



Multi-actor design of low-waste food value chains through the demonstration of innovative solutions to reduce food loss and waste

**LOWINFOOD**

## PRACTICE ABSTRACT No: 14

### Research against food waste in a multi-actor approach

What gets measured, gets managed. This famous quote also applies to the fight against food loss and waste (FLW).

Measuring the amounts of FLW, and their impact, is crucial to understand which initiatives and innovations can really help. For example, innovations that process FLW into bio-based materials can be beneficial because of the reduction in waste but may not make sense from an environmental perspective because of the additional energy/resource input required. Or they can generate new income and jobs in the bio-based packaging industry at the expenses of the waste management industry, which requires a calculation of the net gain. Also, a holistic approach is necessary to avoid shifting FLW from one sector to another. For a future implementation of promising innovations, an appropriate evaluation is therefore essential.

Measuring food waste requires the involvement of the people who work every day in food companies, restaurants, catering etc. Hence, LOWINFOOD researchers apply a multi-actor approach to involve different actors of the food supply chain. In this collaboration, researchers look at robustness of methods for the evaluation, practitioners contribute with making these methods feasible in real life. This can be challenging, but also beneficial when used for selected aspects.

The evaluation of innovations to prevent and reduce FLW is conducted for the efficacy as well as the environmental, social, and economic impacts. Two systems are compared:

- Conventional food supply chain (baseline); the system before implementation of innovation and
- Low-waste food supply chain (monitoring); the system after the implementation of innovation

The main challenge is finding the most robust but at the same time most feasible data collection method. The experience within LOWINFOOD showed that partners can judge quite well, which method can successfully be applied. This decreases the risk of failures and increases the quality of data.

#### Author(s)

Silvia Scherhauser (BOKU)  
Clara Cicatiello (UNITUS)  
Gudrun Obersteiner (BOKU)  
Simone Piras (JHI)  
Claudia Giordano (UNIBO)

#### Contact

Clara Cicatiello  
cicatiello@unitus.it

#### Country/region

Europe



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### Additional information

The complementary knowledge of multi-actors can join forces for a successful implementation of innovations to cut down food wastage. Mutual discussions about barriers and solutions as well as shared knowledge of best practices but also of failures can stipulate a transformation from business as usual to a more efficient and sustainable business.

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### ABOUT LOWINFOOD

The LOWINFOOD project, launched in 2020 and coordinated by the University of Tuscia, Italy, is working to deploy and improve a set of 14 innovative solutions to the food waste problem, by demonstrating their effectiveness and market potential. The core activities of the project are all focused on the evaluation of the efficacy of these innovations in reducing food losses and waste, in terms of the amount of food waste avoided as well as their environmental and socio-economic impact.

### CONSORTIUM



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