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A Food Loss Definitional Framework for the European Union

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Abstract

The issue of food loss and waste (FLW) encompasses social, environmental, and economic dimensions, which is why it is addressed at both the European Union and Member State levels. One of the key steps in this effort was the European Waste Directive 2018/851 and Delegated Decision 2019/1597, which defined the concept of food waste and established the minimum requirements for its measurement in the EU, mandatory for Member States. However, this European legislation on food waste measurement does not cover the entire agri-food chain, as it begins at the post-harvest stage, leaving earlier stages unmonitored and the magnitude of the problem unknown. This gap is intended to be addressed with the introduction of the Food Loss Definitional Framework for the European Union, which is also referenced in the revised Waste Framework Directive 2025/1892. Accordingly, this document aims to provide substance to a concept that is not yet fully consolidated in European legislation, and which has been part of the European FOLOU project (HE FOLOU Project, 2023). Throughout this presentation, this definition is analysed in detail, both at the semantic level and in terms of key parameters. Accordingly, FL includes: Stages: encompassing the sub-stages of pre-harvest, harvest, and post-harvest; Material type: including both the edible and inedible parts; Intention: products whose original intention was human consumption; Utilization: if the final product destination is put back into the ground, composted on-farm, incinerated on-farm, discarded at sea, or managed as waste by a company without a waste management license. This general framework has been tested with various real case studies to assess its alignment with this new concept at the European level. Accordingly, the following main food categories are considered to fully align with the general framework: Fruits and vegetables; Cereals and pulses; Roots, tubers, and oilseeds; Aquaculture products. Only meat and dairy products have required adjustments to the general framework to accommodate their specific characteristics. With all of this, the aim is to present a definition of food loss that is fully aligned with the already established European Union concept of food waste, avoiding both overlaps and gaps between them, and thus allowing the analytical framework to extend to stages prior to post-harvest. This approach facilitates a more holistic analysis and understanding of the problem across the entire system. Moreover, this concept aligns with the FAO definition of food loss (FAO, 2019), used for SDG 12.3, analysing their interrelations to adapt it for the EU context and facilitate comparability and synergies.

Keywords: food loss, measurement, definition, quantification, food security

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