



## Virtual training course\* Artificial intelligence technologies for food security

11:00-13:00 Abu Dhabi time, Thursday, 17 September 2020

### Trainers



#### Dr. Khalil Ammar

Program Leader, Sustainable  
Natural Resources  
Management, Principal Scientist  
- Hydrology/Hydrogeology



#### Dr. Ali El Battay

Senior Scientist - Remote  
Sensing and Drone Technology,  
Chief Innovation Officer of FEDS



#### Mr. Rashyd Zaaboul

Modeler - Climate Change

International Center for  
Biosaline Agriculture (ICBA)

[www.biosaline.org](http://www.biosaline.org)

**Language:** Arabic

### Agenda

**11:00-11:15**

**Welcome remarks and introduction - Dr. Khalil Ammar**

**11:15-11:45**

**A.I. for Drone-Based Agricultural Intelligence - Dr. Ali El Battay**

Artificial intelligence (A.I.) combined with the Internet of Things (IoT) and big data are game changers when it comes to retrieving, compiling, and converting agricultural data into day-to-day decisions, national policies and strategies. From a smallholder level to a national level, the tremendous amount of data generated around the clock is useful only if there are equivalently sophisticated ways to digest and make use of the information available. This presentation will discuss how ICBA uses drones and A.I. techniques for seeding and planting and comprehensive agricultural surveying as part of broader research on such areas as surveillance systems for red palm weevil and rehabilitation of marginal environments. It will also share the possibilities, advantages and limitations of such techniques and technologies.

**11:45-12:15**

**How to improve agriculture for food security - Mr. Rashyd Zaaboul**

Lack of food is one of the most pressing issues today in many countries around the world, and specifically in Africa. According to the United Nations, more than 400 million farmers are considered food-insecure worldwide. This situation is largely attributed to the vulnerability of farmers to agricultural risks such as extreme weather events, conflicts and market shocks. Emerging technologies such as A.I. have been particularly promising for tackling challenges such as lack of expertise, climate change and resource availability. This presentation will focus on the use of A.I. at a small scale to address the challenges faced by farmers and how this can help to improve the overall production and productivity and minimize risks and negative impacts.

**12:15-13:00**

**Q&A**

\* For invited participants only