



## Training Session

### **“Evaluating the impact of climate change on agriculture and farmer’s decision using bio-economic models” – SupMed project 28-30 January, 2023 Beirut and Hermel - Lebanon**

#### **1. Training objectives**

The SupMed project aims to improve farmer’s resilience in Luxor (Egypt) and the Baalbek-Hermel (Lebanon) regions to climate change and market uncertainty. For this, the project will, in close interaction with local stakeholders, propose implement and evaluate agro-ecological practices and their socio-economic impacts.

A training session will be organised in Lebanon with concrete cases for local actors to take part in bio-economic modeling at local level. The objectives of this s training session will be threefold. Firstly, to introduce the bio-economic modeling methodology in a greater audience. Secondly, to describe and discuss the performance of current representative farm types in the Baalbeck-Hermel area. And lastly, to train the participants in farm-level bio- economic models for decision-making in complex issues, such as tradeoffs between competing issues (economic, agronomic, and environmental) or deciding between different conservation policies.

Participants in the session would be researchers, young researchers and key farmers in the area, as well as persons of the water users associations (WUA) managing the three hill lakes in the SupMed project focus area (Nahle, Medwi, and Bouday), in addition to leaders of the Union of Cooperatives in Bekaa. Selected agriculture extension engineers working in the Baalbek-Hermel area will also be invited to attend.

#### **2. Training program**

##### **Day 1: January 28, 2023**

*Speakers: Dr. Salem Darwich - Dr. Ahmad Fakhri - Dr Mohamad El Khansa*

09:30 - 10:30 : Brief Introduction to SUPMED.  
10:30 - 11:15 : Coffee break  
11:15 -13:00 : Bio-economic Modeling (BEM) in Agriculture: Concept and local examples.  
13:00 - 14:00 : Lunch  
14:00-15:30 : Presentation of the farm-types in Baalbeck-Hermel case study

### **Day 2: January 29, 2023**

*Speakers: - Dr. Ahmad Fakhri - Dr. Mohamad El Khansa*

09:00- 10:30 : Presentation of the selected scenarios and indicators  
10:30 - 11:15 : Coffee break  
10:15 - 13:30 : Presentation of the simulated results  
13:30 -14:30 : Lunch  
14:30 - 15:30 : Presentation of the simulated results

### **Day 3: January 30, 2023**

*Speakers: Dr. Salem Darwich - Dr. Ahmad Fakhri - Dr. Mohamad El Khansa*

09:00- 10:00 : Communication of the model to the participants and workshop on scenario simulations  
10:30 - 11:15 : Coffee break  
10:15 - 14:30 : workshop on scenario simulations