MarginUp! Swedish Use Case

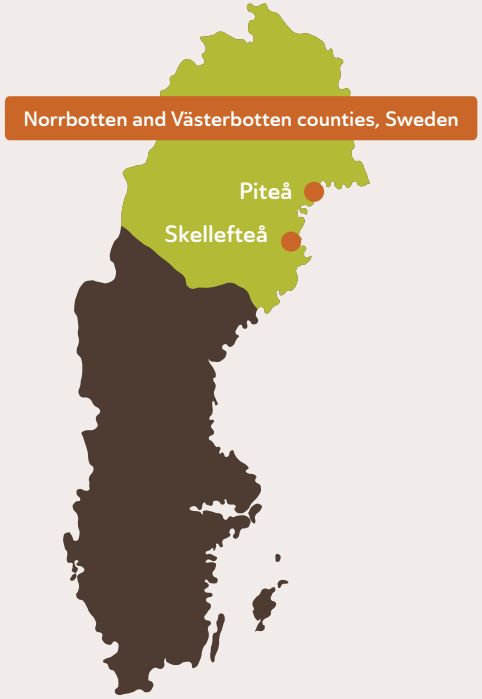
Introductory information:

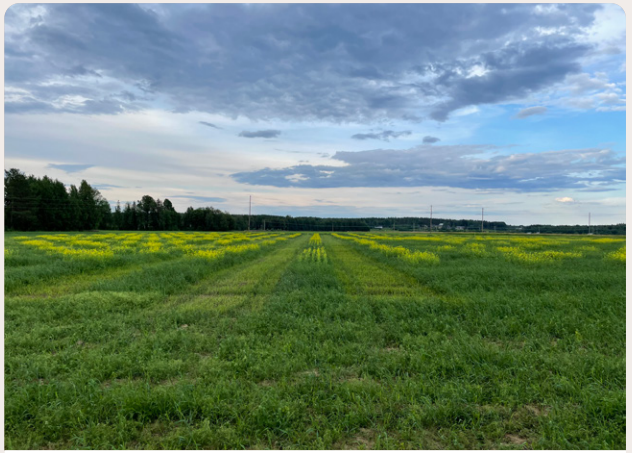
Location: Öjebyn Agro Park near the town of Piteå and a farm near the town of Skellefteå, Norrbotten and Västerbotten counties, Sweden

Area: 11,5 ha

Climate: Cold

MarginUp! proposal: Introducing turnip rape cultivation in field crop rotation





Norrbotten county, Sweden. Photo: Hushållningssällskapet

Benefits:

Biodiversity enhancement

Circular use of biomass

Replication potential

New regional business models

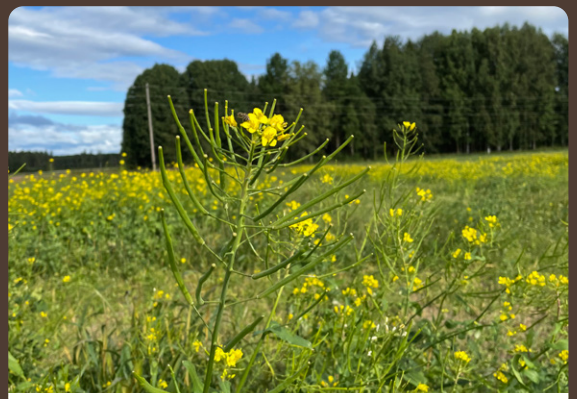
Funded by the European Union

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 REA. Neither the European Union nor REA can be held responsible for them.

Replication potential:

Northern European countries, regions with comparable pedoclimatic soil attribute, such as, Estonia, Finland, Latvia, Lithuania, and Norway.

Feedstock:



Turnip rape cultivation. Photo: Hushållningssällskapet

Land, biodiversity, and ecosystem resilience:

Intercropping with turnip rape, more resilient under harsh climates than oilseed rape, contributes to the control of pests and diseases, provides resources for pollinators while promoting biodiversity at the same time.

Supporting the development of the bioeconomy:

This use case will supply an upscaled value-chain for turnip rape, an indemand crop, providing new alternatives for the agricultural sector and its transportation needs in north Sweden.

Stakeholder engagement:

Research institutes, universities, technology providers, industry, the public sector, bio-based related business, farmers, beekeepers and rural entrepreneurs will all be involved in the use case through the different stages: Crop cultivation, harvesting, drying and storage, oil pressing, animal feed process, biodiesel and biogas processes, and feedstock production.

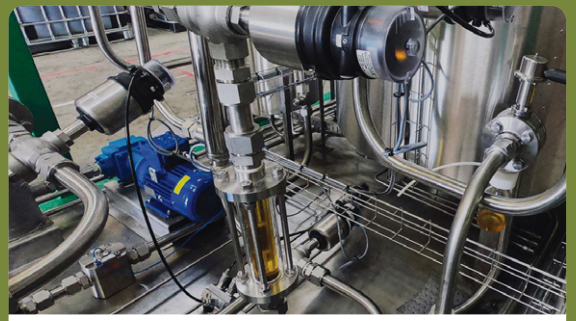
Circularity and biomass cascade use:

The biomass produced will be used for biodiesel production and by-products for biogas, which could be employed as heat drying alternative for some farms. The oil pressing residue can be used to produce protein rich bio-products for animal feed.

Bio-based products:

Animal feed. Photo: Curt Dennison

Biogas. Photo: Robert Heilinger



Biodiesel. Photo: Green Fuels