Implementation of a food loss and waste prevention and reduction plan in agri-food companies: principles and guidelines



1. Introduction

Since the Food and Agriculture Organization of the United Nations (FAO) revealed in 2011 that food losses and waste (FLW) represented one third of the food produced annually for human consumption, FLW have become highly relevant at an international level.

Although the debate on FLW has entered the political and public agenda in recent years and despite the existence of certain discrepancies, there is a clear consensus on the importance and urgency of preventing and reducing FLW throughout the agri-food chain. Thus, in 2015, the 2030 Agenda of the United Nations Organization (UN) added objective 12.3 to the Sustainable Development Goals (SDG) in order to "halve per capita global food waste at the retail and consumer levels and reduce food losses along production and supply chains, including post-harvest losses".

In addition, the European Commission (EC) has begun to mobilize the tools at its disposal to encourage all agents in the agri-food chain to integrate the prevention and reduction of FLW to their activity. Recently, in Directive (EU) 2018/851 of the European Parliament and of the Council of 30 May, amending Directive 2008/98/EC on waste, an official definition of the term "food waste" has just been agreed. In addition, this Directive states that by 2019 the EC will publish general guidelines on how to submit information on food waste, and by 2023 the Member States should submit the respective data and begin to include specific measures in order to prevent and reduce the aforementioned waste.

In Catalonia, the Catalan General Waste and Resource Management and Prevention Programme 2020 (PRECAT20) sets out the objective of reducing food waste by 50% compared to 2010 in the last stages of the chain, while proposing to establish a quantitative objective to reduce FLW in the primary and agri-food sectors, within which wholesale distribution is included.

In this context, it would not be surprising if the prevention and reduction of FLW were to become mandatory in the coming years. The prevention and reduction of FLW will become a key objective for companies in the agri-food chain.

2. What is food loss and waste?

Currently, there is no official and agreed definition of food loss and waste. This Guide offers a proposal, although companies may adapt it while waiting for this concept to be defined by the competent bodies.

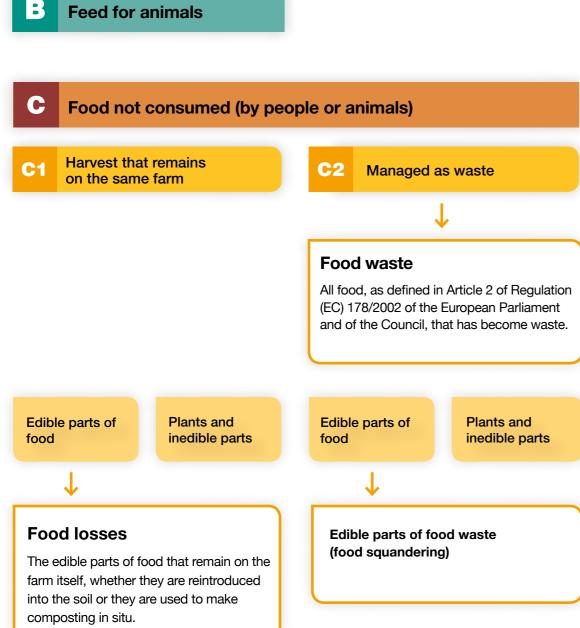
In this Guide, we propose a definition of FLW aligned with the definition of food waste recently approved in Europe in Directive (EU) 2018/851 and through discussions at an international level in the framework of the SDGs and FAO.



In order to define food losses and food waste, the possible destinations of food produced for human consumption have been taken into account.





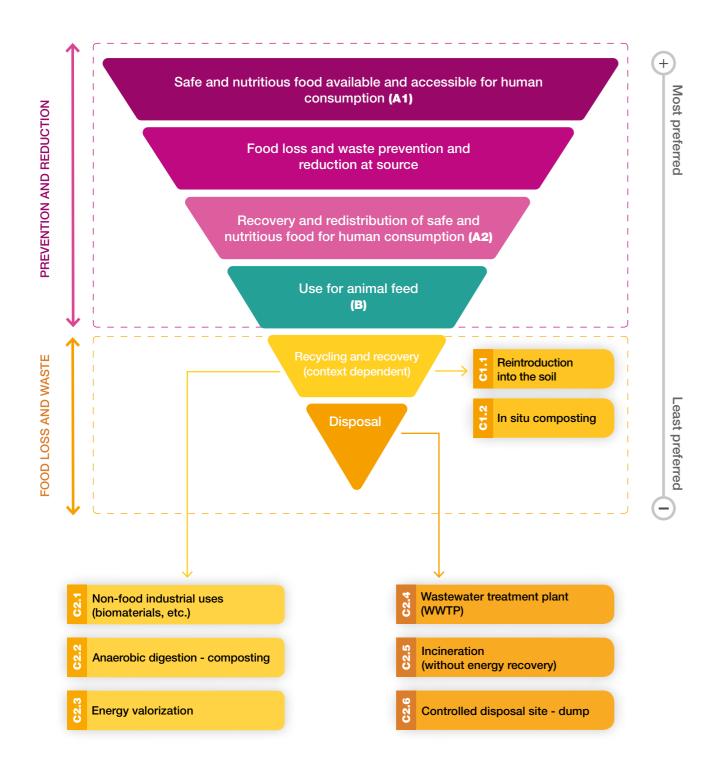


The scope of FLW is the food production supply chain (vegetables, animals and fungi) intended for human consumption. Crops intentionally cultivated for bioenergy, feed, seeds or other non-food industrial uses are excluded. This scope begins to apply once production has become food (according to Regulation (EC) 178/2002).



3. What is the food use hierarchy?

The food use hierarchy proposed in this Guide prioritizes the purposes of food produced for human consumption.



What is food loss and waste prevention and reduction?

The prevention and reduction of FLW is the reduction of FLW in terms of volume, either because FLW generation is avoided in the first place (prevention and reduction at source) or because alternative uses not considered to be FLW have been sought, such as free distribution of food (A2) and animal feed (B).

We should highlight the role played by technological innovation, non-technological innovation and social innovation when seeking solutions for the prevention and reduction of FLW. Prolonging the shelf-life of products, searching for new food ingredients or alternative markets for commercialization, investing in the design of the production process or creating new forms of co-operation with food production agents are some examples of how innovation contributes to the prevention and reduction of FLW.

What is a food loss and waste prevention and reduction plan?

The food loss and waste prevention and reduction plan (FLWPRP) is a document through which the company:

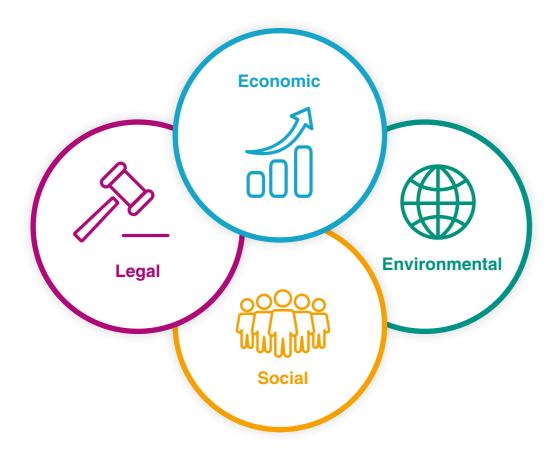
- ✓ Expresses its COMMITMENT to the prevention and reduction of FLW.
- ✓ Displays the data obtained in the QUANTIFICATION of FLW and their evolution over the years.
- ✓ Identifies the main CAUSES of FLW and defines their prevention and reduction actions.
- ✓ Identifies the CRITICAL POINTS of FLW generation and defines corrective measures.
- Defines the personnel AWARENESS AND TRAINING strategy.
- ✓ Defines the COMMUNICATION strategy of the data and the results achieved.

We begin on the premise that the main objective for any business activity or agri-food production is to improve the efficiency of its procedures.

In this sense, agri-food sector companies already regularly carry out many FLW prevention and reduction actions in their facilities and farms. However, whenever a company develops a process for the exhaustive analysis of its procedures, it can identify previously undetected margins for improvement.

We must also bear in mind that FLW generation does not only depend on each individual company's internal efficiency. In many cases, FLW that occurs at one stage in the chain has its root in a previous or subsequent stage or is due to causes beyond the company's scope of responsibility. In this sense, the FLWPRP enables a reflection on the effects of each company's actions, both inside and outside its facilities or farms. It also highlights the crossed effects of the actions of the other food production agents.

Benefits of implementing a food loss and waste prevention and reduction plan



Legal

The FLWPRP allows work to begin on FLW prevention and reduction actions or to raise awareness about such actions, in preparation for the possibility that FLW prevention and reduction becomes a legal requirement in the future.

Economic

The prevention and reduction of FLW entails being more efficient in the use of economic resources and, therefore, a reduction of the costs arising from the production and elimination of products.

Social

Consumers
and customers
are increasingly
beginning to demand
that agri-food
companies
incorporate a social
approach and make
efforts to prevent
and reduce FLW.

Environmental

The prevention and reduction of FLW implies greater efficiency in the use of natural resources and, therefore, a reduction of the environmental impacts arising from the production and elimination of products.

7. Objectives of the Guide

The objective of this Guide is to offer recommendations and tools so that companies interested in beginning to work on FLW prevention and reduction actions or raising awareness about such actions can develop a FLWPRP in a simple way. Having a FLWPRP is a voluntary decision. Following the recommendations in this Guide is also a voluntary decision.

8. Who is the Guide for?

The Guide is aimed at companies in the agri-food sector that produce or commercialize food for human consumption. It provides specific recommendations for primary production, wholesale and processing stages in the chain.

9. Structure of the Guide

The Guide is structured in three large information blocks:

The first block contains the 10 principles for developing and implementing a FLWPRD. 2

The second block includes 3 chapters with recommendations for the primary production, wholesale and processing stages, with indicators and suggestions for the 10 principles and examples of companies already working on FLW prevention and reduction.

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The third block of annexes contains support resources, success stories and reference documents for the preparation and implementation of the FLWPRD.

10. 10 principles to develop and implement a food

QUANTIFICATION STRATEGIC OBJECTIVES PROCESS FLOWS ANALYSIS AND PERSON PREVENTION IN CHARGE

Principle 1

Define the strategic objectives that will guide the focus of the entire FLWPRP in the long term.

Principle 2

Appoint a person in charge or a work team to develop all phases of the FLWPRP.

Describe the production process flows in order to identify the product's sources and purposes and be able to quantify the FLW generated.

Principle 3

Principle 5

Principle 4

Quantify the FLW.

Second, define

methodology.

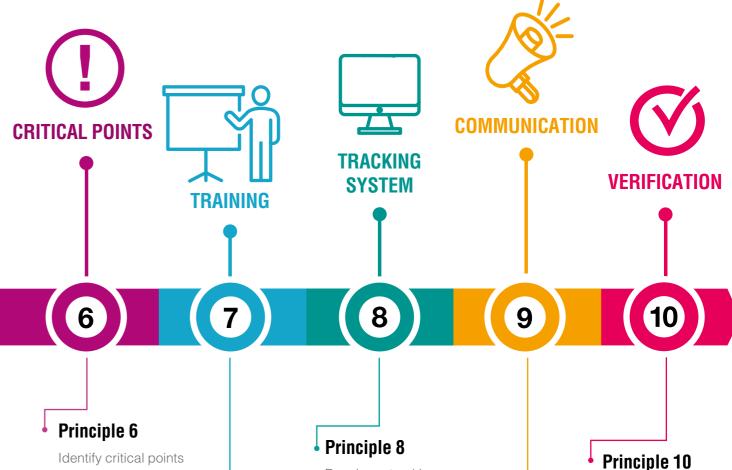
Third, quantify.

the quantification

First, define the scope.

Analyse the causes and define and implement FLW prevention and reduction actions.

loss and waste prevention and reduction plan



and define corrective measures (reasons, critical limits).

Principle 7

Train staff in the FLW prevention and reduction.

Develop a tracking, documentation and registration system for the entire FLWPRP.

Principle 9

Communicate the results achieved and establish messages to be disseminated and their recipients (inside or outside the company).

Verify and update

the FLWPRP.



Together we save food

In collaboration with:









