



UNISECO

UNDERSTANDING & IMPROVING  
THE SUSTAINABILITY OF AGRO-ECOLOGICAL  
FARMING SYSTEMS IN THE EU

SESSIT -

Socio-Ecological System Interaction Tool

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# Challenges

Climate change, loss of biodiversity & global population growth

Lack of knowledge of agro-ecological practices that could make European agriculture more sustainable



# Why socio-ecological systems?

## Understanding the system

*“Many of the situations of interest in understanding social dilemmas, however, are uncertain and complex.”* Ostrom 2011

## The significance of the decision-makers at the local level

## Shared social norms



# Path to sustainability?

Science should facilitate local decision making by:

- **Providing accurate information for it**
- **Providing technical assistance**
- Providing a conflict resolution arena
- Support local monitoring and sanctioning

Ostrom 2011

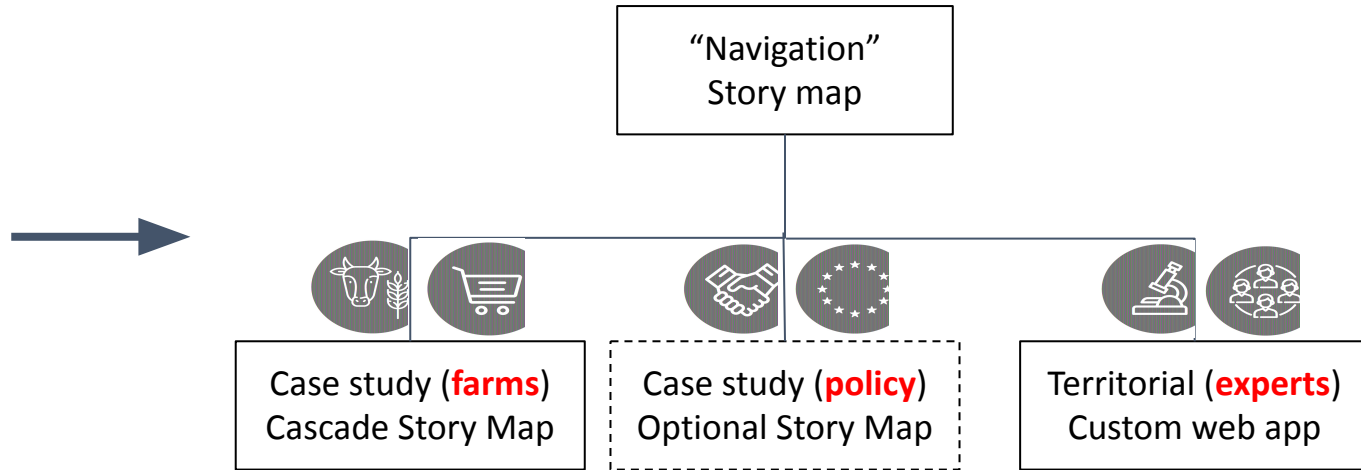


online tool



Socio-ecological systems as such are too complicated for communicating solutions at the local level → Storification

→ Different features for separate **target audiences**



# Stories of farmers



- An effective means of disseminating information to actors involved in the food system
- Platform which requires minimal technical knowledge for easy content creation at a local level
- Farmer-to farmer story to share information on more sustainable practices in agriculture.
- Increased awareness of effective ways of communicating key aspects and experiences of agro-ecology



# An angle for action/policy



- Looking at the UNISECO case studies from the perspective of national and EU policies/governance
- What patterns of interactions and outcomes are likely to result from using a particular set of rules for the governance?



# Indicators for experts



- Connecting changes in farming practices, value chains and consumption to accepted sustainable development metrics (e.g. Sustainable Development Goals).
- Custom web app with interactive features and dynamic data
- Scenarios and model results





## Socio-Ecological System Interaction Tool (SESSIT)

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Agro-ecological farming

Policies and strategies

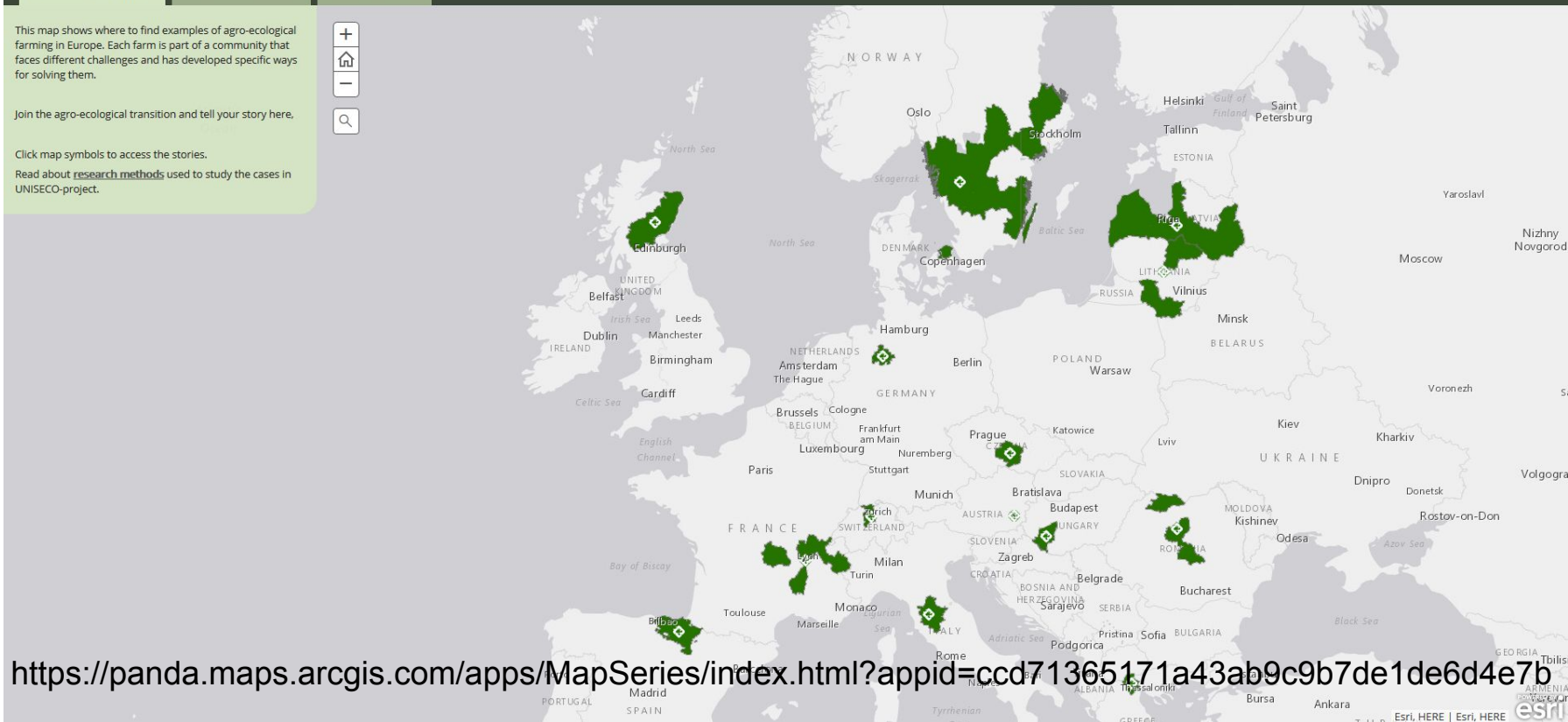
Sustainability tool

This map shows where to find examples of agro-ecological farming in Europe. Each farm is part of a community that faces different challenges and has developed specific ways for solving them.

Join the agro-ecological transition and tell your story here.

Click map symbols to access the stories.

Read about [research methods](#) used to study the cases in UNISECO-project.



<https://panda.maps.arcgis.com/apps/MapSeries/index.html?appid=ccd71365171a43ab9c9b7de1de6d4e7b>



# Future for SESSIT

- Few weeks remain to add some additional indicators & polish visuals
- UNISECO-project has provided a proof-of-concept
- It is the European agro-ecological community and WWF who would need to assess if this work inspired any longer lasting ideas

**GLOBAL – the Global Biodiversity Information Portal**  
**<https://panda.maps.arcgis.com/home/index.html>**



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Ostrom 2011.

Background on the  
Institutional Analysis and  
Development Framework  
PSJ 39

Thank you!