



Detailed analysis and its recommended methods

Bartosz Zambrzycki

European Commission, DG Health and Food Safety
Unit E1, Food information and composition,
food waste

Explanations on Article 5 - *periodical monitoring*

Background:

- Obligation for annual reporting
- Food waste are often collected mixed with other waste, hence
- significant efforts are needed for establishing of food waste amounts.

Proposed approach:

- **Detailed analysis** of the amounts of food waste and share of food waste in the mixed waste conducted at least every 4 years
- **Yearly estimations** conducted on the basis of detailed analysis and other regularly collected socio-economic data and data on waste in general.

Example for food waste from processing and manufacturing.

- **Detailed analysis** would require analysis of the food processing industry in order to identify its structure (sectors, products, typical waste, number of companies, size, production volume turnover). Information obtained from the companies (or representative sample of them)
- **Annual estimations** would require analysis of the links between amounts of waste generation and economic activity – like production volume or turnover - of the companies or production sectors (e.g. oils, meat, dairy, bakery etc.)

Example for household waste

- **Detailed analysis** establishes share of food waste in household/municipal waste (mixed or collected separately) using **compositional analysis of the bin**. Amounts of food waste discarded **via the sewer** can be established by the **kitchen diaries**.
- **Yearly estimations** could be then produced on the basis of results of detailed analysis and yearly data on municipal/household waste generation.

Methods for detailed analysis

- **Methods describe actual measurement of food waste and not how results are collected (surveys, administrative sources, studies etc.)**
- **Different methods are recommended in different sectors**
- **We proposed open catalogue of recommended methods, as it gives Member States more flexibility to adapt to existing or planned schemes on data collection.**

Sources of methods in Annex II:

- Description and usability of methods for different stages of the food supply chain as well as for different cases can be found e.g. in :
 - a. FUSIONS Food Waste Quantification Manual (oriented at Member States)**
 - b. Food Loss and Waste Protocol - Guidance on quantification methods (for all types of entities)**

List of methods:

- **Direct measurement (weighing or volumetric assessment)** – using a measuring device to determine the weight of samples of food waste or fractions of total waste, directly or determined on the basis of volume.
- **Scanning / Counting** – assessing the number of items that make up food waste, and using the result to determine the weight.
- **Waste composition analysis** – physically separating food waste from other fractions in order to determine the weight of the fractions sorted out.

List of methods (2):

- **Diaries** –an individual or group of individuals shall keep a record or log of food waste information on a regular basis.
- **Mass balance** – on the basis of mass of inputs and outputs of food into and out of the measured system, and processing and consumption of food within the system, the mass of food waste shall be calculated.
- **Coefficients** - Establishing food wastage coefficients or percentages representative for a food industry sub-sector or for an individual business operator. These coefficients shall be established through sampling, data provided by food business operators or by other methods.

Questions:

- **Are there any methods which should be added to the act?**
- **What additional information on methods should be included in this act?**



European
Commission

Thank you for your attention