



EUROPEAN COMMISSION
DIRECTORATE-GENERAL FOR HEALTH AND FOOD SAFETY

Food sustainability, international relations
Farm to fork strategy

SUMMARY REPORT

DG HEALTH AND FOOD SAFETY (SANTE)

Webinar on Food Waste measurement for Member States

Via WebEx Events

25 November 2020 – From 10:30 to 13:00

Chair: Bartosz Zambrzycki, Policy Officer, Food waste, Farm to fork strategy, European Commission

DG SANTE: Anne-Laure Gassin, José Luis De Felipe Gardon, Cristina Lisetchi, Alexis Mathioudakis, Vasiliki Boukouvala; **DG ENV:** Caroline Attard; **ESTAT:** Agnieszka Litwinska, Cristina Re; **JRC:** Carla Caldeira

Member States represented (23):

BE, BG, CZ, DE, DK, EE, EL, ES, FI, FR, IE, HR, HU, IT, LT, LU, LV, NL, PL, PT, SE, SI, SK

Observers:

EFTA: Norway

Following the first webinar on food waste measurement organised on 26 June 2020 ([recording; summary report](#)), the European Commission held a second webinar, on 25 November 2020, to **support Member States in their [legal obligations](#)** as regards measurement and reporting on national food waste levels. The webinar, primarily addressed to Member State experts, focused again on concrete examples of national food waste monitoring.

The meeting was held in English and was also **web streamed** so that all interested stakeholders may follow the discussions live. The recording and the speakers' presentations are published on the [Commission's food waste measurement webpage](#).

1// A representative from the [Natural Resources Institute Finland \(LUKE\)](#) presented [[ppt](#)] the work on food waste measurement carried out in Finland. Based on various quantification methods used over the last years (some of them put in place since 2008), it is estimated that 400-500 million kilos of food went to waste (with the highest levels reported in households: 30%). This estimation includes only edible parts; Finland started measuring non-edible parts of waste following the [Commission's Delegated Decision establishing a common EU methodology to measure food waste](#).

The aim of the Finnish food waste measurement project is to build a permanent food waste quantification system in Finland by 2020. Food waste is being quantified across the whole food value chain, in close cooperation with all actors, to ensure proper coordination and implementation of actions. The LUKE expert

highlighted the main aspects of Finland's food waste measurement project, as applied for each stage of the food supply chain:

- **Quantification methods** used (e.g. questionnaires, interviews, diaries, waste composition analysis);
- **Sample sizes and characteristics** (e.g. type of businesses at each stage of the food supply chain, food product categories);
- **Main challenges encountered** (e.g. representativeness of sample sizes, effectiveness of methodologies, variation in food waste figures, user-friendliness of research tools).

LUKE developed an **online application** to obtain the data needed from households through the diary method. Consumers were asked to fill in the online questionnaire with information such as the type and the amount of food wasted, as well as the reason for discarding the food. The tool also offered consumers a visual representation of their food waste behaviour and patterns, through graphs and charts.

The representative from LUKE also referred to [Finland's national food waste roadmap](#), aiming to reduce food waste by enhancing cooperation among stakeholders of the food supply chain, setting priorities and defining actions for the way forward. The need for efficient regulation, focus on education, innovation and research, as well as collective efforts, are some of the actions put forward in the roadmap.

Finland will continue to **improve food waste measurement at national level**, by increasing sample sizes and developing new tools. The results of the project presented in this webinar, as well as more information on the roadmap, will be published early 2021. The final plan regarding how food waste reporting will be organised in Finland will be done over the next few years. Relevant decisions will be taken based on the final report to be issued by LUKE, as well as the evaluation of costs and requirements related to the Commission's legal obligations regarding food waste measurement.

Finland is one of the Member States that participated in the **voluntary reporting exercise**, using previous data available, organised by the [European Union's Statistical Office \(Eurostat\)](#). In 2021, Finland envisages to participate in this exercise again with updated data on its food waste levels.

During the Q&A session, the Commission inquired whether LUKE provided guidance to the participants of the study on how to correctly distinguish between edible and inedible parts of food waste and between side flows and by-products. For the latter, the experts from LUKE confirmed that relevant guidelines were made available, while stakeholders were encouraged to assess the edible or inedible parts of foods.

Denmark asked Finland about the way in which underreporting was addressed during the study, when collecting data through diaries and questionnaires. Finland explained that there is ongoing work being carried out on this issue, in close collaboration with statistical experts who developed a calculation method to take this kind of statistical errors into account in the final estimations of food waste. Based on their own experience, Denmark suggested that waste composition analysis might be a more suitable method for measuring food waste in the food services sector, as compared to diaries and questionnaires.

The Commission asked LUKE experts whether they are aware of the **impact that the COVID-19 pandemic has on food waste levels**, as well as on food waste measurement and reporting activities. Finland pointed out that the results of the studies presented are based on data collected before the pandemic, whereas any conclusions regarding the current crisis could be available next year. Portugal also stressed that 2020 should probably not be set as reference year (cf. [EU Farm to Fork Strategy](#) which proposes to set legally binding targets to reduce food waste across the EU, by end 2023, defined against a baseline for EU food waste levels,

set following the first EU-wide monitoring of food waste levels in 2020), as the calculations will be biased due to the disruptions caused by the COVID-19 pandemic in the food supply chain. Finally, while addressing a question raised by Portugal, LUKE representatives explained that the Finnish statistics office was consulted regarding measurement methods, however they did not have any food waste data available.

2// An expert from the [Irish Environmental Protection Agency \(Food Waste Prevention department\)](#) presented [[ppt](#)] the food waste measurement activities carried out in Ireland.

The expert explained that food waste prevention is a priority area in the [National Waste Prevention Programme](#) and offered an overview of food waste data studies carried out in Ireland. The reliability of data collected within the framework of these studies differs according to the sector of the food supply chain. Based on the studies conducted, the latest estimate of national food waste levels from 2018 indicates that approximately 1 million tonnes of food waste per year are generated in Ireland.

Ireland focussed on the results from the **commercial (food services and retail) food waste study** carried out in 2019 [[report](#)], indicating the sectors where food waste was generated most, the amount of food waste occurred per type of establishment and the average cost of food waste. The study also distinguished between avoidable and unavoidable food waste and looked into the amounts of food waste generated according to food categories. In the food services sector, food waste was further categorised in preparation, unserved and plate waste, for which different levels were observed and analysed.

The main **findings of the study** indicate that the sectors where food waste was generated most are Accommodation, Food Retail, Food Services and Office. The four sectors combined represent 75% of the total amount of food waste. Hotels waste most food, with plate waste being the largest contributor. Finally, fruit and vegetables are the most wasted foods at retail level, whilst meat (important contributor both to financial losses and greenhouse gas emissions) is among the most wasted food products.

The study identifies hotspots and provides a solid base for the design and implementation of successful food waste prevention actions. Ireland will look into further improving the quality of data and fine-tuning the measurement methods used in the food waste studies. Collaboration with the retail sector will also be strengthened, through the [Food Waste Charter](#). Last but not least, Ireland will ensure that its food waste measurement activities adhere to the EU legal obligations and requirements on food waste measurement and reporting (e.g. reconcile definitions (edible/avoidable) or distinguish between food losses and food waste).

3// The third presentation was about a [study](#) carried out by the [Joint Research Centre \(JRC\) of the European Commission](#), introducing a **high-level top-down approach to food waste measurement in the European Union**, for various product groups across the whole food supply chain.

The method used for accounting is the **mass flow analysis**. The model was also based on statistical data, as well as technical and scientific literature. The model accounts for food being wasted across the food supply chain, according to the [EU food waste definition](#) for the most part (including edible and inedible parts, but also assessing food losses, even if this is not included in the EU definition). Based on this model, food waste generated at EU level in 2011 was estimated to be 129 Mt fm. Vegetables accounted for 24% of this amount (highest percentage).

JRC highlighted the main food groups taken into account for the model, according to the stage of the food supply chain. Focussing on the example of potatoes, JRC illustrated how the model can be applied to quantify related waste across different sectors.

This methodology could be utilised by Member States to measure food waste at national level, as **complementary** to other methodologies applied by each Member State. The Commission outlined that the method of material flow analysis developed by JRC should not be used to replace direct measurement activities in Member States. JRC highlighted a few **challenges in adapting the model at Member State level**, such as data gaps in production and trade of food manufactured products and a reduced representativeness of food waste coefficients obtained from the scientific literature, available only for a few countries.

The method may also be used by the Commission to compare the food waste amounts reported by Member States, to provide a consistent overview of food waste evolution and inform possible food waste reduction targets, as well as to provide a benchmark to assess data quality in the estimations of food waste for the years where direct measurements are not available (e.g. based on socio-economic indicators). JRC plans to **further develop the model** by collecting country specific food waste coefficients, extending the food products considered, strengthening collaboration with manufacturing associations to obtain data of better quality and assessing the possibility of using dynamic food waste coefficients to capture changes in food waste generation patterns in result of behaviour changes (cf. COVID-19).

Upon Portugal's request, ESTAT explained that national food waste data obtained by applying the model could be made available to Member State experts in 2021, in order to guide and complement their work on food waste measurement. However, as these are experimental data, making these publicly available would require further investigation and assessment. As a reply to Denmark's question, the Commission can provide information on Member States which have participated in the voluntary reporting of previous national food waste data, to enhance collaboration and exchange of best practices between Member States.

4// At the end of the webinar, the Commission updated participants on food waste measurement activities at EU level [[ppt](#)].

As regards future meetings, a **virtual plenary meeting of the [EU Platform on Food Losses and Food Waste](#)** is foreseen for 10 December 2020, which will be [webstreamed](#) for everyone interested to follow the discussions. A **virtual meeting of the [subgroup on Food Waste Measurement](#)** is set to take place early 2021, which will focus on identifying incentives for the private sector to publicly report on available food waste data. Last but not least, the Commission will keep Member State experts updated regarding the organisation of **future webinars on food waste measurement** (Member State representatives who are interested in sharing their experience on measuring food waste in their country in such webinars are encouraged to get in touch with the [Platform's Secretariat](#)).

Finally, the Commission informed the audience that applications for the grants on food waste measurement (for both Member States and civil society actors), offered in the framework of the new **Single Market Programme**, are not yet open as the [related legislation](#) has not yet been adopted (expected for Spring 2021). The Commission will inform Platform members as soon as relevant information becomes available.