



FOLOU

Responses provided to the comments made by attendees during the webinar "Defining Food Loss in the European Union Framework – Challenges and Significance"

14th March 2024



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Acknowledgements

Firstly, we would like to express our gratitude to the numerous experts in the field who not only attended the webinar but also actively participated by posing questions to the speakers and engaging in fascinating debates among themselves.

Secondly, in order to preserve these vital conversations aimed at standardizing methodologies and concepts, we propose a series of responses and comments to the main questions raised in the chat channel and Slido program. Thus, we intended to compile all these questions and comments and categorize them by theme.

Of course, if there is any issue that was not addressed and you believe it would be valuable to include in the document, please do not hesitate to contact us. Our email addresses are provided at the end of the document.

Furthermore, if you would like to continue these dialogues or simply if you have any difficulty understanding any of our responses, please feel free to reach out to us. Additionally, we have gathered your interests for future meetings via Slido in the form of working groups to address and agree on specific aspects discussed in the webinar.

Once again, thank you very much for everything.

Kind regards,

Espigoladors and FOLU Team.

Topic: “Any living being” within the food losses definition.

- Comment 1: "any living being" is quite legally challenging in this definition. I would say we can refer to the codex alimentarius categories for food, if not already clarified by the EU, to use a coherent reference point.
- Comment 2: I don't understand "living being", what else is there than plants and animals?.
- Comment 3: "any living being" legal challenge. refer to the codex alimentarius categories for food, if not already clarified by the EU, to use a coherent reference point.

The inclusion of the expression "living being" was aimed at covering any living organism that could be considered "food," present or future, beyond those identified as "animals" or "plants," which obviously cover the vast majority of food items. However, in order to be meticulous and precise, and to include any possibility, no matter how small, outside of these two main groups, it has been deemed appropriate to include this option. Here, all types of edible mushrooms could be included. This is especially relevant in today's times where the "famous" five kingdoms of living organisms have evolved towards more complex models:

[https://www.cell.com/trends/ecology-evolution/fulltext/S0169-5347\(19\)30257-5](https://www.cell.com/trends/ecology-evolution/fulltext/S0169-5347(19)30257-5)

In any case, this has been a highly demanded issue in the webinar, so possible alternatives will be considered, including reference to the food categories proposed by the Codex:

<https://www.fao.org/gsfaonline/foods/index.html?collapse=86>

Topic: “Harvest losses” the suitability with the EU measurements and SDG linkages

- Comment 1: Harvest losses are optional and at the country-level can be included in the SDG Index. It was excluded from the international Index because its measuring is complex and production data, that is net of harvest losses, would need to be changed. Harvest losses need to be added to production, if not well measured it can introduce an error to the total loss percentage along the supply chain, that uses production as denominator. Since the EU does not require loss percentages along the supply chain, this might not be a problem for the EU compared to the SDG. But interesting details that are presented. (In the Silo app, the writing goes from right to left in my case...).

Indeed, in the case of the United Nations, and the Sustainable Development Goals (SDGs) in particular, there are so-called harvest losses that can be quantified optionally, within indicator 12.3.1.a, while pre-harvest/pre-slaughter processes are framed within SDG 1.5 (Extreme events).

In this case, we consider it not particularly important whether certain flows are studied within one SDG or another, as long as there is ultimately a quantification process for the entire agri-food chain.

For the United Nations, the existing question is whether the development of different indices (12.3.1.a/12.3.1.b and 1.5) could behave as "watertight compartments," analyzing only the study framework that each of them encompasses, making it impossible to also provide a global view of the entire agri-food chain. This would identify causes that arise in one part



of the chain but whose effects in the form of food losses, food waste, pre-harvest losses, and/or harvest losses occur in another.

In the case of the European Union, this risk is much more evident as all stages prior to post-harvest are excluded from the mandatory food waste quantification process. This exclusion from the mandatory quantification process may lead to demotivation among different Member States and even result in the abandonment of their measurement policies, as these stages are not required for annual reporting by the Commission.

Topic: Waste license and food losses definition

- [Comment 1: What is a waste license?](#)

Waste management processes and their valorization can be carried out with companies officially registered as such, and therefore, information on the managed/valorized waste is sent to the waste statistical system of the different Member States, which in turn report to the EU.

Topic: Outsourced losses

- [Comment 1: Outsourced losses to country of consumption is in conflict with EU MS reporting obligations to the EU. How do you look at / propose to deal with this conflict?](#)
- [Comment 2: Could you please explain the reason you said FL should be allocated to the country there food is consumed?](#)

Within the FOLOU European project, addressing outsourced losses is not among its main objectives. However, it is a term and a phenomenon that we want to bring to the table to analyze the level of support among different stakeholders and experts for it to be a topic to address in the near future. This aims to prevent us from solely focusing on creating a sustainable "European Union" without looking beyond borders, and the impact that our consumption may be having on third countries outside the European Union.

Furthermore, a key aspect would also involve who should address the issue of waste/losses that may be generated and recorded in third countries, but due to the demand from European Union countries.

Therefore, this new perspective requires, first and foremost, a consensus on its relevance to be addressed and analyzed. From there, it is necessary to establish methodological foundations that allow for compatibility between the current EU recommendations for measuring food waste and the analysis of its impact beyond the EU borders.

Topic: Economic loss and quality lowering aspects

- [Comment 1: Are you proposing to include economic loss as well \(quality lowering\)?](#)

No. Only and in line with what is defined for the quantification of food waste in the EU, the quantification is only proposed in terms of mass losses.

Topic: Slaughtering phase and possibilities within the food losses and food waste definitions

- [Comment 1: Are losses during slaughtering completely excluded or are they part of a different stage/sector?](#)

Complex question. Before the expert review, we would have said yes, since the slaughtering process would fall under the processing stage, and therefore, it would be within the realm of the term "food waste" and not "food losses." However, after the expert review, the situation becomes more complex, as until the post-mortem check, it would not be considered "food." Therefore, there is a gap between the slaughtering process and the post-mortem check, and if there is a discard between these two processes, it would be considered "waste" but not "food." Hence, there is doubt as to whether, despite these nuances, this information still goes to the waste statistics service. Therefore, even though it may not be terminologically considered "food waste," it is actually being recorded as such, and therefore, it cannot be considered "food losses" to avoid double accounting of a flow.

Therefore, there is doubt as to whether, either a discard occurs between the slaughtering process and the post-mortem check, or the post-mortem process does not pass, the information still goes to waste statistics or not. If not, in order to avoid gaps in the flows and if it is not collected under any other concept such as "by-product," "animal feed," or the mentioned "food waste," in that case, it could be considered as food losses. This will be a task that we will try to clarify in the coming months.

Topic: the possibility of including algae within the case studies and main food commodities

- [Comment 1: What about algae? Not included in any of these groups](#)

FOLOU will carry out various case studies on common food typologies in people's daily intake, such as fruits, vegetables, cereals, roots and tubers, milk, fish, etc. Unfortunately, a specific case study has not been defined to address the nutritional possibilities of seaweed intake and its potential loss issues. Given the evident lack of data regarding food losses, it has been decided, in the first instance, to prioritize those food typologies most common in intake, and therefore, more likely to generate a greater volume of losses in absolute terms.

However, it is considered essential to have more projects and studies on specific food typologies that contribute to this knowledge of losses, especially if this process of aggregation can be carried out through similar quantification methodologies, which will allow for comparability processes and the establishment of synergies between studies. FOLOU aims to propose, in line with past initiatives both at EU and non-EU levels, to continue paving the way to improve these processes of methodological standardization in the measurement of food losses.



Topic: Animal feed

- [Comment 1](#): I agree with XXX. Some crops, eg. starch potatoes are clearly not intended for food consumption but still farmers plant them and get paid for it. So it shouldn't be considered as food loss
- [Comment 2](#): YYYY. I agree with you on that. If its grown with the intention to go to feed I dont think its a food loss. Feed production is not a food loss, but for example carrots becoming feed is a food loss (I think it depends on the intention of the production)
- [Comment 3](#): Or cereals produced for human consumption and become animal feed due to high quality standards - this would be food loss from my perspective
- [Comment 4](#): In Australia, food that remains in the human food chain is not considered a loss/waste. This includes animal feed. However, it is the lowest value option and I agree with ZZZ - if a product was grown with the intention of feeding humans but is then fed to animals - it is a loss as the inputs to grow food for humans are far higher, more expensive and more emissions intensive than food grown for animals.
- [Comment 5](#): animal feed for example should be considered at least as a qualitative loss
- [Comment 6](#): If a crop is produced with the intention of becoming food, more resources have been used for reaching food quality than if it was produced with intention to become feed. So we see feed-destination as a food loss from an environmental point of view. And also a loss from a economic point of view, the growers rarely get paid when the food becomes feed. Its the next best option but still a food loss, from my point of view.

The case of feeding animals has been a longstanding issue, as it was initially excluded from the definition of "food waste" on the grounds that it constitutes food returning to the agri-food chain.

This circumstance has been widely debated, as there are examples where its consistency is clear, and others where it is not. In the former case, we can take the example of milk cow farms, where colostrum is used as food for calves, an essential nutrient for them. Without the use of colostrum, it would be necessary to seek/buy alternatives for calf consumption.

On the other hand, we can observe products, even precooked ones, at the final stages of the agri-food chain, where food has been grown with the inputs and requirements for human consumption, including cultivation, storage, packaging, distribution, and sale, only to end up as animal feed. It is not understandable that this latter case is considered "food waste = 0" when there are more preferable waste hierarchy alternatives, such as prevention or human consumption.

Indeed, the [European Commission](#) itself considers animal feed as one of the actions for minimizing food waste, but it is not at the top of the pyramid, so there are other actions that are even more prioritized.

This debate also extends to food losses. If the flows related to animal feed are not considered within "food waste," it would be interesting to include them under the term "food losses."

Our stance is that, to be consistent with the current terminology of "food waste" in the European Union and to seek the best fit for the definition of food losses to ultimately be incorporated into the EU's quantification and monitoring process, the current practice of excluding animal feed from the concept of food loss should also be adopted. Otherwise, food loss would not only be limited to primary production within the chain but would encompass the entire chain by including the flow of animal feed, making it a less intuitive term for establishing measurement and quantification protocols.

However, as emphasized in the presentation, the flow of animal feed, like other terms such as production losses, are other "pieces of the puzzle" that must be quantified and analyzed to understand the entire problem affecting the agri-food chain.

Therefore, we want to emphasize once again that the exclusion of animal feed from the term "food losses" does not imply that its measurement and quantification are unnecessary. On the contrary, given the current paradigm of the Circular Economy, all flows in the chain must be quantified, and their root causes analyzed to pursue better use and valorization of all of them.

Topic: Meat products

- Comment 1: For livestock, particularly cattle where certain parts of the animals are required to be incinerated under the Animal By-Product regulation, the residual ash is obligated currently to go to landfill. This is a grey area where we need to seek clarification.

Thank you very much for your reflection. We should analyze the reasons why they are being sent to landfill and whether these flows are being monitored/accounted for in any public registry within the EU Member States. We will take this into account.

Topic: If there are flows outside those considered as food losses and food waste, should they also be quantified and strategies for reduction sought?

- Comment 1: XXX., even if it is decided to qualify a certain product of stream in the food supply chain NOT as FLW, it can still be decided to take action to reduce or prevent it. E.G., food intended for human consumption reduces in quality, and for that reason it is used for animal feed.

We completely agree. As mentioned, if we are operating under the paradigm of the Circular Economy, every waste stream is susceptible to improvement in terms of its management and valorization, ultimately aiming for the top of the hierarchy, prevention. Therefore, regardless of whether a flow is considered food loss or waste, it should be quantified, analyzed for its causes, and solutions should be proposed to continue ascending the waste management hierarchy. Just because a certain level of the hierarchy has been reached, such as animal feed, doesn't mean that possibilities for further advancement within the hierarchy should not be explored.

Topic: Food concept in the European Union

- [Comment 1](#): Nothing prevents to amend food definition, too.
- [Comment 2](#): Better not - stick to the Codex Alimentarius
- [Comment 3](#): I am not sure about changing the food definition, it is used for various means, i.e. a change might also impact production statistics?
- [Comment 4](#): I agree with AAAA it might be too difficult to try to change the food definition. But the same time, I think it's important to include what is not yet classified as food.
- [Comment 5](#): Maybe, more than changing food definition, a proposal of e.g. 'potential food' or something similar may be done

Thank you very much for the insightful debate. It is indeed true, from our perspective, that there are two similar but not entirely identical definitions between the current definition of "food" from European legislation and the one related to the CODEX.

The [latest reference](#) we have for the definition of "food" in relation to the Codex Alimentarius is as follows:

Food means any substance, whether processed, semi-processed, or raw, which is intended for human consumption, and includes drink, chewing gum, and any substance which has been used in the manufacture, preparation, or treatment of "food" but does not include cosmetics or tobacco or substances used only as drugs.

However, as shown in the presentation, the definition from [Regulation \(EC\) No 178/2002 of the European Parliament and of the Council of 28 January 2002](#) has a series of exceptions that do not seem to be included in the Codex:

Food (or foodstuff): means any substance or product, whether processed, partially processed, or unprocessed, intended to be, or reasonably expected to be ingested by humans. Food includes drink, chewing gum, and any substance, including water, intentionally incorporated into the food during its manufacture, preparation, or treatment. It includes water after the point of compliance as defined in Article 6 of Directive 98/83/EC and without prejudice to the requirements of Directives 80/778/EEC and 98/83/EC. Food shall not include:

- (a) feed;
- (b) live animals unless they are prepared for placing on the market for human consumption;
- (c) plants prior to harvesting;
- (d) medicinal products within the meaning of Council Directives 65/65/EEC (1) and 92/73/EEC (2);
- (e) cosmetics within the meaning of Council Directive 76/768/EEC (3);
- (f) tobacco and tobacco products within the meaning of Council Directive 89/622/EEC (4);
- (g) narcotic or psychotropic substances within the meaning of the United Nations Single Convention on Narcotic Drugs, 1961, and the United Nations Convention on Psychotropic Substances, 1971;
- (h) residues and contaminants;
- (i) medical devices within the meaning of Regulation (EU) 2017/745 of the European Parliament and of the Council (5).



Therefore, it can be seen how subsection "c" directly excludes the term "food waste" from all discards made before and during harvesting, as they are not considered as food, as they must be harvested for such consideration.

We do not consider this exclusion as food logical, as these products are perfectly edible by all of us, and have simply not been harvested, perhaps, for example, because the cost of their collection is higher than the selling price. Therefore, we believe that the starting point to be considered as food should be the same as that considered for the term "food loss".

For this reason, we believe that, although we are fully aware of the enormous difficulty of changing this term in European legislation, due to the number of regulations and standards that would then need to be modified, at least in the form of a "claim", we consider that the expression "food losses" should be maintained. If FAO colleagues do not say otherwise, this conception of "food" would be more aligned with the Codex Alimentarius than the current definition in the European Union.

In any case, our main purpose is to be extremely strict and rigorous with the normative and conceptual fit of the term food loss, for its perfect alignment with the current term "food waste", as well as with other "pieces of the puzzle" such as "production losses" or "animal feed". Therefore, we respect the current definition of "food" in European legislation and work to ensure that the entire fit is within this regulatory framework. However, we believe that this fit is not hindered or muddled simply by including the term "food" in "losses", instead of proposing other terms such as, for example, "agrarian losses", "harvest losses", ready-to-be harvest losses", and also maintains the claim to consider these losses, also as food, even if only as a reflection by all.

Topic: Inedible and edible parts in FLW concepts

- [Comment 1](#): inedible is not food
- [Comment 2](#): I think we should apply a resource perspective as requested by F2F strategy, this is independent if the material under consideration is called "food" or has another name.
- [Comment 3](#): unavoidable = inedible
- [Comment 4](#): I think it concerns inedible parts only if they are unseparated from edible parts
- [Comment 5](#): I think edible and avoidable is the real loss, but it can be too hard to exclude inedible/avoidable when measuring. One has to be pragmatic. Very much depends on if there is a market for it, and what's edible differs between countries food traditions. Try to get as much knowledge as possible for taking action to make a difference, is more important than being fully exact for measurements.
- [Comment 6](#): I think it concerns inedible parts only if they are unseparated from edible parts
- [Comment 7](#): inedible unseparable from edible: does that exist? Do you know an example? what is considered 'inedible' is culturally determined. What is eaten in one country is considered as inedible in another
- [Comment 8](#): If inedible parts are included, these can be excluded from food losses using fixed factors that can be available in the respective country (not always the case). On the other hand, each country, even each stage might have an own



definition of what is inedible. It also changes in time, so its treatment is not straightforward.

We also agree that the concept of food losses should follow the guidelines adopted by the definition of "food waste" in the EU, where both edible and inedible parts are included. The reference text to clarify this issue, at least within the European Union, is found in the [Commission Delegated Decision \(EU\) 2019/1597](#) of 3 May 2019 supplementing Directive 2008/98/EC of the European Parliament and of the Council as regards a common methodology and minimum quality requirements for the uniform measurement of levels of food waste, specifically in the following paragraph:

"Food also includes inedible parts, where those were not separated from the edible parts when the food was produced, such as bones attached to meat destined for human consumption. Hence, food waste can comprise items which include parts of food intended to be ingested and parts of food not intended to be ingested."

The specific question arises from the part of the text that says "inedible parts, where those were not separated from the edible parts." This issue could be understood as, for example, if someone peels an avocado, it raises doubts as to whether that non-edible part would be considered food waste because *"it is an inedible part which was separated from the edible part, thus it is not food, so it is not food waste."* This is a reasoning to exclude the inedible part.

Our point of view is precisely to continue reading that fragment of text that continues: *"inedible parts, where those were not separated from the edible parts when the food was produced"* indicates that it refers to the moment in the primary sector where this separation would take place.

Beyond this stage, the food would already be considered as such, with its edible and non-edible parts. Therefore, in the example of the avocado, the peel would be a non-edible part of the food, meaning a non-edible part of potential food waste, and therefore, or at least as we understand it, this would also apply to the case of food losses.

Having said all that, it would greatly aid in establishing an accurate diagnosis of this issue if the quantities referring to edible and inedible parts could be estimated within food losses and food waste, in order to facilitate possible solutions/routes for valorization of these flows. To achieve this, a proposal that has been put forward, and which is considered of great interest, is the utilization of common databases where the edible and inedible parts can be calculated according to the analyzed foods. However, ideally, it should be a common database (with the challenge that this logically entails), thus facilitating the comparability of results.

Topic: Out from primary production

- [Comment 1](#): Food surplus (e.g. cooked, from restaurants): how do you consider it?

After post-harvest, it is food waste

Topic: Reporting food losses in the EU

- [Comment 1](#): Food waste is reported in the waste statistics. Where does the food loss data foreseen to be hosted? For member states.

We understand that this is information that should be centralized in the statistical services of each Member State, although in many cases, the quantification and monitoring work



may be carried out within the public administration itself or in entities external to it, depending on the singularities and circumstances of each Member State.

Topic: Between farm and processor

- Comment 1: Are we assuming for instance no grain loss between farm and processor or that this loss is accounted for as waste not loss....?

If there is a discard in transportation between the production site and the processor, thus falling outside the production site, it is also considered outside the definition of food losses and falls into the realm of food waste. This specific case is illustrated in the graph shown on slide 31 of the presentation.

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