Interreg
North-West Europe
Food Heroes
European Regional Development Fund

EUROPEAN UNION

ORGANISATIONS INVOLVED
ZLTO & Wageningen

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In field losses of carrots and potatoes

The Food Waste **Problem**

There has been much discussion about how much crop is **left in the field** and what condition it is in.

- Is it market standard?
- Good but wrong size?
- Green or damaged?

The problem has been that the figures quoted by farmers were only estimates based on their personal impressions rather than actual measurements, therefore difficult to plan what to do with anything left. Previously there has been no hard data collected on actual losses in the field or weather effects.

How much crop of carrots or potatoes has been left in the field? Around 1%, is this acceptable or not?

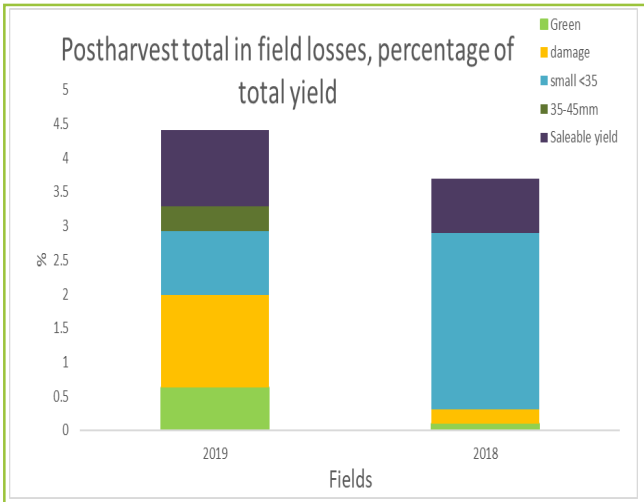
The Food Waste **Solution**

In 2018, The University of Lincoln devised a methodology to be used to **calculate potential potato yield prior to harvest**, plus the **post harvest field losses** for table and processing potatoes. Individual farmers and management operators were contacted to gain permission to conduct trials during harvest operation in England and Holland.

In 2019, the exercise was repeated in the UK and extended to trials on salad potatoes and with a slight change in the methodology to carrots.

When the actual loss in the field at harvest has been physically measured two or three times the operator has a much better "feel" of the % loss that actually occurs and can use this experience to benchmark in the future

The results produced provided examples of **benchmarking** which could be taken up by and used to optimise valorisation by comparing any harvesting operation against the benchmark so as to know whether it was good/moderate/poor performance .



The Food Waste **Impact of the Solution**

Potatoes.

- Typically we are talking of a yield of 50t/h with a loss of all types of 3.5-5.0% our work is reducing this loss by about 0.5% of marketable yield which is 0.25 t /h Mean losses are about 1% higher this year with the more difficult harvest conditions.

How much food do you expect to save in 2020?

- If we say our results have had an effect on 2000 hectares we are talking about 500 tonnes

Carrots

- Typically we are talking of a yeild of 100t/h with a loss of all types of 2.5% our work is reducing this loss by about 0.25% of marketable yield which is 0.5 t /h, if we say our results have an effect on 2000 hectares we are talking of 1000 tonnes

How much food will be saved 5 and 10 years after the end of the project (on a yearly base)?

- For potatoes 5000 tonnes and 7500 tonnes
- For carrots 4000 tonnes and 5000 tonnes

Project Food Heroes aims to reduce food losses in the primary sectors (on farm and fisheries) by creating higher value uses for byproducts and products that are out of specification. Throwing it away is such a waste. This project is funded by INTERREG North West Europe, European Regional Development Fund.