Building up unique Food Waste Monitoring System and Prevention Road Map in large collaboration in Finland

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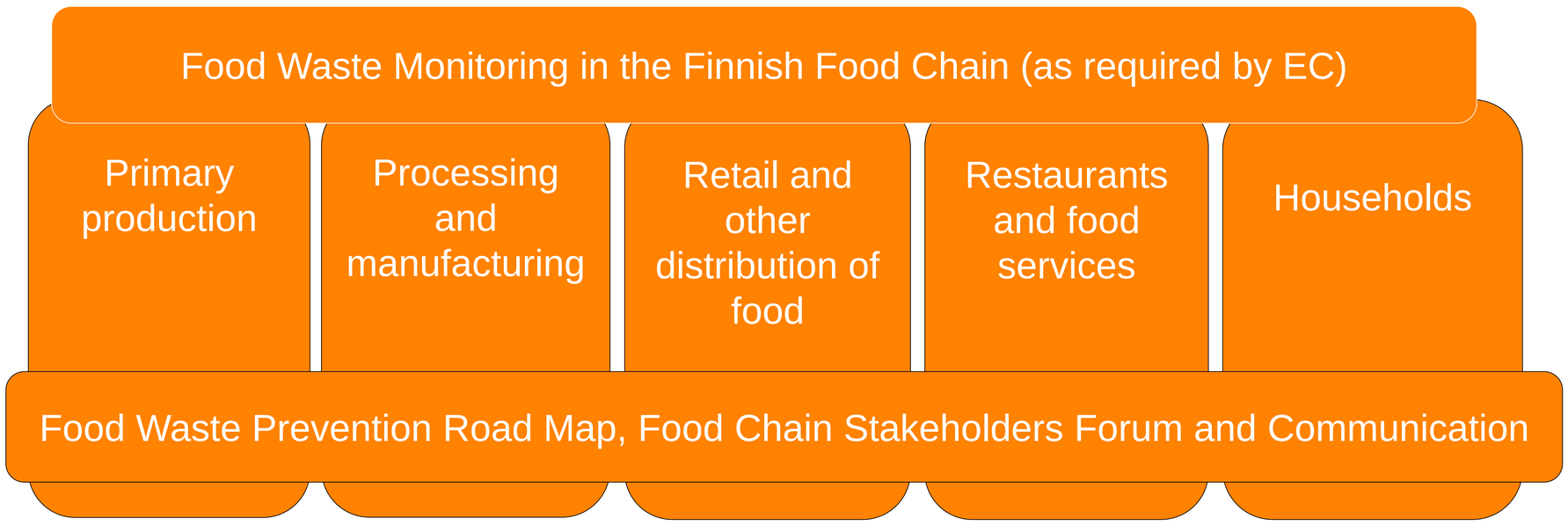

Food Waste Monitoring in Finland and EU

Mandatory Food Waste Monitoring Framework by EU, reporting from 2020 to Commission (Delegated Act C(2019) 3211). So far waste food waste figures between countries are non-comparable. Now common methodology *(with minimum quality requirements for the uniform measurement) by EC* developed to produce comparable data sets between countries.

SDG/EU goal is to reduce per capita food waste by 50% at the retail and consumer level, and to remarkably reduce food waste and losses in entire food supply chain. Entire food supply chain with our own Quality protocol system is included in the food waste monitoring system, which is under development in Finland. Detailed Finnish specific definitions and system boundaries and data collection questionnaires and methods play important role, while at the same we are adjusting the work compatible with EC minimum requirements – but we go beyond those. Representativeness of data is one the most critical issue in the future. In addition to the EC approach and requirements, **edible and avoidable food** waste is highlighted in the Finnish work and prevention map. First Finnish baseline figures ready in summer 2020. After that we are able to show progress in food waste reduction. Our **food waste prevention road map** targets for the most prominent and effective ways to decrease food waste in the entire Finnish food chain.

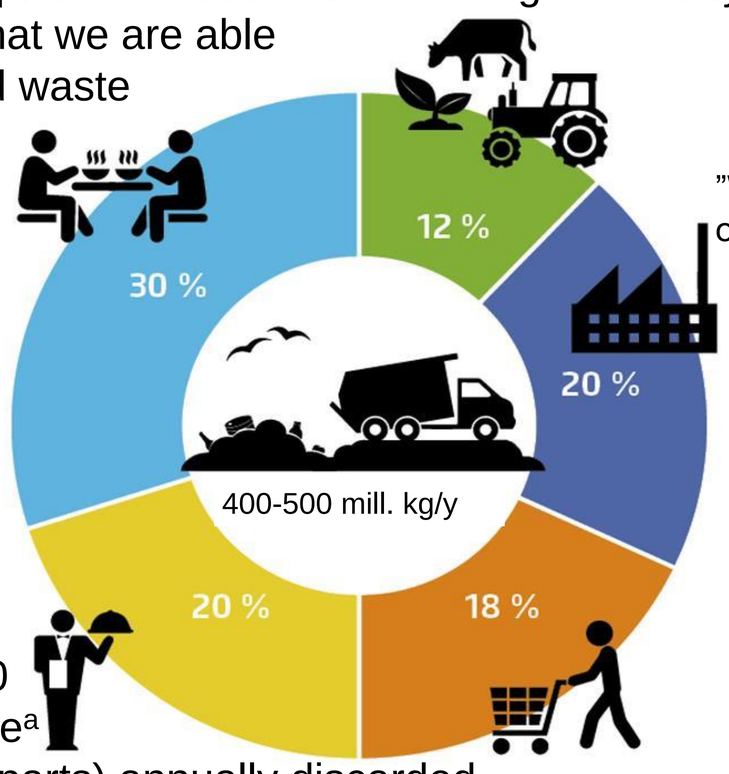

Fig 2. Around 400-500 million kilos food waste[a] (including only edible parts) annually discarded.

Step of the Food Chain	Monitoring Method (pilot)	Desired sample size (phase 1)
Primary production – cereal farm	Questionnaires to producers simultaneously with crop production survey	Producers representing 30% of cultivation area/case product
Dairy farms	Questionnaires	Producers representing 10% of production volume
Animal husbandry, fishing, fish cultivation	Statistics: dead/rejected animals, rejected marine fisheries Questionnaires: other animals/fish groups	Producers representing 30% of production volume
All primary production	Interviews: supplementary	Supplementary information
Food industry	Questionnaire Interviews: supplementary	Producers representing 30% of production volume//sector
Retail	Data collected by retail Groups	The three biggest retail chains, representing over 90% of sector sales
Restaurants and Food Services	Food waste diary (D) Questionnaire (Q): Supplement	D: 20 caterers/caterer type = over 140 caterers Q: 500 caterers
Households	Online-questionnaire (Q) Waste composition analysis (W Food waste diary (online) (D)	Q: 1,000 households W: 5,000 households D: 200 households

Fig 1. Different methods and desired sample sizes as part of Finnish Quality Protocol for Food Waste Monitoring.

”Wasted food corresponds Carbon footprint of around 350 000 passenger car driving”

Luke in collaboration with

- **Ministry of Agriculture and Forestry MMM**
- **Ministry of Environment YM**
- **Ministry of Economic Affairs and Employment TEM**
- **Finnish Food and Drink Industries’ Federation ETL**
- **Finnish Grocery Trade Association PTY**
- **Finnish Hospitality Association MARA**
- **Food chain companies**

See more: https://www.luke.fi/ruokahavikkiseuranta/en/
https://ec.europa.eu/transparency/regdoc/rep/3/2019/EN/C-2019-3211-F1-EN-MAIN-PART-1.PDF

[a]Katajajuuri et al., 2014, Hartikainen et al. 2014, Silvennoinen et al. 2015, 2019 etc. (Current estimate for Finnish Food Waste)

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