

THE CHALLENGE OF FEEDING A GROWING POPULATION AS CLIMATE GETS HOTTER AND DRIER



JOIN our SESSION

Coping with Climate Change in the Middle East and North Africa (MENA) Region:

Meeting Future Food Demand through Science & Innovation

When: **November 16, 15:00 – 16:30**

Where: **Green Zone, Room 1**

PANEL DISCUSSION

The Adaptation of African Agriculture initiative and the Role of MENA in Supporting It

KEY SPEAKERS

Rachid Mrabet, Research Director, INRA Morocco and Member of COP22 Scientific Committee
resources Ensuring climate resilience of agro-ecosystems and sustainable management of natural resources

Mr. Aly Abousabaa, Director General, ICARDA
Agricultural technological innovation in MENA in the context of climate change: Are we up for the challenge?

Mark Rosegrant, Director of IFPRI's Environment and Technology Division
The role of agricultural policy reform and investment in meeting future food and nutritional security in MENA

Dr. Riad Balaghi, INRA Morocco
Climate Risk management: Experience of Morocco

Come and explore the potential of today's science advances to:

- increase food production
- cope with increasing water scarcity
- avert degradation and desertification

... under a hotter and drier climate



Boosting food production in MENA against climate change

Seizing the Opportunity with Science & Technology

MENA's Climate Change Plight

Climate change in the Middle East and North Africa (MENA) region is posing a serious threat to the region's already fragile food supply. Today, the region's agricultural production systems are able to meet only half of its food requirements – MENA countries are the world's largest food importers. As changing climate patterns make these agro-ecosystems hotter and drier, the region's capability to produce food is diminishing at a time when food demand from a rapidly growing population is increasing. This creates a scenario of uncertainty and volatility in markets and an impending threat to the region's food and nutrition security, along with political stability.

MENA's food production capability is in urgent need of improvement. The region suffers from constraints that include water scarcity, degraded soils, and outdated production technologies that are ill-equipped to respond to temperature and water stresses, and new disease and pests emerging from climate change. Further, the fresh water availability, already at half the per capita amount needed for overall well-being, is decreasing.

An urgent action plan is needed that can help MENA countries adapt to climate change in a strategic and systematic way, so they can boost resilience and increase the productivity of their agricultural systems.

Increasing rain-fed productivity: the low-hanging fruit in MENA

The farming systems in MENA perform far below their potential. The wide yield gaps offer a **potential to triple yields in rain-fed production systems** that dominate the MENA region.

Science and Innovation Game-Changers for MENA

ICARDA, INRA and other countries in the region have demonstrated a range of agricultural tools, technologies and practices that can substantially and sustainably improve food production and enhance the resilience of farming systems and communities. There is clear evidence from several countries that these technologies, when backed by enabling policies, have a transformative impact when scaled out. This opens the door for decision-makers in MENA countries to significantly improve their food and nutrition security, despite the harsh conditions brought by changing climate patterns.

The key to achieving climate-smart increases in food production lies in integrating improved technologies and practices, such as below, tailoring the “packages” to suit the natural potential of agro-ecosystems:

- Advanced varieties of crops staple to the region – bread and durum wheat, barley, chickpea, lentil and faba bean – that are high yielding and tolerant to drought, heat, salinity, and disease and pests
- Water-saving technology packages such as mechanized raised-bed planting that reduce irrigation water use by 25% and increase crop yields by 30%
- Cereal-legume cropping systems that sustainably intensify production systems, while adding new income source for farmers and building resilience in production systems
- Integrated crop-livestock systems that secure the livelihoods of farmers even under harsh conditions and create new levels of food, nutrition and income security, especially for rural women

Join us in discussions with leading science and policy experts on the MENA region

Organized and
co-hosted by:

