

EDITORIAL

Food Waste Challenge

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Next to the other waste streams, food waste has been gaining a significant attention on global and EU level. According FAO (2013) global food loss and waste amounts to 1.6 billion t. annually. Food loss is usually attributed to the food supply stages like agricultural production, food processing, distribution, whole sale retailers; food waste mostly refers to the food loss that take place at hospitality and household sectors (consumption stage). Much more is lost at the stages of primary production, processing, distribution in lower incomes countries, but significantly more food waste is generated at higher incomes countries at consumption stage. For example, total food wastage in EU is estimated to reach around 88 million t. annually, more than half (47 million t.) coming from household sector alone (FUSIONS, 2016).

Because of global food supply chains negative food waste related impacts occur both in producing and consuming countries. In addition to the management and treatment challenge of such an enormous amount of food waste, indirectly it has a number of interlinkages with other global and local problems: environmental, social and economic ones. Estimations indicate that the Global Warming Potential of current food waste for EU is around 227 MT of CO₂e, (FUSIONS, 2015). Next to the climate change, food waste is related to land use uptake, water and soil pollution

due to pesticides and fertilizers use, biodiversity loss etc, especially at primary production stage. Economic food waste related costs could amount to 750 billion dollars globally (Thyberg and Tonjes, 2016). Yearly costs associated only with edible food waste for EU-28 are estimated at around 143 billion euros (FUSIONS, 2016). Having in mind that so many foods is just wasted and so many people are still undernourished, food security and social aspects could also be attributed to the food waste challenge.

Hence, dealing with the food waste along whole supply chain may open new opportunities solving variety of global challenges and in turn contribute to Global Sustainability Agenda 2030 goals, particularly to sustainable consumption and production patterns (SDG 12), ending hunger, achieving food security and improving nutrition and promoting sustainable agriculture (SDG 2), as well as combating climate change and its impacts (SDG 13). EU policy also address global food waste related issues. New directive 2018/851 amending waste directive for the first-time included food waste as such, aiming at the reduction of global food waste per capita by 50 %. Member States should establish specific food waste prevention measures, including awareness campaigns, as well as a common methodology for food waste measurement. Food waste reduction is also addressed in Circular economy

programme (COM/2014/0398 final), aiming to reduce food waste by half by 2030 in EU. From the point of more efficient resource use, food waste is indirectly covered also in the Roadmap to a Resource Efficient Europe (COM (2011) 571).

Despite political commitments, number of challenges in reducing food waste are persistent. First, still there is lack of common definitions on food waste (loss), gaps in data, no common methodology. Secondly, reasons behind the wastage vary in food supply stages, therefore different approaches are needed. EU platform on Food Losses and Food Waste is launched to address those challenges on EU level. General recommendation for EU food waste reduction includes setting reduction targets on national,

regional, local level and sectoral levels, improvement of data sources, unification of quantification methods and definitions, integrated supply chain management, reviewing food safety regulations, improving the comprehensibility of food date labelling, reviewing European marketing standards (external appearance of a product), strengthening alternative marketing channels, reviewing the EU tax regulation, introduction of taxes and fees on waste treatment, mandatory separate collection of food waste, promotion of food redistribution programmes (Priefer et al. 2016). Regardless the sector or supply chain stage, focus on food waste management hierarchy (avoidance, feeding people, feeding animals, industrial use, composting and landfilling or incineration) could be a good approach to start food waste reduction actions.

References

- COM (2011) 571. Roadmap to a Resource Efficient Europe
- FAO. 2013. Food Wastage Footprint – Impacts on Natural Resources. FAO, Rome.
- FUSIONS. 2015. Criteria for and baseline assessment of environmental and socio-economic impacts of food waste. EU project. Final report.
- FUSIONS. 2016. Estimates of European food waste levels. EU project. Stockholm.
- Priefer C., Jörissen J., Bräutigam K.R. 2016. Food waste prevention in Europe—A cause-driven approach to identify the most relevant leverage points for action. *Resources, Conservation and Recycling* 109, 155–165. <https://doi.org/10.1016/j.resconrec.2016.03.004>
- Thyberg K. L., Tonjes D. J. 2016. Drivers of food waste and their implications for sustainable policy development. *Resources, Conservation and Recycling* 106, 110–123. <https://doi.org/10.1016/j.resconrec.2015.11.016>