Nordic Food Waste Project
Primary Production

Ulrika Franke

Swedish Board of Agriculture

ulrika.franke@jordbruksverket.se
Pre-study 2012

Literature study

Case studies on
• Potatoes
• Carrots
• Onions
• Milk
• Pork
New project 2014-2016

- Definitions, system boundaries and methodology
- Data collection in primary production

Hanna Hartikainen, LUKE (Finland)
Erik Svanes, Østfoldforskning (Norway)
Lisbeth Mogensen, Århus Universitet (Denmark)
Jesper Sørensen, NaturErhvervStyrelsen (Denmark)
Ulrika Franke, Swedish Board of Agriculture (Sweden)
Primary production

Other food waste initiatives
FUSIONS, WRI and WRAP

Primary production in Denmark, Finland, Norway and Sweden

Production of agricultural and horticultural products as well as wild fruits and berries, wild game, fishery and aquaculture
Food waste - Side flow

Primary products intended to be consumed by humans but never enter the food chain

The whole sector including rearing of animals

Planned feed production for animals excluded, but food that ends up as feed included

Edible parts of the products - peels and bones are excluded
System boundaries

- Growth phase
- Harvest, slaughter, remove product from animal or plant
- Pre-processing
- Processing
Calculation of side flows

Estimated total volumes of side flows for Nordic countries by

- Literature study followed up by interviews
- Over 6,000 questionnaires to Nordic farmers
- Statistical data
Case studies

Tried different methods to collect data for

• Carrots
• Onions
• Cereals
• Field peas
• Green peas
• Farmed fish
Field study – onions
Field study - cereals

1. Pre-harvest losses, caused by shattering and lodging, and loss of dry matter due to wildlife, birds, weather and other natural causes.
2. Harvest/machine losses, caused by the combine and harvesting.
3. Total field loss by counting seeds and spikes behind the combine.
More information

Food losses and waste in primary production: Case studies on carrots, onions, peas, cereals and farmed fish

Interview and questionnaire guide: Quantification of food losses and waste in primary production
Key findings

- 800 000 + 100 000 tonnes of side flows
- 330 000 tonnes of food waste
- Lack of data and uncertainties in existing data
Recommendations

• *Side flow* is a good complement to *food waste*
• More than one method is preferable for quantification
• There is a need for further studies and analyses
Final report

Food losses and waste in primary production: Data collection in the Nordic countries