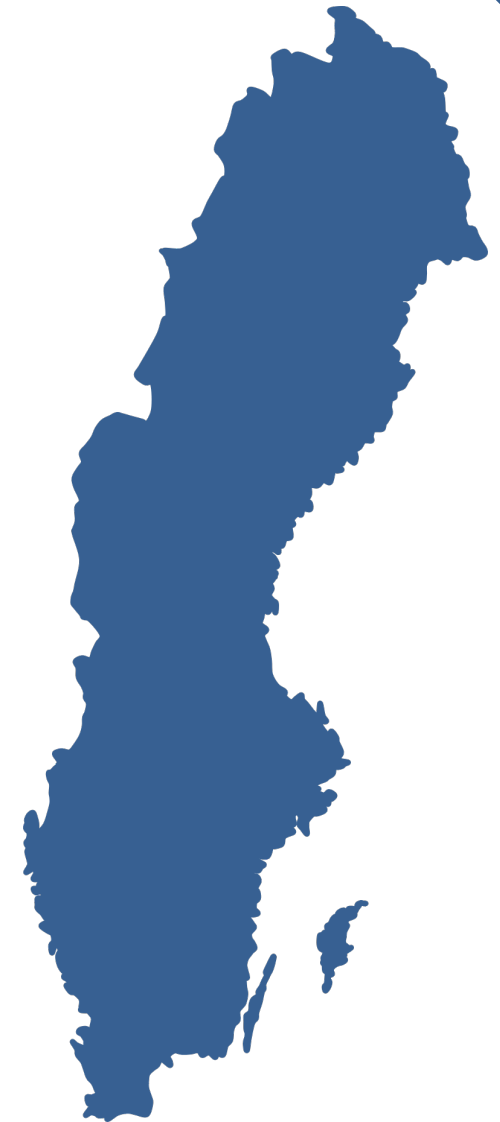


# Welcome to day 1 of **TAIEX TSI Workshop**

Strengthening the Resilience of Island Economies of  
Croatia, Greece, and Sweden: focus on data and island  
proofing



**Mathias Moberg**, *Director General at the Ministry of Rural Affairs and Infrastructure, Sweden*





**Meit Fohlin**, *Chair of the Regional Executive Board Board,*  
Region Gotland, Sweden

**Rickard Vidlund**, *Chair Executive Officer of Öckerö*  
*Municipality, Öckerö Municipality, Sweden*

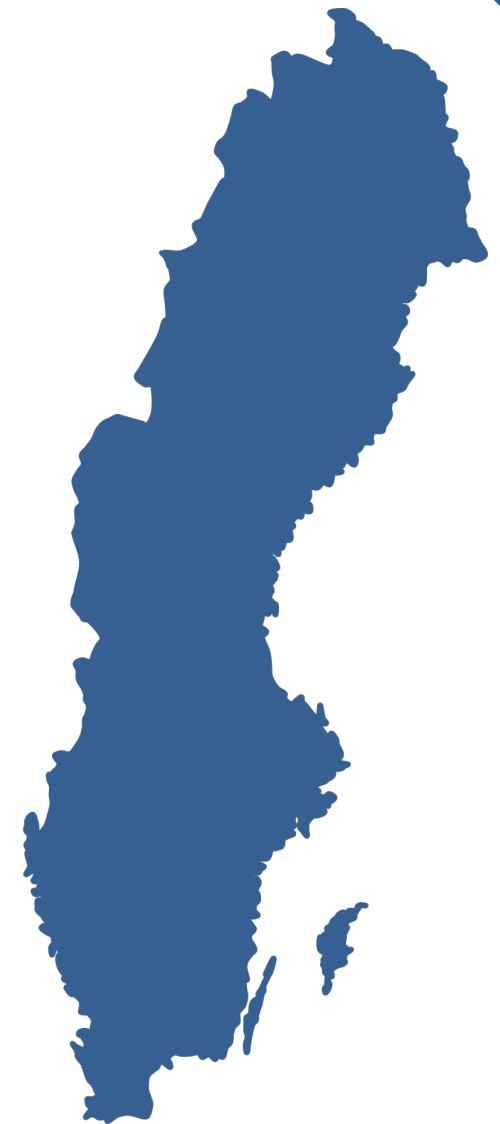
**Elodie Boulch**, *Policy Officer, Directorate General for*  
*Structural Reform Support, DG REFORM*



# TAIEX TSI Workshop

About Nordregio

Rolf Elmér, Director of Nordregio







Welcome to



Nordregio



# Nordic research and expertise

- International applied research centre founded in **1997** by the **Nordic Council of Ministers**
- Part of the **Nordic co-operation**, the world's oldest regional partnership
- Bridging policy and research in support of the Nordic Vision 2030
- A link between research in the Nordics and in the EU

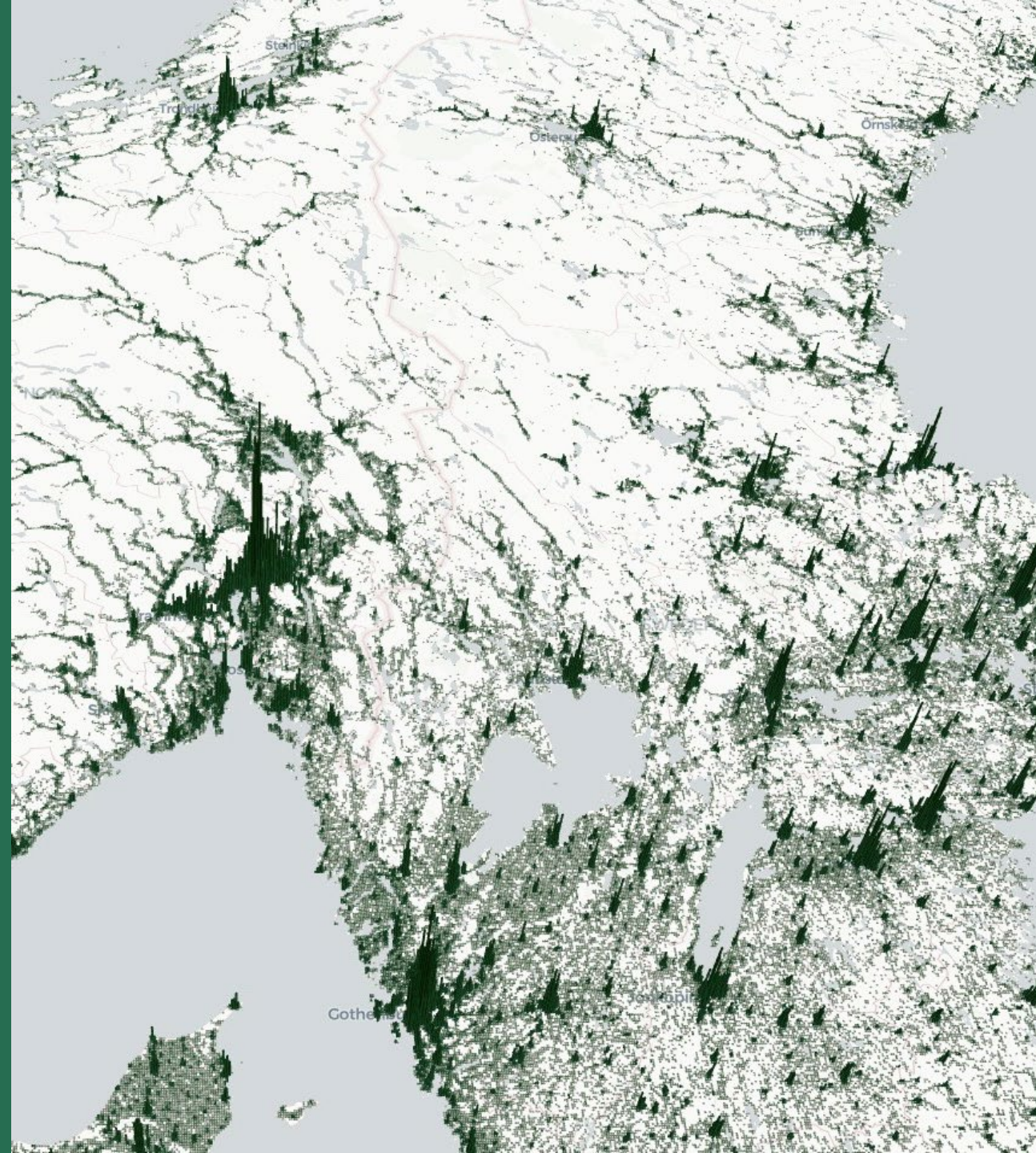




# Data-driven research supports informed policy making

GIS team at Nordregio:

- data collection and analysis
- Maps and their interpretation
- State of the Nordic Region





# State of the Nordic Region 2024



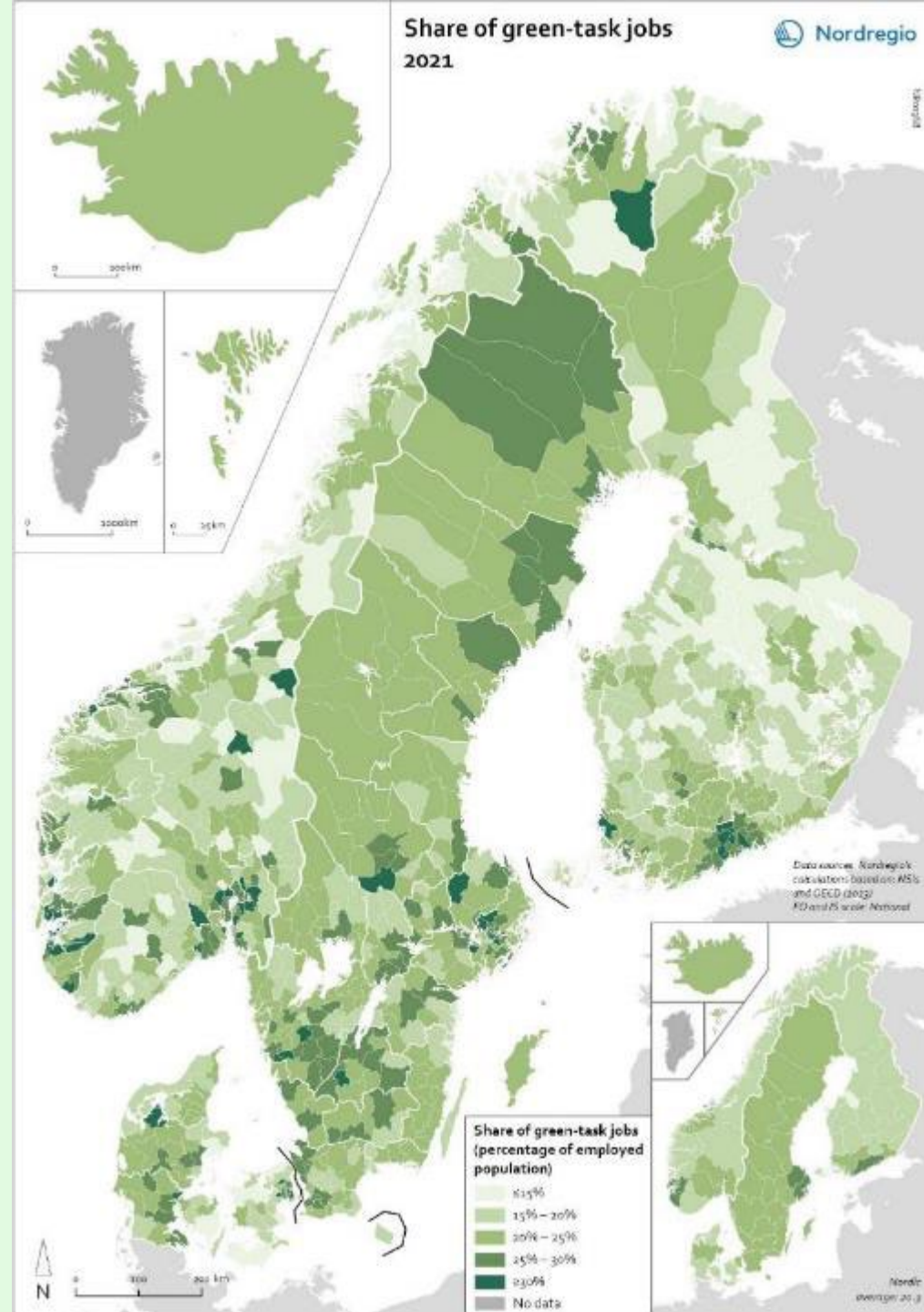




# Green transition

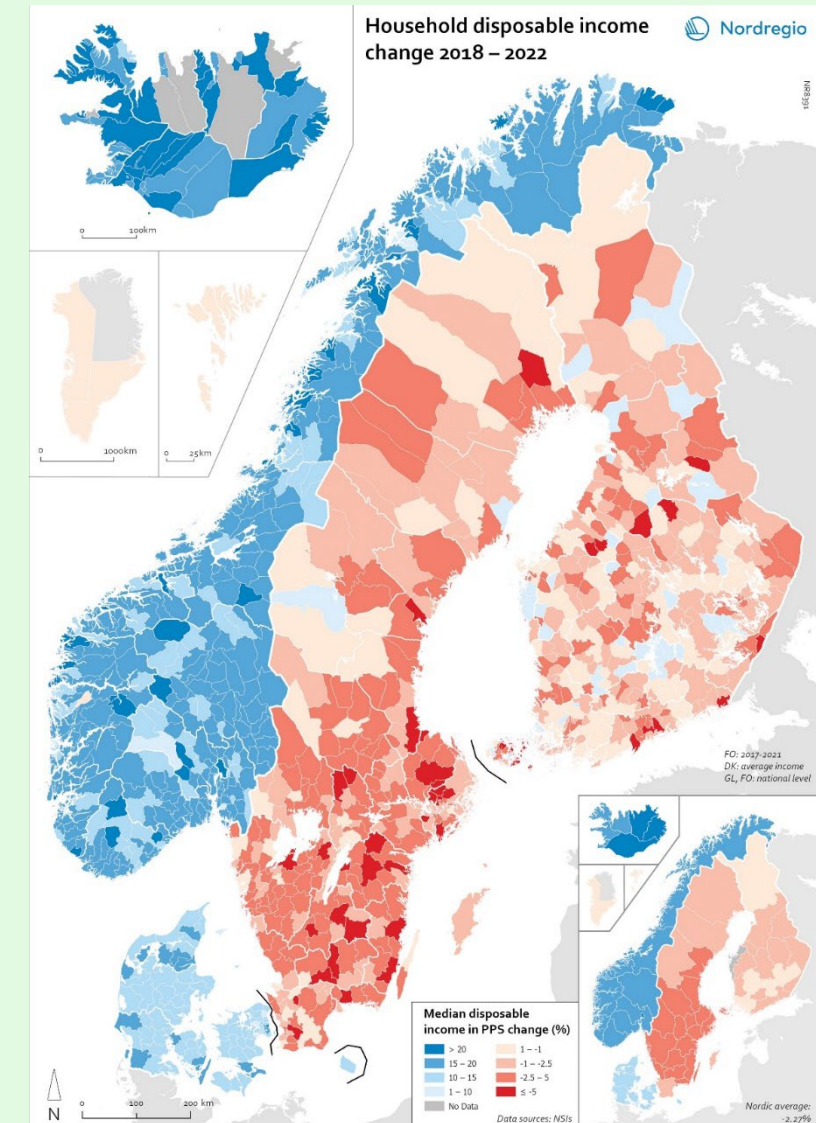
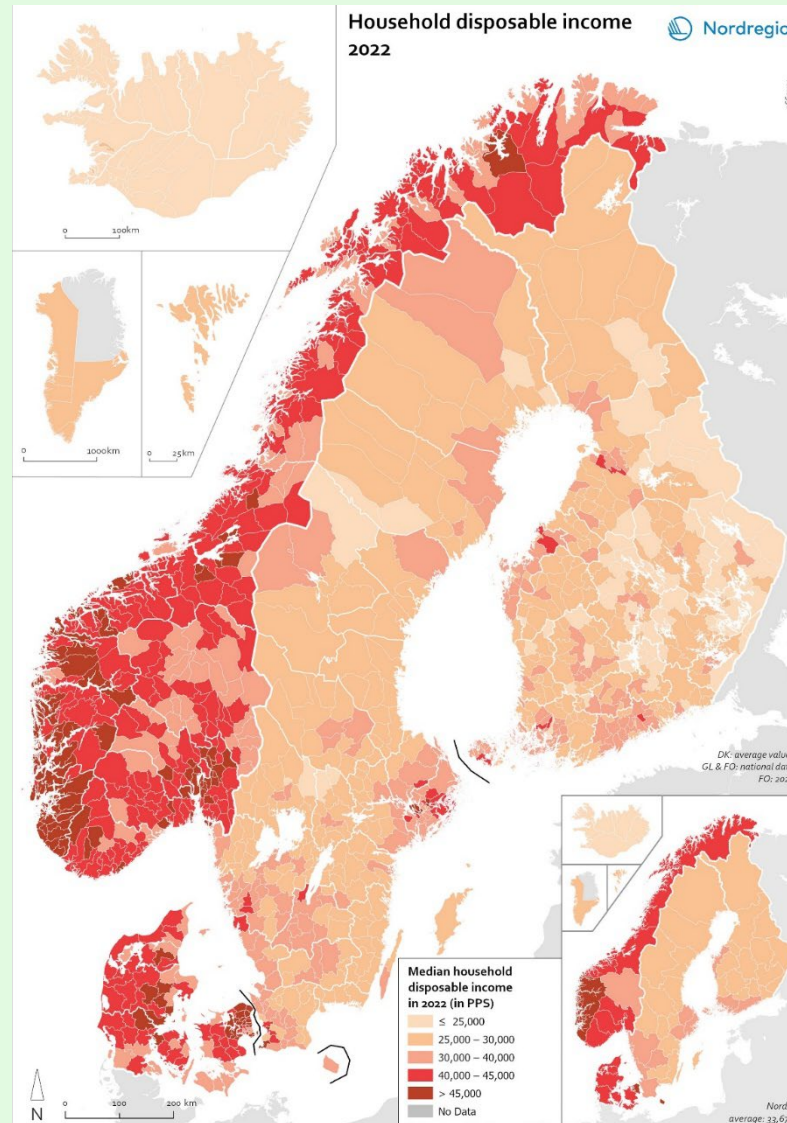
## 'Green jobs'

- In 2021, ca. **3.4 million jobs (25.2%)** of total employment in the **Nordic Region** classified as green
- **More green jobs in urban areas** – on average **28%** in urban areas vs. **21%** in rural areas.
- Green transition is in an early phase and there is a demand for **new skills and innovations**. Green jobs are correlated with **higher education** and a **skilled workforce**



# Income differences

- Nordics have **high household income** compared to EU average
- Income differences are **increasing** both between and within regions
- Norway: **less** differences than the other countries
- Iceland: changed from largest to **smallest gender pay gap** (between 2007 and 2022)





# Recent research



New storymap:

## Can local ownership drive a green transition?

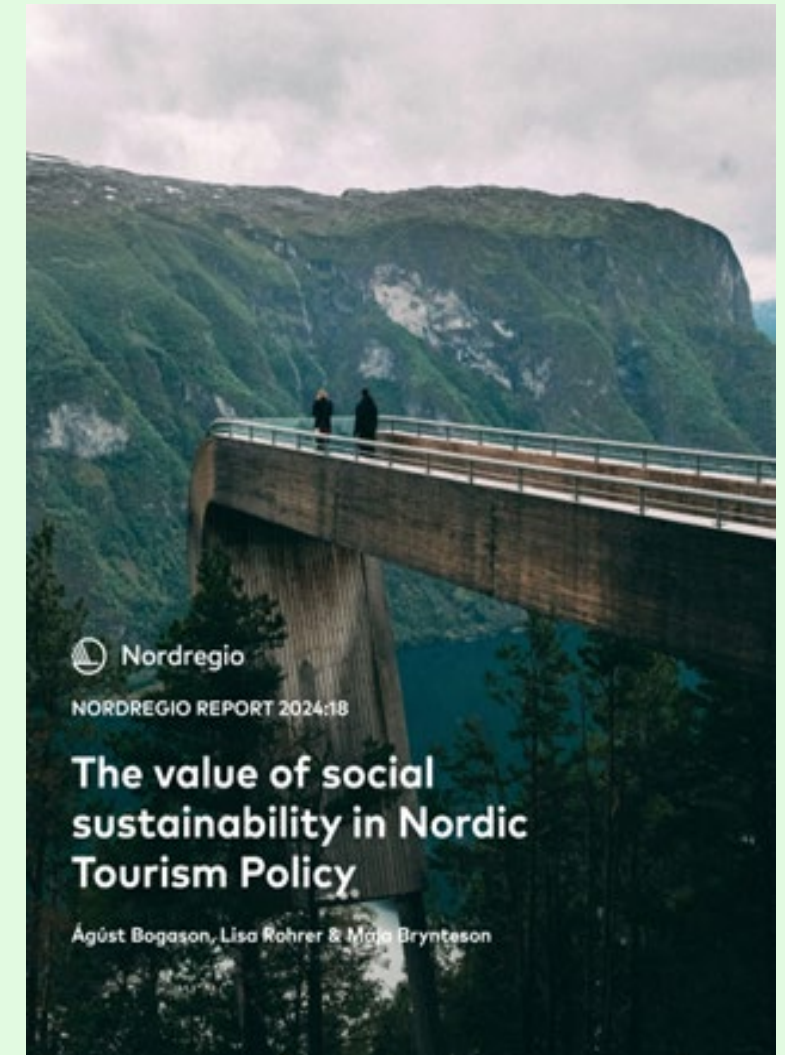
Islanders in **Bornholm** want to establish a locally owned windmill – an act for a sustainable future and to unite the island. Nordregio researchers have interviewed 8 of them to explore the steps they took and the challenges they faced.

"I think one lesson, among many, from the Bornholm Havvind case is that local involvement is important – but not enough to create change to a fossil-free sustainable energy system. As actors, we are always surrounded by enabling and hindering physical and social structures." - [Elin Slätmo](#), Senior Research Fellow and author of the storymap.

Read the full story "**Inclusive green transition using wind in Bornholm**" available now and discover key takeaways for locally owned energy systems:

75% (561 click)

READ STORY MAP

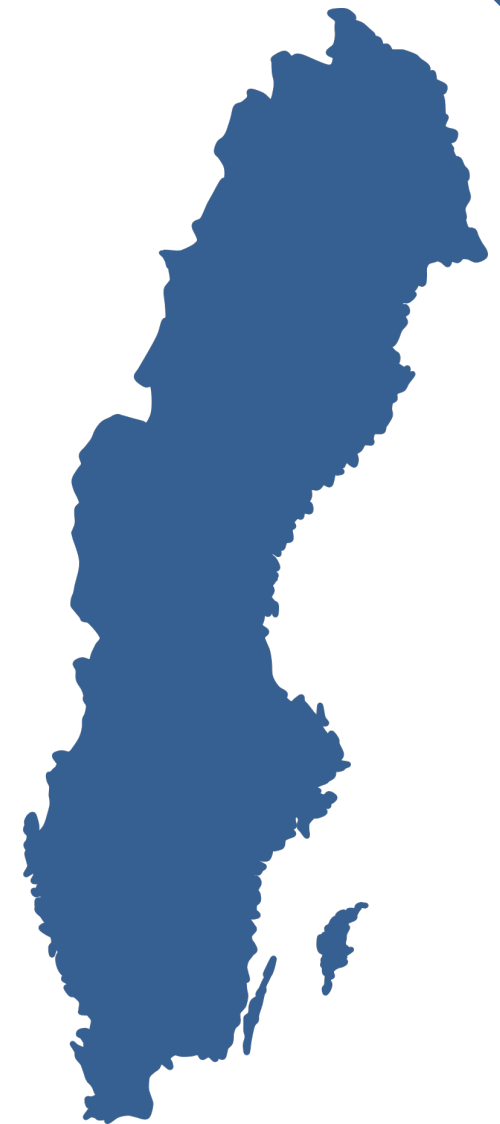




# TAIEX TSI Workshop

The Report of Sweden – Preliminary Findings

Stefano Barbieri, Senior Policy Analyst, OECD





# IMPROVING THE QUALITY OF MULTI-LEVEL GOVERNANCE AND STRENGTHENING THE RESILIENCE OF ISLAND ECONOMIES OF SWEDEN

14 November 2024

Stefano Barbieri –Senior Policy Analyst

 @OECD\_local

 [www.linkedin.com/company/oecd-local](https://www.linkedin.com/company/oecd-local)

 [www.oecd.org/cfe](https://www.oecd.org/cfe)



# Island Challenges

## Key challenges

- **Island specific challenges**
  - transport logistics to mainland, housing & permanent residence challenges, natural resource management)
  - Insularity
  - Small scale of markets (lack of agglomeration benefits), higher costs (incl. transport), reduced institutional capacity
- Challenges common to rural remote areas (e.g. demographic decline, limited financial capacity, workforce constraints, service provision)

**Table – Common challenges and opportunities in Island economies**

| Themes                          | Challenges  | Opportunities   |
|---------------------------------|---|---|
| <b>Economic</b>                 | <ul style="list-style-type: none"> <li>• Lack of critical mass (e.g., local market size and narrow production base)</li> <li>• Geographic isolation and transport costs</li> <li>• Seasonality of industries (e.g. tourism), including in primary sector</li> <li>• Integration with national communications and energy networks</li> <li>• Low level of innovation</li> <li>• Lack of qualified labour and professional development</li> </ul> | <ul style="list-style-type: none"> <li>• Diverse tourism offers (natural, recreational, business, cultural, health and well-being)</li> <li>• High-quality, diverse food production (agriculture and fisheries)</li> <li>• Entrepreneurial spirit and "can do" mindset</li> <li>• Blue economy</li> </ul> |
| <b>Environment</b>              | <ul style="list-style-type: none"> <li>• Vulnerability to climate change and natural hazards</li> <li>• Complex land use planning</li> <li>• Sensitive environmental management issues (e.g. waste, water and sanitation)</li> </ul>  | <ul style="list-style-type: none"> <li>• Green economy, renewable sources of energy</li> <li>• Natural resources and high levels of natural and man-made amenities</li> <li>• Unique biodiversity and ecosystem services</li> </ul>   |
| <b>Social and institutional</b> | <ul style="list-style-type: none"> <li>• Ageing population, migration trends and "brain drain"</li> <li>• High cost of services</li> <li>• Diseconomies of scale (higher unit costs for infrastructure and public services)</li> <li>• Expensive housing and poor access to housing for all stages of life</li> </ul>   | <ul style="list-style-type: none"> <li>• Quality of life</li> <li>• Close social ties and community support structures</li> <li>• Territorial attractiveness / cultural heritage and histories</li> </ul>   |



# Swedish Island's specific challenges

## Key challenges

- Swedish islands are exposed to the costs of insularity and can be costly for their economies.
- Gotland and Öckerö (home to more than half of Sweden's island population) give lessons of challenges and policy actions. Both islands show distinctive characteristics but highlight common success factors for policy making.

### Strengths:

- > Good image nationally, key sectors like agro industry produce high-quality local products with a strong trademark.
- > laying the foundations for long-term smart specialization: (1) Food and food industry, (2) energy transition and (3) tourism (with growth potential)

### Challenges:

- > Gotland stands out because of the connections and the costs of travel and transport (e.g. high ferry fares)
- > Lack of economic diversification → vulnerable to sector-specific downturns and global shocks, limited innovation and export capacity
- > Insufficient attraction of businesses and talent
- > difficulties in co-operating with other municipalities and regions due to the lack of a fixed link to the mainland.

### Gotland



### Strengths:

- > Tourism and the maritime industry (e.g. fishing, shipbuilding, consumer products) serving as key drivers of growth.
- > Öckerö has seen the second-highest economic growth in Sweden.

### Challenges:

- > Finding skilled workers and managing high labour costs are two significant challenges.
- > Seasonality in tourism and other key industries
- > Renewable energy is a source of untapped potential
- > Geopolitics has underscored the need for enhanced civil defence, resilience, and cybersecurity, especially for island communities.

### Öckerö





# Place based policies to capitalise on Island's unique assets

- Place-based policies that are customised to the local conditions of each island is vital for maximising their opportunities and addressing their specific challenges effectively -> capitalize on specific assets (e.g. natural resources, cultural heritage, strategic location)
- Tailoring policies to local conditions allows for greater community involvement and ownership -> Island residents are more likely to support initiatives that resonate with their realities and aspirations.

**Table – Making the case for place-based policies in Islands: risks of generic, place-blind policies**

| Islands' features  | Risk of generic, place-blind policies   |
|--|---|
| Limited resource availability (e.g. freshwater, arable land, and energy sources)                                   | Generic, place-blind policies may not be suitable or sustainable  |
| Insufficient economic diversification (e.g. away from tourism or fishing)  | Economic diversification might be neglected, leading to more exposure to economic downturns or changes in global market trends.                   |
| Infrastructure and connectivity significantly different from mainland areas due to their isolation                 | might not account for the necessary investments in transportation, communication, and utilities that are crucial for island development.          |
| Rich biodiversity and unique ecosystems  | may not adequately safeguard these delicate environments or recognize the value of preserving biodiversity for the island's long-term well-being. |
| Magnified exposure to climate change, including issues like rising sea levels and extreme weather events           | may not adequately address these unique climate-related concerns, putting island communities at higher risk.                                      |
| Governance structures and decision-making processes in island communities that differ from larger mainland regions | Ignoring these differences can lead to ineffective policy implementation and reduced community engagement.  |
| Local knowledge and expertise, which matter more in places with such peculiarities                                 | may miss opportunities for sustainable development and conservation   |



# Gotland policy assessment – strategic initiatives

## Good practices

- Integration of regional development strategy with national strategies.
- Alignment of Gotland's regional food and food industry strategy to the respective national strategy. This strategy has an action plan that refers directly to Our Gotland 2040 and Smart Specialisation strategy.
- Aligning strategy and operation with steering approach.
- Regular monitoring and revision of the regional development plan (Our Gotland), with public consultations
- EU Funding and strategic use of funds (e.g. in sustainable food or hospitality), but still room for improvement
- Collaborations with neighbouring regions.

## Areas for improvement

- Though the Comprehensive Plan accommodates for national interests and regional needs, including for land use, there is no mechanism that arbitrates between national interests.
- Though by law Region Gotland "holds the plan" for regional development, it is less clear to what extent it influences national authorities.
- Limited long-term impact analysis of regional development projects.
- Dependence of local actors on regional co-funding, which limits scale of initiatives.
- Insufficient organisational capacity for an active management of the implementation of the existing strategies.
- Underutilisation of EU funds (given organisational and competence limitations by local development actors)
- Internal communication and resources in Region Gotland can be improved to better meet national commitments.

## Policy Gaps:

- Strategies for strengthening business ecosystems are lacking detail.
- No specific strategies for digital transformation.
- Further focus on social services (incl. healthcare infrastructure) would strengthen ability to attract residents
- Double insularity unique challenges (e.g. with Fårö), with no clear solutions for lack of critical mass and higher costs to deliver services.



# Öckerö policy assessment – strategic initiatives

## Good practices

- A common vision, as a collaborative effort involving all political parties.
- Solid steering model, with a vision, objectives for the current term and various policy documents (led by the Comprehensive Plan).
- The Comprehensive Plan is regularly updated, with consultation with residents for political direction.
- Regional collaborations in Gothenburg to pursue strategic goals. Active in several networks to promote the municipality as part of the Gothenburg archipelago.
- Have initiated a visit and business council in the municipality.

## Areas for improvement

- Limited municipal resources.
- Municipality does not have a person responsible for EU coordination.
- No central structure for applying for national or EU grants.

## Policy Gaps:

- No local smart specialisation strategy, which is primarily addressed at the regional level through Business Region Gothenburg
- Need for a diversification strategy, which is missing.
- Insufficiently defined SMART goals for strategic initiatives
- Systematic policy analysis and evaluation.





# Key success factors in policy making

## National Government

- National guidance: Local action is often framed and guided by national strategies, including in spatial planning and land use.
- E.g. in specific policy areas like digital transformation, Region Gotland has pursued its work for developing a new comprehensive plan based on the digital model of the Swedish National Board of Housing, Building and Planning.
- Cooperation between regional and national actors: e.g. National institutions and policies continue to support local businesses and workers, in addition to the local initiatives in each Island. Also, national-regional collaboration is essential to jointly meet national and local goals.

## Regional and local Government

- > Forward-looking governance: e.g. a new governance model in Region Gotland – balancing political priorities in the short term (4 years) to achieve the goals of the regional development strategy in the long term (until 2040).
- > Common vision involving all political parties: e.g. in Öckerö, prior to each new term of office, the municipal council establishes a set of mandate goals that the administration will strive to achieve during the upcoming term – the goals are formulated by the political majority.
- > Public consultations: e.g. during the elaboration of the regional development plan and the comprehensive plan – inclusive approach to citizens engagement to ensure that diverse perspectives are considered in the planning process.
- > Collaborations with private sector: e.g. Region Gotland's coordinated efforts for talent attraction – better targeting of skills and investments
- > Inter-regional collaborations – and learning from other regions – collaborative approach to enhance economic resilience and innovation.
  - > e.g. Gotland collaborates with Småland regions to pool resources in areas lacking the critical mass to sustain clusters independently
  - > e.g. Öckerö's agreement with neighbouring regions – Öckerö is promoted as part of the Gothenburg archipelago (branding)
- > Branding the lifestyle of islands – more attraction of businesses and people
- > Monitoring, adjusting and learning: e.g. Region Gotland and regional stakeholders and interested parties reassess the challenges currently within the framework of the implementation of the regional development strategy.
- > Piloting policies + Measuring progress with SMART goals – increase policy effectiveness





# Key success factors by policy area

## Land & Infrastructure

- > Panning & assessing: adopt a more visionary and foresight-oriented approach to exploring the consequences of different scenarios
- > Smart Island vision → integrating open and shared data across various sectors such as transport, waste management, energy, and healthcare.
- > Align infrastructure planning and investment decisions to regional development priorities
- > Support infrastructure solutions specific to local needs, involving local initiatives and seeking synergies with local service providers.
- > Multilevel coordination for infrastructure development.
- > Small community development organisations as drivers of developing local infrastructure and providing for certain needs.
- > EU funding for Island infrastructure

## Competitiveness

- > Strategic planning for talent attraction (with a mature local brand strategy)
- > Strategic planning for education
- > Future planning capacity: e.g. regionally, Region Gotland intends to have annual competence dialogues with industries from a multitude of trades to get relevant data
- > Inter-regional collaborations for business and talent attraction
- > National-local coordination for employability (and local provision of employability services)
- > Business ecosystems and entrepreneurial support on the ground (in addition to access to national finance)
- > Tailored solutions to foster innovation → business ecosystem programmes
- > Collaborative local networks → promote the flow of knowledge, technology, and ideas between different actors.

## Sustainability

- > Comprehensive strategy to cut emissions
- > Plan to become carbon neutral
- > Plans to use land for sustainability efforts
- > Resource-efficient spatial planning as sustainability enabler:
- > Strategic vision for green talent attraction
- > Plan for nature conservation
- > Incorporation of climate change risk into Comprehensive Plan
- > Investigation of local needs (e.g. future energy needs and potential for renewable energy)
- > Targeted grants
- > Teaching sustainability since early ages



# Reinforcing strategic frameworks for island development in Sweden

## National Strategy for Sustainable Regional Development 2030

### Key challenges:

- National Strategy does not recognise islands as a distinct territorial category (only sparsely-populated and urban areas).
- Lack of national-level data to help identify island-specific challenges.

### Recommendations:

- Improve island data coverage to strengthen the evidence base for island-specific interventions.
- Develop a typology of island challenges, assets and needs.
- Amend the National Strategy to recognise different island categories identified in the typology.
- Consider requiring island impact assessments for policy making.



## International example

### The Scottish Government's Islands Typology

- Data collected on island populations, local amenities and ferry connectivity
  - Ten island typologies identified through data (e.g. independent hub islands, unserved islands)
- Data help improve policy makers' understanding of island capacity and how to target support to specific islands.
  - E.g. they are used as a resource to inform Island Communities Impact Assessments



# Cross-government co-ordination and consultation mechanisms to support island development

## Vertical co-ordination and dialogue mechanisms in Sweden

### Key challenges:

- Current multi-level co-ordination and consultation mechanisms provide limited opportunities for regular dialogue on island-specific challenges.
- SALAR has limited capacity to advocate consistently for island needs.

### Recommendations:

- A number of approaches could help to bolster the voice of islands in national policy design and implementation, including:
  - Holding an annual cross-government forum on island challenges
  - Setting up a cross-government committee on island affairs
  - Allowing subnational governments to submit proposals to adapt the territorial application of certain laws and regulations



## International example

### Finland's Advisory Committee for Island Affairs

- Composed of national and subnational government representatives and supported by a technical secretariat
- Reviews proposals made by regional and local governments to support island development
- Also conducts research on island-related challenges and formulates national government recommendations



# Subnational funding and financing arrangements to support island development

## Subnational funding and financing arrangements in Sweden

### Key challenges:

- Fiscal equalisation system is reviewed infrequently, and without ongoing consultation of island territories on service cost measurement.
- Eligibility criteria for Cohesion Policy funding may place potential island beneficiaries at a disadvantage.
- Lack of human resource capacity in certain island territories to apply for/or manage EU Cohesion Policy funding.

### Recommendations:

- Create a multi-level working group on islands to improve measurement of service delivery costs.
- Develop specific funding calls that aim to address island insularity.
- Establish island co-ordinators to help territories apply for EU funding.



## International example

### Croatia's island co-ordinators

- 11 co-ordinators appointed to cover every coastal region
- Amongst other tasks, they are responsible for helping island territories identify funding opportunities, and assisting them with proposal-writing activities.

# Island Economies – Challenges and Opportunities, Policy Responses, Insularity Costs, and Multi-level Governance

## Introduction to the workshop themes

**Cecilia Linblom**, Controller, Öckerö Municipality, Sweden

**Erik Bäckström**, Regional Analyst, Region Gotland, Sweden

**Maria Ahlsved**, Senior Advisor, Ministry of Rural Affairs and Infrastructure

**Roland Engkvist**, EU Policy Advisor, Region Gotland

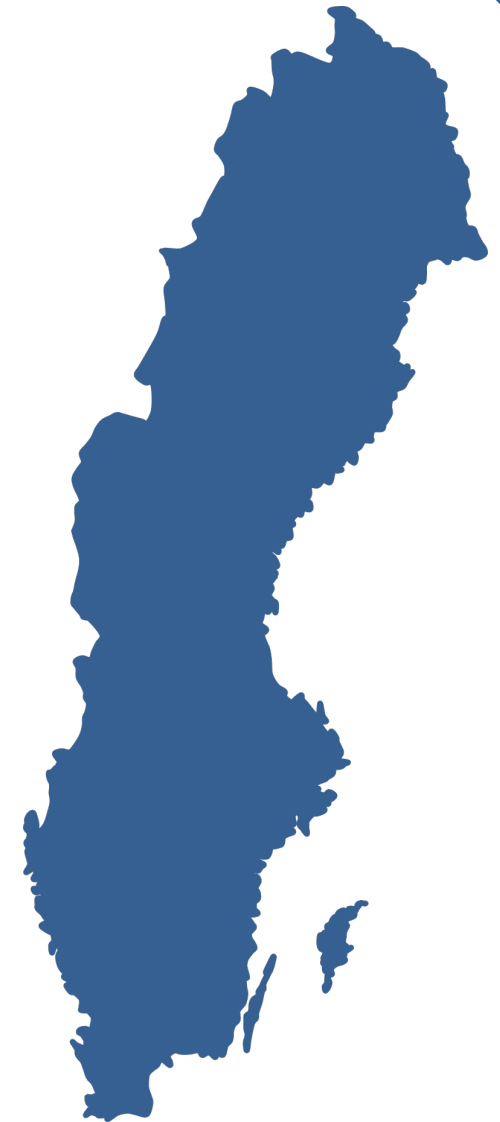
# Workshop Theme 1

Island Proofing – a Method to Address  
Insularity Challenges

# TAIEX TSI Workshop

Regional Development and Rural Development in  
a Swedish Political Context

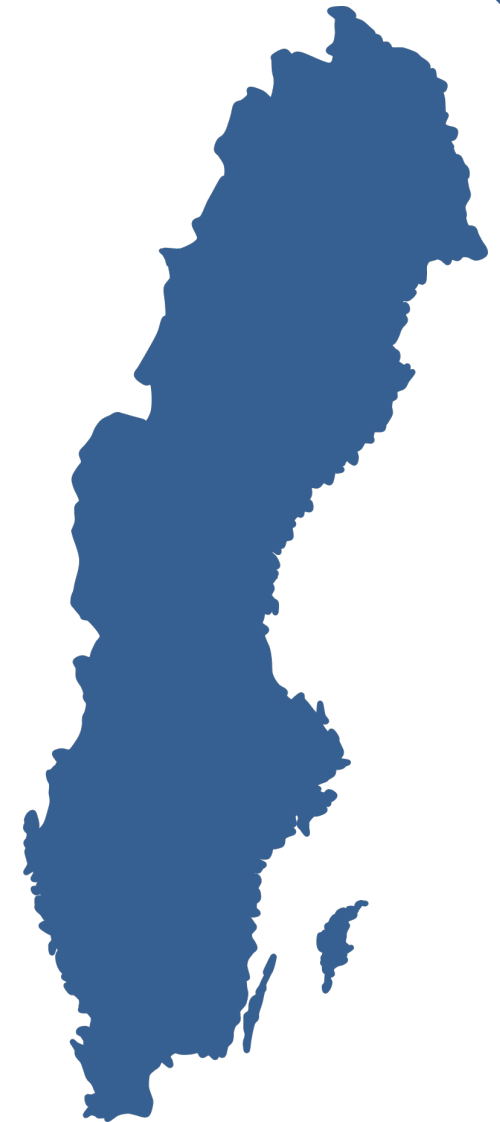
Martin Olauzon – Head of Government Inquiry  
of Swedish Development Coherence SVESAM



# TAIEX TSI Workshop

Swedish Efforts in Rural Proofing

Carin Persson – Rural and Local Strategist, the  
Swedish Agency for Economic and Regional  
Growth







# ▲ A Stronger Rural Perspective for Public Actors

Carin Persson, Swedish Agency for Economic and Regional Growth  
14 November 2024

# Swedish Agency for Economic and Regional Growth







Tillväxtverket is tasked with strengthening and coordinating the implementation of the national rural policy.

The rural policy goal is:

*"a vibrant rural area with **equal opportunities** for entrepreneurship, employment, housing, and welfare, leading to long-term sustainable development throughout the country."*

# The National level needs to “step up”

*"Sweden's long-term growth and development depend on vibrant rural areas. However, the state and national sectoral policies have not always fully contributed to creating sufficient conditions ---*

*---Solutions and models that work in dense areas have often not achieved the intended effect—or have even had the opposite effect—in sparsely or very sparsely populated rural areas."*



*Prop. 2017/18:179. En sammanhållen politik för Sveriges landsbygder – för ett Sverige som håller ihop*  
*Prop. 2017/18:179. A Cohesive Policy for Sweden's Rural Areas.*





# Why is it important to polish your geographical lenses?

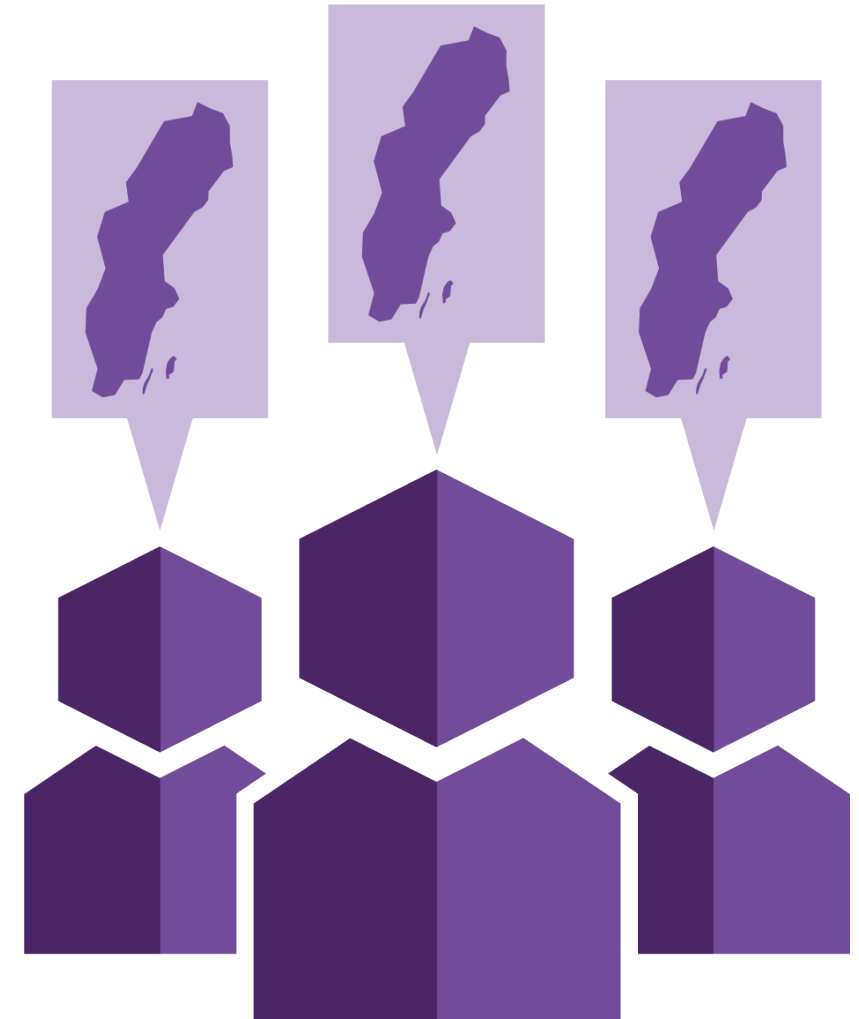
- Conditions for development vary from place to place
- Challenges may vary, and therefore solutions need to be different
- This can affect how we need to operate, within areas as for example digitalization, innovation, access to competence, infrastructure and so on.



# A Network for Regional Development and Rural Policy

- The purpose is to strengthen the ability of authorities to contribute to sustainable regional development in all parts of the country.
- Sharing knowledge and experiences on how to become better at addressing opportunities and challenges in both rural areas and cities.
- The network consists of both staff level and director-general level

[Myndighetsnätverk för regional utveckling och landsbygds politik - Tillväxtverket](#)



# A Support for a Stronger Rural Perspective

## Metodstöd för livskraftiga landsbygder



Här finns stöd och verktyg för hur de geografiska glasögonen kan putsas i praktiken. Metodstödet riktar sig till kommuner, regioner och myndigheter och kan användas för att få ett mer systematiskt arbetssätt både inom organisationen och i samverkan med andra.

---

[Om metodstödet för livskraftiga landsbygder](#)

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[Verktyg: Landsbygdsbarometern](#)

---

[Vägledning för livskraftiga landsbygder](#)

---

[Verktyg: Slipa dina geografiska glasögon](#)

---

[Lärande exempel om landsbygder](#)

---

[Verktyg: Utmana den urbana normen](#)

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[Vem gör vad för landsbygder?](#)

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[Verktyg: Kommunikation för hela Sverige](#)

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[Begrepp för landsbygder](#)

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[Verktyg: Genomlysning av processer](#)

# Support for a Stronger Rural Perspective



## Lärande exempel om landsbygder

Ta del av smarta tips och arbetssätt från kommuner och myndigheter, regioner och länsstyrelser som jobbar för starka och livskraftiga landsbygder.



[www.tillvaxtverket.se/landsbygder](http://www.tillvaxtverket.se/landsbygder)





# When is the Support needed?

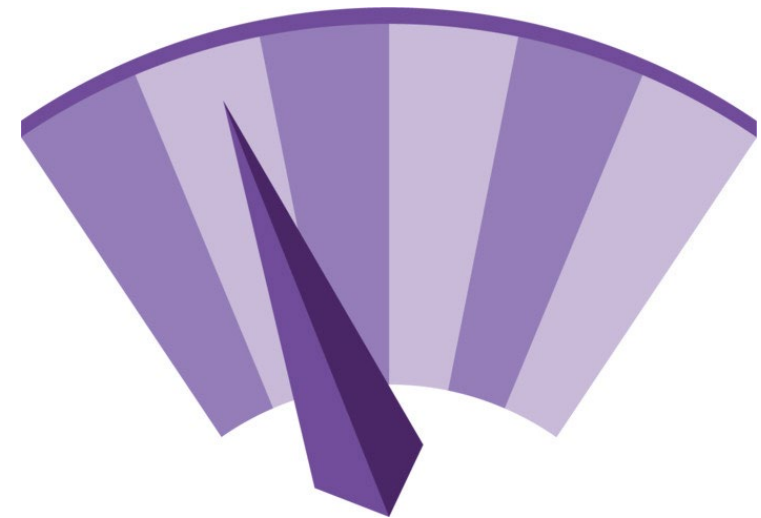
- ▶ Planning and decision-making processes
- ▶ Analysis, monitoring and evaluation
- ▶ Communication
- ▶ ...But also as an “eye-opener”



# Tool: "Rural barometer"

## Measuring the presence of a rural perspective

- ▶ Helps to illuminate the presence of rural perspectives in your organization
- ▶ Can be used by a unit or a group of colleagues or "the management team"
- ▶ The results helps to gain understanding of how the work is done today and identify what needs to be done to strengthen the rural perspective in the organization





# Tool: Checklist for Strategic Work

- ▶ Contributes with structure when leaving formal comments on strategic documents where you want to emphasize the importance of a rural perspective
- ▶ Directs towards well-thought-out choices of how the rural perspective is made visible and balanced against other perspectives





# Tool: Communicate for All of Sweden



- How do we portray rural areas in images and text?
- How can we stay relevant for our entire municipality, our region, or the entire country?
- The tool offers tips on how we can “challenge the Urban Norm” and communicate in an inclusive way through images and text





# How do we encourage organizations to "polish their geographical lenses?"

## Platforms for change – some examples

- Governmental Network for Regional Development and Rural Policy - Learning Circle on Territorial Perspectives
- Workshops and seminars
- Coaching
- Education

### Lunchkafé för livskraftiga landsbygder: Allt ljus på byn!

Samtal över tallriken för kommuner, regioner och myndigheter. Tillsammans med Landsbygdsnätverket bjuder vi på inspirerande lunchkaféer från aktörer som på olika sätt jobbar med att bidra till landsbygdsutveckling.

### Kontakta våra landsbygd



Fotograf: Robert Berggren

### Landsbygdsutveckling för yrkesverksamma - perspektiv från teori och praktik

SENAST ÄNDRAD: 30 OKTOBER 2024

En uppdragsutbildning riktad mot offentligt anställda och som syftar till att öka kunskaperna om landsbygder och bidra till stärkta landsbygdsperspektiv i offentlig förvaltning.

Intresseanmälan

### Ny kursomgång 2025

En ny kursomgång startar i mars 2025 och avslutas i oktober 2025. Detaljerad information om kursdatum och kursinnehåll publiceras på denna websida under november 2024. Tillsvidare kan du nedan ta del av upplägget för kursomgången som genomförts 2024. Kursupplägget med två fysiska träffar och två digitala träffar kommer vara detsamma under kommande utbildning.

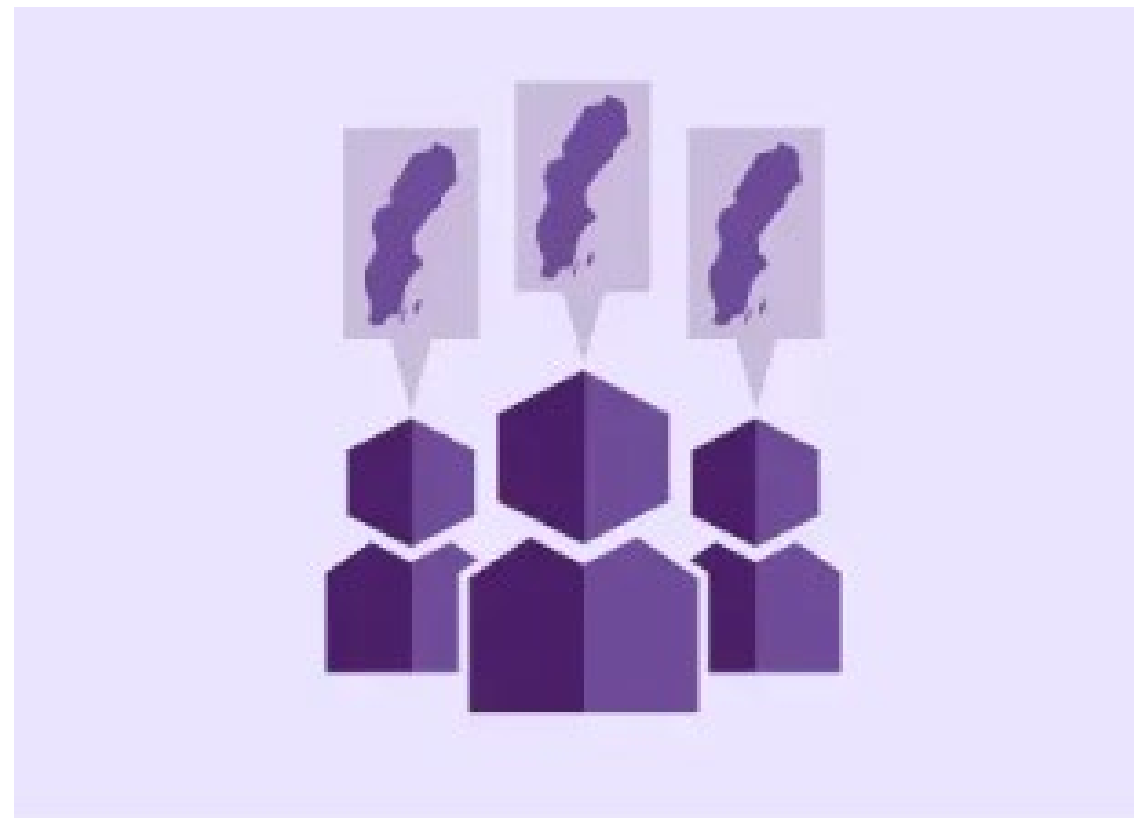




# Lessons learned

The “Support for a Stronger Rural perspective” is primarily used as...

- **An eye-opener for other colleagues**
- **Knowledge support** – for example, when updating a rural strategy
- **Workshop support** - Tools are used during workshops and discussions.
- **Other organizations are already doing it!** A way to refer to examples of how things are done in other organizations.
- **Creating legitimacy** – and also serves as a confirmation that one is doing the "right" thing in their professional role.



# Lessons learned

- Every organization needs to find its own path
- One small step at a time – “it's important to talk about it.”
- It takes time - we need to hold on and keep going!



# Working together

- ▶ **Multi-level collaboration**  
Working together with other state agencies cross sectors and at all levels of the society is a key for success for a sustainable rural development







# Thank you!



Carin Persson, Tillväxtverket  
[carin.persson@tillvaxtverket.se](mailto:carin.persson@tillvaxtverket.se)



# Quick Guide to Geographical Lenses

Consider Geography in Everything You Do

...Review Representation

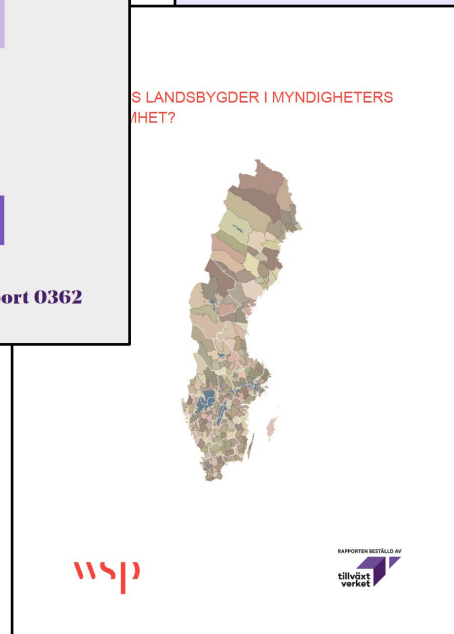
...Address the Shifting Conditions of Place

...Consider your Communication Carefully

...Show where the Efforts Land



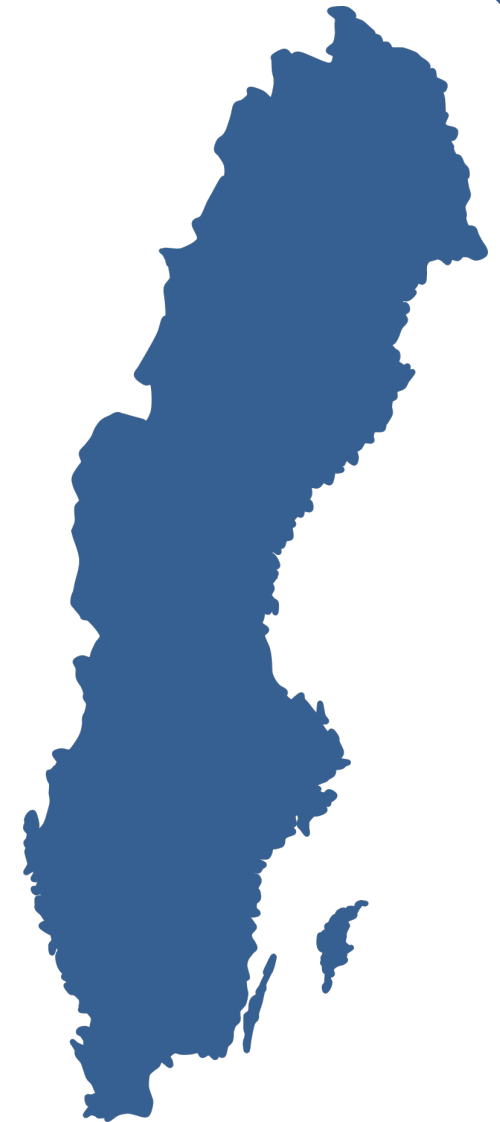
# Analysis and knowledge



# TAIEX TSI Workshop

**SHORT BREAK!**

The workshop continues 14:50





# TAIEX TSI Workshop

Greek Practices from Multilevel Cooperation –  
Lessons Learnt

Manolis Koutoulakis, Secretary General of  
Aegean and Island Policy, Ministry of Maritime  
Affairs and Insular Policy, Greece



# TAIEX TSI Workshop

Finland's Approach to Territorial Development and  
National Policies for Islands and Archipelagos

Laura Latvakoski, National Expert at the  
Ministry of Agriculture and Forestry, Finland





# Finnish Islands and island policy in Finland

Laura Latvakoski  
TAIEX workshop, Stockholm  
14.-15.11.2024



# Finnish Islands Numbers and facts



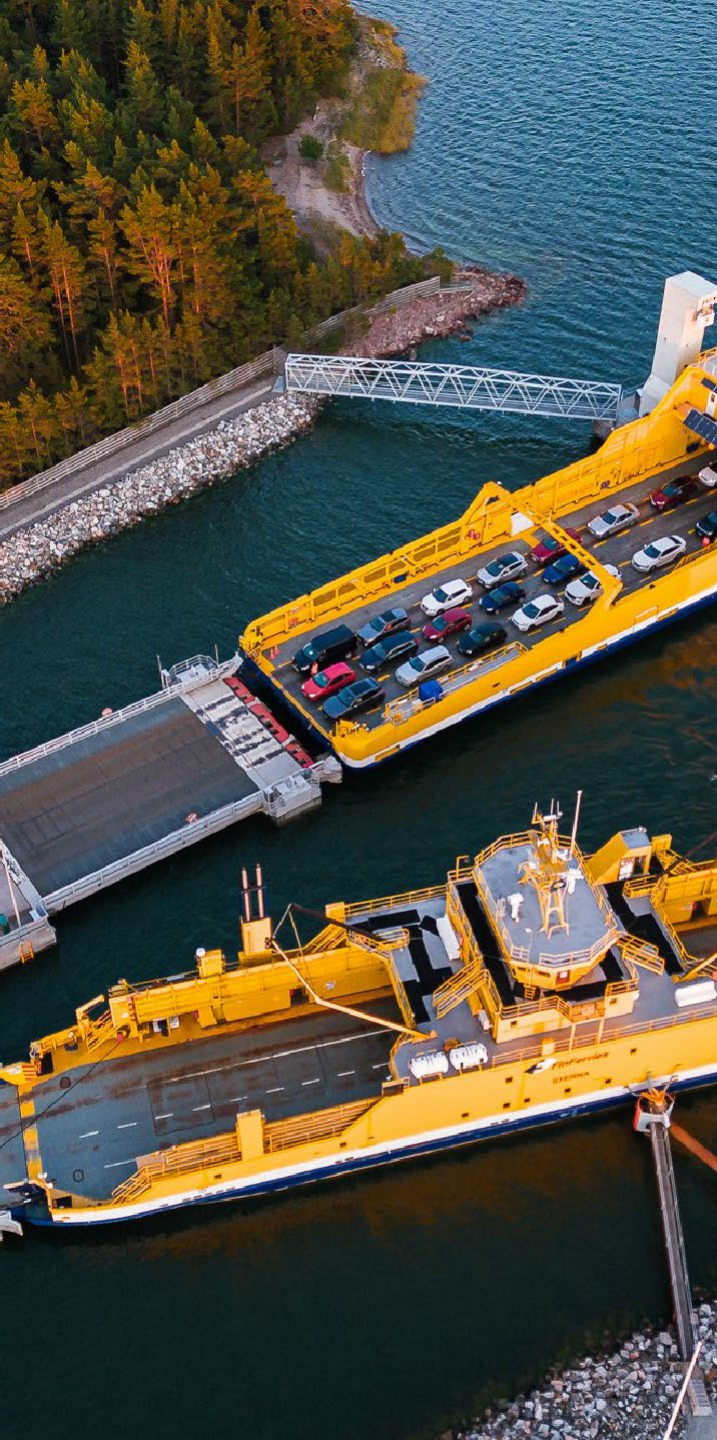


# Amount of islands

- There are about 200 000 islands in Finland.
- In addition, there are 6 757 islands in Åland. (Åland is part of Finland, but it has its own autonomous parliament, own legislation and it operates as an independent nation. → Island policy concerns only mainland Finland.)
- Island areas cover 15 % of the surface area of mainland Finland.
- Archipelago exists both in marine and lake areas.
- According to the Island Act: § 3 *Island areas are comprised of islands in the marine area and inland waters that do not have a fixed road connection, and islands and mainland areas that are otherwise similar to an island area with respect to their circumstances.*
- Most islands are small, less than half hectare.
- 1 % of islands are over 50 hectares size.
- Most of islands do not have fixed road connections.
- Finland has coastline 315 000 kilometres.
- 46 000 kilometres of coastline are at sea and 215 000 kilometres in lake areas, 54 000 kilometres coastline of rivers.



# Islands' residents



- There are about 20,000 inhabited islands without a fixed road connection to mainland in Finland. Out of these, about 500 are full-time and 19 500 are part-time inhabited islands.
- About 330 000 permanent and 615 000 seasonal residents live in the island areas. (Finland's population is approximately 5.5 million)
- About 8,700 people live permanent in the islands with no fixed road connection. (Connection to the mainland is by ferries, commuter vessels or private cable ferries.)
- Finland has 17 commuter vessel routes, 41 car ferries and 21 private cable ferries. (Around 1.3 million trips were made on ferries, around 270,000 trips on commuter vessels and around 200,000 trips on private cable ferries.)





# Age structure

- The age structure of the archipelago is the same as in rural areas, which means that the population is older than average in the whole country.
- 30 % of archipelago residents are over 65 years of age and 17 % are children and young people, i.e. under 18 years of age.
- In the outer and middle archipelago live more people aged over 65 years and fewer children and young people.
- 51 % of island residents are women and 49 % men.



# Livelihoods in the archipelago

- Jobs have decreased in island areas and an increasing share of archipelago residents work outside their municipality of residence.
- The importance of the traditional livelihoods in the archipelago, agriculture, forestry and fishing, has decreased.
- The most significant industries in island areas are manufacturing (e.g. fish processing, boat industry) and health and social services.
- In addition, public administration and national defence are important.
- Tourism and related livelihoods have increased in island areas.
- Multi-entrepreneurship is typical in island areas.





# Island policy in Finland

## Smooth living in the archipelago!



# What is island policy in Finland?

- Island policy is the oldest form of organised regional policy (the other two are urban policy and rural policy).
- In Finland island policy dates back to 1949.
- Today's island policy is based on the Island Development Act adopted in 1981.
- Island policy highlights the island areas and their special characteristics in decision-making processes.
- The aim is to ensure smooth everyday living and a good life in island areas for both permanent and holiday residents.
- The key priorities of island policy are:
  - Connections and mobility
  - Livelihoods and services
  - Island culture
  - Nature and the environment
- The primary responsibility for island policy lies with the Island Committee (SANK) and its secretariat, which are appointed by the Government.



# Island Committee

**Supports the development of island areas and waterways together with rural and urban policy.**



## What is Island Committee?

- The Island Committee (SANK) is appointed by the Government.
- Its activities are based on the Island Development Act.
- It is a parliamentary body that is appointed for each government term.
- It has a secretariat whose members represent the ministries, Government agencies and institutes, Regional Councils, municipalities, non-governmental organizations and commercial operators.
- The Committee holds about 8 meetings per year.
- It gives statements and opinions and carries out small-scale research and survey projects. The Committee has its own budget (250 000e per year).





# Island municipalities and partial island municipalities



## Island policy

1949

Finland's island policy dates back to 1949.





1981

Island policy is based on the Island Development Act, which entered into force in 1981.

### Finland's island areas

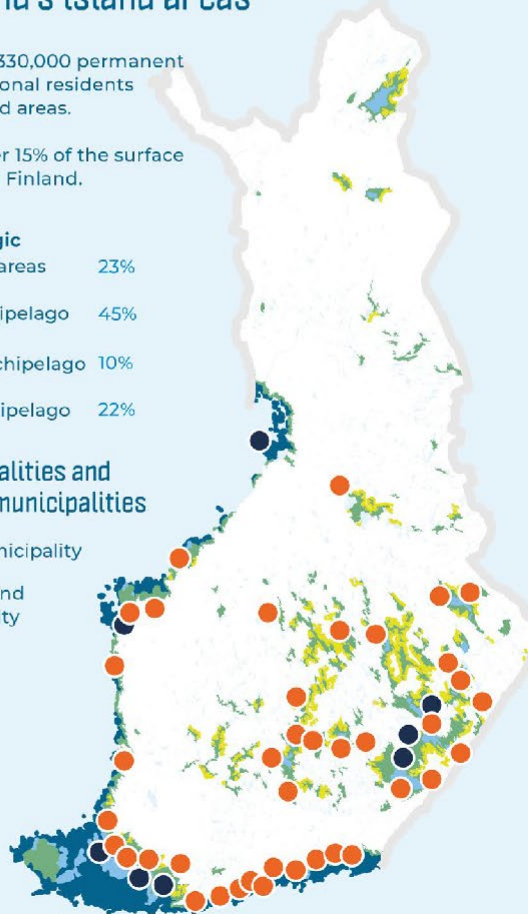
There are about 330,000 permanent and 615,000 seasonal residents living in the island areas.

Island areas cover 15% of the surface area of mainland Finland.

|  |                                    |     |
|--|------------------------------------|-----|
|  | <b>archipelagic mainland areas</b> | 23% |
|  | <b>inner archipelago</b>           | 45% |
|  | <b>middle archipelago</b>          | 10% |
|  | <b>outer archipelago</b>           | 22% |

### Island municipalities and partial island municipalities

|  |                             |
|--|-----------------------------|
|   | Island municipality         |
|  | Partial island municipality |



# Island municipalities, partial island municipalities and supplementary grants

- Based on the Island Development Act, the Government designates municipalities where the island circumstances constitute a significant obstacle to their development as island municipalities.
- The provisions concerning an island municipality may also apply to island areas of another municipality. Such municipalities are called partial island municipalities. According to the Government Decree in force, there are eight island municipalities and 40 partial island municipalities in Finland.
- These are located in both marine and lake areas.
- Island municipalities and partial island municipalities receive supplementary grants for island areas as government transfers. Provisions on supplementary grants for island areas in government transfers are laid down in the Act on Central Government Transfers to Local Government for Basic Public Services.
- Besides the economic impact, the designation as an island municipality or partial island municipality is important for the municipalities. It shows that the State recognizes and understands the special characteristics of island areas and the need for special measures that arises from these.



# Island Development Act



# Island Development Act

- Purpose of the Act:
  - The State and municipalities must act in a way that ensures permanent inhabitation of the island areas by creating adequate opportunities for livelihoods, mobility and access to basic services and protects the landscapes and nature of the island areas against environmental harm.
- Island residents are very happy that there is this special Act concerning them.
  - It means that the State recognises the special characteristics of island areas.
- For the most part the Act is a framework act in nature.
  - The Act is not binding.
- The Act will be updated during the government term by 2027.
  - The Act has not been updated since 1981. In many respects the Act is outdated. Some sections are technically old and the operating environment has also changed a lot over the past 40 years. The aim is for the Act to take better account of the conditions of the island areas today.
  - The aim is to make the sections more precise and transparent and leave less room for interpretation.
  - Updating the Act is included in the current Government Programme and it will be updated during the government term.





# Island proofing

- In Finland the impacts on islands and the archipelago are assessed either as part of the assessment of the impacts on regional development or of rural proofing.
  - Impacts on regional development comprise the impact on the development of the regions, on the objectives set for the development work, and on the measures taken and resources used. Areas comprise administrative and statistical areas such as regions/counties, subregions and municipalities, as well as different types of areas, such as rural and urban areas and the archipelago. The types of areas according to the classification of archipelago areas are archipelagic mainland areas, inner archipelago, middle archipelago and outer archipelago.
  - Rural proofing examines the impacts on the operating environment of different kinds of rural areas, people living in rural areas permanently and part-time, businesses and livelihoods in rural areas, rural communities, and the structures and interrelationships of these. In terms of impacts on archipelago areas, the provisions of the Island Development Act (494/1981) must be taken into account.
- In the process to update the Act a new section on island proofing has been considered (inspired by the Islands Act of Scotland). Island proofing would also concern processes other than legislative projects, such as programmes, strategies and decisions.



Island classification supports  
island policy

# Island classification supports island policy



- The Finnish Environment Institute introduced the classification of Finnish island areas about two years ago. The classification is composed of four classes: inner archipelago, middle archipelago, outer archipelago and archipelagic mainland areas.
- The classification brought the different kinds of island areas on the map for the first time. Through the classification we have access to various kinds of statistical data on island areas, including on their population, services, economic activities, telecommunications connections, etc.
- The classification has been used in various surveys and studies, including:
  - Statistical analyses of island areas (national and regional)
  - Finland's Archipelago 2024 (completed in December 2024)
  - Monitoring project on access to services (completed in December 2024)
- The classification has also been used in the process to update the Island Development Act. The section where archipelago as a concept is defined will in future be based on the classification of island areas.
- The classification supports place-based development.



# Thank you!



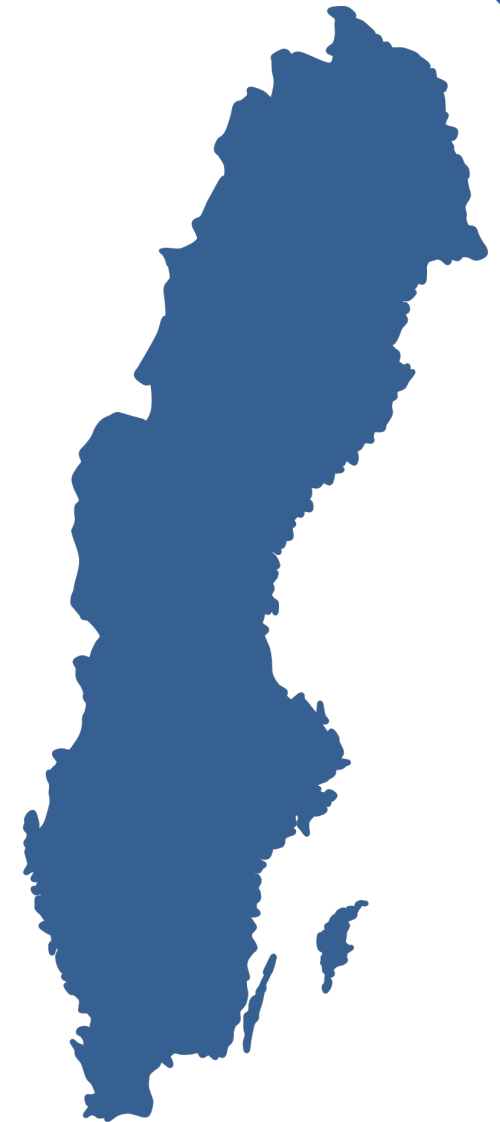
Maa- ja metsätalousministeriö  
Jord- och skogsbruksministeriet  
Ministry of Agriculture and Forestry



# TAIEX TSI Workshop

**COFFEE BREAK!**

The workshop continues 16:10



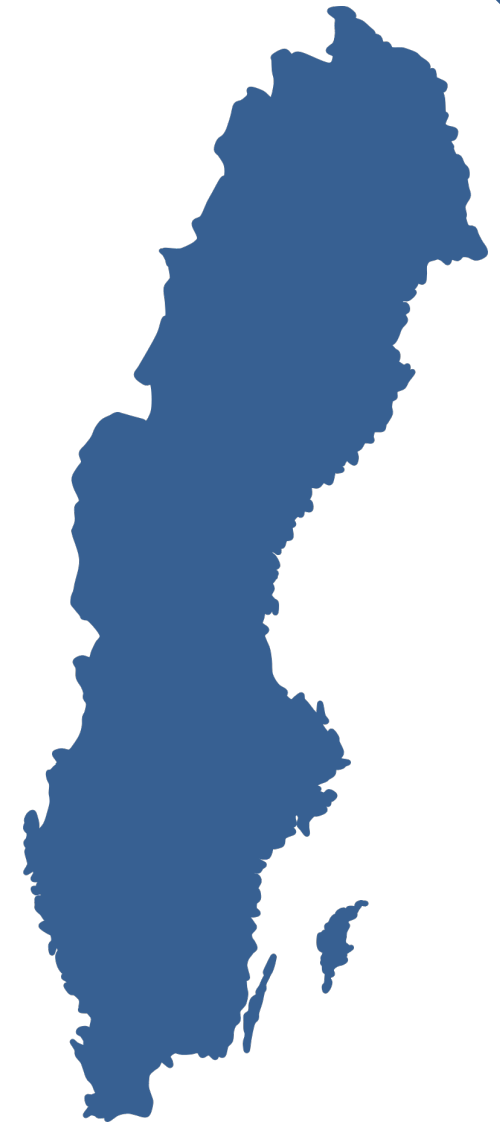
# Workshop Theme 2

**Data Use – Development of Island Economies in a  
Multi-level Governance System**

# TAIEX TSI Workshop

Territory and Data in the Case of Sweden

Wolfgang Picher, Coordinator Analysis and Reporting, and ESPON National Contact Point Sweden, Swedish Agency for Economic and Regional Growth, Sweden





# Territory and Data in the Case of Sweden

Wolfgang Pichler, National Agency for Economic and Regional Growth  
14th of November 2024 at TAIEX TSI Workshop



# What will I talk about?

- An informed society ...
- 25 years of regional and rural analysis
- Statistical data in silos
- Statistical data on different geographic scales
- A Swedish super-tool for spatial analysis?
- Back to Indicators
- Another source of insights
- Summary



# An informed society....

*“An informed democratic discourse on islands needs very well-informed islanders but also an informed public in general to understand why certain investments or services not only are necessary but also fair.”*



Tabell 1. Befolkning på öar utan fast landförbindelse 2006 och förändring 2002-2006

| Region                         | 2002<br>totalt | 2004<br>totalt | 2006<br>män   | 2006<br>kvinnor | 2006<br>totalt | Förändr.<br>antal | Förändr.<br>% |
|--------------------------------|----------------|----------------|---------------|-----------------|----------------|-------------------|---------------|
| Norrlandskusten                | 593            | 571            | 314           | 239             | 553            | -40               | -6,7          |
| Stockholm-Uppsala-Södermanland | 8 189          | 8 361          | 4 483         | 3 856           | 8 339          | 150               | 1,8           |
| Östergötland-Kalmar            | 571            | 539            | 288           | 244             | 532            | -39               | -6,8          |
| Blekinge-Skåne                 | 1 020          | 1 013          | 507           | 480             | 987            | -33               | -3,2          |
| Västkusten                     | 19 310         | 19 416         | 9 794         | 9 638           | 19 432         | 122               | 0,6           |
| Insjöarna                      | 2 202          | 2 184          | 1 098         | 1 044           | 2 142          | -60               | -2,7          |
| <b>Totalt</b>                  | <b>31 885</b>  | <b>32 084</b>  | <b>16 484</b> | <b>15 501</b>   | <b>31 985</b>  | <b>100</b>        | <b>0,3</b>    |

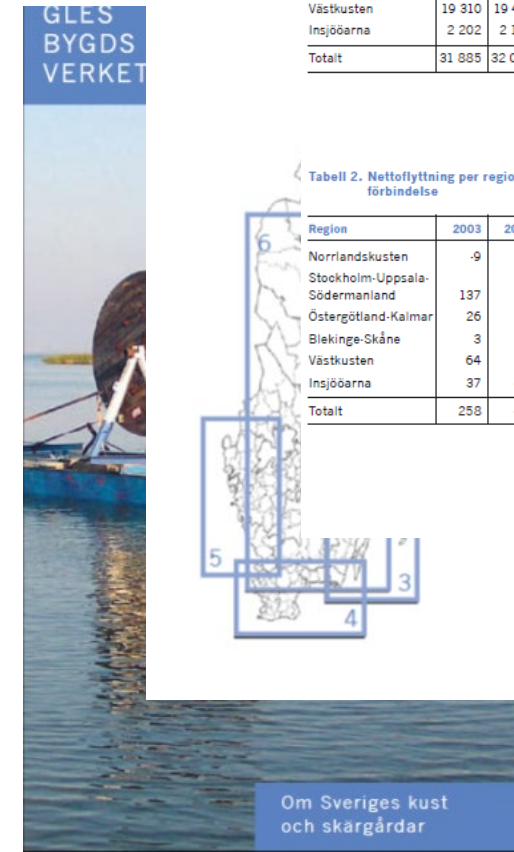
Figur 1. Glesbygd

Med befolkning avses folkbokförd befolkning.  
Källa: SCB, Glesbygdverkets bearbetning.

Tabell 2. Nettoflyttning per region 2003-2006 på öar utan fast landförbindelse

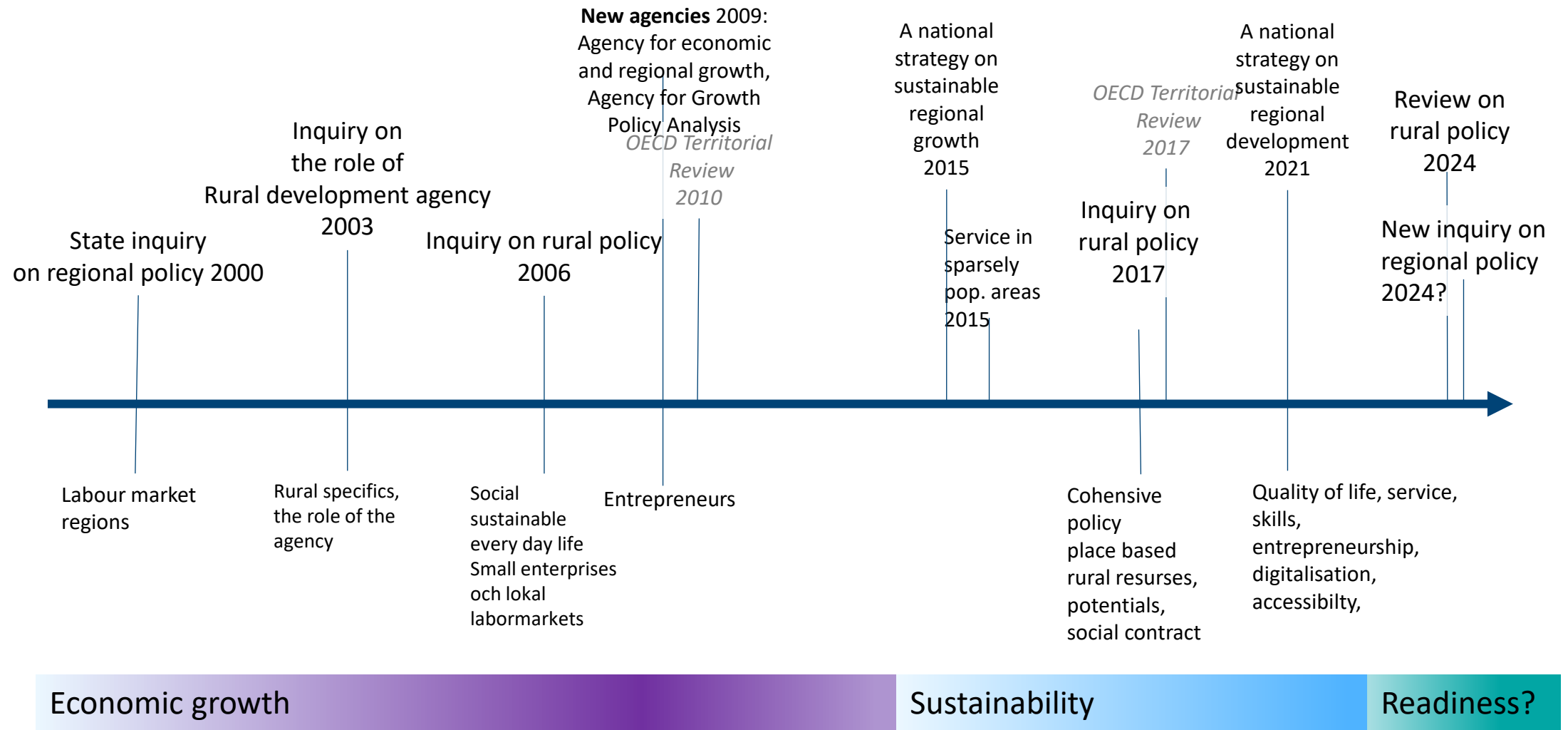
| Region                         | 2003       | 2004       | 2005      | 2006       |
|--------------------------------|------------|------------|-----------|------------|
| Norrlandskusten                | -9         | 13         | 15        | 0          |
| Stockholm-Uppsala-Södermanland | 137        | -23        | -44       | 12         |
| Östergötland-Kalmar            | 26         | -19        | 31        | -19        |
| Blekinge-Skåne                 | 3          | 11         | -2        | -31        |
| Västkusten                     | 64         | 3          | 38        | -19        |
| Insjöarna                      | 37         | -30        | 27        | -16        |
| <b>Totalt</b>                  | <b>258</b> | <b>-45</b> | <b>65</b> | <b>-73</b> |

Med befolkning avses folkbokförd befolkning.  
Källa: SCB, Glesbygdverkets bearbetning.



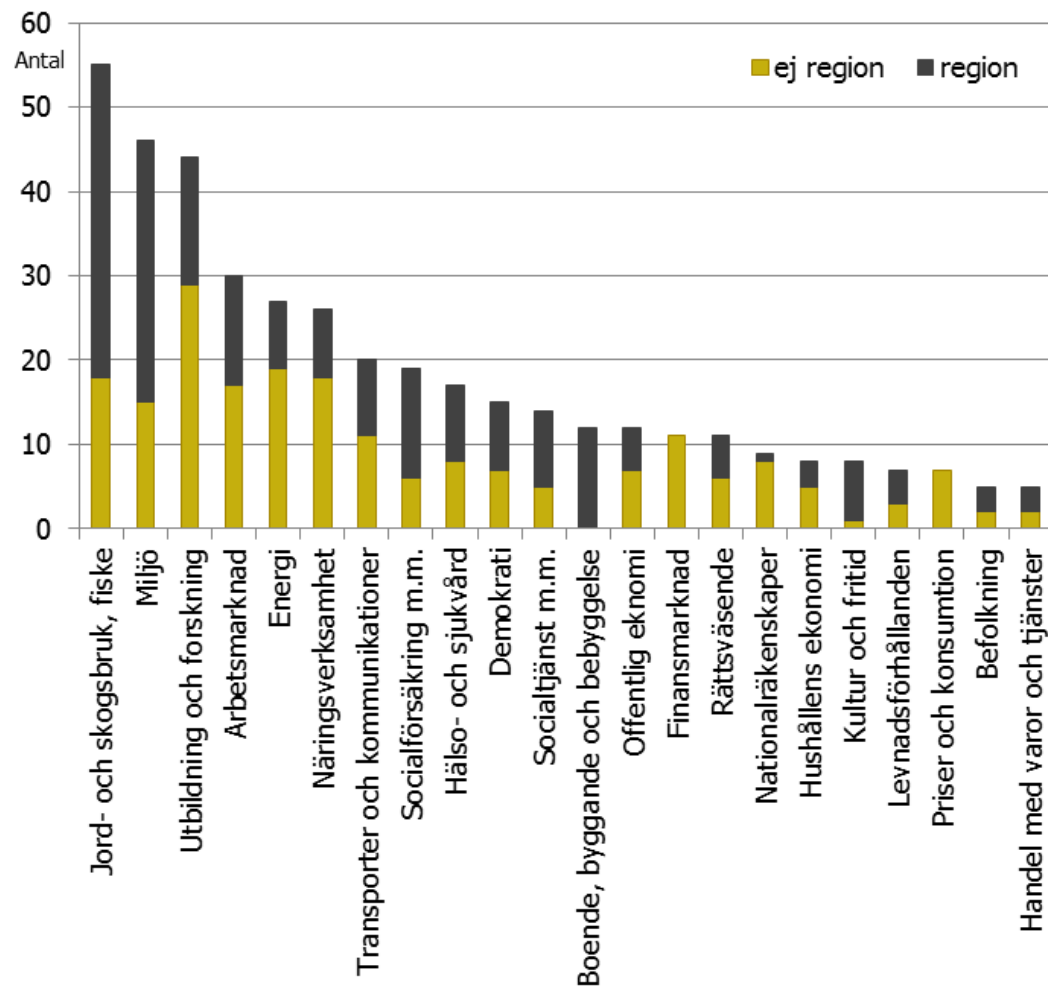
In the general knowledge on islands or any types of specific geographies is (perhaps) not very high

# Political changes influence analysis



# Statistical data in silos

- Official statistic in Sweden is a goldmine!
- A lot of statistic is not within the framework of official statistics
- Sectoral logic makes it difficult to use different sources for cross-cutting analysis
- There is no common standard on which territorial level statistical data is produced at the lowest

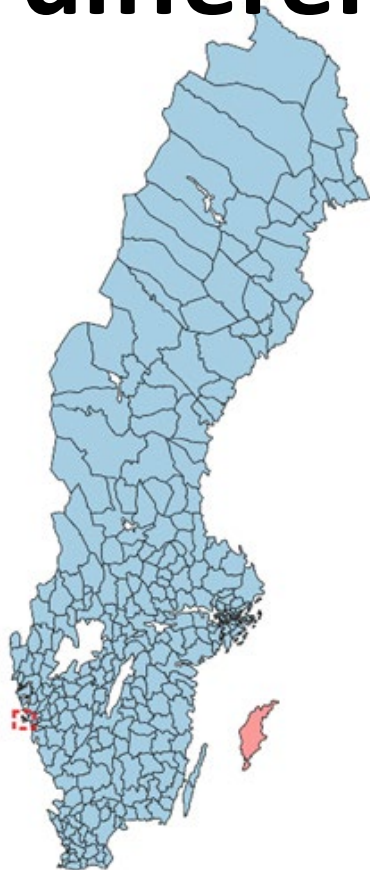




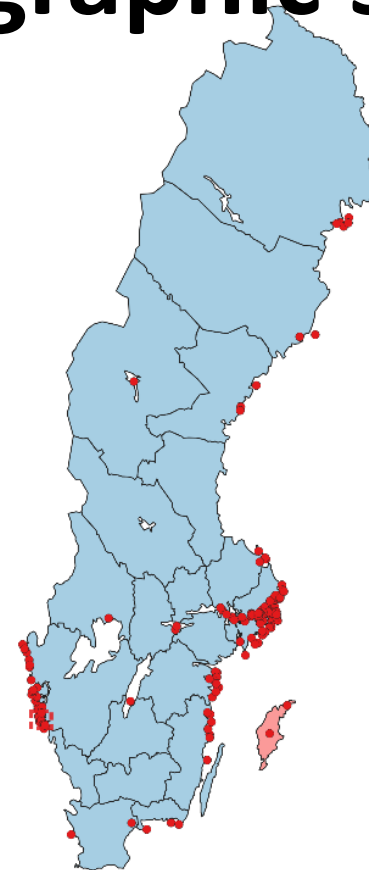
# Statistical data on different geographic scales



1 Island region (Nuts 3)



2 Island municipalities (LAU)



> 150 populated islands (44 municipalities)

One level of territorial data-representation fits not all types of island analysis. Co-operation is needed to strengthen analysis capacity at public authorities at all levels of governance to deal with specific geographies like islands.

# A Swedish super-tool for spatial analysis?

Regionalanalys - 2022 ↗ Wolfgang Pichler

ARBETSMARKNAD KOMMERSIELL SERVICE OFFENTLIG SERVICE SJUKVÅRD UTBILDNING

Ändra **POPULATION**

Panorera till län, kommun eller ort

**ALLMÄNT** TILLGÄNGLIGHET

Eget område ✖✖

Vill du spara området?

Välj namn Området skapat med Area 29 km<sup>2</sup>

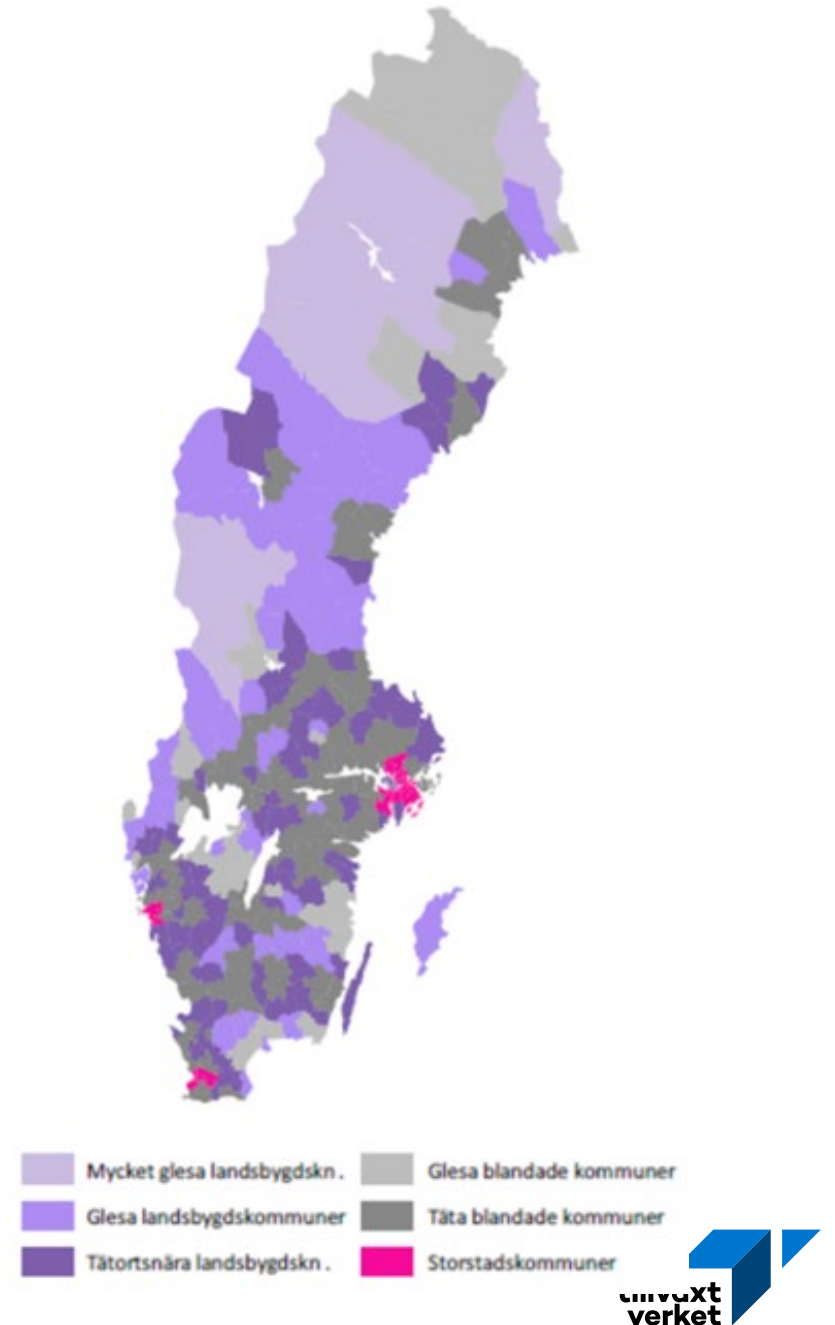
SPARA

| Eget område                        | Jämfört med Riket |                                    |            |
|------------------------------------|-------------------|------------------------------------|------------|
| Folkbokförda                       | 274               | Folkbokförda                       | 10 521 556 |
| Dagbefolkning                      | 38                | Dagbefolkning                      | 4 767 076  |
| Tillfällig befolkning              | 894               | Tillfällig befolkning              | 1 564 873  |
| Högsta specialiseringskvot:        |                   | Högsta specialiseringskvot:        |            |
| Fler med samma specialiseringskvot |                   | Fler med samma specialiseringskvot |            |
| Lägsta specialiseringskvot:        |                   | Lägsta specialiseringskvot:        |            |
| Fler med samma specialiseringskvot |                   | Fler med samma specialiseringskvot |            |

Teckenförklaring tillväxtverket

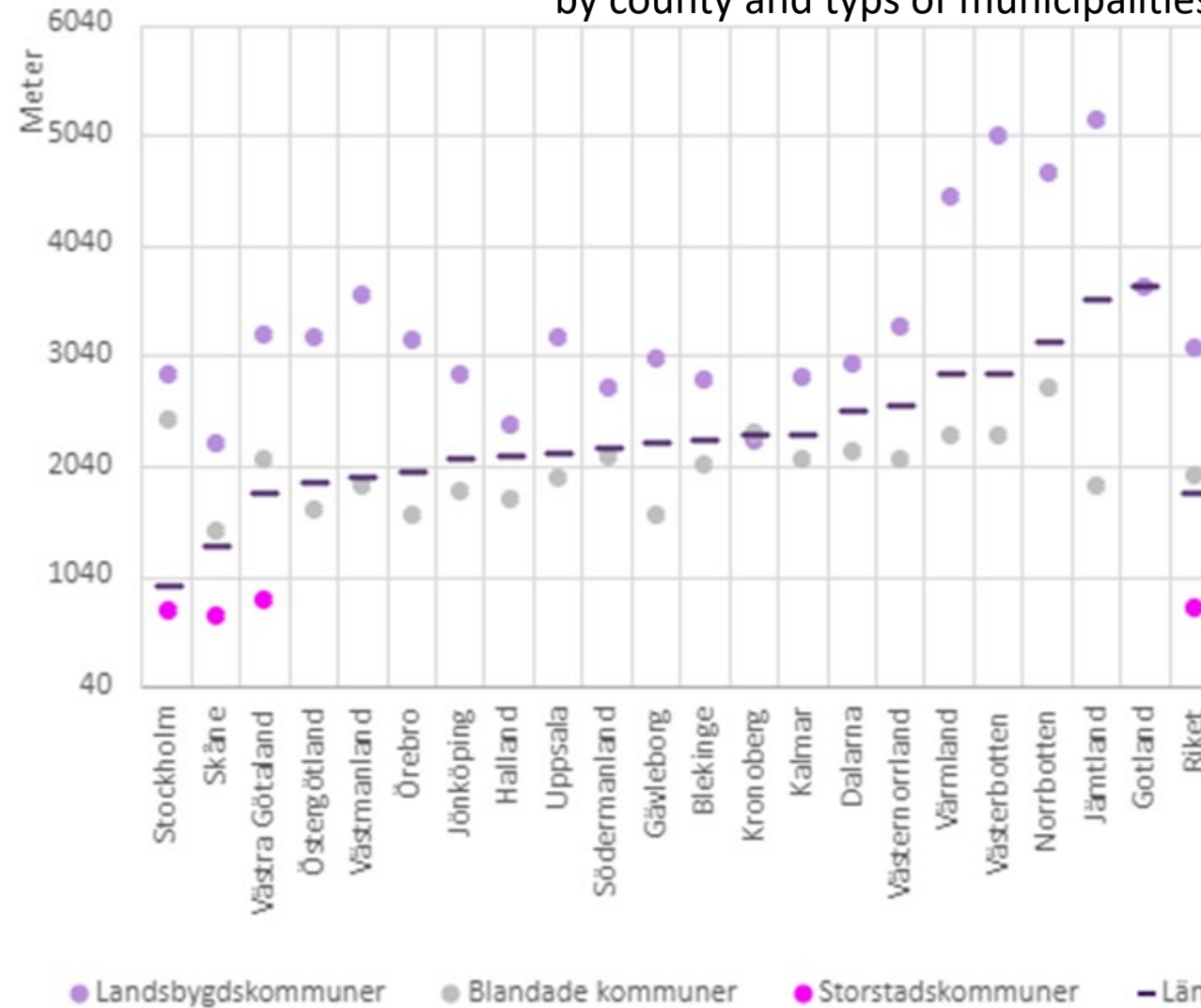
# Back to indicators

- Important to have capacity to analysis data on islands ....
- Even more important to share some basic facts/indicators on islands
  - Regularly updated
  - Trustworthy
  - Related to a logic of change
  - In the best case, inter-linked with indicators on territorial development in general
- Integrated territorial typology could include specific geographies like small islands



# Exempel

Average access to grocery stores  
by county and types of municipalities



Continuity providing basic-indicators should be secured by National-agencies and EU



# Other sources of insights

## Using surveys and questionnaires

- Citizen-survey (Medborgarundersökning)
  - Information on inhabitants attitudes towards different services, aspects of life ...
  - Includes question about where you live in the municipality, for how long you have lived there ...
- Precondition
  - Motivated inhabitants ready to answer
- Problems
  - Declining numbers of respondents
  - Small numbers lead to problems with uncertainty, secrecy



# Summery

- ▶ In the general knowledge on islands or any types of specific geographies is (perhaps) not very high. Trusted facts on islands are useful.
- ▶ The focus of politics is changing over time and so is information/statistic/indicators provided by public organizations
- ▶ Statistical data is organized in thematic silos and not necessarily available at adequate geographic scale.
- ▶ New analys tools could be useful for “exploring” islands.
- ▶ Basic indicators on islands may be a low hanging fruit for a better dialog between different layers of governance. Provided by National Agencies and EU?
- ▶ More frequent use of surveys and questioners for a better understanding of islanders’ needs and obstacles

# TAIEX TSI Workshop

Territory and Data in the Case of Croatia



**Veljko Radić, Head of Sector, Directorate for  
Islands, Ministry of Regional Development and  
EU Funds, Croatia**

# IMPROVING THE QUALITY OF MULTI-LEVEL GOVERNANCE AND STRENGTHENING THE RESILIENCE OF ISLAND ECONOMIES OF CROATIA, GREECE, AND SWEDEN

## Territory and Data in the case of Croatia



REPUBLIKA HRVATSKA | REPUBLIC OF CROATIA  
Ministarstvo regionalnoga razvoja i fondova Europske unije  
Ministry of Regional Development and EU Funds



# Croatian islands- general overview

- 1244 natural island formations: 78 islands, 524 islets, 642 reefs
- The second-largest archipelago in the Mediterranean
- 53 inhabited islands, including the Pelješac peninsula
- Population of 127 838 (2021 Census)
- Island classification (Article 7 of the Islands Act):
  - Geographic criteria and territorial jurisdiction (7 counties)
  - Distance from the mainland
    - Offshore islands
    - Channel islands
    - Coastal islands
    - Bridged islands (5 islands + Pelješac peninsula)
  - Specific position (islands and parts of islands) - 42 islands + 3 archipelago



# Legislative and institutional framework-background (1)

- **Islands' Act**
  - 1999 first Islands' Act
  - 2018 current Islands' Act
- **National Islands Development Plan 2021 – 2027 (NIDP)** was developed in 2021
  - 4 Priorities
  - 10 Specific Objectives
  - 21 Outcome Indicators for each specific objective to measure progress on a yearly basis
- **Islands' Act** - defines island development evaluation according to Island Development Indicators (IDI)
- The purpose of the IDI is to:
  - Determine the state and direction of development of each individual island
  - Classify islands into development groups

# Legislative and institutional framework-background (2)

- National level (MRDEUF, Directorate for Islands - coordinators, other ministries and bodies governed by public law)
- Regional level (7 coastal-island counties)
- Local level (51 LGUs on islands and 8 LGUs on the mainland that include islands)
- Island coordinators are an important link between levels
- Island Council- advisory body (members from all levels)
- The long-term goal is to strengthen vertical coordination of the bodies responsible for the islands' development

# National Island Development Plan (NIDP)

- The NIDP was a pioneer of systematic data collection and introduction of indicators into the island development policy
- The sources of data were exclusively institutions from national level
- **General issues:**
  - The island territory does not correspond to the administrative division into local self-government units, and administrative data is not tracked at the island level
  - Lack of data on levels lower than NUTS III
  - Lack of data for particular aspects of island development (e.g., energetics, environmental protection, culture)
  - The data is dispersed within different institutions – no automatic exchange and updating of data, all has to go manually
  - Only few data was available publicly (online)
  - Outdated census data



# National Island Development Plan (NIDP)

- The **21 indicators** were finally selected based on the data that was available at that point
- 8 out of 21 indicators don't include „islands with specific position” into calculation because there was no data for them
- The reporting based on these indicators will continue until 2027
- The new NIDP (after 2027) will have revised list of indicators

# Island Development Indicators (IDI)

- The IDI is basis for further systematic data collection and indicators for island development policy
- The sources of data were predominantly institutions from national level
- **146 indicators**, 6 groups (geographic, demographic, economic, infrastructural, suprastructural and environmental indicators), 4 subcategories in each of the group (input, output, outcome, effect)
- 20 out of 146 indicators were used for classification of islands into development groups („the Island Development Index”)
- 19 indicators were not available but recommended (10 of them involve conducting surveys on the satisfaction of population)
- General issues:
  - Very complex, big data base
  - It didn't solve the availability of data for islands with specific position
  - It didn't solve the availability of data in certain areas (e.g. social, environment, fiscal, research and development)

# The findings from the Study on the IDI's

- The bridged islands have development advantages and should be considered as the most developed ones
- The „islands with specific position” have 55 % less indicators available than islands generally
- The „islands with specific position” can be considered most underdeveloped based exclusively on the following demographic indicators:

|                                | Livebirths rate 2011-2020<br>(number of livebirths/ average population*100) | Vital index 2011-2020 (number of livebirths/ number of deaths*100) | Share of 0-14 age<br>(in total population 2021) | Share of older than 65<br>(in total population 2021) |
|--------------------------------|---|--|---|--|
| Islands with LGU               | 8,4   | 59,2   | 11,9%   | 30,1%  |
| Islands with specific position | <b>4,5</b>  | <b>18,7</b>  | <b>7,0%</b>                                     | <b>41,5%</b>   |
| Croatia                        | 9,2   | 73,0   | 14,3%   | 22,5%  |

# Application of indicators

## Yearly reports on the implementation of the NIDP:

- Until now, 2 reports were prepared and published
- We observe the relation of the investments and the progress of the indicator within the specific goal
- The conclusion so far is that some of the indicators are not aligned with investments and do not reflect entirely the specific goals of the NIDP

## Classification of the islands into development groups based on the IDI:

- Needs to be adopted by the Minister
- It has to be updated at least once every 3 years
- It serves to better define/update current measures and programs

## Determine the state and direction of development of each individual island:

- Should be based on the IDI
- The IDI database should allow easier handling and updating (integration with different data providers)
- Basis for targeted interventions on each island

## Other:

- Preparation of programs for islands (Integrated Territorial Program and other programs)
- Preparations for Island Council meetings
- The Report on the effects of the implementation of the Island's Act is prepared on the yearly basis for the discussion in Croatian Parliament
- Different reports to the Minister and the Government



# Island Council

- Advisory body to the minister of regional development and EU funds
- First Island Council was constituted in 2004
- More than 20 meetings of the Island Council were held so far
- The Prime Minister of Croatia chaired the meeting in 2023 – it strengthened the importance of the Island Council and highlighted the important position that the islands have in national policies
- At that meeting, the Study on the IDI's was presented - emphasizing the importance of working on data and indicators for islands

# Report on the effects of the implementation of the Islands Act

- Defined in the Islands Act
- Once a year, Government of the Republic of Croatia reports to the Croatian Parliament on the effects of the implementation of the Islands Act
- It contains presentation of the investments in the islands from different programs across the country and the analysis of the effects of realized investments on the islands
- Part of the data and indicators for the analysis in the Report is taken from NIDP and IDI's
- Greatest significance – The Report is presented in the Parliament and islands are set as the topic of political discussions

# Conclusion

- Importance of outcomes of the OECD project:
  - Evaluation of our existing measures
  - Developing comprehensive and comparable data and indicators
  - Calculating the costs of insularity that will help us to convince the Parliament and relevant bodies to take special account of islands
- OECD project expectations:
  - Outcomes of the project should include all Croatian islands
  - Find a way to include „islands with the specific position” since those are often left out due to the lack of data



Thank you!



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Ministarstvo regionalnoga razvoja i fondova Europske unije  
Ministry of Regional Development and EU Funds

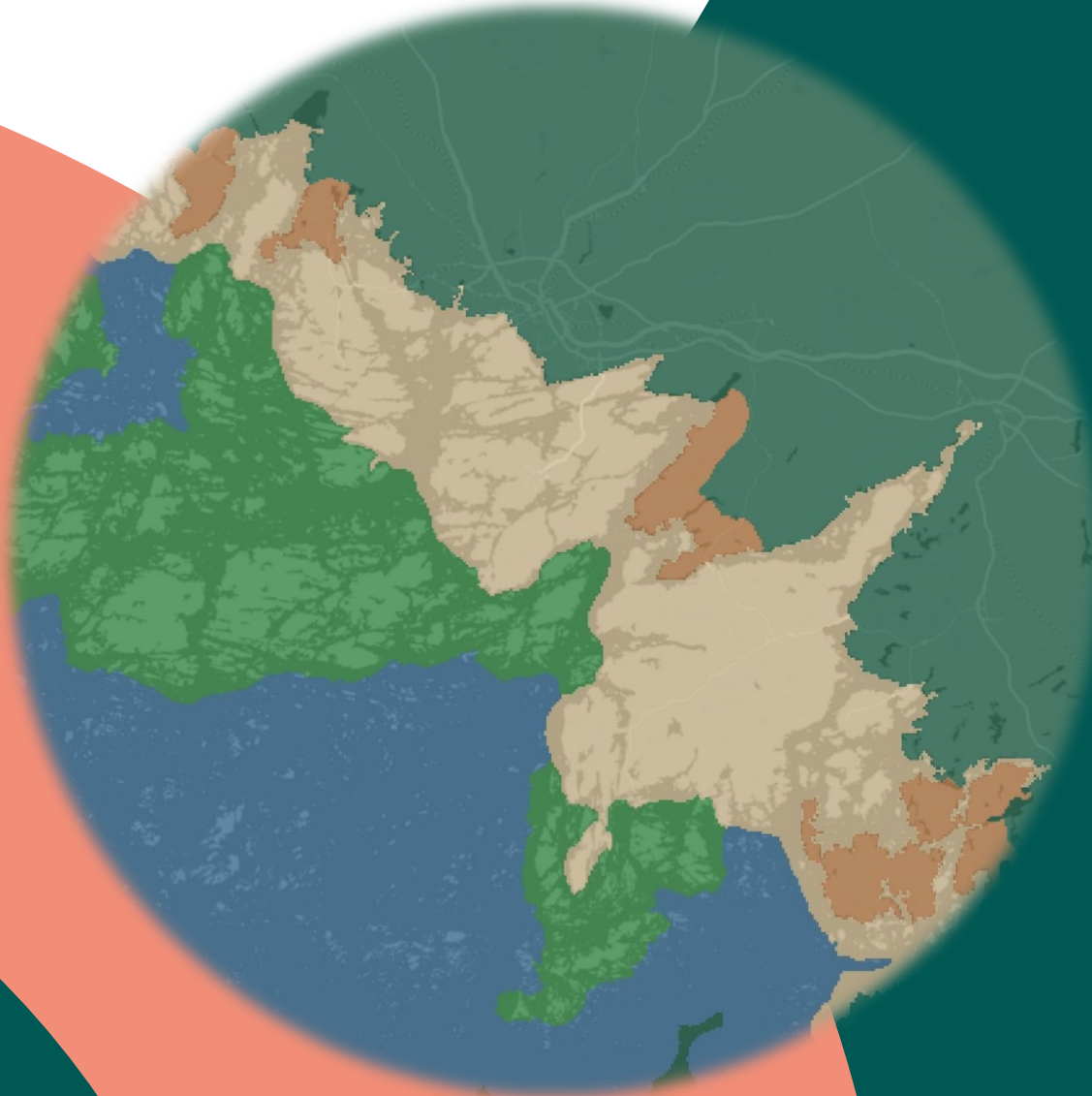


# TAIEX TSI Workshop

Territory and Data in the Case of Finland

Kimmo Nurmio, Researcher at Finnish  
Environment Institute SYKE, Finland





# Island classification and data in Finland

Kimmo Nurmio, Syke  
TAEIX-workshop.  
14.11.-.15.11.2024 Stockholm



Suomen ympäristökeskus  
Finlands miljöcentral  
Finnish Environment Institute

# What is island classification



Suomen ympäristökeskus  
Finlands miljöcentral  
Finnish Environment Institute

# From island typologies to island classification

## Island typologies

Island areas

Mainland ja  
water areas

Inner  
archipelago

Intermediate  
archipelago

Outer  
archipelago

Archipelagic  
mainland  
areas

Other water  
and  
mainland  
areas

Islands, marine and lake areas

Mainland areas, islands,  
marine and lake areas

Island typologies identify categories for different island and mainland areas.

The island classification is a spatial interpretation of these categories using appropriate gis-data and methods.

It is a regional classification that divides island areas and mainland Finland into five distinct spatial categories.



## Is based mainly on **variables** describing:

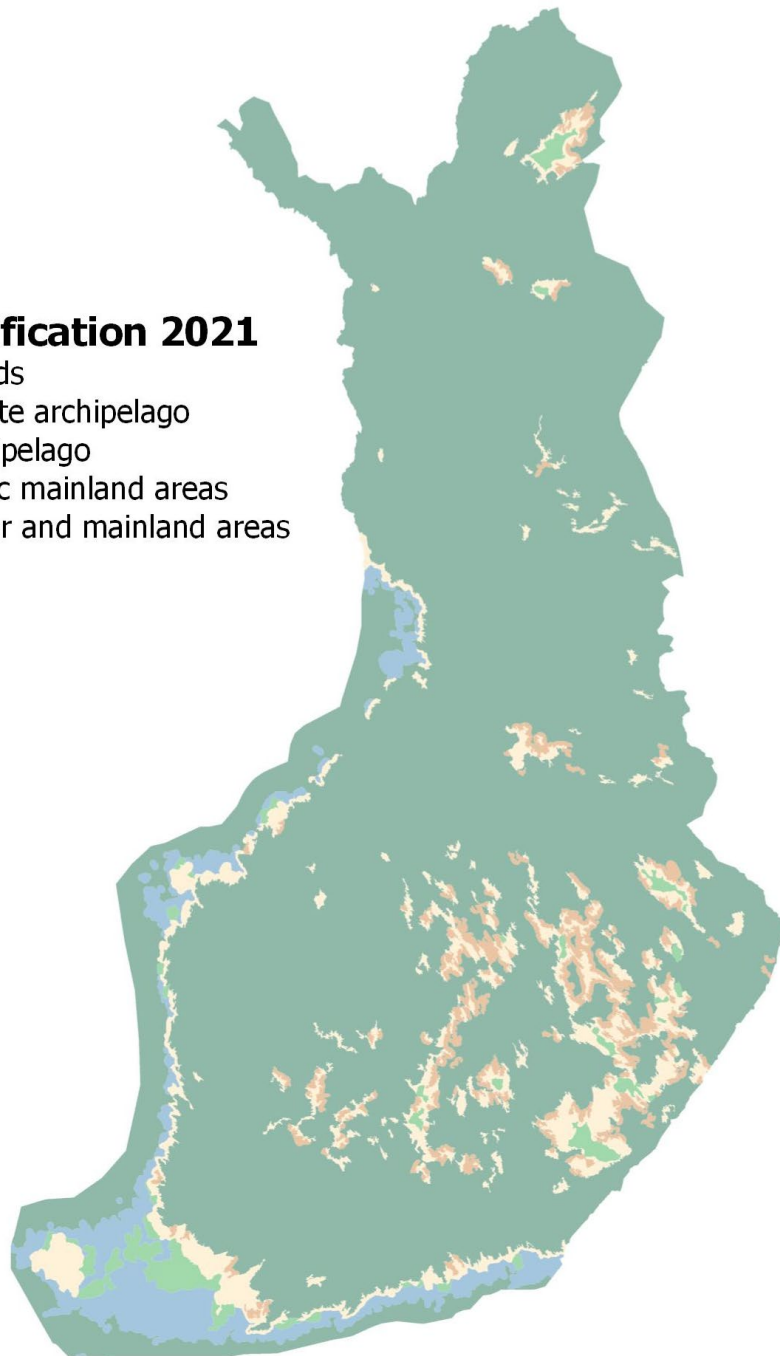
1. Distance to mainland
2. Share of waters and islands
3. Connections to islands from mainland:
  1. Fixed road (bridge, causeway) or road- and commuter ferries
4. Accessibility disadvantage caused by water areas
  1. Used only to identify mainland areas with similar characteristics as island areas → “archipelagic mainland areas”
5. Population distribution

## Results

- Results on 250 meter grid resolution
- Describing 2021
- GIS-data available as open data set

### Island classification 2021

- 1. Inner islands
- 2. Intermediate archipelago
- 3. Outer archipelago
- 4. Archipelagic mainland areas
- 5. Other water and mainland areas



# Classification principles

## Stability:

- **Changes in the classification should be slow or very slow.** A small change should not cause significant shifts in the classification, and minor definitional differences should not alter the classification substantially.

## Transparency and Repeatability:

- The method should be as transparent and as open as possible, with the data sources being as open as possible as well. The number and diversity of criteria should be minimized.

## Exhaustiveness:

- Each area or place belongs to only one class. Each island should primarily belong to only one class where the resolution allows. All areas are classified.

## Scale:

- The classification represents types of **geographic and functional regions**. Primarily it illustrates **differences at regional level**. It does not so much depict the characteristics of a single place as it characterizes entire regions. The boundaries of regional classes are generalized so that the classification functions best for broader area analysis, while striving to retain the natural geographic distinction between the island areas and the mainland as precisely as possible within the 250m resolution of the classification.

# Data and methods



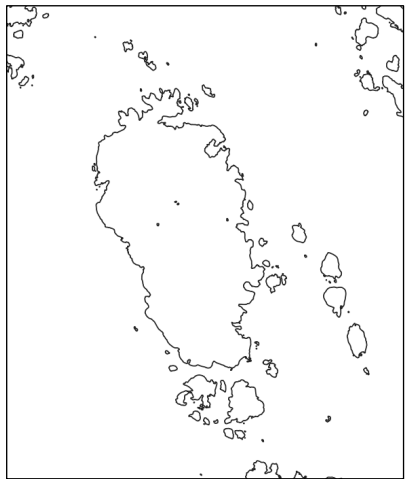
Suomen ympäristökeskus  
Finlands miljöcentral  
Finnish Environment Institute

# Data

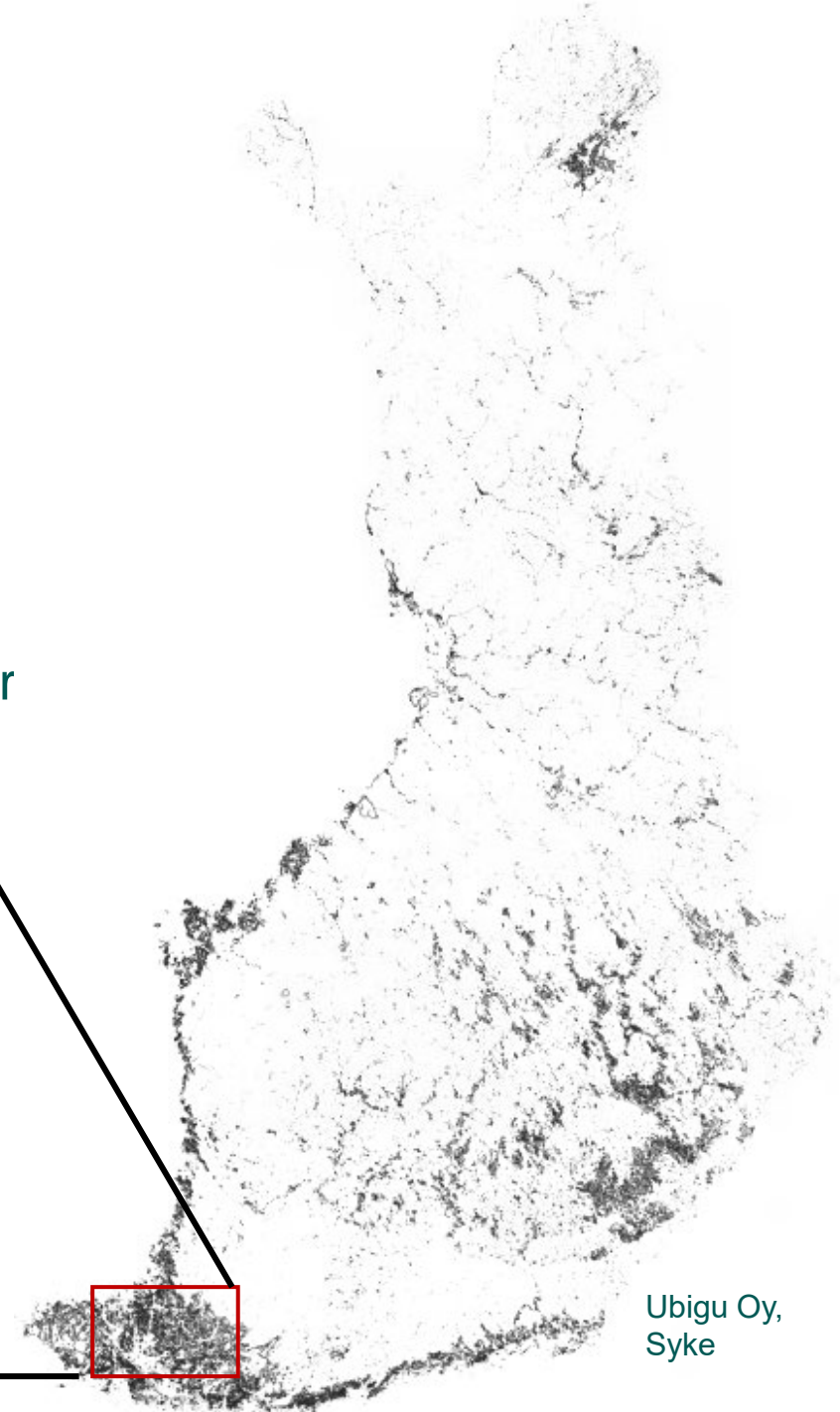
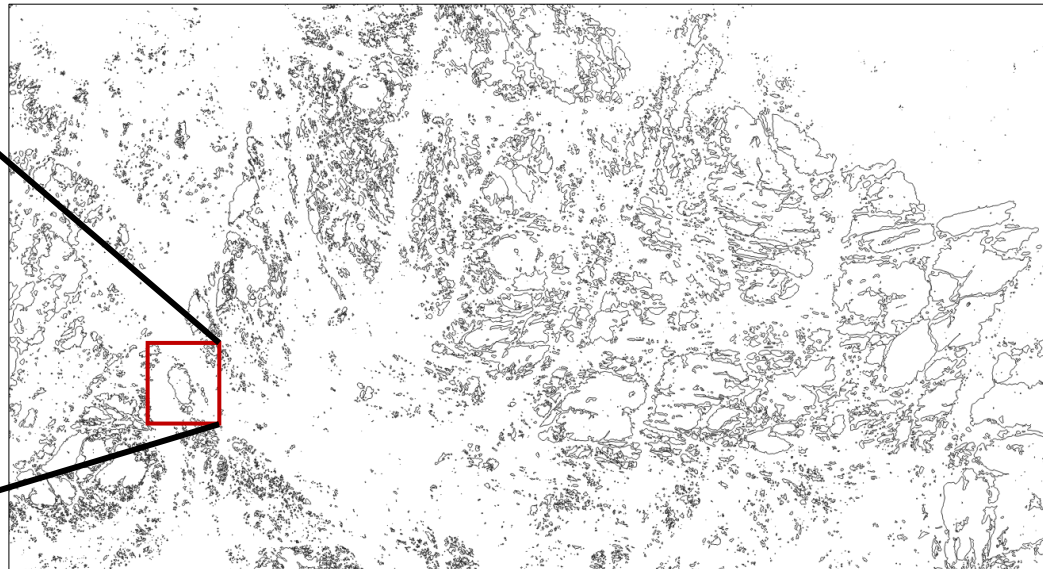
- Topographic Database
  - Includes for example: physical infrastructure (roads, buildings etc.), administrative borders, geographic names, land use, rivers, lakes, marine areas and elevation as vector data sets.
  - Does not include islands as vector data
- Corine land cover 2018
  - Raster data set 20m resolution
- Digiroad - National Road and Street Database
  - Vector representation of roads and streets with tens of attributes
- Building and Dwelling Register (BRD)
  - Buildings as point data with dwelling and resident information

# Island data

- A polygon-data representing islands were derived from topographic database
- A simple geoprocessing method (by Ubiqu oy):
  - Area not water
  - Surface area below certain threshold
  - Shoreline is on average at the same height above the water level.



105



Ubiqu Oy,  
Syke



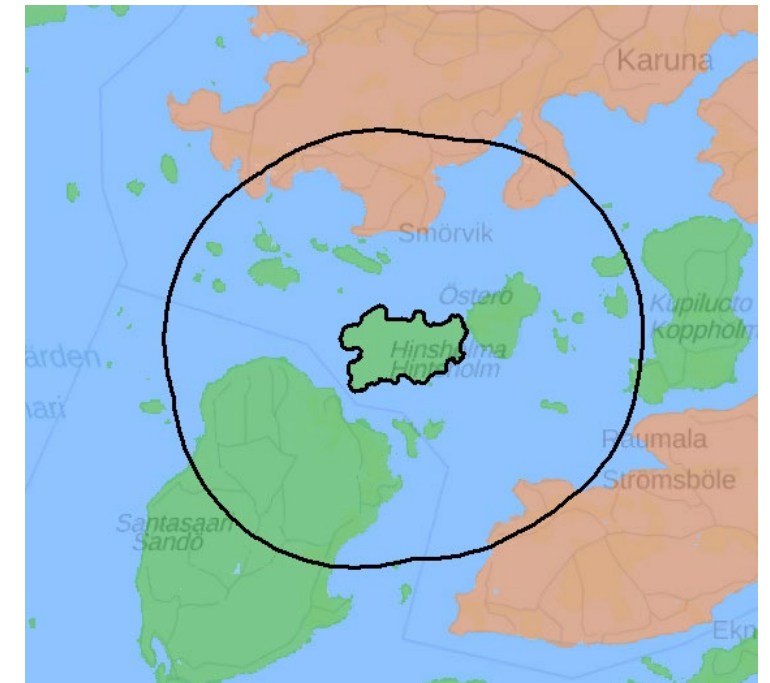
# Method Summary

1. Calculate surface areas of land, water and islands within a 2km surrounding area of each islands and → each island is classified in relation to its broader geographic surroundings
2. Determine area-based threshold values for area-based criteria.
3. Identify connections to the islands (fixed road or road- and commuter ferries).
4. Classify islands according to area and connections based on the criteria.
5. Convert classified islands into a 250m grid, which serves as the final resolution for the classification.
6. Ensure that one island primarily belongs to a single class (the most common class on the island).
7. Classify the surrounding water areas based on the classified islands (the most common surrounding class).
8. Identify mainland areas with conditions similar to the island areas
9. Classify left over other areas.
10. Generalize.
  1. For example: Minimum area size and coherence of regions.

# Share of mainland, water and island area

- Using GIS-methods, calculate the proportions of mainland, island, and water areas within a 2km distance from each island.

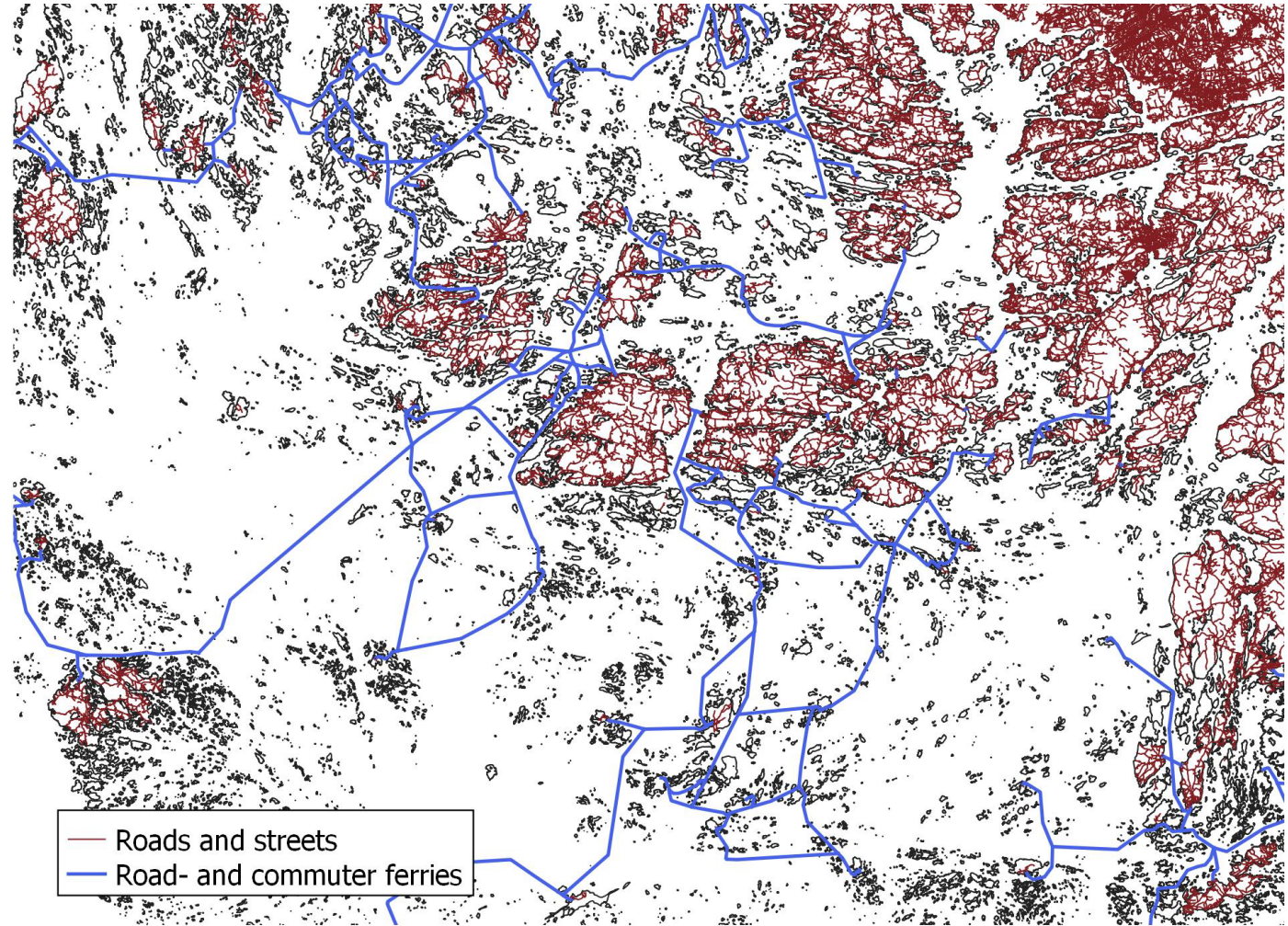
Mainland proportion = 0.0%  
Island proportion = 28.4%  
Water proportion = 71,6%



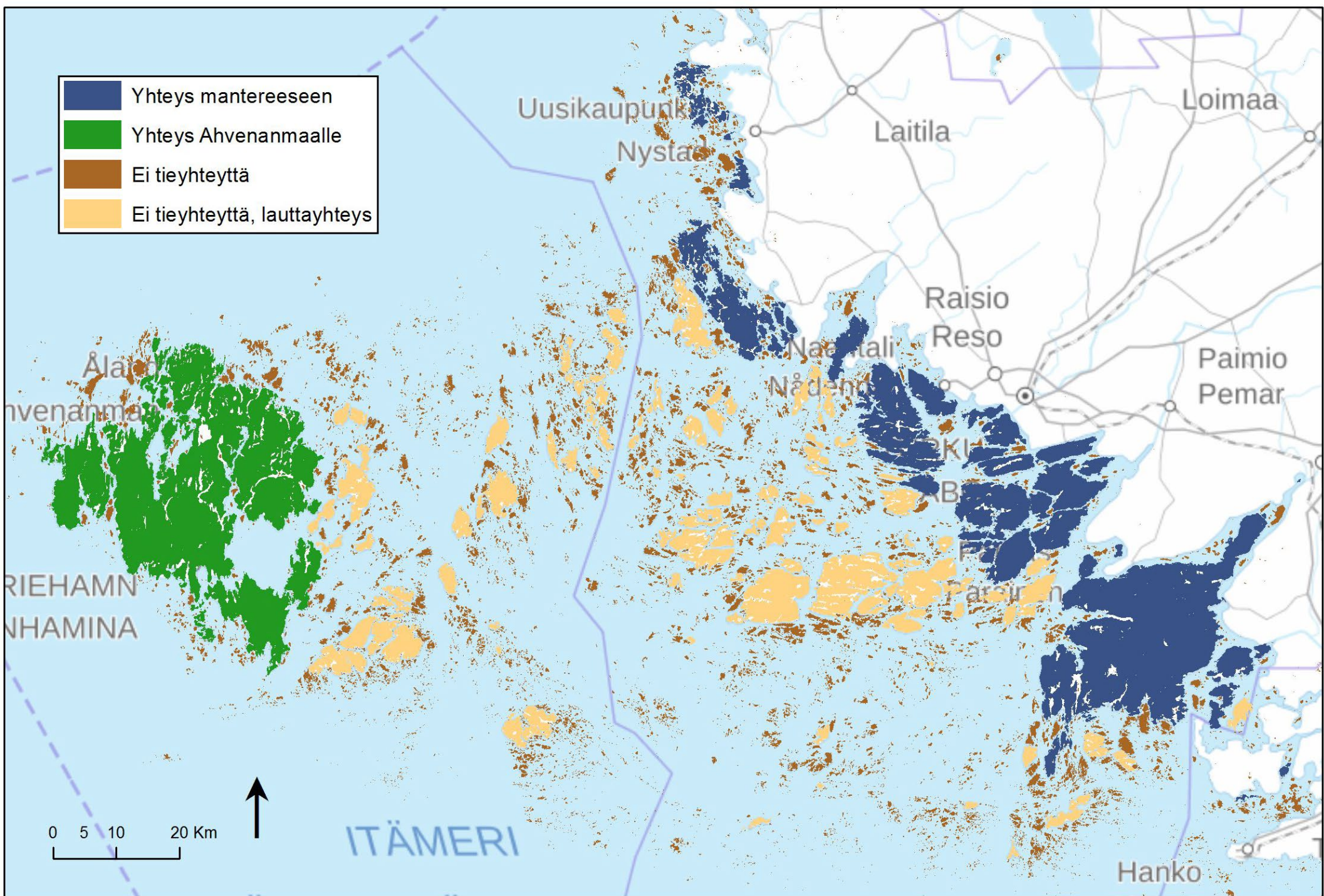
Mainland proportion = 10.2%  
Island proportion = 27%  
Water proportion = 62,8%

# Connections to islands from mainland

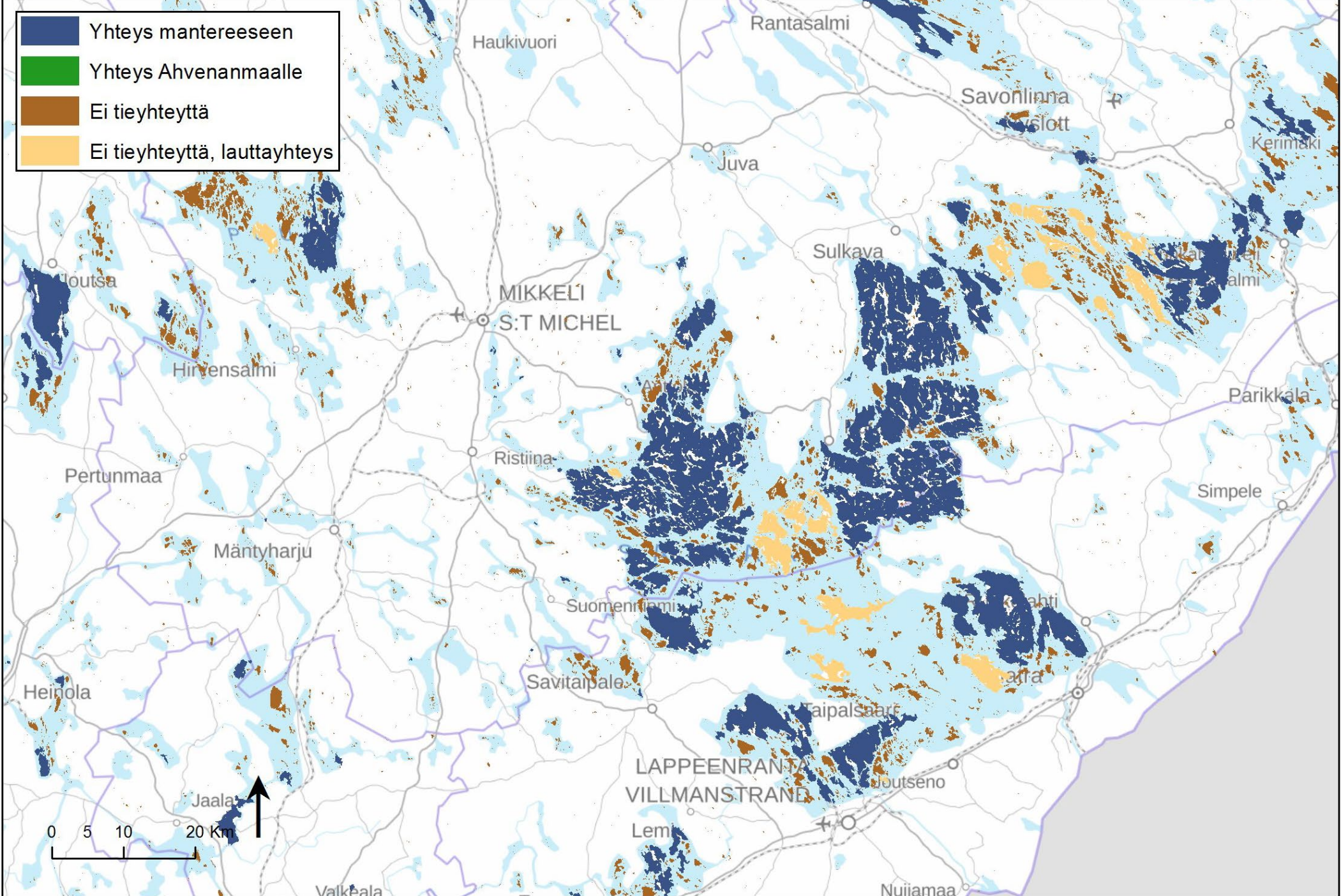
- The identification of island connections is based on the Digiroad - National Road and Street Database.
- Using GIS-analysis, islands that do not have a fixed road connection (bridge, causeway) to the mainland or Åland are identified. Additionally, islands that only have island transport connections (road- and commuter ferries) or no connection at all are recognized.











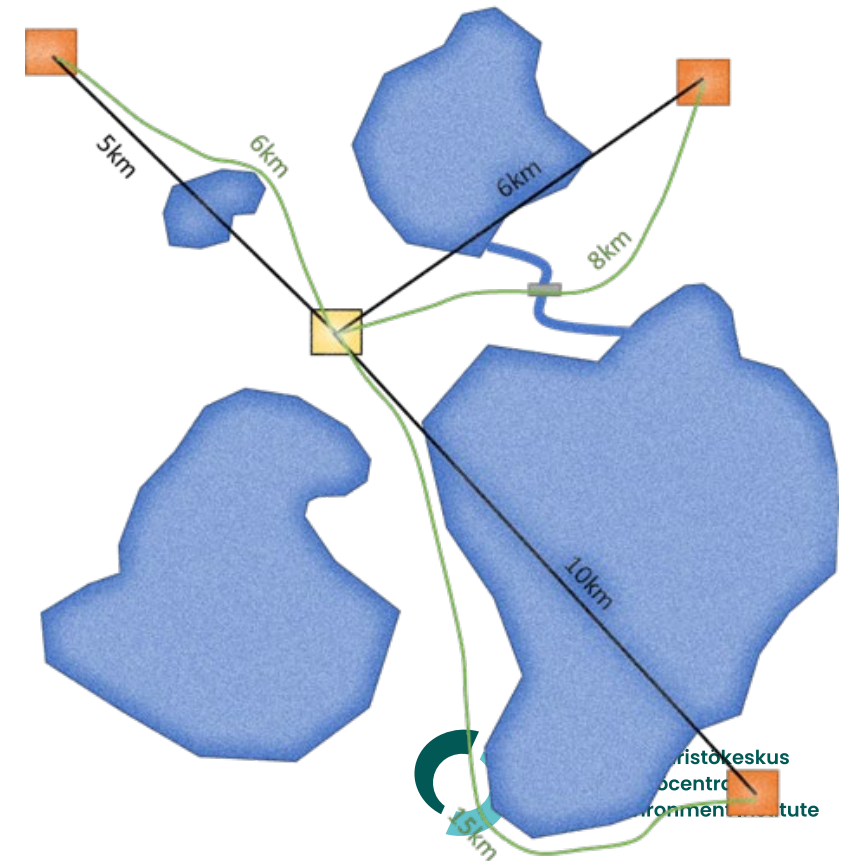
- Yhteys mantereeseen
- Yhteys Ahvenanmaalle
- Ei tieyhteyttä
- Ei tieyhteyttä, lauttayhteys



# Accessibility disadvantage caused by water areas

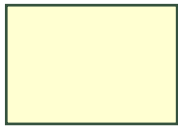
Simplified example, waters cause that distances to nearby places are longer.

- Water areas characterizes island areas significantly, but also present a significant barrier effect.
- Does water areas cause similar barrier effect in mainland areas and where?
- Simply defined: *“The longer the land distance compared to the euclidian distance to nearby population is, the greater the disadvantage caused by water bodies.”*



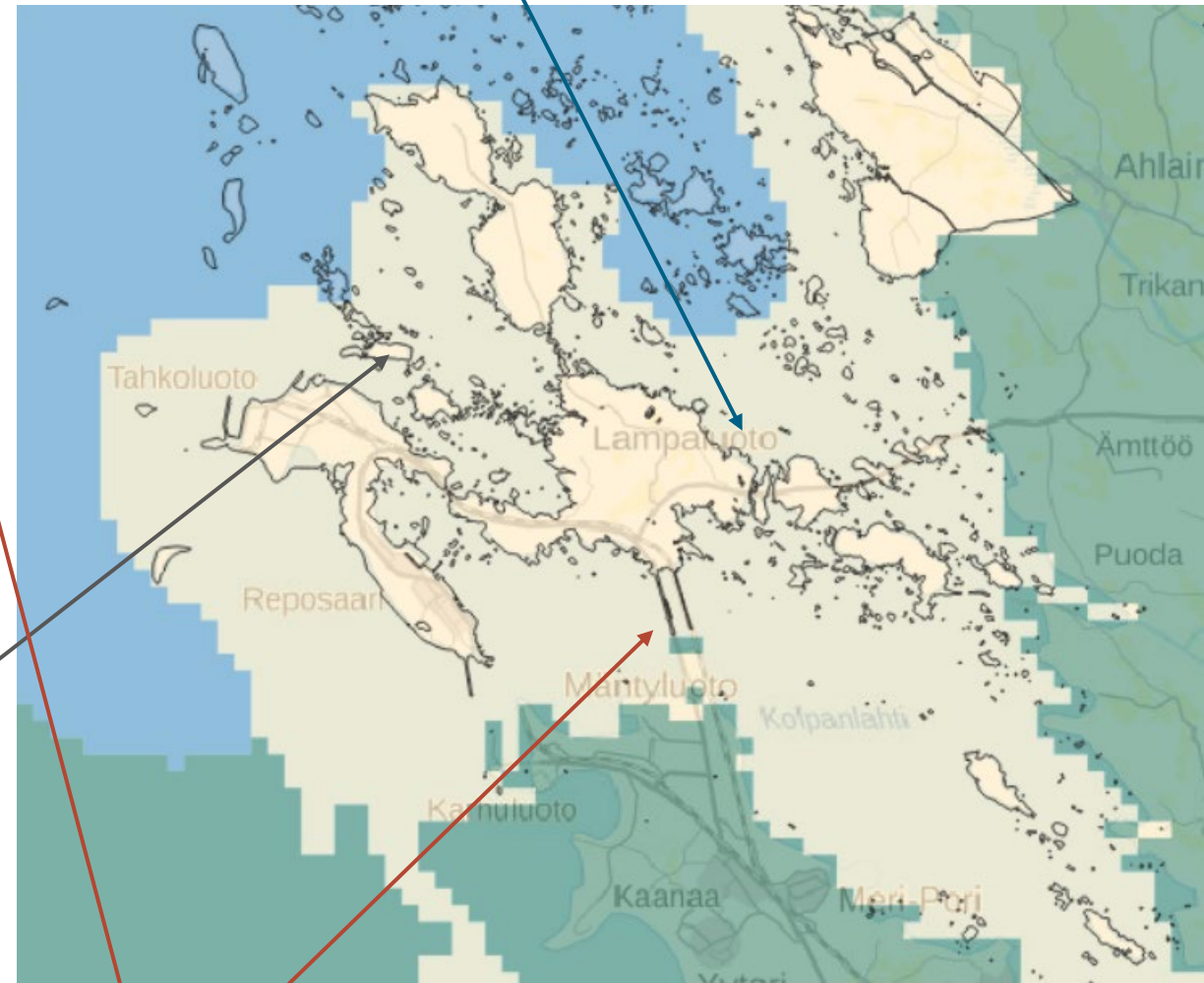
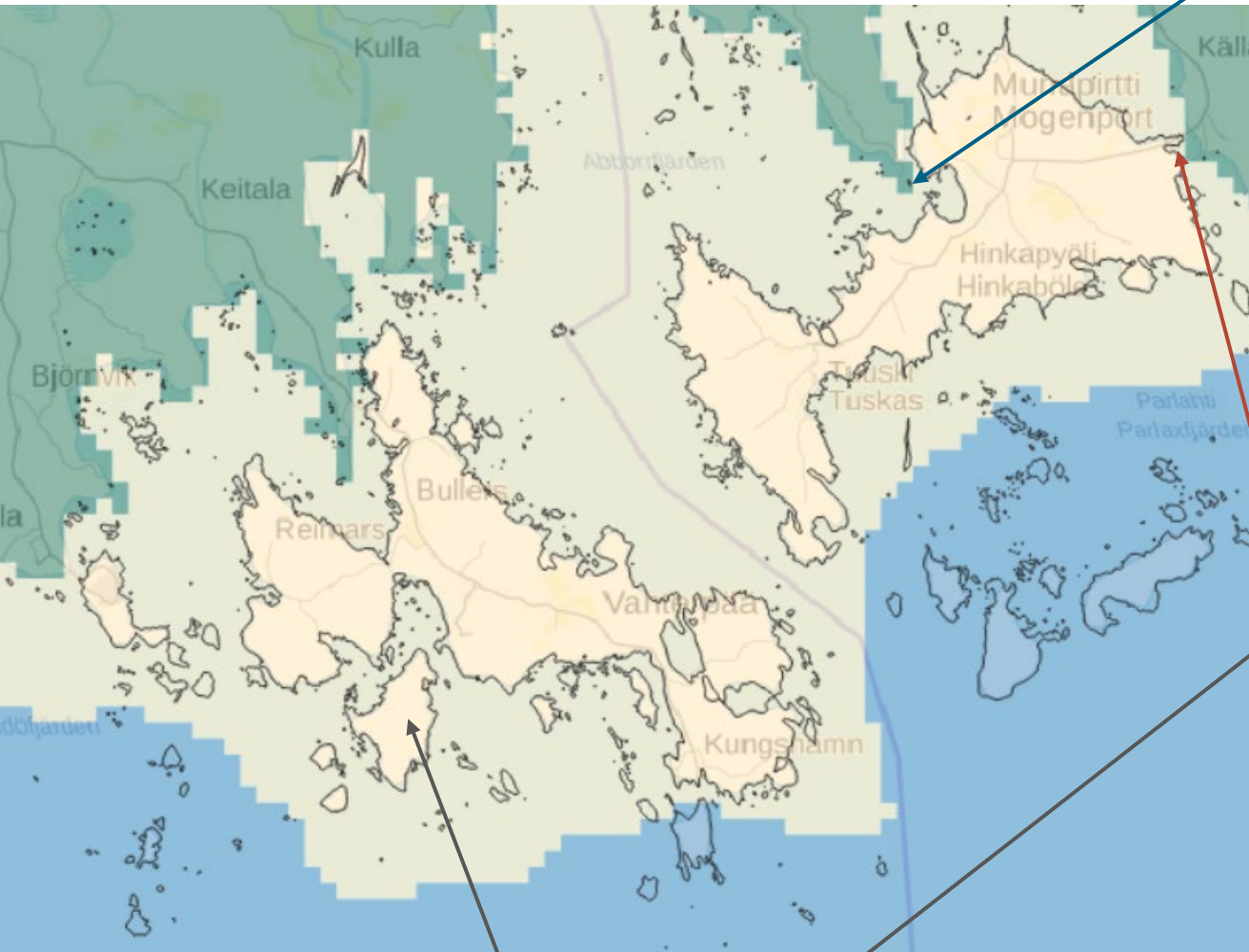
# Results, some examples





Inner archipelago

Close to mainland, extensive continuous area



Lots of islands and/or island area

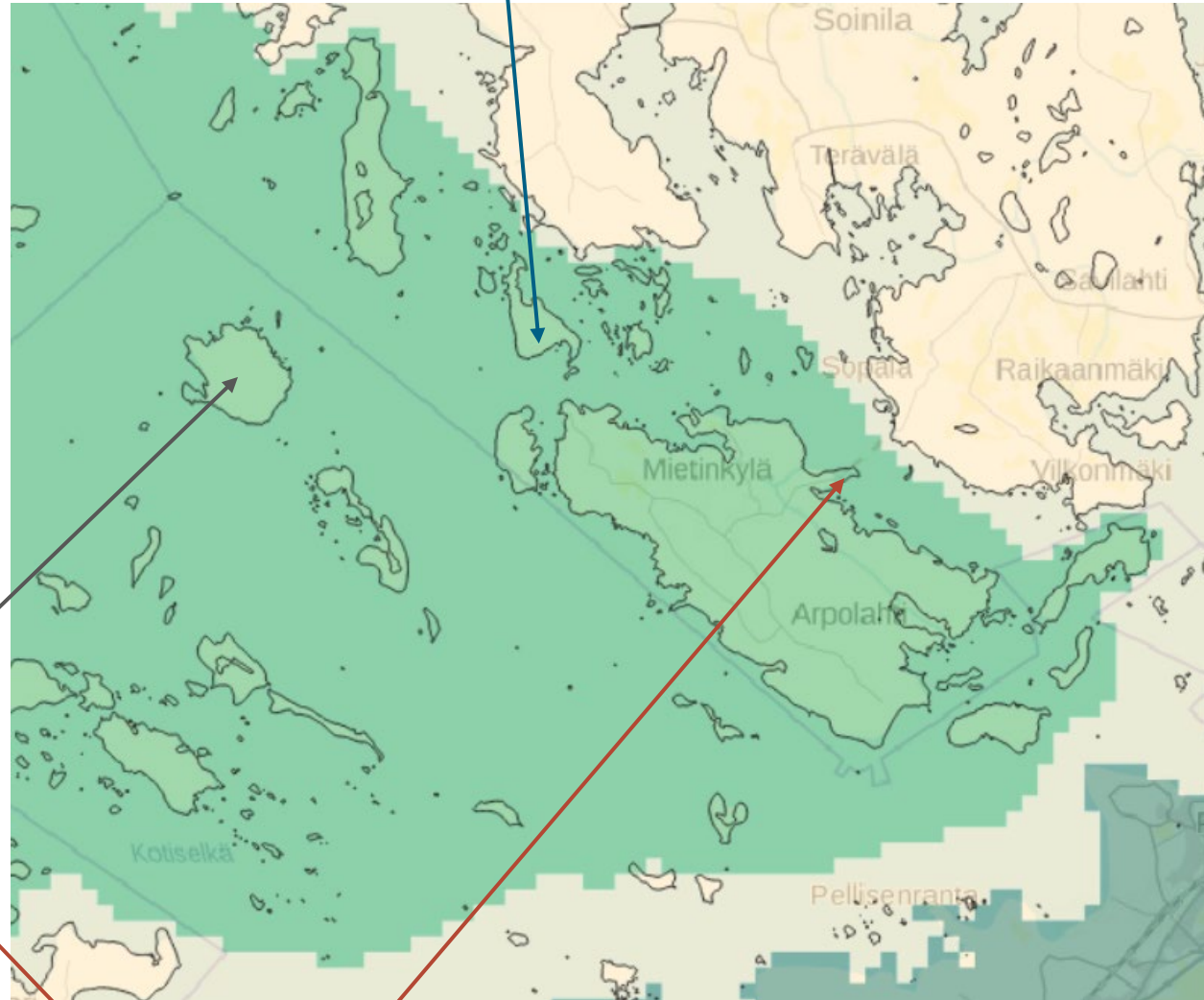
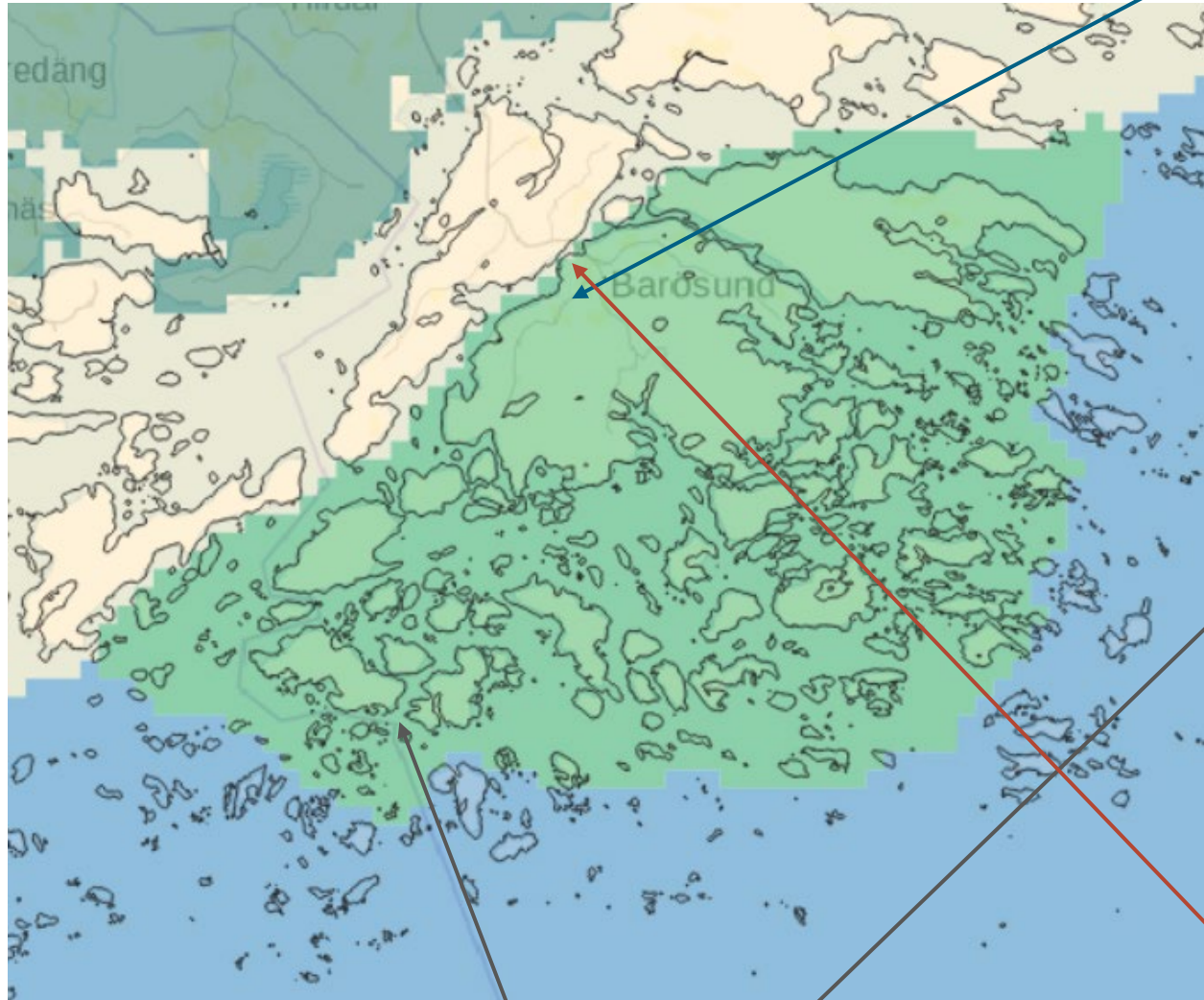
Road connections





Intermediate archipelago

Directly connected to inner islands,  
extensive continuous area.  
A bit farther from mainland



Lots of islands and/or island area

Ferry connections

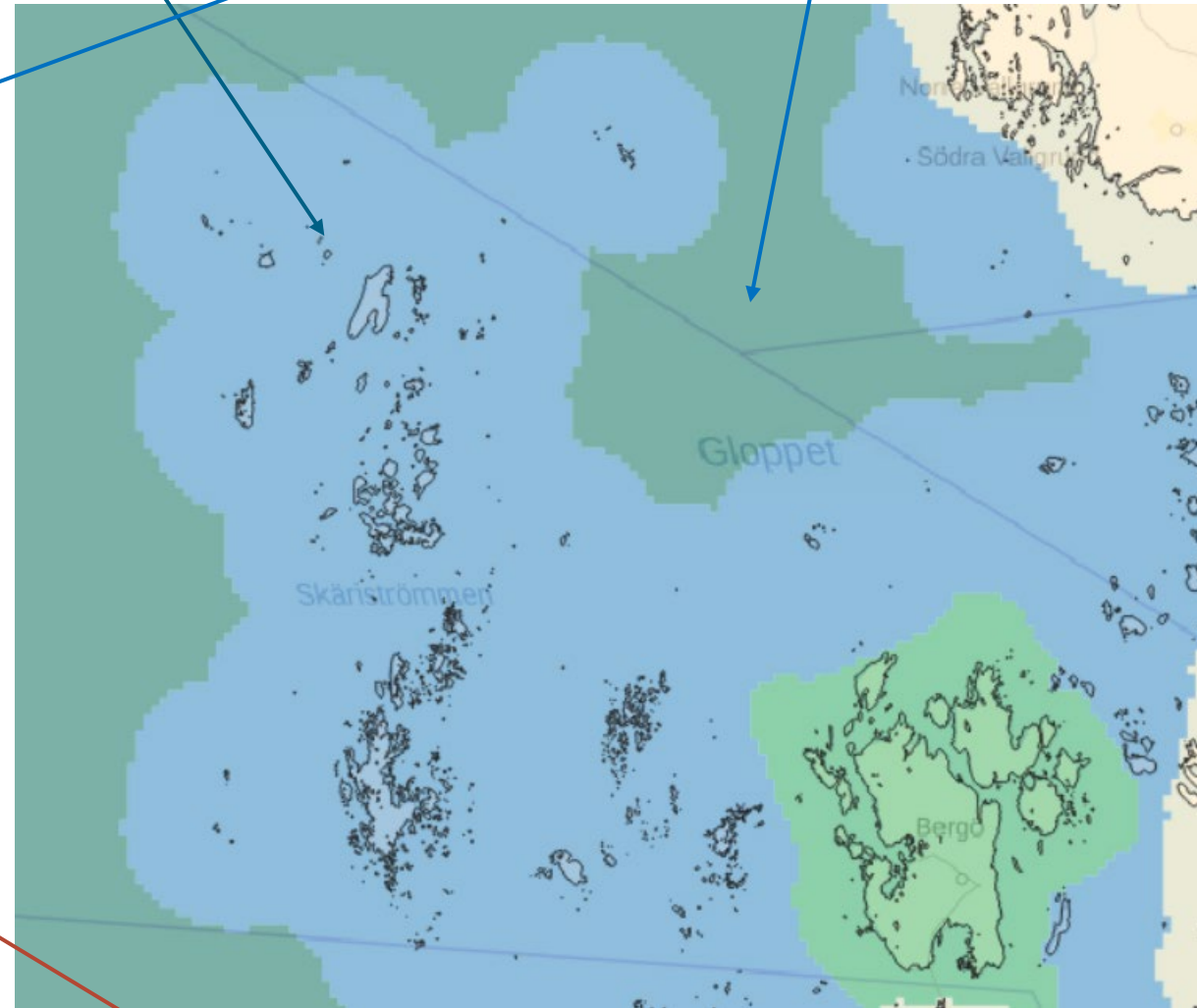
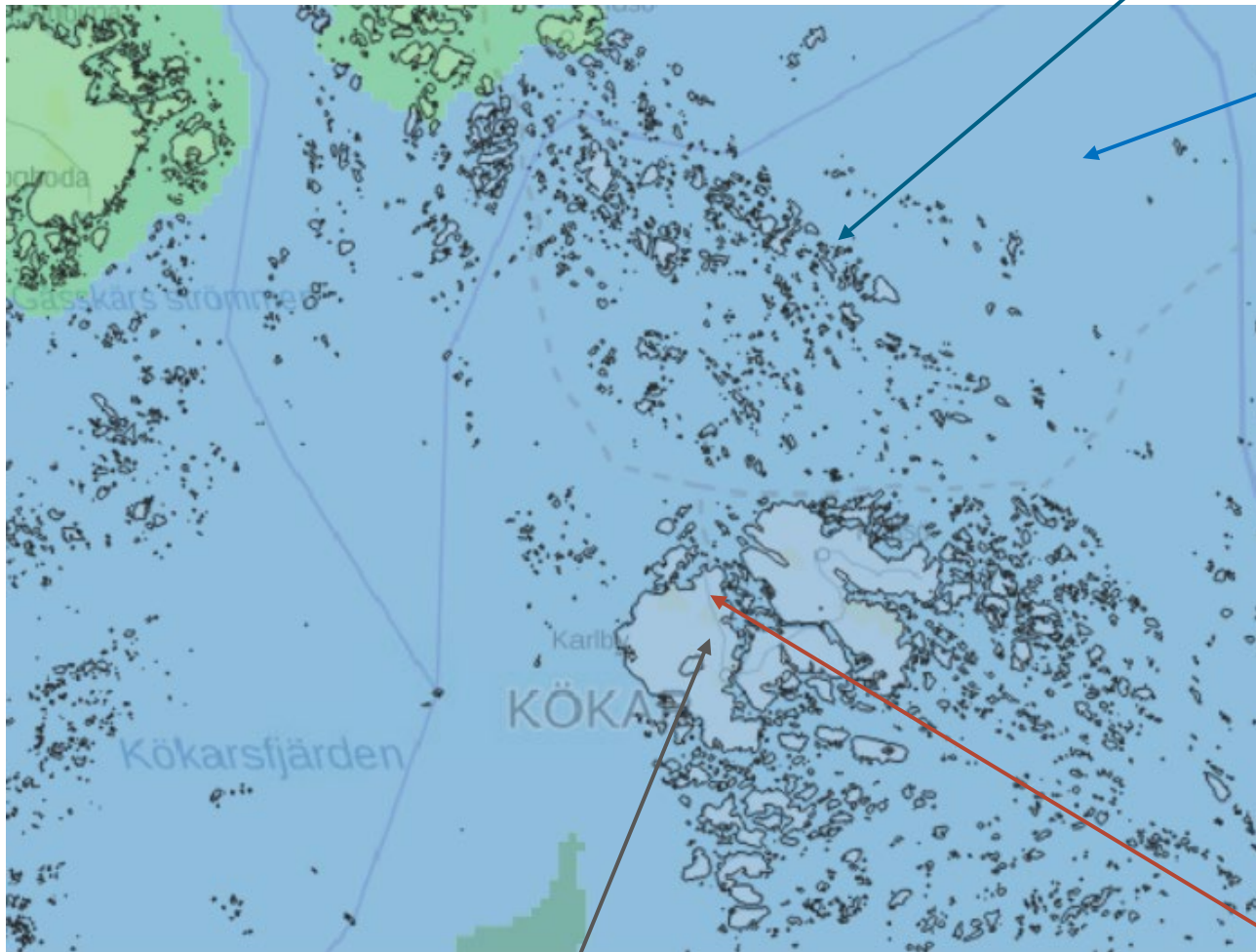




Outer archipelago

Not much island area

Large water areas



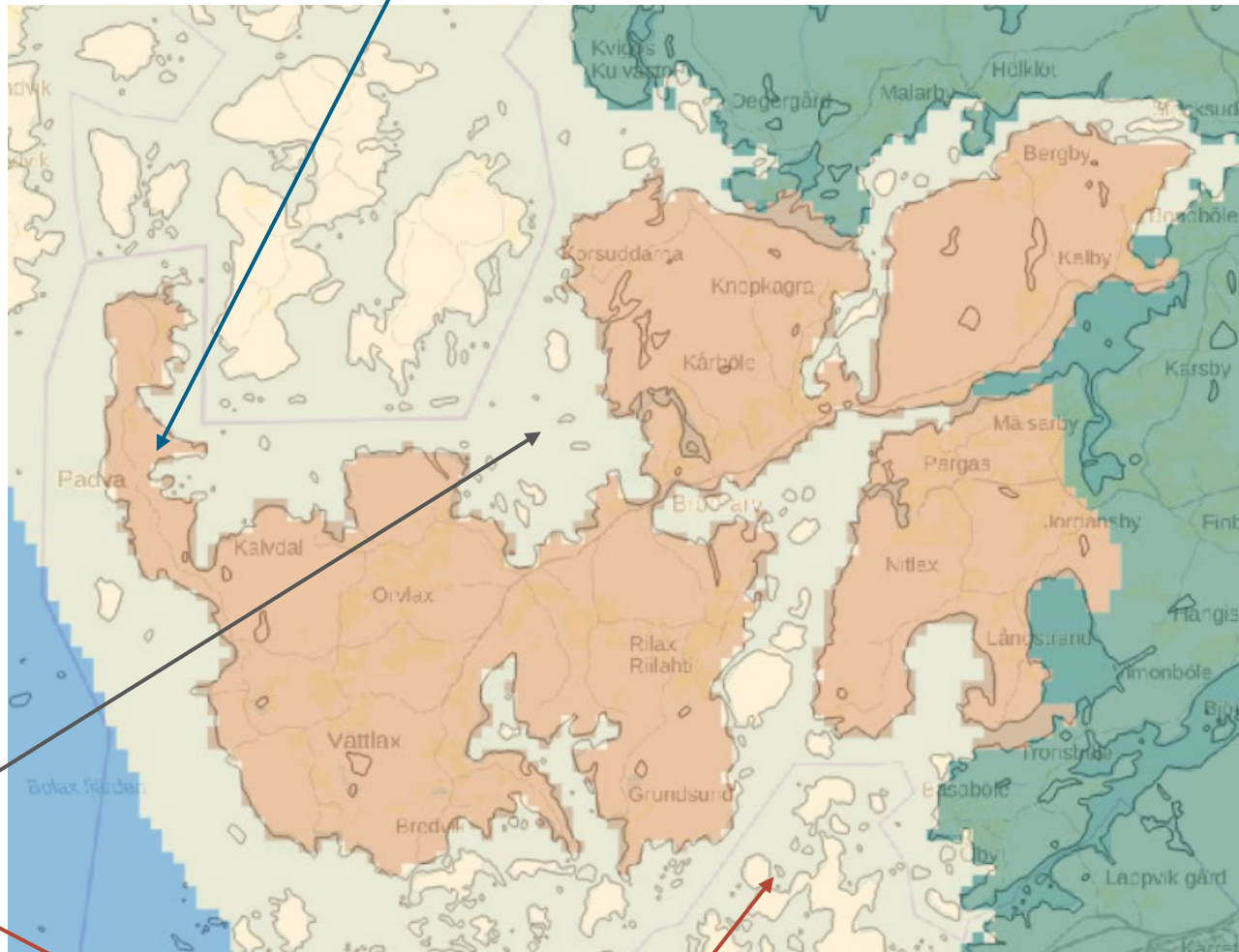
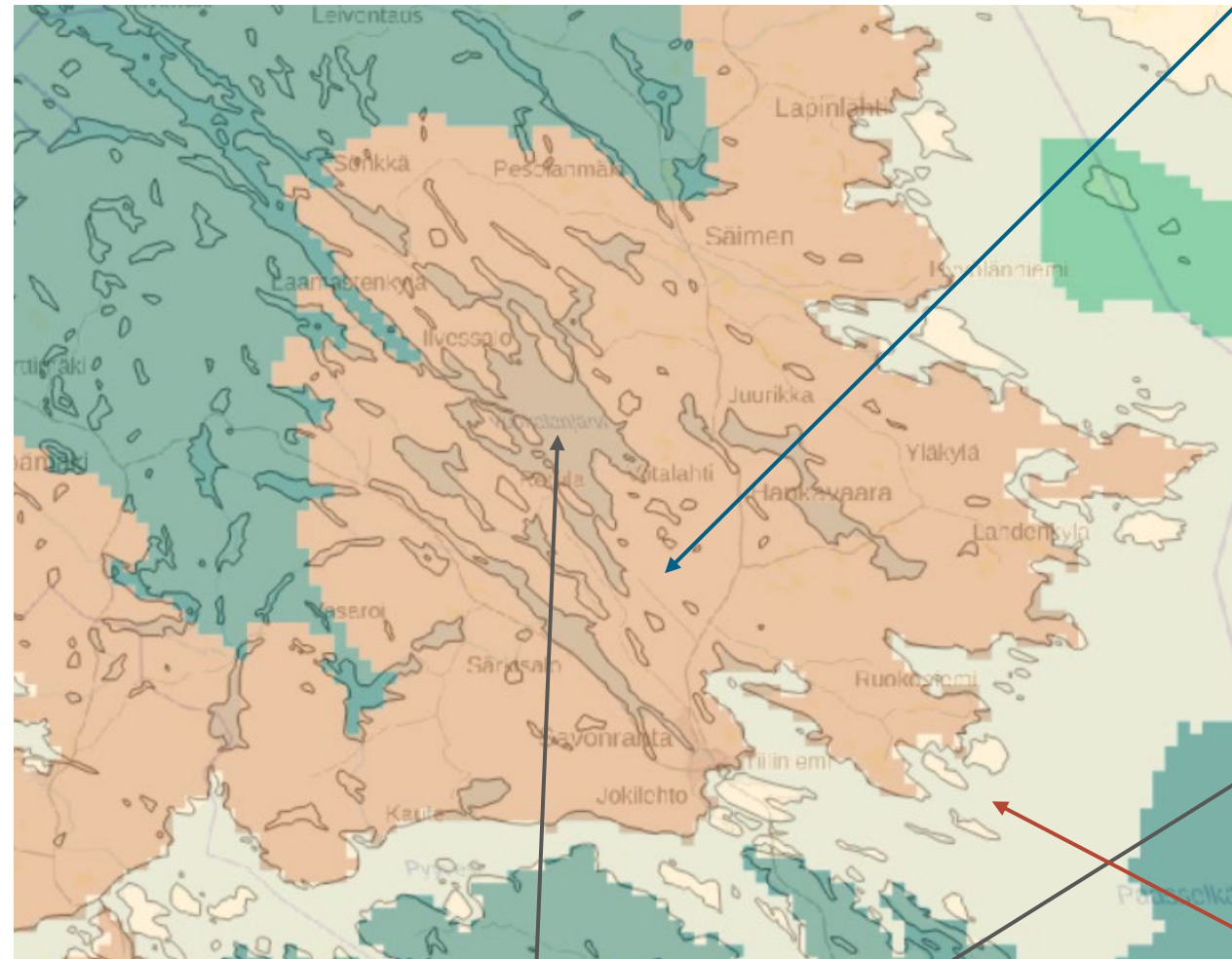
Moderate amount of island area but distant from other archipelago areas.

Rarely ferry connections, never road connections



Archipelagic mainland areas

Long distances, a ragged shoreline



Lots of water areas

Directly connected to islands areas



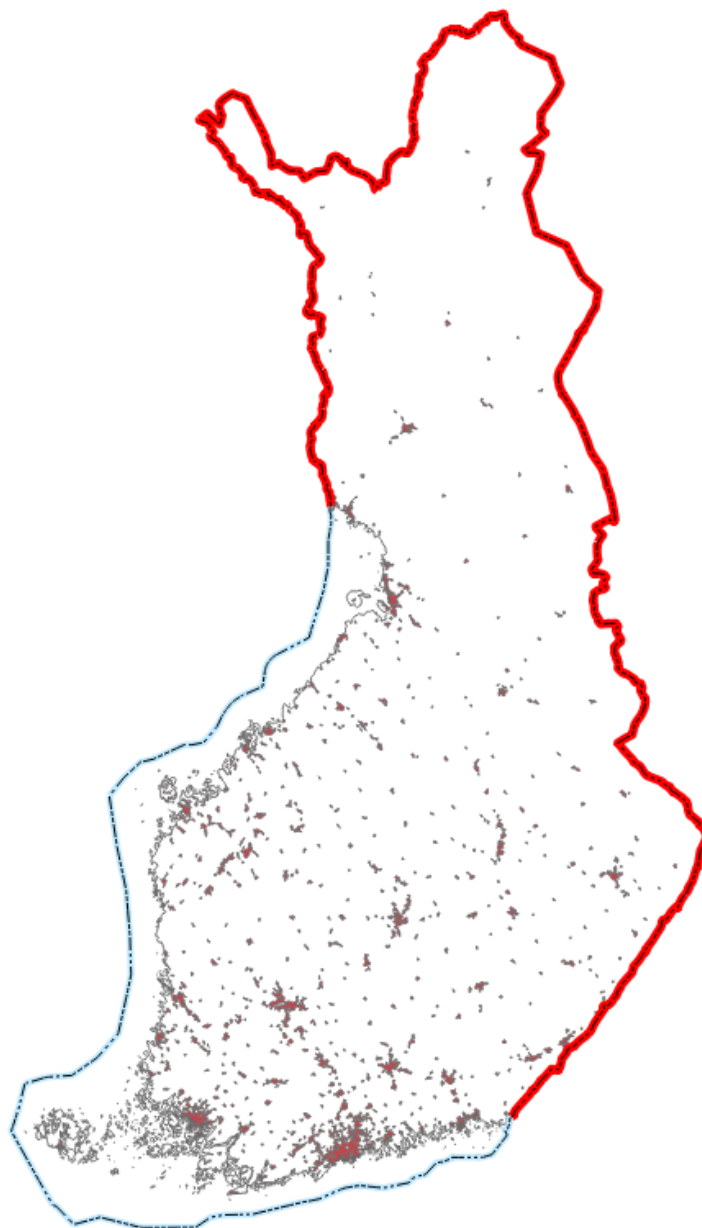
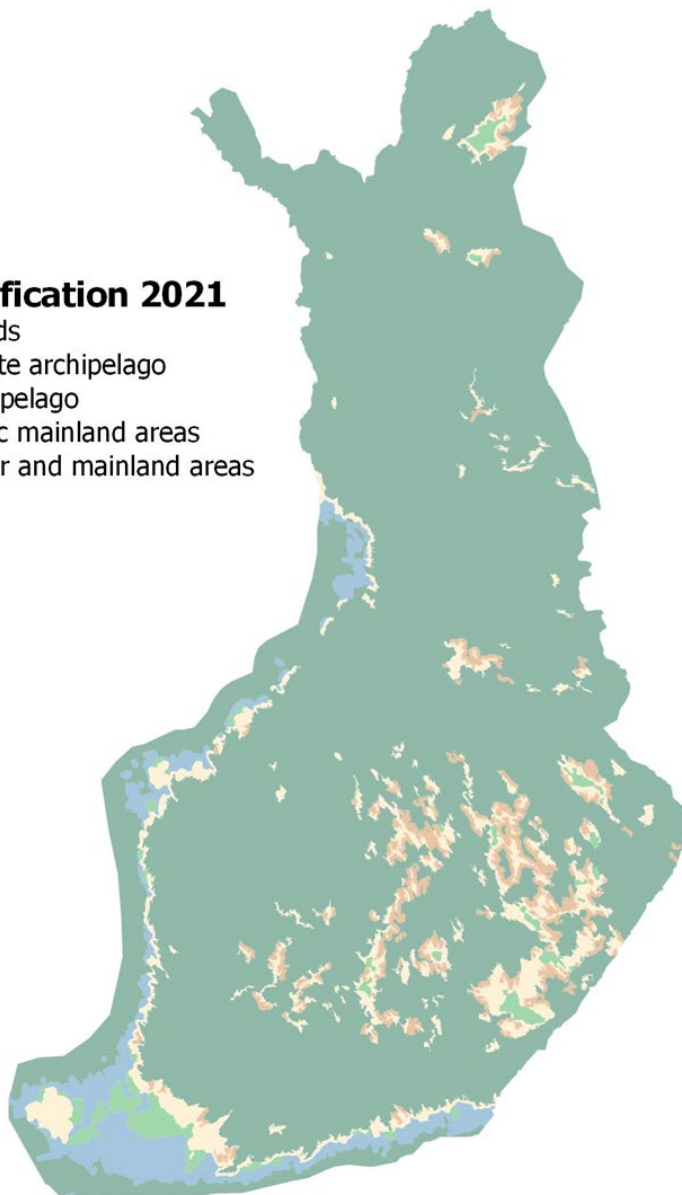
# Pros and cons

- + **Easy to interpret, the power of generalisation!**
- + Quite straightforward and transparent method
- + Detailed GIS-results
  - Information contained in other spatial datasets can be integrated into the island classification based on location and vice versa.
- + Aligns with other Finnish spatial classifications on 250-meter grid resolution
  - **Works best when combined with other spatial datasets, indicators and spatial classifications.**
- The classification resolution (250m grid) causes some inaccuracy
  - The classification should be interpreted at a sufficiently general level, and too much attention should not be paid to the exact location of grid boundaries.
- Definition of variable threshold values not totally objective
- Mainland areas with similar characteristics as island areas

# Localities (Densely populated Areas)

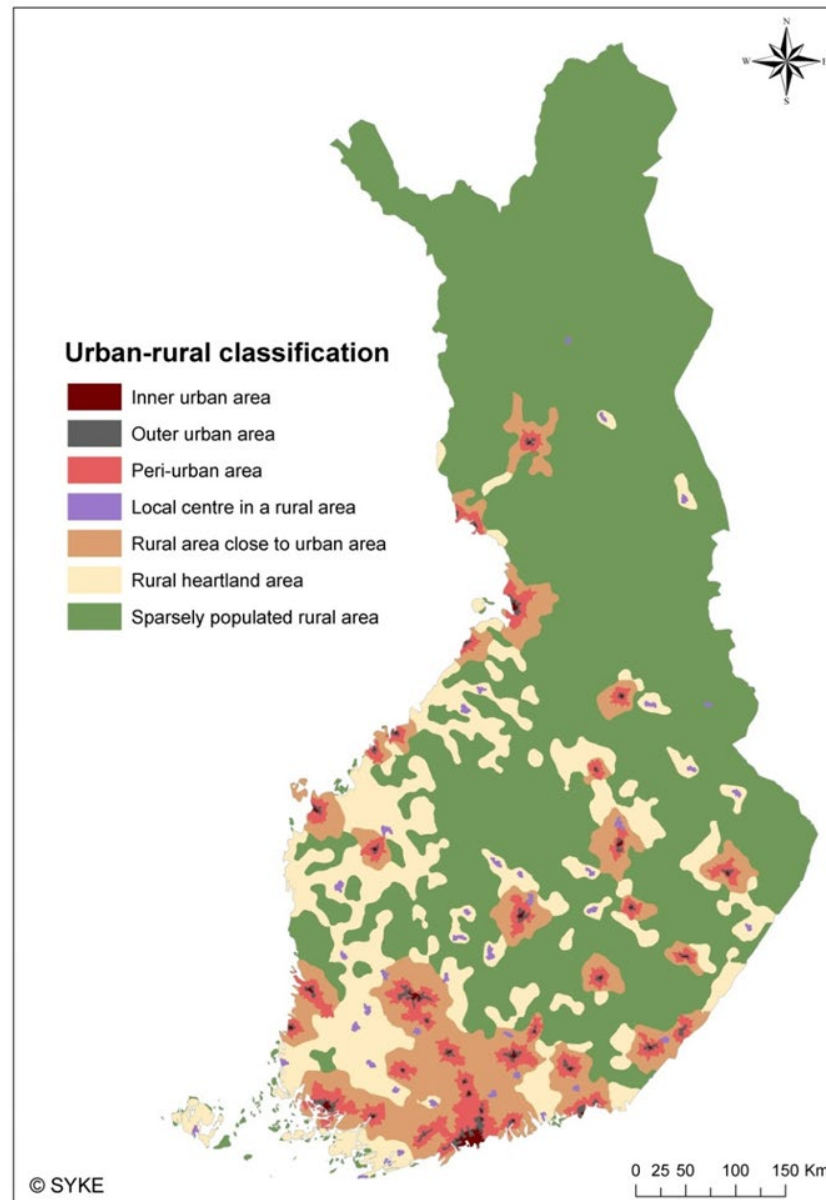
## Island classification 2021

- 1. Inner islands
- 2. Intermediate archipelago
- 3. Outer archipelago
- 4. Archipelagic mainland areas
- 5. Other water and mainland areas



## Urban-rural classification

- Inner urban area
- Outer urban area
- Peri-urban area
- Local centre in a rural area
- Rural area close to urban area
- Rural heartland area
- Sparsely populated rural area

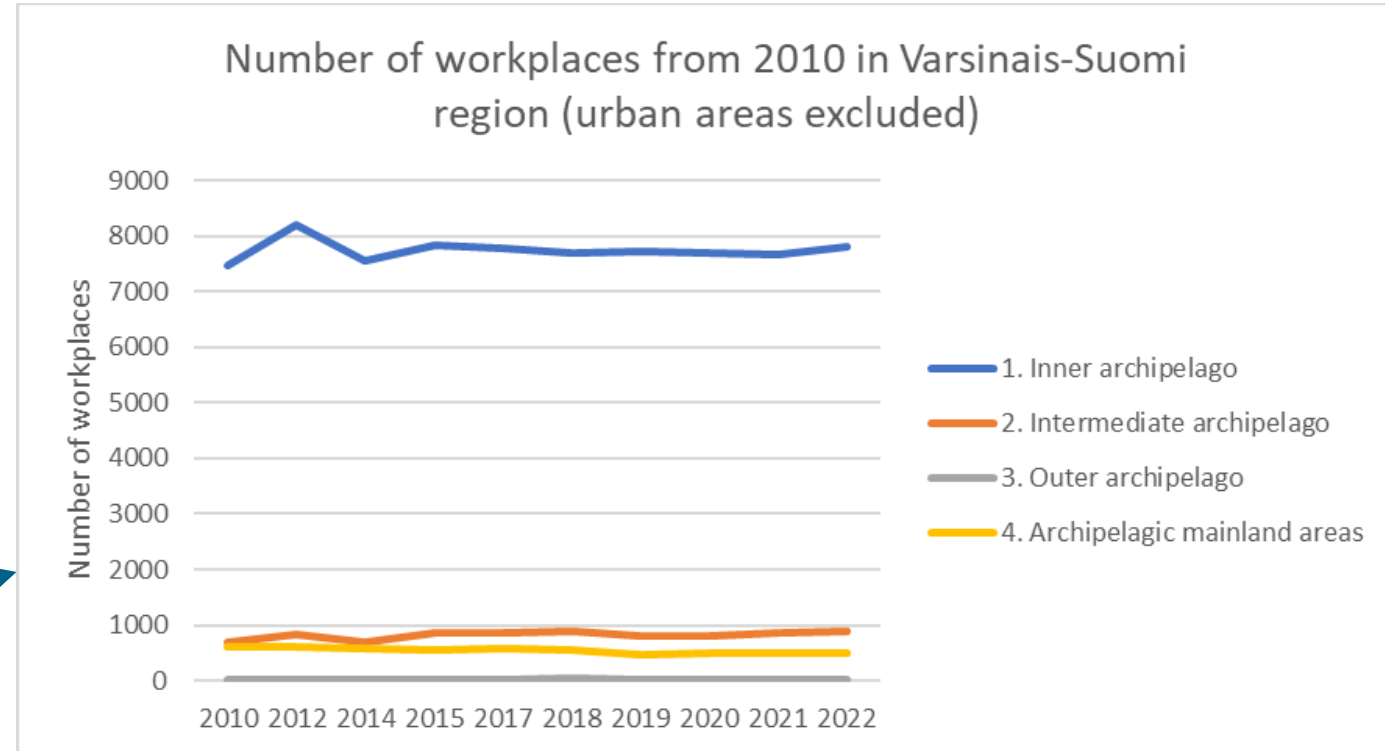




# Use cases

## Statistics and Monitoring

- Serving different purposes (e.g. rural planning, island policies, regional development)
- Regional changes and spatial distribution of area types.
- Internal factors within area types and their changes. What changes are occurring within area types?
  - **For example, how the number of workplaces have changed in the area types within a specific region?**
  - What proportion of the residents in inner islands live within walking distance of a grocery store?



# Use cases

## Policy tool

- For example used in defining island municipalities and in determining supplementary grants island municipalities receive from government
  - Number of permanent population and seasonal residents within a municipality in island classes
  - Area of different classes within a municipality
  - "Urban islands" excluded

## Background variable

- As a background variable or explanatory factor in studies and surveys.
- For example, a variable describing the area type of the respondent's place of residence

# Liiteri information service – web-based tool

**LIITERI**

Kartta  
Haku  
Karttatasot  
Tilastot

Työmatka-analysit  
Asemakaavojen seurantalomakkeet  
Palvelupaketit

**Tilastot**

1. Valitse alue  
2. Valitse esitystaso  
3. Valitse tilastot  
4. Valitse vuodet  
5. Valitse toiminnalliset alueet

*Mikäli haluat tarkastella tilastoja myös toiminnallisiin alueisiin jaettuna, valitse ne listasta.*

- Asemakaavoitettu alue
- Kaupan alueet
- Kaupunki-maaseutu-luokitus
- Kaupunkiseututyypit
- Keskusta-alueet
- Kylät
- Taajamakokoluokka
- Taajamat ja haja-asutusalue
- Taajamien asuinalueet
- Tiheä ja harva taajama
- Yhdyskuntarakenteen vyöhykkeet

Muodosta valittujen toiminnallisten alueiden leikkaus (valitse vain kaksi aluetta)

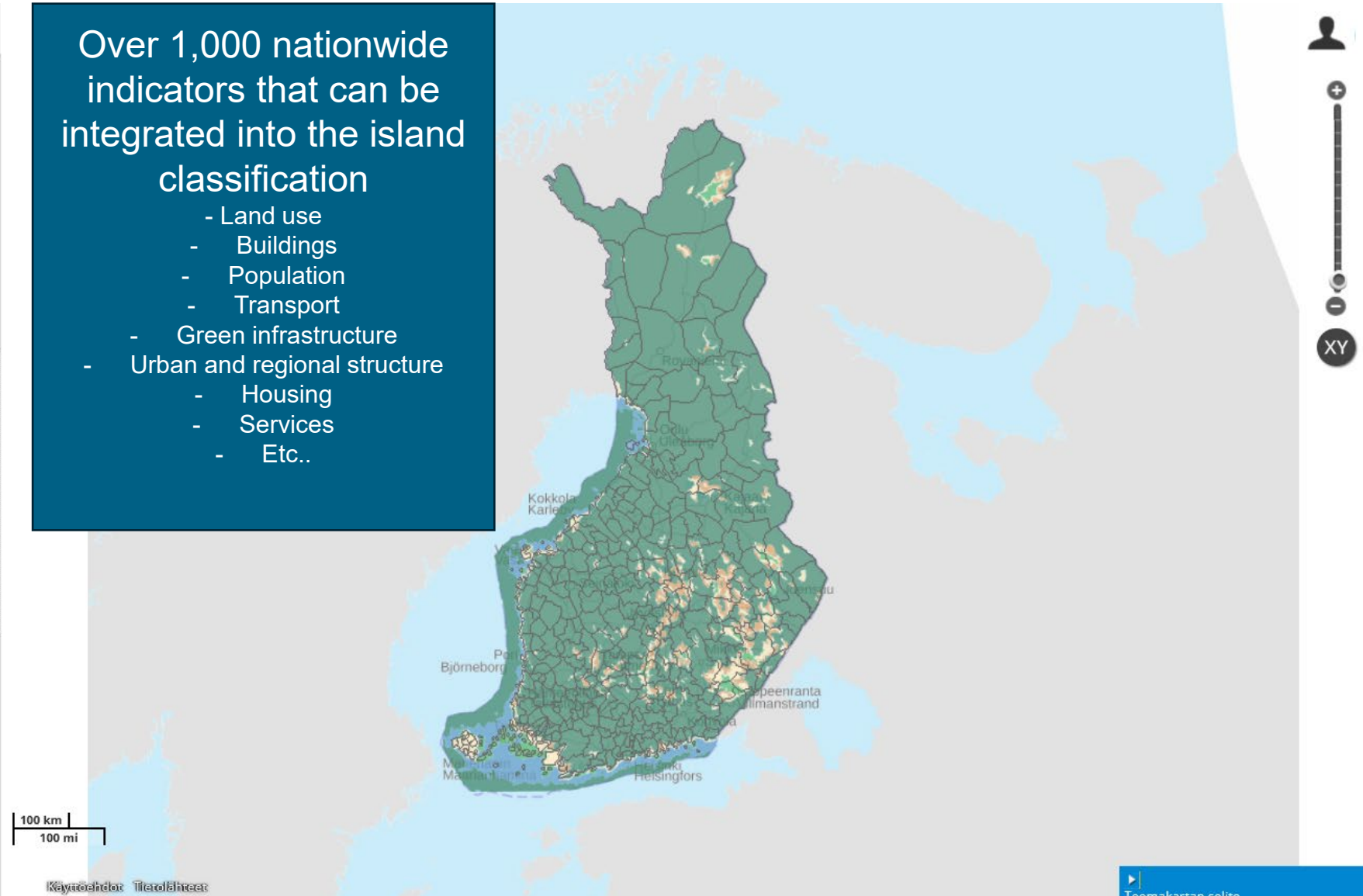
**+ Laske** **✕ Tyhjennä valinnat**

Luo diagrammi > Lataa tiedostona >  
Tulosta teemakartta >

Anna palautetta Käyttöohjeet  
Tietosuojaohje Alueuutokset

Over 1,000 nationwide indicators that can be integrated into the island classification

- Land use
- Buildings
- Population
- Transport
- Green infrastructure
- Urban and regional structure
- Housing
- Services
- Etc..



# Thank you!

More information:

[kimmo.nurmio@syke.fi](mailto:kimmo.nurmio@syke.fi)

[Data in Syke open data portal](#)

[Detailed description of the classification \(in finnish\)](#)



Suomen ympäristökeskus  
Finlands miljöcentral  
Finnish Environment Institute



# TAIEX TSI Workshop

On the Cost of Doing Business

Tsekeris Theodore, Senior Research Fellow,  
Transport Economics and Spatial Development,  
Greece



# Any other business and wrap up day 1