Runway for Organic Food in South-Eastern Finland

INTEGRATING THE CIRCULAR ECONOMY APPROACH IN THE FOOD SYSTEM

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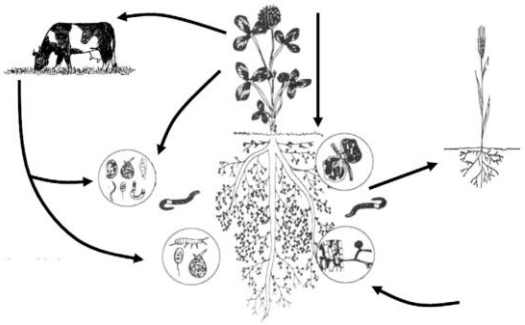
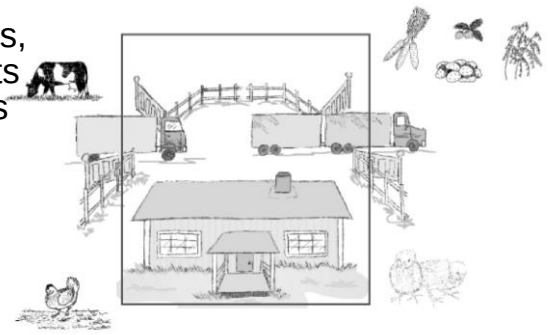
Nutrient cycle in organic farm



Biological nitrogen and carbon fixation, crop rotation

Increased soil productivity and health, biodiversity

Lesser inputs, more outputs as products



More local nutrient cycle

Co-operation with other organic farms and consumers

Rajala et al 2005, Pro Luomu 2019

Three reasons for our project

- Organic production and consumption have grown steadily in Finland.
  - increase in sales 9.0 % in 2018
- South-Eastern Finland is one of the strongest organic cultivation areas in Finland.
  - 14.2 % in 2018 (10.6 % in Finland)
- Demand for organic products is constantly higher than supply.

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We want to enhance the organic farming, further processing and the consumption of organic products in the area.

The aim of the project is to create a development plan for organic production in South-Eastern Finland.

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Improvements needed

- Organic production and food is not included in regional strategies and developlment plans
- Sustainable development and organic – the connection is not obvious
- Organic food is not on top of dicussion
- Amount of organic products in institutional kitchens is low and invisible
- Local or domestic food has higher added value than organic food

Circular economy & fish

Maximising the value of Cyprinids towards a competitive circular economy

- Cyprinides - Underutilized fish species
- Fishing cypernids has many ecological benfits
  - Remoe of nutrients from water
  - Reduce eutrophication
  - Manage fish stocks
  - Sustainable source of animal protein

Photo: Eetu Karhunen

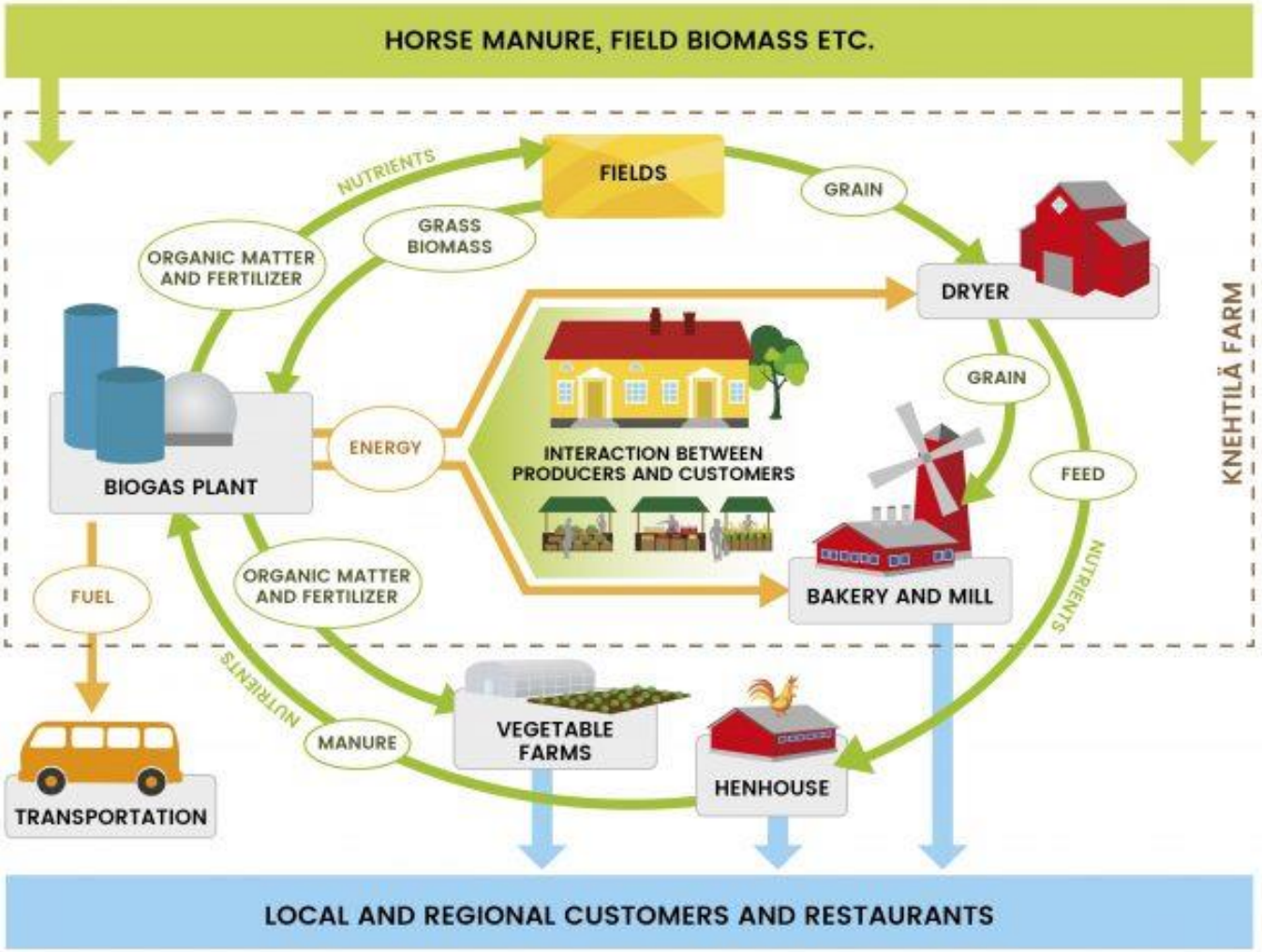
Bottlenecks and solutions for industrial food production

- Availability
  - Steadily, all year round
- Logistics
  - Costs: Adecuate batch sizes (Keepnet methods), transprotation routes, temporary stores
- Handling process
  - Process automation (sorting, gutting)
- Selective fishing → Commercial fishing

Project info

Circular Economy in Food System: Case Palopuro

Palopuro Agroecological Symbiosis



Koppelmäki et al 2016 & 2019

Tunne huominen – All for the future.

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