

Monitoring Food Waste in Sweden: Can Current Monitoring Systems Track the EU's 30% Reduction Target?

Mattias Eriksson^{1,*}, Amanda Sjölund¹, Claudia Giordano², Hanna Hartikainen² and Christopher Malefors¹

¹*Swedish University of Agricultural Sciences, Department of Energy and Technology, 756 51 Uppsala, Sweden*

²*Natural Resources Institute Finland (Luke), Latokartanonkaari 9, 00790 Helsinki, Finland*

Abstract

Reliable measurement of food loss and waste (FLW) is essential for monitoring progress toward policy targets and informing effective interventions. Within the European Union, recent revisions to the Waste Framework Directive introduce binding reduction targets requiring member states to reduce food waste by 10% in processing and manufacturing and by 30% per capita at retail and consumption levels by 2030. Achieving these targets requires monitoring systems capable of detecting relatively small changes in waste generation over time. However, current evidence suggests that such precision may not yet be achieved in many monitoring systems. This paper examines whether existing policy frameworks and measurement practices are sufficiently detailed and robust to track the reductions implied by EU targets. Specifically, it investigates whether the available quantification approaches allow for the detection of annual changes consistent with the required trajectory toward a 30% reduction by 2030. Sweden is used as an illustrative case study because it is among the countries that have progressed relatively far in developing national food waste monitoring systems. By analysing the methodology applied in Swedish data collection practices, the study examines how food waste data are generated and how uncertainty in the underlying data affects estimates of food waste. This enables an assessment of the variability and robustness of current measurements, and whether their precision is sufficient to verify that reductions have actually occurred and reliably track progress towards policy targets.

Keywords: Food waste prevention, monitoring, binding targets

Acknowledgments: This work was supported by the Horizon Europe project WASTEWISE (Waste Avoidance Strategies for Environmental Sustainability), which is funded by the European Union's Horizon Europe research and innovation program under Grant Agreement no. 101181915. Views and opinions expressed are however those of the author(s) only and do not necessarily reflect those of the European Union or European Research Executive Agency (REA). Neither the European Union nor the granting authority can be held responsible for them.