

**MEASUREMENT AND ACTIONS TO REDUCE FOOD LOSSES AND WASTE AND ENHANCE
FOOD SYSTEM SUSTAINABILITY**

Zaragoza (Spain), 29 May -2 June 2023

PROGRAMME

- 1. Opening Session and Presentation of the Course (1 hour)**
- 2. Introduction (1 hour) (J.M. Gil)**
 - 2.1. Identifying the problem
 - 2.2. Why is it important to address this issue?
 - 2.3. Current figures
 - 2.4. Underlying drivers of FLW
 - 2.5. FLW hierarchy and potential interventions: basic concepts
- 3. FLW: the concept (2 hours) (R. Rolle)**
 - 3.1. Food Losses (1 hours)
 - 3.1.1. Mapping flows of food and resources
 - 3.1.2. Causes (macro, meso and micro)
 - 3.2. Food Waste (1 hours)
 - 3.2.1. Mapping flows of food and resources
 - 3.2.2. Causes (macro, meso and micro)
- 4. Institutional FLW quantification and Reporting (2 hours) R. Rolle)**
 - 4.1. FAO approach to measure food losses
 - 4.2. UNEP approach to measure food waste
 - 4.3. EU approach to measure food losses and waste
- 5. FLW: Theoretical framework and strategic approaches to design and implement interventions (6 hours)**
 - 5.1. Theoretical frameworks (3 hours) (J.M. Gil)
 - 5.1.1. Related to FL
 - 5.1.2. Related to FW
 - 5.2. Experimental design (3 hours) (M. Vittuari)
 - 5.2.1. Related to FL
 - 5.2.2. Related to FW
- 6. Policy oriented interventions to reduce FLW (4 hours)**
 - 6.1. Information and educational approaches: Nudging and behavioural change strategies to increase awareness (1 hour) (H. Bos-Brouwers)
 - 6.2. Financial and market-based instruments (1 hour) (H. Bos-Brouwers)
 - 6.3. Regulatory instruments: international and national strategies, laws and regulations (1 hour) (H. Bos-Brouwers & R. Rolle)
 - 6.3.1. EU Donation Guidelines
 - 6.3.2. Waste to resources: legislative barriers, technical options and sustainability considerations
 - 6.4. Voluntary agreements and multi-stakeholders' partnerships (1 h) (1 hour) (H. Bos-Brouwers & R. Rolle)
- 7. Action oriented interventions to reduce FLW across the food supply chain (6 hours)**
 - 7.1. Upstream segments of the food supply systems (3 hours) (T. Candeal)
 - 7.1.1. At the farm level
 - 7.1.2. At the processing level
 - 7.1.3. At the wholesale level
 - 7.2. Downstream segments of the food supply systems (2 hours) (H. Bos-Brouwers)
 - 7.2.1. At the retail level
 - 7.2.2. At the food service (restaurants and public canteens)
 - 7.2.3. At home
 - 7.3. Food distribution and social protection (1 hour) (M. Vittuari)

- 8. Impact assessment of Interventions to reduce Food Losses and Waste (4 hours) (L. Garcia-Herrero ó JM Gil)**
 - 8.1. Evaluation Framework (2 hours)
 - 8.1.1. Experimental design
 - 8.1.2. Effectiveness
 - 8.1.3. Efficiency
 - 8.1.4. Sustainability of the action over time
 - 8.1.5. Transferability and scalability
 - 8.1.6. Intersectoral cooperation
 - 8.2. Complementary Tools (1 hour)
 - 8.2.1. FAO Tools
 - 8.2.2. European Commission Tools
 - 8.3. Trade-offs and burden shifting: how to prioritize interventions (1 hour)
- 9. Practical work (6.5 hours) (M. Vittuari, JM. Gil, L. Garcia-Herrero)**
 - 9.1. Exercises on quantification
 - 9.2. Exercises on impact assessment
 - 9.3. Presentation of results
- 10. Final Round table: What´s next? (2 hours) (L. García-Herrero, Ana Diez, R. Rolle, M. Vittuari, J.M. Gil)**