Advanced Course
FOOD SUSTAINABILITY ASSESSMENT: A METHODOLOGICAL APPROACH
Zaragoza (Spain) 21-25 October 2024

PROGRAMME

0. Opening session and programme presentation

1. Introduction (2 hours)
- 1.1. Concepts and analytical framework (1 h) (J. Valls)
  - 1.1.1. What is food system? Why sustainability is important? What are sustainability assessments?
  - 1.1.2. Impact of food production and consumption and food system resilience to shocks and threats. ¿Why sustainability is important?
- 1.2. International and national policy context
  - 1.2.1. The SDGS and The UN Food System Summit (0.5 h) (J. Valls)
  - 1.2.2. European framework: European Green Deal, Farm to Fork Strategy, New Circular Economy Strategy, Single Market for Green Products: Product Environmental Footprint (0.5 h) (J.M. Gil)

2. Food systems governance (3 hours) (D. Bojic)
- 2.1. Stakeholders' mapping
- 2.2. Coordination mechanisms and power relation
- 2.3. Prioritization of outcomes and dimensions, and defining criteria

3. Measuring sustainability (2 hours) (A. Arslan)
- 3.1. State of the art about measuring sustainability
- 3.2. Defining system boundaries
- 3.3. Designing measurable sustainable objectives
- 3.4. Quantitative and qualitative approaches
- 3.5. Issues in data availability: simple vs complex indicators
- 3.6. Creating and maintaining monitoring systems

4. Assessment methodologies (16 hours)
- 4.1. Global food systems sustainability indicators: type of indicators. True cost accounting (TCA) (2 h) (A. Arslan)
- 4.2. Environmental assessment
  - 4.2.1. Life Cycle Analysis (1 h) (M. Cidad)
  - 4.2.2. Environmental footprint (1 h) (M. Cidad)
  - 4.2.3. Water footprint (1 h) (M.M. Aldaya)
  - 4.2.4. Carbon footprint (1 h) (M. Aldaya)
  - 4.2.5. Practical exercise: assessment of the environmental footprint of seafood product and water footprint of a drink (3 h) (M.M. Aldaya, M. Cidad)
- 4.3. Socio-economic assessment (4 h) (J.M. Gil)
  - 4.3.1. Life Cycle Cost
  - 4.3.2. Extended Cost-Benefit Analysis
- 4.4. Food and nutrition composite indicators (3 h)

5. Synergies and trade-offs among environmental, social, economic and nutritional assessments. Resolution of conflicts (4.5 hours)
- 5.1. Synthetic indicators (5.1 to 5.3: 3 h) (Z. Kallas)
- 5.2. Participatory tools
- 5.3. Mathematical tools
- 5.4. Practical exercise on resolution of conflicts (1.5 h) (J.M Gil, Z. Kallas)

6. The example of the nexus water-energy-food (4 hours) (A. Rhouma)
- 6.1. Why considering the nexus water-energy-food
- 6.2. State of the art about indicators to measure the nexus water-energy-food in rural and urban areas

7. Round table discussion: how to engage public and private actors in assessing sustainability of food systems? (2 hours) (J.M. Gil, Z. Kallas, A. Rhouma, S. Gil)