

From projects to market-based: how to commercialize fishing of underutilized fish species ?

- experiences from Local Fishing and Baltic Fish projects

FARNET webinar 25.3.2021
Marjukka Porvari
John Nurminen Foundation



- + ONGOING PROJECTS
- + COMPLETED PROJECTS
- + COOPERATION PROJECTS



JOHN NURMINEN FOUNDATION

- Started as cultural foundation in 1992
- Baltic Sea protection projects started in 2005
- First Clean Baltic Sea project in St. Petersburg in 2005–2011
- By 2021, 40 launched environmental projects, of which 30 have been completed
- JNF projects have decreased algal available phosphorus load to the Gulf of Finland by 60%.



Reducing nutrient discharges in order of volume and cost-efficiency



Photo: Lasse Hendriks

1. Point source loads from municipal treatment plants

- Improving the efficiency of phosphorus removal in St. Petersburg and in other cities in Russia, the Baltic countries, Poland, and Belarus

3. Non-point source loads from agriculture

- Gypsum treatment of fields in Lieto
- Gypsum treatment of fields in the River Vantaa
- Gypsum treatment in the Baltic Sea catchment area (Gypsum Initiative)
- Manure nutrient recycling project

2. Point source loads from industry

- Fertilizer production, e.g. Phosphorit, Kingisepp
- Discharges from fertilizer shipping
- Biogas production (Sustainable Biogas, biogas project in Lviv)
- Intensive livestock farming (Udarnik, large poultry farm in Russia)
- Loads from industry to municipal treatment plants (BEST Project)

4. Internal load

- Management fishing in Finland, Sweden and Åland Islands
- SEABASED project
- Coastal Reed project

Food or waste?

Fishing removes nutrients from watercourses: in Finland, annually some 700 tons of phosphorus are recycled on land by fishing.

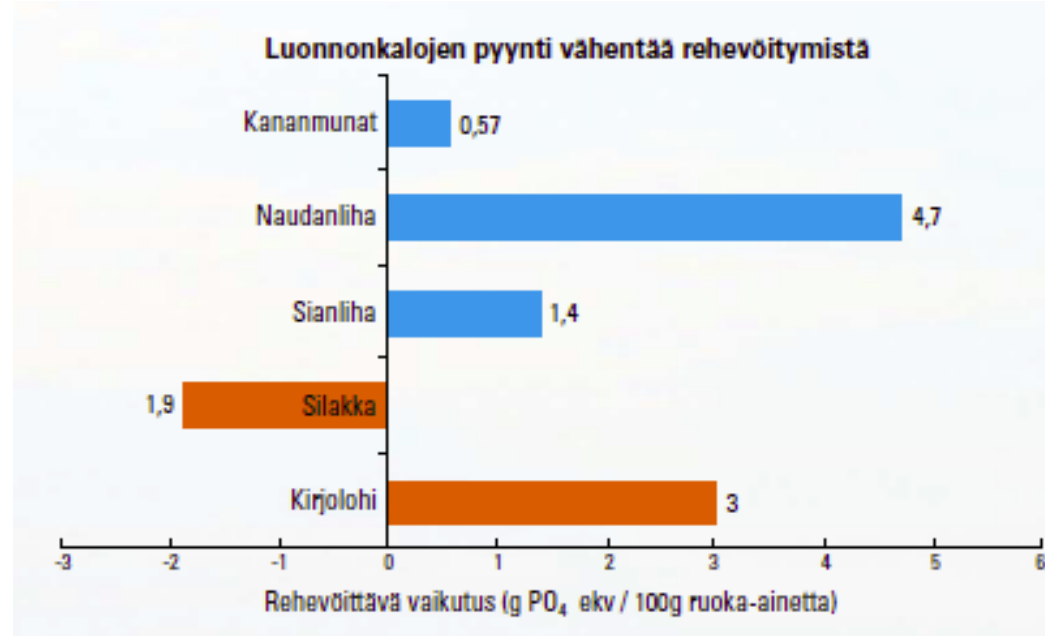
Appreciation of different fish species is strongly conditioned by cultural habits. After 1980s, roach, bream, ide and smelt have not been commonly utilised as human food in Sweden and Finland, whereas they are still consumed e.g. in the Baltic States.

Cyprinid species and smelt have become abundant in lakes and the Baltic Sea due to eutrophication.

With targeted fishing of underutilised fish species, it is possible to reduce nutrients in water ecosystems and complement measures on land.

In addition, fishing targeted to these species restores the balance of water ecosystems.

Products are healthy, environmentally friendly, ethical and locally produced.



Kuvat, lähde: tuottajien verkkosivut

JNF fishing projects



- Local Fishing: commercialization of cyprinid (roach and bream) fishing in Archipelago Sea and Bothnian Sea area in 2015-2019
- SEABASED: stickleback fishing in Åland Islands in 2018-2021



- Baltic Fish: commercialization of cyprinid fishing in Åland Islands and Sweden in 2019-2021



Management fishing of cyprinid fish (bream, roach, ide)

Objectives

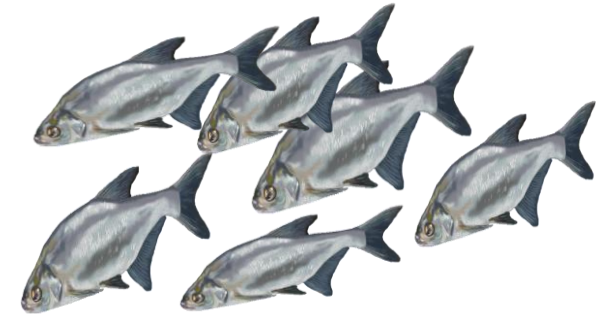
- Recycling significant amount of nutrients (P, N) by targeted fishing of cyprinid fish.
- Utilization of cyprinid fish for human consumption.
- Commercialization of management fishing to ensure long-term economic sustainability.

Implementation

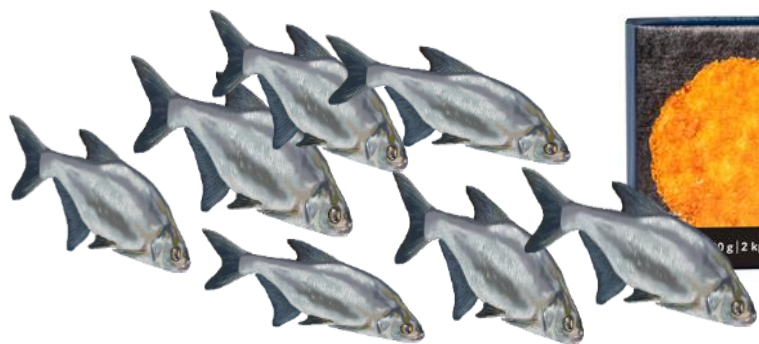
- A large group of stakeholders from all sectors engaged in close cooperation.
- Commercial sector included from the beginning.
- Jointly agreed sustainability rules for fishing, to ensure the ecological and social sustainability of actions.

Environmental benefits

- Reduction of nutrients from the marine ecosystem.
- Positive impact on food chain and coastal ecosystem by restoring the overgrown population of cyprinids closer to their natural balance.
- Utilising fish as human food reduces climate emissions from food consumption.



Value chain of our cyprinid fishing projects





Local Fishing Project

Preparations in 2014

Contact from Archipelago Sea area fishermen

Consultations with stakeholders (fishermen + organisations, free-time fishermen + organisations, researchers, environmental NGOs)

Jointly agreed sustainability rules for fishing

JNF financing decision

Phase 1. Start on local level in the Turku region 2015 - 2017

Kala-apu Oy produces fish mass, Kalaliike Wallin produces fish patties

Institutional kitchens involved to guarantee stable demand

Side streams and leftovers used for biogas production

Development of production methods, recipes, products, logistics → preparations for the next phase

Phase 2. Launch on national level with Kesko 2017 - 2019

Based on experiences in phase 1

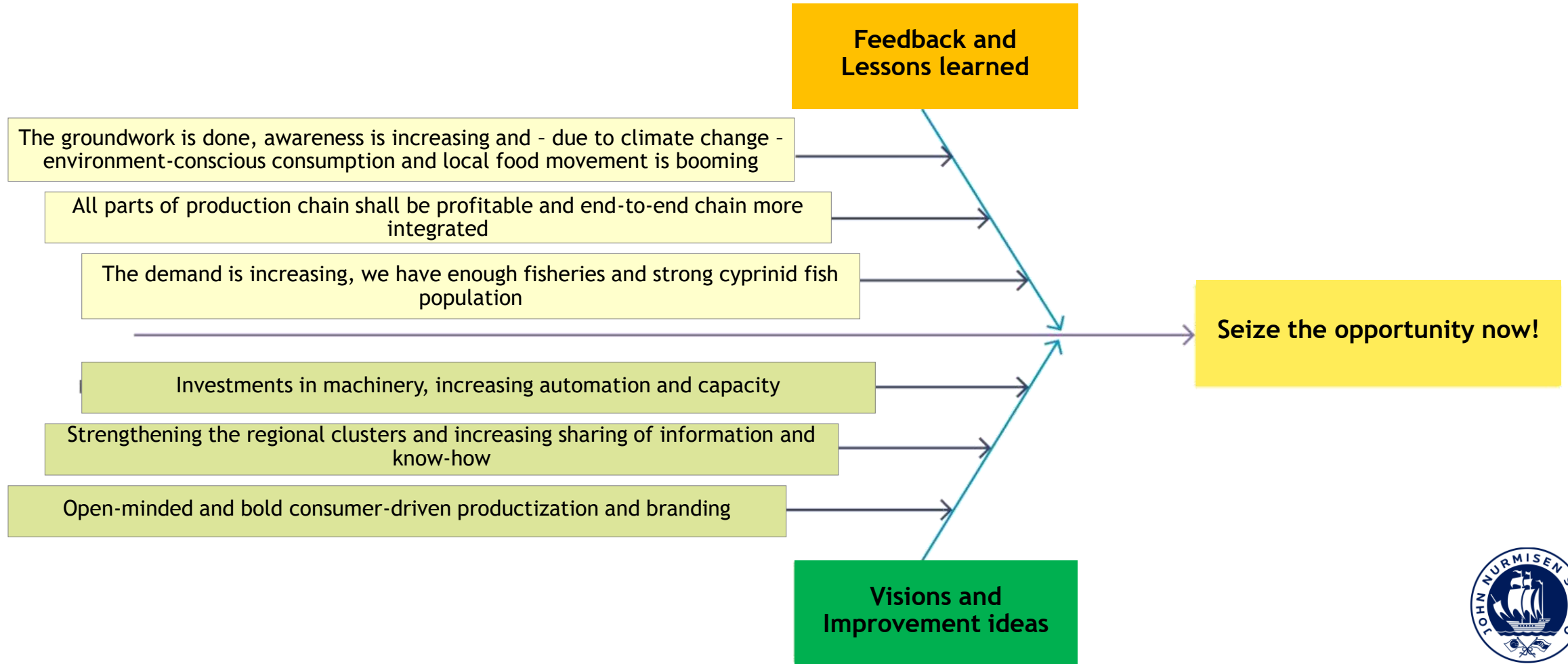
Product development, branding and marketing for consumers

Fishermen from Archipelago Sea, Bothnian Sea and Bothnian Bay areas



The opportunity is there and the right time to act is - now!

How do we achieve financially sustainable model for solidifying Baltic Sea cyprinid fish as part of the food chain?



Baltic Fish Project

Implemented in 2019-2021

Our partners

Guldhaven Pelagiska (SWE), Race for the Baltic (SWE), Rädde Lumparn (Åland Islands), Ålands Fiskarförbund

Co-financed by Baltic Sea Action Plan Fund

1. Creating commercially based targeted management fishing of cyprinid species in Sweden and Åland Islands

Consultations with the local fishery agency and other stakeholders

Contacts with commercial producers, foodservices and institutional kitchens to utilise the catches

Test fishing activities to find the best fishing gear, most suitable fishing seasons and to establish production chains

Based on test fishing results, drafting rules for sustainable management fishing

Signing contracts with the participating fishermen and supporting the purchase of suitable fishing gear

Starting commercial fishing and production chains



Photo: Therese Andersson

Baltic Fish Project



2. Opening market for products made of cyprinid species in Sweden - creating demand both in institutional kitchens and consumer side

Based on test fishing, analysing relevant toxic substances such as dioxins and mercury in cyprinid catch to be used for human consumption

Producing information material on the ecosystem and health benefits of eating sustainably caught Baltic Sea fish

Marketing products to foodservices, institutional kitchens and commercial retail chains in Sweden





www.johnnurmisen-saatio.fi



@johnnurmisen-saatio