



International Conference on:

## Food Security and Climate Change in Dry Areas

1-4 February 2010, Amman, Jordan



### AMMAN DECLARATION ON FOOD SECURITY AND CLIMATE CHANGE IN DRY AREAS February 2010

The Intergovernmental Panel for Climate Change and agricultural development experts have highlighted that the world's dry areas will be severely affected by climate change, putting at high risk agricultural production, food security and human livelihoods in these already vulnerable areas, and urgent coordinated efforts are essential to develop both effective climate change adaptation strategies and mitigation measures. More than 200 policy decision-makers and scientists from 29 countries from across the globe met in Amman, Jordan, on February 1-4, 2010 at the **International Conference on Food Security and Climate Change in Dry Areas**.

#### **Recognizing that:**

- The temperate and semi-tropical dry areas occupy about **40 percent of the earth's total land area** and are home to 30 percent of its people, the majority located in the developing world. Of these, a large proportion, especially the poorest and most marginalized, live in rural areas practicing mixed crop/livestock/rangeland production systems.
- **Characterized by water scarcity**, the dry areas have less than eight percent of the world's renewable water resources and are challenged by frequent droughts, extremes of temperature, land degradation and desertification. **Poverty is disproportionately concentrated in dry areas**; population growth rates are high; women and children are highly vulnerable and 16 percent of children are malnourished. Out-migration is common.
- Climate change will have serious implications for further **degradation of natural resources, including the unique biodiversity**, and **increase already existing food insecurity and poverty**.

#### **We, the participants of the Conference, pledge to:**

- **Establish and participate** in an **international food security and climate change network** that will identify and share adaptation, mitigation and ecosystem resilience solutions to enhance food security to counter the effects of climate change in dry areas.
- **Mobilize science, technology, and human, physical and financial resources** to support research and integrated development activities, and enhance regional and international cooperation.
- **Promote the following specific actions** within national, regional and international organizations, with private sector partners, and in particularly farming communities.

## **ACTIONS**

To enhance food security and reduce vulnerability to climate change, the following activities are prioritized for emphasis and action.

### **1. NATURAL RESOURCES ( LAND, WATER and BIODIVERSITY)**

- **Collect and ensure the long term conservation and utilization of biodiversity, including crop wild relatives and landraces**, before it is lost.
- **Focus explicitly on water conservation, productivity and sustainable management** of increasingly scarce water resources in rainfed and irrigated production systems with the participation of land- and water-users.
- **Address land degradation** through integrated **agro-ecosystem-based** approaches, including crops, livestock and rangelands, aiming for overall food production system resilience and sustainability.
- **Promote the net, long-term sequestration of carbon** in soils and above ground biomass within dryland land use systems.

### **2. FOOD PRODUCTION SYSTEMS:**

- **Develop crop varieties and animal breeds resistant to drought, extreme temperatures, salinity and other stresses**, and integrated soil, crop, pest and disease management practices.
- **Diversify and improve the management of farming systems**, including the use of crop rotations, conservation agriculture, effective and efficient use of water and other agricultural inputs.
- **Identify and implement strategies** to enhance **adaptation which will further mitigate greenhouse gas emissions** (CO<sub>2</sub>, CH<sub>4</sub> and N<sub>2</sub>O) within **mixed crop/livestock/rangeland systems**.

### **3. POLICIES AND INSTITUTIONS:**

- **Strengthen policies and institutional structures** that enhance the **adoption of improved technologies** and promote the **sustainable and equitable use of common biological, water, and land resources, particularly rangelands**.
- **Reinforce and increase investments** in national, regional and international agricultural research systems to enhance their **agricultural research and development programs** to improve food security and cope with climate change.
- **Ensure that 'climate change-proofing'** is comprehensively considered in all governmental and private sector initiatives, policies and development strategies.
- **Strengthen capacity development in research and technology transfer**.

### **4. ENERGY:**

- **Develop sources of renewable energy (solar, wind, etc.)** for sustainable food security and mitigating the effects of changing climates.

### **5. REGIONAL INITIATIVES:**

- **Establish a Regional Commission for Food Security and Climate Change in dry areas involving all stakeholders** to enhance **regional cooperation** in matters related to food security and climate change, with **ICARDA** taking the **coordinating role**.
- Establish a **regional network** for weather monitoring, and market information, and a dissemination system for farmers towards adapting their planting, efficient watering and harvesting decisions.
- **Establish knowledge system** on the **adaptation and resilience practices** in response to climate change, particularly **drought and extremes of temperatures**.

The fragile dry areas of the world are at the forefront of the international battle to confront the effects of the climate change, and we the participants of the Amman Conference on Food Security and Climate Change, pledge to **work together with farming and livestock communities to adapt and cope with the effects of climate change towards enhancing food security.**

**We appeal to the scientific community, policy makers and the donor community, as well as national, regional and international organizations, to give priority in their research, investments and activities, towards enhancing food security and coping with climate change implications in dry areas.**

We request ICARDA to coordinate implementation of this declaration by all partners and to keep all stakeholders informed on developments in this regard.

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*The International Conference on Food Security and Climate Change in Dry Areas*, 1-4 February 2010. Amman, Jordan. Organized by: National Center for Agricultural Research and Extension (NCARE), Ministry of Agriculture, Hashemite Kingdom of Jordan, and the International Center for Agricultural Research in the Dry Areas (ICARDA).

In partnership with:

AARINENA (Association of Agricultural Research Institutes of the Near East and North Africa)

APAARI (Asia Pacific Association of Agricultural Research Institutions)

Bioversity International

CACAARI (Central Asia and the Caucasus Association of Agricultural Research Institutions)

GFAR (Global Forum on Agricultural Research)

FAO (Food and Agriculture Organization of the United Nations)

IDRC (International Development Research Centre)

MESF (Middle East Science Foundation)

OFID (OPEC Fund for International Development)

SRSF (Scientific Research Support Fund), Ministry of Higher Education and Scientific Research, Hashemite Kingdom of Jordan

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