HOW TO MEASURE FOOD LOSS?

A PRACTICAL GUIDE TOWARDS HARMONISED QUANTIFICATION

FOLOU Policy Brief D7.5

This policy brief is addressed to

- Primary producers
- Representatives of producer organisations, interbranch organisation, farmers' association, etc.,
- Agricultural advisors and
- Agricultural researchers.

The problem: Food lost before it leaves the farm

Each year, a substantial amount of food produced does not make it past the farm gate and is lost in the primary production sector. According to FOLOU research, the main reasons include:

- Adverse weather, pests and diseases damaging harvest-ready crops
- Crops ploughed back into the soil due to overproduction or not meeting marketing standards
- Crops remaining unharvested due to low market prices
- Animals and seafood lost during transport or cleaning processes

The magnitude of this problem is currently unknown, although according to recent estimates **25% of food loss and waste in the EU may occur before or during harvest** (Agora Agriculture, 2024)**.**



The impact – why it matters

Food loss is a lose-lose situation for all actors in the supply chain as well as society at large:

- **Farm income:** you carry the full cost of seeds, feed, labour, water and energy for food that is never sold.
- **Environment:** the water, land, soil, fertilisers and energy used are wasted, and food left to decompose in the field causes emissions that product footprints do not capture today.
- **Rural economies:** losses reduce regional income, jobs and access to nutritious food.

RISK: SHIFTING THE BURDEN ONTO FARMERS

As long as food loss is not measured, its impacts remain uncertain and low on the policy agenda. When reduction targets apply only downstream, buyers can partly meet them by tightening specifications or cancelling orders. The surplus then reappears as unrecorded loss on farms.

The policy context

The EU concept of food waste only considers post-harvest/post-slaughter losses and waste. Primary production food loss is thus not addressed in the harmonised measurement methodology and reporting framework nor in the binding reduction targets recently adopted in the Waste Framework Directive (2008/98/EC).

The goal: Measuring food loss the same way everywhere

The first step to managing food loss reduction effectively is **its systematic, consistent and continuous accounting**. This makes food loss visible and thus creates the public support that pushes politicians and downstream actors into taking the necessary measures for its reduction.

The FOLOU Food Loss Quantification Methodology is specifically targeted to this:



- It is based on a **definition** of food loss filling the gap between production losses (prior to crop harvest or animal slaughter) and food waste (after crop harvest or animal slaughter). This ensures everyone is talking about the same thing and avoids double counting with other reporting frameworks.
- It has been **co-developed** with experts in the field, international institutions collecting food loss and waste data and practitioners in the primary production sector. This ensures that the methodology is relevant and practical for the actors involved.
- It includes both **traditional** field-based procedures **and emerging technologies** (e.g. autonomous image-based measurements with drones or tractor-mounted cameras).
- It has been **standardised in CEN/CENELEC[1] Workshop agreement CWA 18410:2026** and is taken into consideration in the development of ISO standard ISO/TS 20008 on food loss and waste quantification methods. Standardisation is essential to harmonise food loss quantification internationally and make results comparable across countries and regions.

1) https://www.cencenelec.eu/media/CEN-CENELEC/CWAs/RI/2026/cwa18410_2026.pdf

The pathway towards implementation

Measurement works best when the sector is involved from the very beginning. Food loss data then become a shared tool rather than an external obligation.



1 TEAM UP

Farmers, producer organisations, administrations, advisors, and researchers agree on scope, aim and logistics



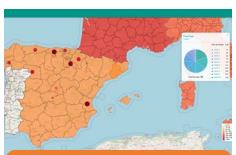
2 LEARN

Free online course "Measuring Food Loss" and the Quantification Manual



3 MEASURE

Delve into the FOLOU field guides and carry out food loss measurements on the ground



4 SHARE

Make results publicly available by feeding them into a central database and spread the word



5 REPEAT

Repeat measurements at regular intervals to track progress over time

For more information, refer to complete "A practice guideline for policy makers" and the complementary "D7.4 Policy Brief on the FOLOU Food Loss Registry".

All resources available here:

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