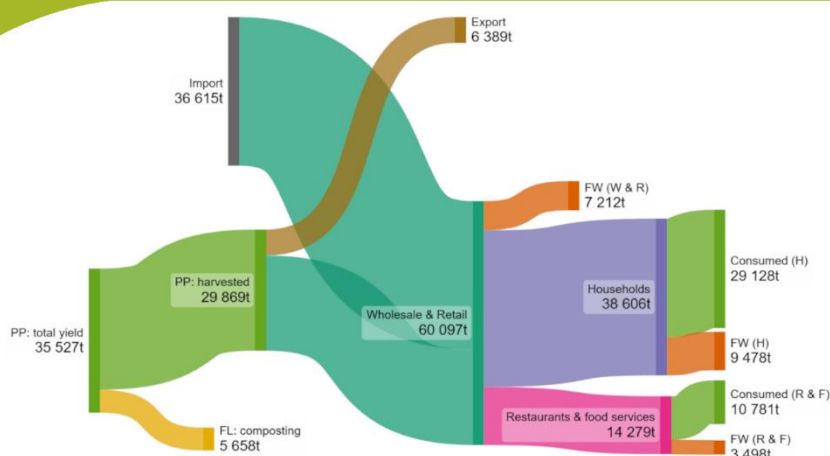




Practice Abstract #5: A mass flow analysis of lettuce in Sweden



WASTEWISE
Waste Avoidance Strategies for
Environmental Sustainability

The WASTEWISE project aims at deepening the understanding of leverage points for food loss and waste (FLW) reduction. Researchers from the project compiled a database to enable product-based investigations regarding which products and which points in the supply chain should be targeted to achieve the most efficient reduction in FLW. To test the database and to make use of it, exemplary mass flow analyses were conducted. Here, we present key insights from the mass flow analysis of FLW for lettuce in Sweden. The analysis is modelled for 2013 on studies of FLW in the production and retail of Swedish iceberg lettuce. Due to a lack of data for greenhouse production, the FLW rate was assumed to be equal to that of open field production. The mass flow analysis focused on the edible fractions of lettuce, which were assumed to be 92% of the harvested head. Outer leaves that were removed at harvest were considered to be unavoidable food loss due to marketing reasons and were excluded from the mass flow analysis.

The results of the analysis showed that the main share of the total edible FLW in the lettuce supply chain occurred at the consumption stage in households and restaurants, and amounted to about 25%. The second highest share of FLW (16%) was in the primary production stage. If the outer leaves were included, the highest loss rate would be at the primary production stage. This underlines the importance of the definition of edible and inedible, avoidable and unavoidable food waste.

“it is of high importance that studies report transparently and in a detailed manner what exactly they have quantified”

A comparison of different FLW rates for lettuce in the database showed a large range. This shows that it is of high importance that studies report transparently and in a detailed manner what exactly they have quantified, since conceptual and methodological differences have a greater impact than national practices.

Authors: Manika Rödiger (AGR; manika.roediger@agroscope.admin.ch); Rebecca Waterhouse (SLU; rebecca.waterhouse@slu.se); Mattias Eriksson (SLU; mattias.eriksson@slu.se); Jeanine Ammann (AGR jeanine.ammann@agroscope.admin.ch)

wastewise-project.eu



@wastewise-eu



Funded by
the European Union

Funded by the European Union. Views and opinions expressed are however those of the author(s) only and do not necessarily reflect those of the European Union or the European Research Executive Agency (REA). Neither the European Union nor the granting authority can be held responsible for them.