

Highlights from the ClimateFood data dashboard and company interviews



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Introduction

- One of four work packages in the ClimateFood project
- Overall aim to provide knowledge management tools for climate smart food business ecosystem in northern Finland and Sweden.
- During the project we:
 - Created an **interactive dashboard** that visualizes current state and development of food production
 - Conducted **case studies of SMEs** that provide climate smart solutions
 - Organized co-learning **workshops** with food value chain actors
- Today: brief highlights from the project work
 - A report is currently being developed. Will be available digitally by end of year.
 - The dashboard is available: <https://www oulu.fi/my/climatefood/>

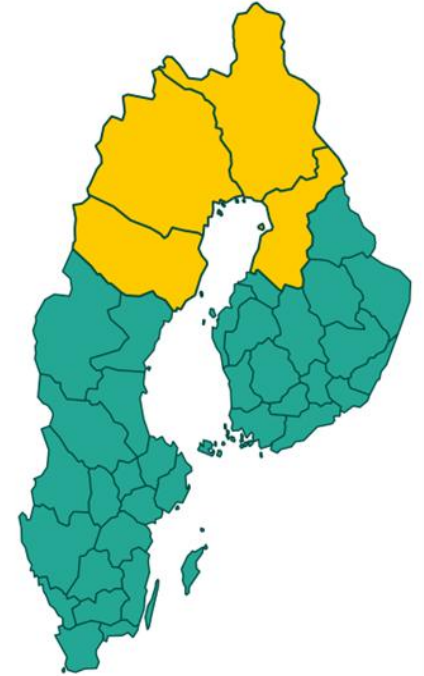


Figure 1: The project area consists of Norrbotten, Västerbotten regions from Sweden and North Ostrobothnia and Lapland regions from Finland.

Key figures

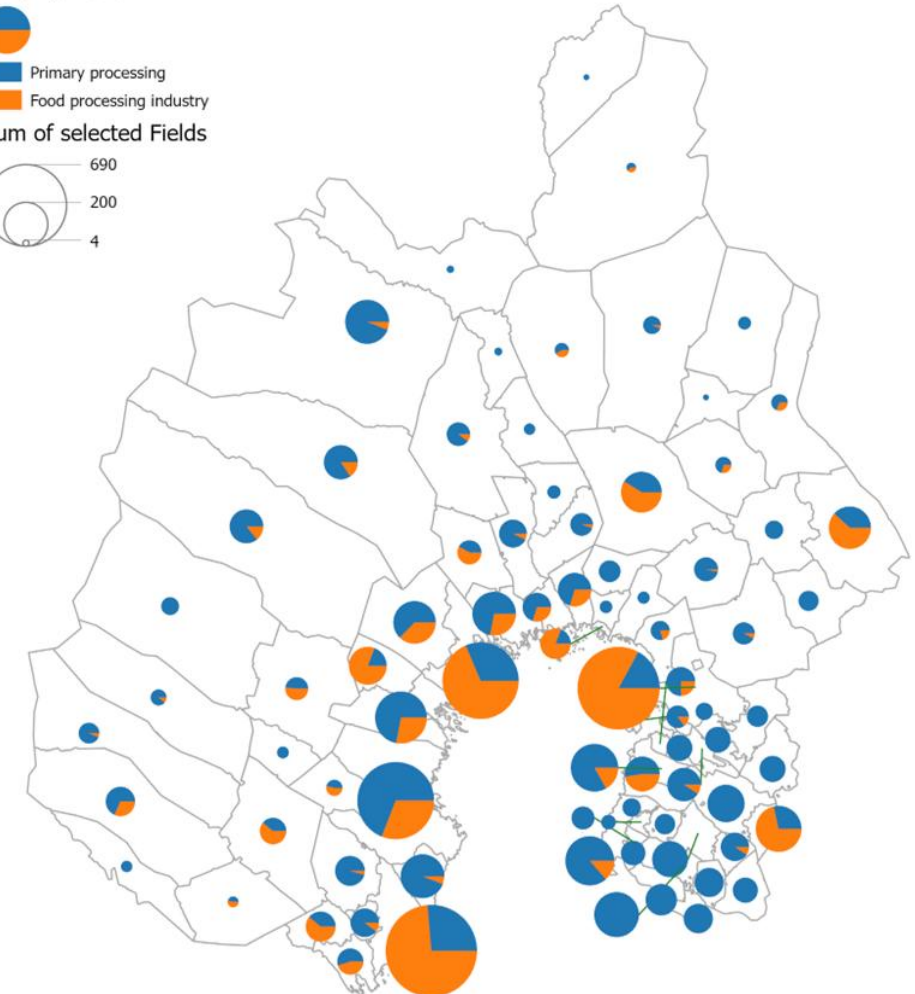
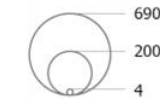
- Total value of food production in the region is over 1000 M€ .
- There are over 6000 jobs in the food primary production and 3500 in the food processing industry.
- Food primary production is mostly located in coastal areas and in southern part of North Ostrobothnia. Most important food processing industry locations are Oulu, Umeå and Luleå.

Primary production and food processing industry employment by municipality

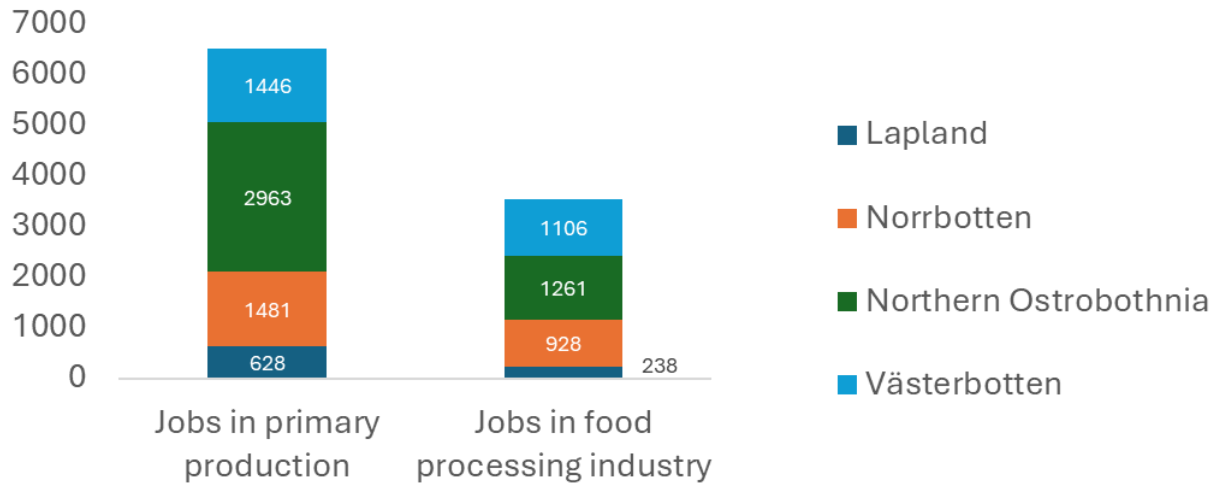
Employment*



Sum of selected Fields



Jobs in the food sector in the project area

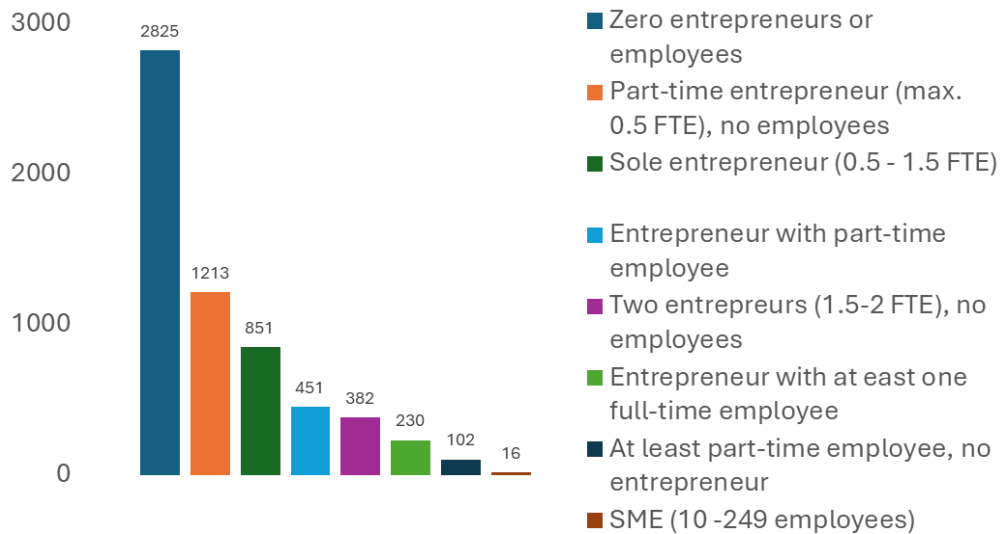


Farms and farmers

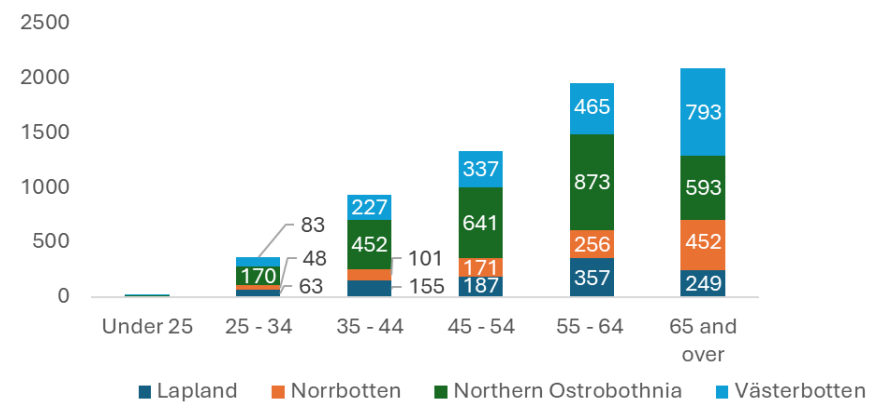
- Most agricultural companies are very small and have no employees at all. Part-time entrepreneurship is common.

- Average age of farmers is high and 65+ years is the largest age group
- Number of farms has been declining. In North Ostrobothnia and Lapland the number of farms has declined over 40% in 15 years, while in Norrbotten and Västerbotten the decline has not been as pronounced.

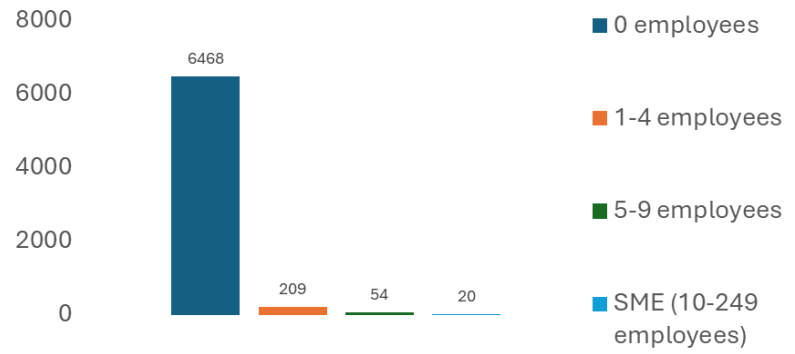
Sizes of firms in agriculture in North Ostrobothnia and Lapland



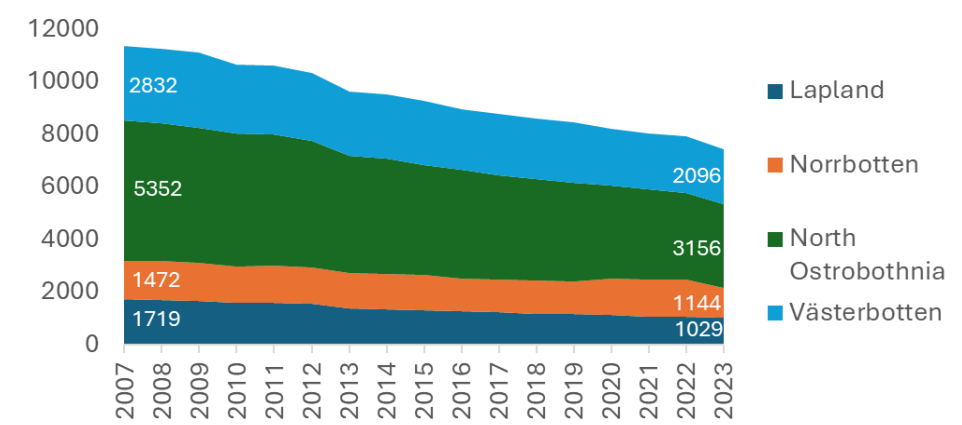
Number of farms by farmers age group



Sizes of firms in agriculture in Norrbotten and Västerbotten



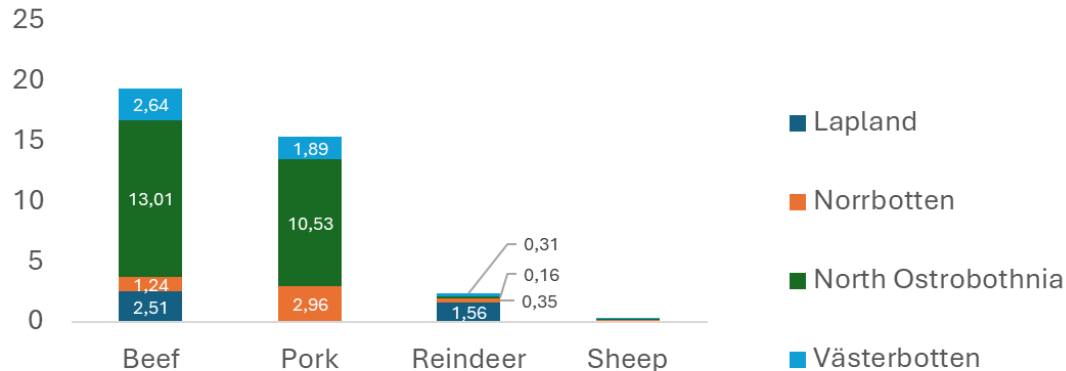
Number of farms 2007 - 2023



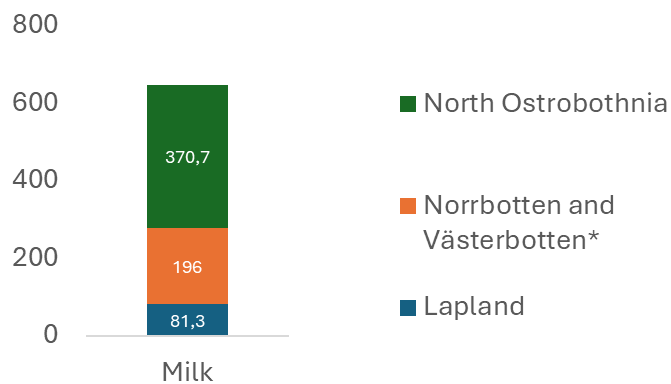
Food production and CO2

- Cattle farming, cattle feeds, dairy and beef industry together are the most important sectors in food production in the project area
- The importance can be measured as jobs in cattle farming, growing crops for animal feeds and processing of beef and dairy products.
- Main sources of greenhouse gas emissions are from ruminant's (cow, sheep, reindeer) enteric fermentation and also from soil in Northern Ostrobothnia

Meat production, million kg

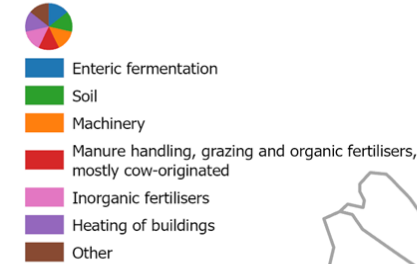


Milk production, million l.

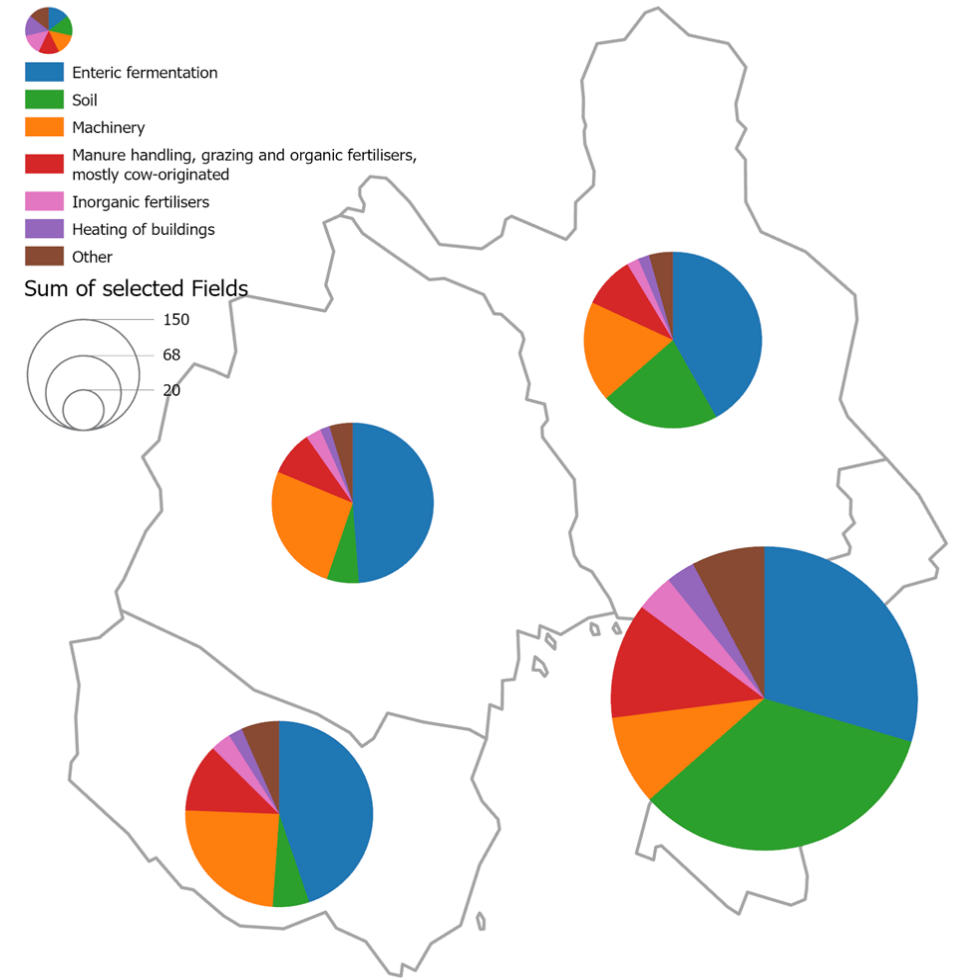


CO2e emissions by region

CO2e ton



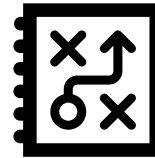
Sum of selected Fields



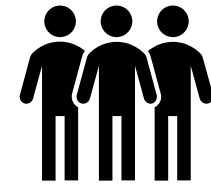
WE CONDUCTED 6 TECHNOLOGY PROVIDER INTERVIEWS AND IDENTIFIED:



What kind of **benefits** can different types of technologies provide to food producers and processors?



What kind of **challenges** do technology providers face when they develop technologies for food sector?



How could we **improve** technological development and adoption in the food sector?

WE ALSO CONDUCTED 28 FOOD PRODUCER AND PROCESSOR INTERVIEWS AND IDENTIFIED:



Climate-smart practices that food producers and processors utilize



SOCIALLY CLIMATE-SMART PRACTICES

Working environment

Employee involvement

Responsible working practices

Community development

Donations to charity

Sharing resources and lessons learned to local community

Utilizing local community resources

ECONOMICALLY CLIMATE-SMART PRACTICES

Efficiency

Efficient production chains

Combined processes with other actors

Production and package design

Strategy

Online marketplaces

Product certifications

Customer responsibility awareness

Investments

Regular reviews to identify potential areas for investment

Regular renewals to operating methods

ENVIRONMENTALLY CLIMATE-SMART PRACTICES

Emissions

Close-to-close mindset to minimize carbon emissions

Use of natural substances over artificial substances

Use of resources

Process development

Sustainable energy solutions


Efficient utilization of raw materials

Respect towards renewal

Julkaisemme tutkimuksen tulokset loppuvuodesta ilmestyvässä digitaalisessa raportissa. Jos haluat pääsyn raporttiin sen julkaisuhetkellä, täytä tietosi oheisen QR-koodin kautta avautuvaan kyselyyn

Vi publicerar forskningsresultaten i en digital rapport som släpps i slutet av året. Om du vill få tillgång till rapporten vid publiceringstillfället, fyll i dina uppgifter via enkäten som öppnas via den bifogade QR-koden.

The cover of the report features a stylized map of the Arctic region in light green. Overlaid on the map is a vibrant, colorful salad of vegetables including tomatoes, cucumbers, carrots, and quinoa. In the top left corner, the 'Interreg' logo is displayed next to the European Union flag and the text 'Co-funded by the European Union'. Below this, the word 'Aurora' is written in blue. At the bottom, a purple banner contains the title 'CLIMATE-SMART PRACTICES IN THE NORTHERN FOOD ECOSYSTEMS' in white capital letters. Below the title, the authors' names and affiliations are listed in small text, and at the very bottom, the publisher information 'Publications of University of Oulu Kerttu Saalasti Institute X/2025' is provided.

Interreg  Co-funded by the European Union

Aurora

CLIMATE-SMART PRACTICES IN THE NORTHERN FOOD ECOSYSTEMS

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