



#### **MISSION**

To demonstrate the value of marginal and saline water resources for the production of economically and environmentally useful plants, and to transfer the results of our research to national services and communities

### MANDATE

To help water-scarce countries improve the productivity, social equity and environmental sustainability of water use through an integrated water resource systems approach, with special emphasis on saline and marginal quality water

## FOREWORD



The International Center for Biosaline Agriculture (ICBA) is a strong international center of excellence for Research and Development in marginal environments. All its activities since its inception in 1999 are to improve the livelihood of small farmers in different saline regions in the world.

Established in 1999 under the visionary leadership of the Islamic Development Bank and the United Arab Emirates, the Center has received generous support from its host country (the United Arab Emirates), the Arab Fund for Economic and Social Development, the OPEC Fund for International Development and the International Fund for Agricultural Development.

The major thrusts of ICBA's research programs are focused on salt-tolerant plants, water management, governance and policy, and soil management. Capacity building and knowledge-sharing is an important component in all ICBA programs.

Food security is a major issue worldwide and in many regions it is closely connected to water security. To ensure food security, agriculture is expected to feed a population that will number 9.1 billion in 2050, while providing income, employment and environmental services. These challenges to food security are compounded by climate change, bio-energy and land degradation.

To meet these complex challenges, ICBA conducts research for development in marginal environments to ensure food security through diversification of crop species, soil management, and the use of conventional and nonconventional water resources (saline, treated wastewater, industrial water and sea water). We are looking for innovative technologies and partnerships to address the challenges of tomorrow.

Dr Ismahane Elouafi Director General

The Party of Court of Court

# GOVERNANCE

Headed by the Chairman, Mr Fawzi Al Sultan, the Board of Directors comprises currently eight members appointed by the Islamic Development Bank and the Center's host country, the United Arab Emirates. Members bring a diverse set of skills gained from operational, financial and research backgrounds in the agricultural and environmental arena. The ICBA Director General is an ex-officio member of the Board.

At the management level the Director General is supported by the Deputy Director General and three directors: Director of Research and Innovation; Director of International Cooperation and Partnerships; and Director of Finance and Administration.

## **FUNDING**

ICBA Research and Development programs have been expanded in line with increased budgets (core and grant funding) and partnerships.

#### **CORE FUNDING**



Ministry of Environment and Water, United Arab Emirates (MOEW)

Environment Agency-Abu Dhabi (EAD)



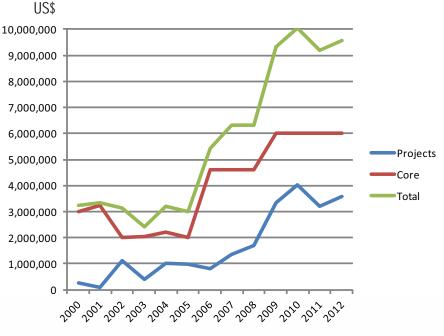


Islamic Development Bank (IDB)

#### **GRANT FUNDING**

The following organizations have funded projects undertaken by ICBA: Arab Bank for Economic Development in Africa (BADEA), Arab Fund for Economic and Social Development (AFESD), Australian Agency for International Development (AUSAid), Dutch Ministry of Foreign Affairs, European Union, Farmers Services Center in Abu Dhabi (FSC), International Fund for Agricultural Development (IFAD), Ministry of Agriculture and Fisheries in Oman (MAF), OPEC Foundation for International Development (OFID), United States Agency for International Development (USAID) and The World Bank (WB).

A Station Station



**ICBA Budget 2000-2012** 

# **ICBA RESEARCH AGENDA**

ICBA has been conducting Research and Development in the following areas:

- Crops diversification and development of production systems
- Water/irrigation management and policy
- Soil management and improvement

In the crop diversification and selection program we are focusing on the development of conventional and non-conventional production systems including vegetables, forages, halophytes, agroforestry and biofuels systems, suitable for marginal and saline environments.



Development of non-conventional crop production systems



Water management deals with developing new irrigation systems to optimally use irrigation water for better crop production and environmental protection. A critical aspect of water management is the formulation of policy instruments.

In the soil management program we are focusing on enhancing the soil health to guarantee productive soils for agriculture production. This is achieved through improving water and nutrient use efficiencies and salinity management.



Developing optimum irrigation management and monitoring systems

Soil salinity measurement and monitoring are pre-requisite for soil management

# **EXPERTISE**

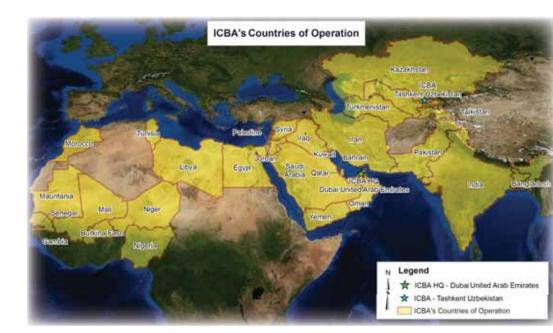
Currently ICBA has 54 staff with strong academic qualifications and multicultural diversity with 22 different nationalities represented in the following disciplines:

- Field and forage crop production and management systems
- Soil and land use management
- Irrigation management
- Plant genetic resources
- Molecular biology and biotechnology
- Water resources-modeling, governance and policy
- Agricultural socio economist
- Remote sensing and GIS
- Information management and networking
- Administration, finance and IT

## PARTNERSHIP

ICBA is implementing its programs in collaboration with a diversity of partners at national, regional and international levels. So far ICBA has partnered with 30 countries by working with:

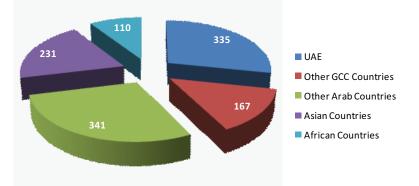
- National agricultural research systems (NARS)
- Ministries of agriculture, environment and water resources
- Universities
- Regional and international research centers
- Development agencies
- Private sector



### **TRAININGS**

From 2000 to 2012 ICBA has conducted many training programs at its Headquarter sin Dubai and internationally in partnering countries. These training programs were conducted mainly on plant production systems in marginal lands, soil and land use management, socio-economic assessments, and water resources management. A total of 1184 trainees from different regions received training at ICBA headquarters (567) and in partnering countries (617).

#### **Regional distribution of trainees**





## **PUBLICATIONS**

ICBA scientists have continued to disseminate the results of their research and development by publishing scientific papers in peer reviewed refereed international journals, conference proceedings, book chapters, books, and scientific newsletters and magazines. To date they have 145 publications to their credit. In addition, ICBA also publishes the "Biosalinity News" and "ICBA Annual Report".



# **ICBA FACILITIES**

ICBA has modern research and training facilities at its headquarters equipped with essential equipment. These facilities include:

- Gene bank
- Central Analytical Laboratory
- Plant Genetic Resources Laboratory
- Agronomy and Plant Physiology Laboratory
- Library
- Training and Auditorium
- Experimental farm
- Green houses
- Treated wastewater, low and high saline waters

International Center for Biosaline Agriculture (ICBA) PO Box 14660 Dubai United Arab Emirates Tel +971 4 336 1100 Fax +971 4 336 1155 Email icba@biosaline.org.ae

www.biosaline.org