

Workshop on Protected Agriculture



وزارة البيئة والمياه
MINISTRY OF ENVIRONMENT & WATER



Food and Agriculture
Organization of the
United Nations



Funder: Ministry of Environment and Water of the United Arab Emirates

Partners:

- Food and Agriculture Organization of the United Nations (FAO)
- International Center for Biosaline Agriculture (ICBA)
- International Center for Agricultural Research in the Dry Areas (ICARDA)
- Technical University of Berlin (TUB)

Project Lead at ICBA:

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For more information and other publications visit www.biosaline.org

“Unlocking the potential of Protected Agriculture in the GCC countries: cutting water consumption while supporting improved nutrition and food security”

Date: 14-15 September 2015

Venue: International Center for Biosaline Agriculture (ICBA) head office, Dubai-Al Ain Road, Al Ruwayya 2, near Zayed University, Dubai, United Arab Emirates

Agenda

14 September – Monday

- 08:15-08:45** **Transfer from hotel to ICBA**
- 08:45-09:00** **Registration of participants**
- 09:00-10:00** **Opening session**
Welcome address, Dr. Ismahane Elouafi, ICBA Director General
Communication by the Ministry of Environment and Water of the UAE, H.E. Mr. Abdelrahim Mohamed Al Hammadi, Undersecretary of the Ministry of Environment and Water
Statement by Dr. Azaiez Belgacem, Coordinator Arabian Peninsula Regional Program, ICARDA
Setting the scene, background and rationale, Dr. Pasquale Steduto, FAO
- 10:00-10:30** **Tea break**
- 10:30-13:00** **Technical Session – I (The Publication Project)**
- 10:30-10:45** Introducing the Workshop objectives and discussion of the Report-outline, Dr. Wilfred Baudoin, FAO
- 10:45- 11:00** Overview of Protected Agriculture worldwide, Dr. Redouane Choukr-Allah, ICBA
- 11:00- 11:15** Status and prospect of agricultural development in GCC, Dr. Ahmed Al-Massoum, United Arab Emirates University
- 11:15-11:30** Outlook of Protected Agriculture in GCC countries: constraints and opportunities for greenhouse production systems, Dr. Ahmed Moustafa, ICARDA
- 11:30-11:45** Greenhouses: the ultimate protected agricultural system, Dr. Ayman Abou Hadid, Ain Shams University (ASU)
- 11:45-12:00** Ecological footprint and bio-capacity, Dr. Shabbir A. Shahid, ICBA
- 12:00 12:15** New generation greenhouse, Dr. Martin Buchholz, Technical University of Berlin (TUB)
- 12:15-13:00** Discussion
- 13:00-14:00** **Lunch**
- 14:00-15:30** **Technical Session – II (Country reports)**
- 14:00-14:15** Bahrain, Isam Mustafa Abdulrazak

14:15- 14:30	Kuwait, Danah Fadel Al Ali
14:30-14:45	Oman, Muthir Saleh Said Al-Rawahy
14:45-15:00	Qatar, Ali El Kharbotly
15:00- 15:15	Saudi Arabia, Abdulmohsen Ibrahim vA. Binsulaiman
15:15- 15:30	United Arab Emirates, Shama Abdullah Rahma Al Shamsi
15:30-16:00	Discussion
16:00-16:30	Tea break
16:30-17:30	Technical Session – III (Way forward)
16:30-16:50	Road map, Dr. Wilfred Baudoin, FAO
16:50-17:10	Discussion and finalization of road map
17:10-17:30	Conclusions and recommendations, Dr. Pasquale Steduto, FAO

15 September – Tuesday – Field visit

08:30-11:00	Field visit to Agricultural Innovation Center of Al Dhaid where the prototype of NGGH is being installed, as well as tour of ICBA facilities
11:00-11:30	Healthy break
11:30-13:30	Wrap-up and closure of workshop
13:30	Lunch

Background

New generation greenhouse will help save up to 90% of irrigation water

MOEW, FAO, ICBA, ICARDA, and the reserach group Wateryg at TUB have joined forces to develop a prototype of a new generation of greenhouses (NGGH) at the Agricultural Innovation Center, Al Dhaid, Sharjah, the UAE. The new generation of greenhouses will help to save up to 90% of irrigation water and cut considerably on energy consumption. These benefits will serve to promote key protected agriculture solutions adapted to desert conditions and boost protected agriculture in the UAE and Gulf Cooperation Council countries.

The significant amount of water savings in this type of greenhouse can have additional advantages such as: productivity is five times higher than that in the open; pest, diseases and weed control considerably more effective than in the open; and zero pollution of groundwater compared with the open.

Considering that protected agriculture is a major source of food supply in the Middle East, new principles of evapo-condensation applied in this type of greenhouse will greatly boost productivity and water use efficiency across the region. This technology also offers excellent potential for using unconventional water sources like saline water and treated greywater. Thus, greenhouse production of both vegetable crops and fresh water is becoming a reality. This initiative is hoped to pave the way for much broader cooperation across the Middle East in this field.

The partnership between FAO, ICBA, ICARDA, and TUB will support the MOEW in unlocking the potential of protected agriculture using innovative technology and developing a complete business and environmental case on costs and benefits.

New generation greenhouse, scheme prototype at Al Dhaid, United Arab Emirates

