (COP 15), are seriously considering the agricultural sector, recognizing that it is part of both the challenge and the solution.

The proposed **Forum** will take place at the Food and Agriculture Organization of the United Nations (FAO) headquarters in Rome **from 9 to 10 November 2009**, preceding the **FAO Conference** (18-23 November 2009) in order to allow the participation of senior decision-makers from the region.

## Climate Change in the NENA Context

The NENA region, extending from Morocco in the west to Iran in the east, includes some of the most arid countries in the world. The Fourth Assessment Report (November 2007) of the Intergovernmental Panel on Climate Change (IPCC) suggests a worsening of climatic conditions in this region, i.e. increases in temperature of 1-4°C in the short term and up to 9°C during June to August towards the end of the century; and a decrease in mean annual rainfall of 20 percent in the long term along the Mediterranean coast. Indeed, observations and evidence of impacts of climate change in the region are growing, despite the fact that there are still important knowledge gaps.

Severe droughts in the region are increasing in frequency; precipitation patterns are unpredictable and likely to worsen with climate change, resulting in an increase in drought, desertification and land degradation; more intensive water shortages in human settlements and for agriculture; and a decrease by half in the yields of some rainfed crops. Agricultural productivity will be affected by reduced rainfall, changes in planting periods and shorter growing seasons.

According to the recent United Nations – League of Arab States' (UN-LAS) meeting in June 2009, current estimates are that the percentage of degraded land in the region amounts to 68.4 percent of the total area, of which 97.8 percent is attributed to human factors, thus underscoring the failure of land use policies, natural ecosystems management and agricultural production systems in the region. In fact, the scarcity of land and water resources and the lack of fertile soil in the region have aggravated the risks associated with land degradation. Climate change, its ensuing effect on the availability of water resources, increasing population pressure, recurrence of drought cycles, overgrazing, firewood

collection, irrational use of water in irrigation, abusive tillage, agricultural mismanagement and random cultivation of land, are all factors that exacerbate land degradation and desertification.

The agricultural land area in the region represents 0.48 percent of the global agricultural land. The per capita share of agricultural land receded in 2001 to 0.22 ha, compared with 0.25 ha in the early 1990s, whereas the global average is 2.19 ha. In 2006, the total cultivated land area was estimated at 70 million ha, of which 70 percent is used annually while the rest remain unused.

It is expected that the fisheries sector will be negatively affected by the rise in water temperatures. Climate change will also lead to a rise in sea level along the coasts of East Africa and in the Nile Delta, which will raise the risk of flooding in these areas, increase coastal erosion and degrade natural ecosystems, including coral reefs as well as marine and coastal biodiversity.

Such adverse climate change impacts can undermine efforts by countries to achieve the Millennium Development Goals (MDGs) and to attain targeted economic and social development goals, threatening food security, reducing income opportunities, and causing deterioration in public health conditions.

Climatic changes and the rounds of drought will drastically undermine food security, especially in terms of food availability, accessibility, stability and use. The threat posed by climate change to regional food security overrides other threats, especially in most arid and desert areas. It is anticipated that the Arab countries shall grow increasingly more dependent on agricultural plant and animal imports while losing their market shares of agricultural trade.

Furthermore, climate change impacts could degrade the livelihood conditions of large parts of the population in the region, leading to increased migration and/or relocation of population and labour force whether within one country or among contiguous countries, thus increasing pressures on the environment and natural resources and creating the potential for increasing conflicts over resources.

Eventually, it is estimated that the cost of adaptation to these conditions could reach between 5-10 percent of the countries' gross national product.

### **NENA Countries' Response to Climate Change**

The countries of the NENA region are seeking to address the challenges of climate change. To this end, they have launched the development of the "Arab Framework for Action on Climate Change", based on the Arab Ministerial Declaration issued during the 19<sup>th</sup> Session of Ministers Responsible for Environment held in December 2007. This Framework is being developed primarily by the specialized regional organizations with support from UN agencies.

The Ministers declared their determination to, *inter alia*:

- incorporate policies to deal with climate change issues in all sectors within national and regional policies for sustainable development in a manner that will be in harmony with sustained economic growth and efforts to eradicate poverty;
- adopt national and regional action plans dealing with climate change issues in order to assess possible impacts and develop mitigation and adaptation programmes;
- ensure that adaptation measures addressing climate change are fully consistent with economic and social development, in order to achieve sustainable economic growth and eradication of poverty;

- ensure that adaptation programmes focus particularly on provision of necessary infrastructure to reduce potential risks. This will include appropriate mechanisms for risk insurance, as well as improvement in the management efficiency of natural resources.

On this basis, the League of Arab States proposed a series of programmes in the area of climate adaptation, including the sectors of climate, water, land, biodiversity, agriculture, forestry, seas and coastal areas. These programmes include actions for cooperation on monitoring and evaluation of Climate Change impacts, particularly in fragile ecosystems; on water management; land management; and scaling-up successful pilot activities.

### **Forum Partners' Response to Climate Change**

#### **FAO**

FAO assists member countries, particularly developing countries most vulnerable to climate change, to enhance their capacities to confront the negative impacts of climate change and variability on agriculture and food security. This has to be achieved within the context of an increasing population and demand for food and other agricultural products while maintaining or even improving the natural resource base for future generations. Through its multidisciplinary expertise in agriculture, forestry, fisheries, aquaculture and livestock, FAO facilitates an integrated approach to climate change adaptation and mitigation. FAO's core principles in climate change interventions are the following:

- integrating food security and climate change concerns into development planning;
- developing a multidisciplinary approach – a corporate FAO response;
- searching for a systems approach with synergies in mitigation, adaptation and sustainable food production;
- ensuring ecosystem integrity and sustainable natural resource management as a foundation of adaptation and mitigation strategies;
- working in a demand driven, location specific and participatory approach;
- addressing adaptation and mitigation as an ongoing social learning process;
- blending local knowledge with scientific know-how;
- integrating spatial and temporal scales across sectors;
- considering gender specific needs and priorities of indigenous communities;
- assuring pro-active communication and knowledge sharing;
- promoting synergies among the international conventions on climate change, desertification and biodiversity;
- promoting targeted investments for a climate friendly and climate resilient agriculture.

During the FAO Regional Conference for the Near East and North Africa, held in Cairo, Egypt, in March 2008, member countries of the region requested FAO and other concerned organizations to assist them in conducting further assessments of climate change impacts at the regional and national levels and building the region's resilience to the phenomenon through capacity development and adaptation measures. In response to this request, the FAO Regional Office for the Near East and North Africa has adopted climate change as “**a priority area for coordinated multidisciplinary action**” in its current and future mid-term work plans and integrated climate change activities in the regular and field programmes of all the concerned sectors. A multidisciplinary Working Group has been established with the mandate to identify and move forward an agenda for climate change, creating synergies and coordinating both locally and with headquarters and other organizations.

In the NENA region, the UN agencies established in 2008 the UN Thematic Working Group on Climate Change (TWG-CC) under the framework of the Regional Coordination Mechanism (RCM) led by ESCWA and guided by the UN Chief Executives Board (CEB). The main objective of the Group is to

enhance collaboration among UN agencies on climate change related programme planning and implementation as well as assisting countries in the region in addressing their technical and capacity building needs focusing on regional-level activities. To this end, the June UN-LAS meeting identified priority actions on adaptation and mitigation on i) Land and Water Resources Management, Desertification, Drought and Biodiversity; ii) Forest and Food Security (Agriculture, fisheries and aquaculture); iii) Carbon Capture Storage; as well as on cross-cutting issues such as capacity building, integration of Climate Change issues in development planning, and risk reduction. These actions will need support for their implementation.

## **IFAD**

As a lending institution focused on reducing rural poverty and hunger, IFAD primarily funds government operations that seek to strengthen rural livelihoods through sustainable improvements in access to natural resources and in their management. IFAD-supported programmes in the Near East and North Africa place particular emphasis on conserving water, improving water-use efficiency and on combating desertification, soil degradation and deforestation. These programmes also support the following intervention areas relevant to climate change adaptation and mitigation:

- more efficient use of scarce natural resources, e.g. through improved land-use practices, and improved conservation of soil and water;
- reduced vulnerability of local livelihoods, e.g. through expansion in microfinance activities, support to SMEs and diversification of livelihoods;
- increased productivity and improved technologies, e.g. through developing and adopting new cultivars or crop varieties, resistant to increased aridity or other potential effects of climate change and through promoting technologies for water-reuse.

Additionally, through its grant programme, IFAD supports research, testing and scouting for innovations on both adaptation and mitigation of climate change in agriculture. IFAD collaborates closely with other partners and funding institutions (such as the Global Environment Facility [GEF], the Global Mechanism to Combat Desertification, the World Bank, the United Nations Development Programme [UNDP], the International Centre for Agricultural Research in the Dry Areas [ICARDA] and FAO) to design and fund projects that improve the resilience of the rural poor and their livelihoods to the effects of climate change.

## **Objectives of the Forum**

The overall goal of the **NENA Climate Change Forum** is to advance the agenda for investment in climate change adaptation and mitigation measures in the broad agricultural sector (including water and land management, forestry and livestock) in order to respond more effectively and efficiently to the challenges of ensuring national food security and alleviating rural poverty.

More specifically, the **Forum** will:

- provide a platform for the exchange of information on current demand and supply with respect to investments in agriculture and rural development within the climate change framework among key regional and national climate change actors and development partners - UN organizations and international financing institutions (IFIs);
- formulate a road map for collaboration between the participants, based on identified comparative advantages, to ensure mainstreaming of climate change adaptation and mitigation in all agriculture and rural development programmes and projects in the region.

Clearly the decisions to be made by COP 15 affecting the agricultural sector (including forestry, water and land management, livestock) might create new funding opportunities or facilitate access to existing financial mechanisms. The road map would help ensure, through a division of tasks, that such opportunities would be incorporated in the support provided to the countries.

The **Forum** will also benefit from the conclusions and recommendations of the *International Conference on Food Security and Climate Change in the Dry Areas* organized by ICARDA in October 2009.

### **Participants**

The **Forum** will gather key national leaders from the member countries and officials from regional organizations in NENA, as well as representatives from the development partners active in the region. In particular, the forum will be open to the Ministers for Agriculture later attending the FAO Conference.

The following is a preliminary list of participants to be invited to the **NENA Climate Change Forum**:

#### **Countries**

All 18 countries of the NENA region will be invited to attend the **Forum**.

#### **Regional institutions**

Arab Academy for Science and Technology (AASTMT)  
Arab Centre for the Studies of Arid Zones and Drylands (ACSAD)  
Arab Organization for Agricultural Development (AOAD)  
International Centre for Agricultural Research in the Dry Areas (ICARDA)  
League of Arab States (LAS)  
Dept of Environment, Housing and Sustainable Development, LAS Secretariat  
Arab Labour Organization (ALO)  
Organization of Arab Petroleum Exporting Countries (OAPEC)

#### **UN Organizations/IFIs**

International Fund for Agricultural Development (IFAD)  
World Food Programme (WFP)  
Global Mechanism (GM)  
World Bank (WB)  
Global Environment Facility (GEF)  
Islamic Development Bank (IsDB)  
African Development Bank (AfDB)  
United Nations Development Programme (UNDP)  
United Nations Environment Programme (UNEP)  
United Nations Framework Convention on Climate Change (UNFCCC)

#### **Private Sector/Civil Society**

Banks, agribusiness and international/regional carbon brokerage companies (to be determined)

## PROVISIONAL AGENDA

A provisional agenda for the **NENA Climate Change Forum** is shown in the following table:

<b>MONDAY, 9 NOVEMBER</b>	
09:30 hours	<ul style="list-style-type: none"> <li>• Opening – Introductions by Partner Institutions</li> </ul>
10:15 hours	<ul style="list-style-type: none"> <li>• Climate Change Adaptation/Mitigation in the NENA Context</li> </ul>
11:15 hours	<ul style="list-style-type: none"> <li>• Identifying the Needs of the NENA Region – Country Inputs</li> </ul>
12:15 hours	<ul style="list-style-type: none"> <li>• Addressing the Needs – Activities Identified/Planned – Partner Priorities</li> </ul>
13:00 hours	<ul style="list-style-type: none"> <li>• Lunch</li> </ul>
14:30 hours	<ul style="list-style-type: none"> <li>• Addressing the Needs (cont.) – Activities Identified/Planned – Partner Priorities</li> </ul>
15:15 hours	<ul style="list-style-type: none"> <li>• Analysing Financial Mechanisms and Potential Sources of Funding</li> </ul>
16:15 hours	<ul style="list-style-type: none"> <li>• Reaching Agreement on COP 15 for NENA Countries</li> </ul>
16:45 hours	<ul style="list-style-type: none"> <li>• Analysing the Role of Partners in Financing or Accessing Funding Sources</li> </ul>
<b>TUESDAY, 10 NOVEMBER</b>	
09:30 hours	<ul style="list-style-type: none"> <li>• Summary of Conclusions from Day 1</li> </ul>
09:45 hours	<ul style="list-style-type: none"> <li>• Peer-to-Peer Discussions</li> </ul>
11:30 hours	<ul style="list-style-type: none"> <li>• Establishing a Collaboration Roadmap</li> </ul>
12:30 hours	<ul style="list-style-type: none"> <li>• Closing Remarks</li> </ul>
13:00 hours	<ul style="list-style-type: none"> <li>• Lunch</li> </ul>
14:30 hours	<ul style="list-style-type: none"> <li>• Free Time for Individual Meetings</li> </ul>