

Analyzing and Forwarding Sustainability through REISKA Project

Lahti Science Day



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REISKA

- focuses on the economic and environmental performance of the Päijät Häme's agri-food systems;
- identifies the performances of selected sectors in terms of eco-efficiency and sustainability;
- identifies practices, technologies and business ideas that can support the transition towards **Circular Economy**;
- mobilize stakeholders to ensure their active participation in getting and delivering sustainable food and nutrition security;



Sustainability analysis of the agricultural and food systems in Lahti Region (towards Circular Economy)

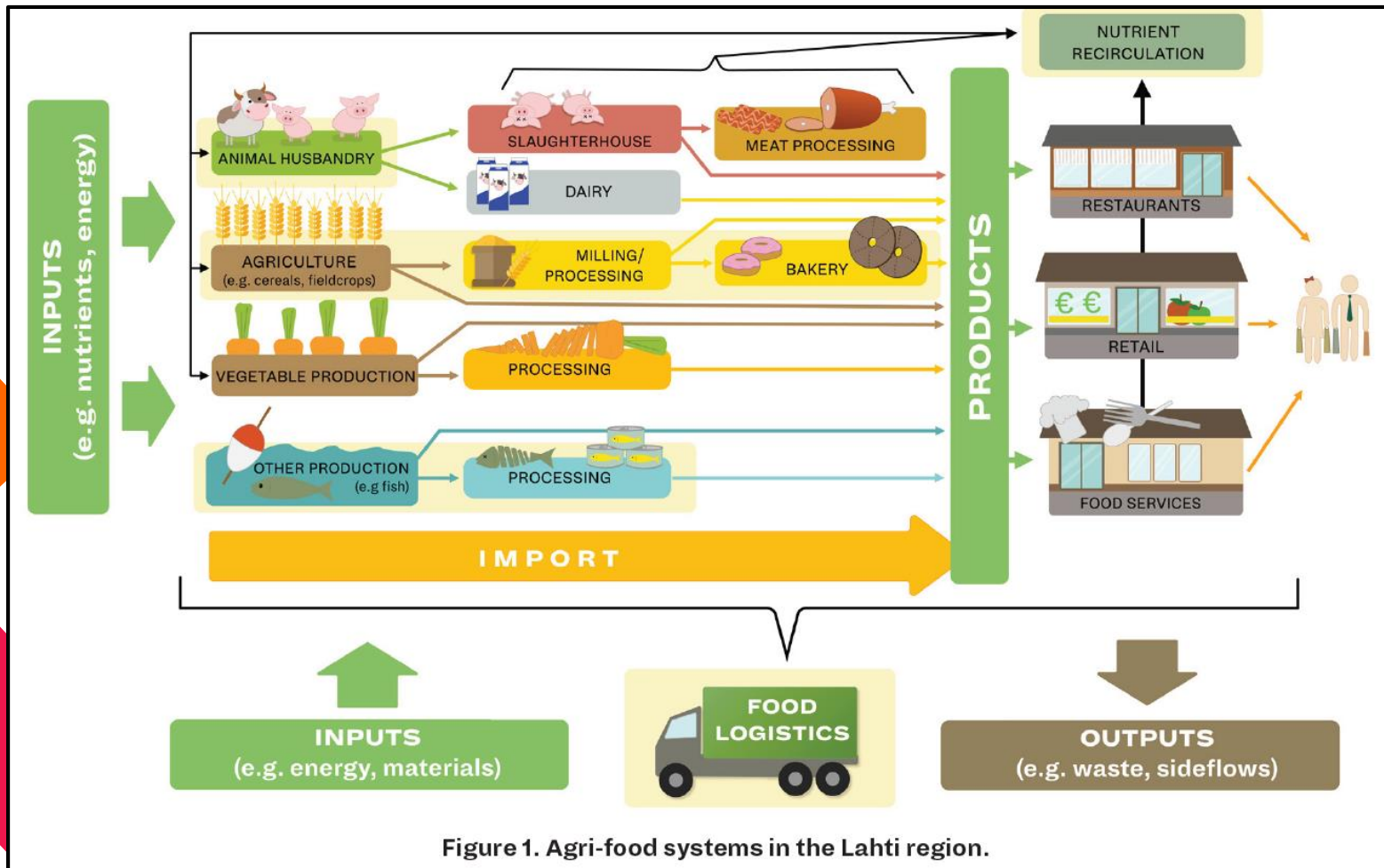


Figure 1. Agri-food systems in the Lahti region.

CASES/PARTNERS:

Fazer Mill; LaBio Oy; Ompputonttu Organic Sheep; Särkifood; Kauppahalli24; Viitahunaja; MeaManna Restaurant; ROK; Lahti public/consumers and local government.

Research, Results and Implications (1)

Closing nutrient loops by producing bio-fertilizers via biogas process

- methane as energy and digestate as fertilizer .
- utilization of biowaste for biogas production helps to prevent climate change.

Saving biodiversity by organic sheep production

- the role of sheeps is important in maintaining biodiversity.
- to keep sheep farmers economic vitality, farmers do need to pay attention to green marketing and green consumers.

Removing nutrients and producing food using local fish

- removing roach fish and using it as food can reduce global warming and eutrophication in water systems.

Evaluating sustainability of oat production

- the sustainability of oat production in Finland is focused on the assessment of ways to produce oat with minimal carbon footprint -> by using side-flows from the production and by producing bio char result to recirculate the nutrients and improve the environment.

Efficient food delivery systems

- grocery shopping in the Internet enables multiple sustainability benefits.
- straightforward logistics from the producer to customer ensures freshness of groceries-> helps to decrease the amount of food waste in households.

Research, Results and Implications (2)

Consumers perspectives on sustainable food consumption and production

- *despite the significance of economic arguments when making purchases and decisions about food, domestic production and healthy products are highly valued and considered important by the consumers.*
- *consumers perspectives as well as decisions as to deciding which food to buy and consume are now affected by varying degree of knowledge and concerns about sustainability issues.*

Stakeholders perspective on trash fish & lake management

- *agreement on sustainable management and business development (processing and making food) is acceptable and getting to the market.*
- *development of trash fish facilities have opposing or conflicting views.*

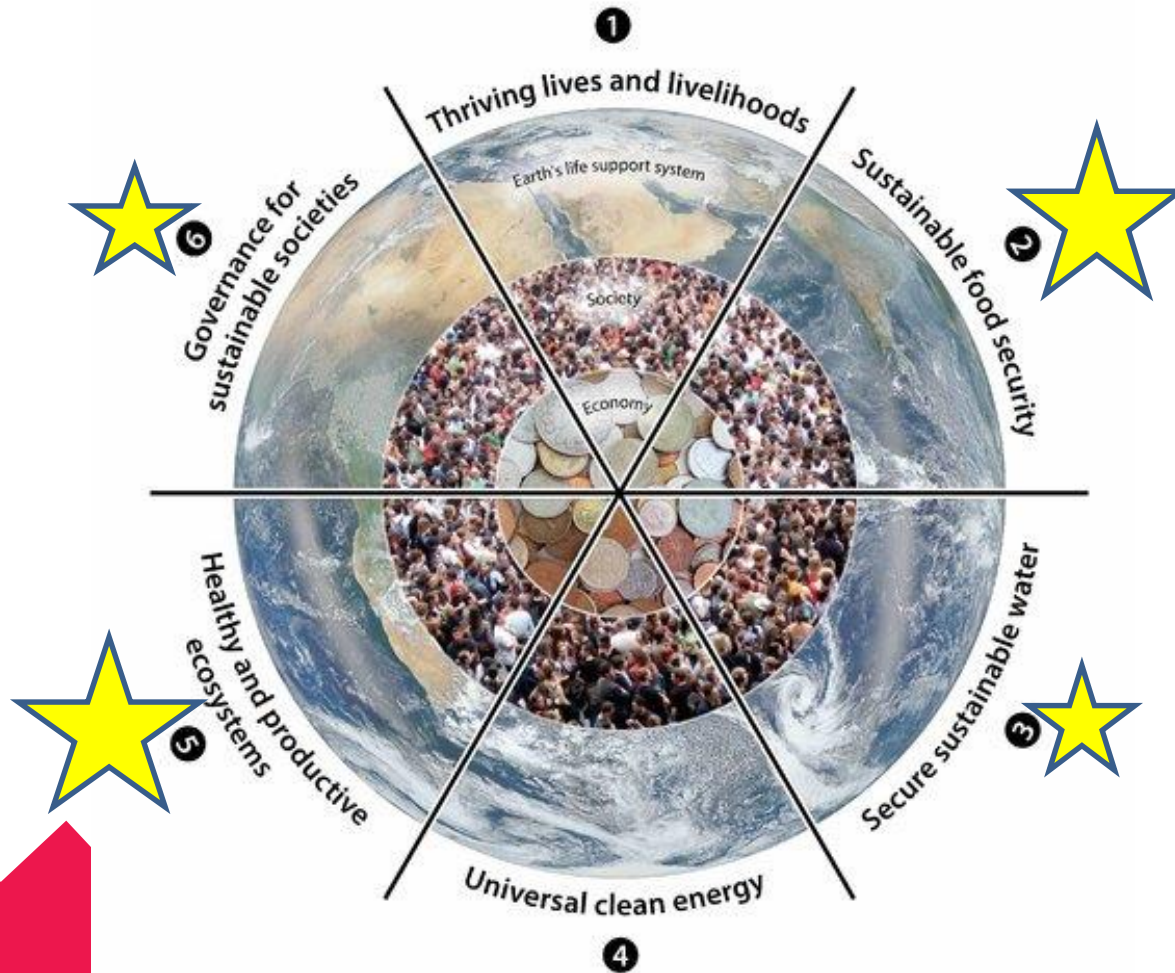
Honeybees and honey production

(on-going) - *looking at the role of bees in pollination to ensure fruits and flowers production and how honey production is impacting or enhancing eco-systems' sustainability.*



Sustainability indicators in the agri-food sector -> improvement, technological and business development, and policy interferences towards Circular Economy.

REISKA's focus of contributions



David Griggs et al. (2013) Nature