



Methodology for Food Loss Quantification (FOLOU Project)

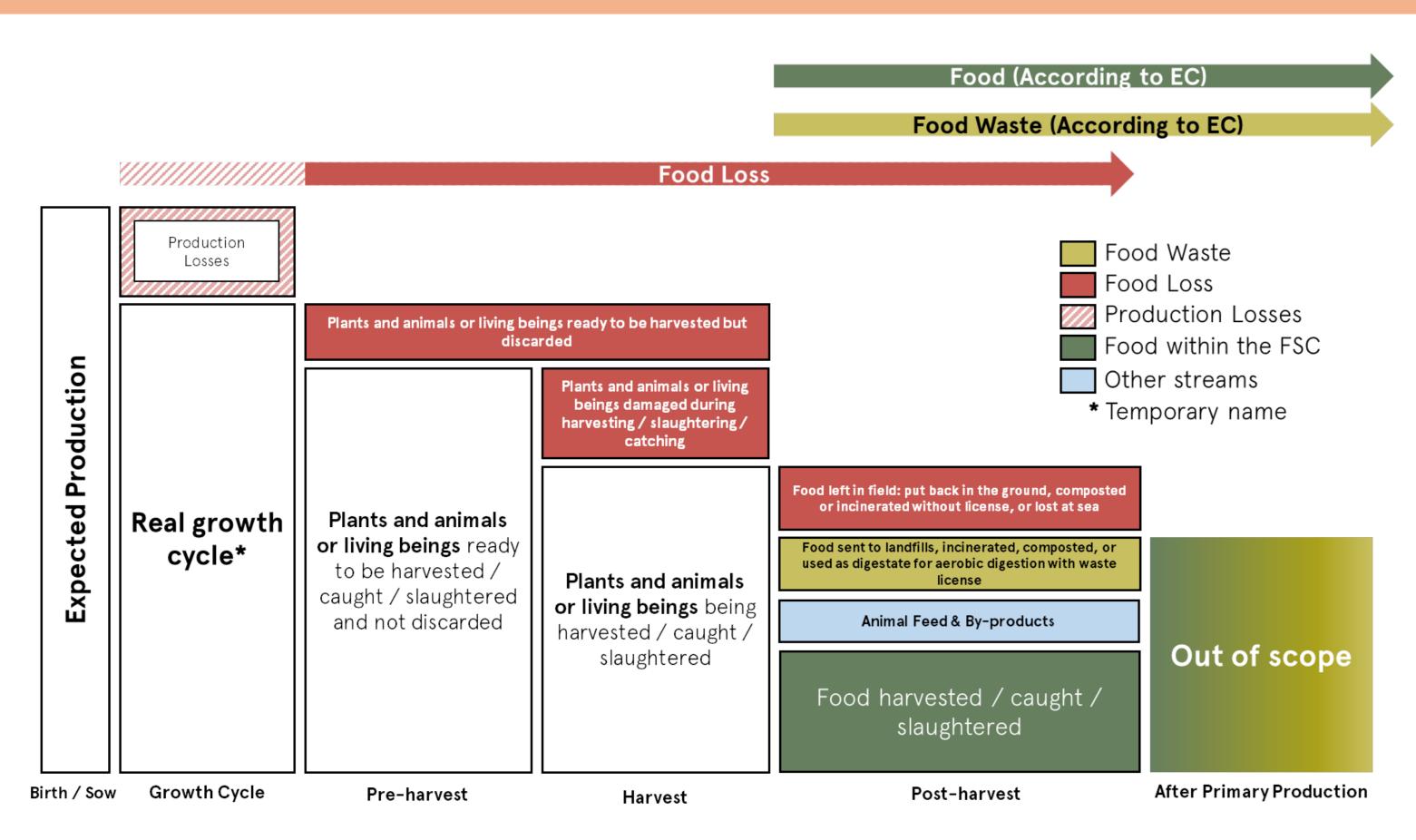
Héctor Barco Cobalea (circular@espigoladors.com), Berta Vidal Monés (zerowaste@espigoladors.com), Raquel Díaz Ruiz (raquel@espigoladors.com)

Fundació Espigoladors, Barcelona, Catalonia - Spain

OBJECTIVE

This methodology aims to serve as a foundation for quantifying parts of the food supply chain that are currently excluded from the concept of food waste as proposed by the European Commission, primarily from the pre-harvest and harvest stages, for which there is currently no regulation for measurement. As a result, the magnitude of the problem remains unknown, and there are no incentives for its potential reduction. This methodology seeks to be adaptable to different food commodities and territories both within and even beyond outside the European Union, particularly at two levels: on the farm level as well as at the territorial level (local, regional, and national).

METHODOLOGY AND RESULTS



A definition of food losses has been proposed that aligns with the current European Union definition of food waste, serving as another "piece of the puzzle" to support a comprehensive analysis of the issue across the entire agri-food chain. The proposed definition is as follows: Food loss is any harvest-mature plant, animal or living being (including inedible parts) that is not successfully harvested, as well as food removed from the supply chain during post-harvest phase that does not become animal feed, by-product or food waste

The development of this methodology has been supported by the experience of the partners involved in the European FOLOU project, as well as the review of external experts on food losses and case studies being conducted within the project, specifically in fruits and vegetables in Spain, meat and dairy in Ireland, mussels in Italy, potatoes in Belgium, and salmon in Norway.

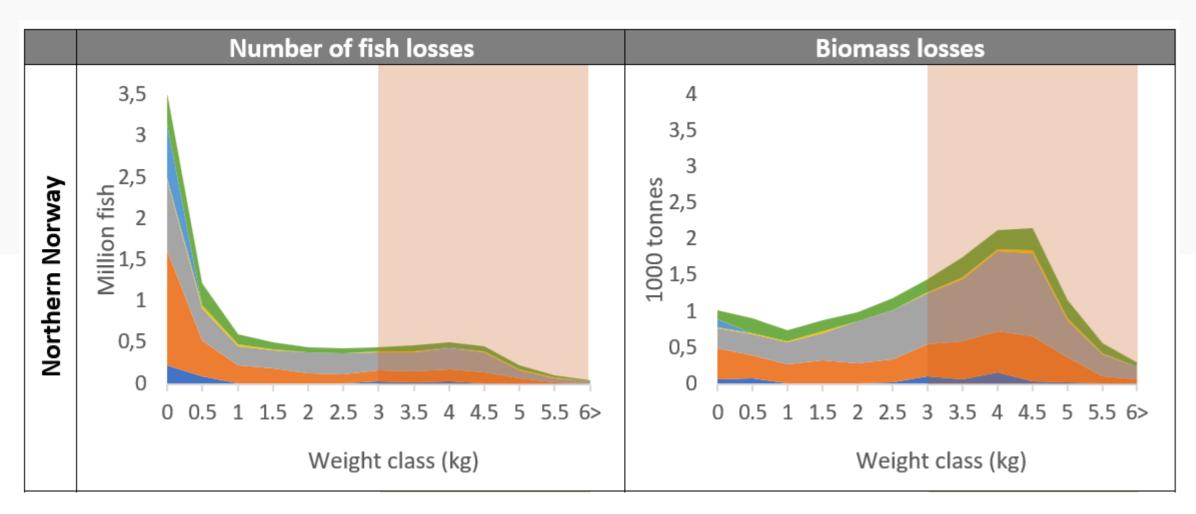








Image of measured losses in wheat, mussels, oranges, and potatoes. Sources: Università Politecnica delle Marche, WWF & Espigoladors and University of Ghent



Salmon losses from salmon producers in Norway. The pink area represents the size of food losses. Source: NORCE & AquaCloud

A solid version of the methodology is already in place, which presents key aspects for measuring losses, such as **What to measure**, **Where to measure**, and **How to measure**, along with the insights gained from the case studies and the initial figures obtained in most of these food commodities. The testing of the methodology is not only being carried out for different types of food, but also for various production types: **conventional**, **organic**, **and agroecological**.

SIGNIFICANCE AND IMPACT OF THE STUDY

This methodology aims to help standardize loss measurement processes not only across Europe but also beyond, enhancing the comparability of results and fostering synergies across various studies. The goal is for future European regulations to encompass policies for the analysis and reduction of food losses and waste across the entire supply chain.

CONCLUSIONS

It has been concluded that a **feasible methodological approach exists** to quantify stages of the supply chain that were excluded from the food waste definition established by the European Commission, across different food commodities and various territories within and outside the European Union.

This project has received funding from the European Union's Horizon Europe research and innovation program, under Grant Agreement: 101084106.































