State of national MAES:Case of Lithuania

Kristina Simonaityte

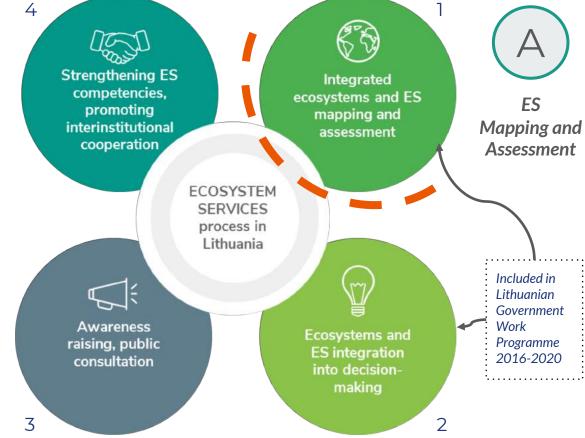
Chief Specialist Ecosystem Services Lithuanian Ministry of Environment

Final LIFE VivaGrass Conference 28 February 2019



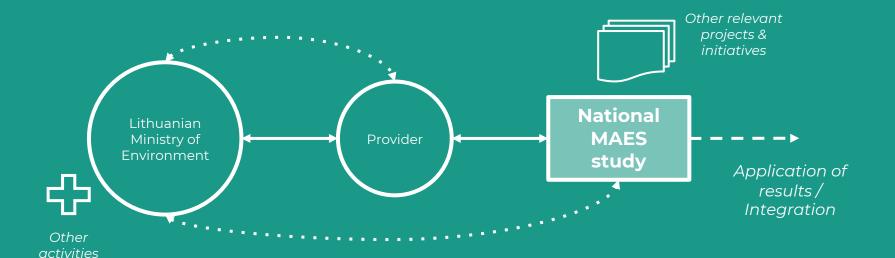
MAES update in Lithuania:

overall process





1) ES mapping and assessment









LINESAM Lithuanian National Ecosystem Services Assessment and Mapping

- 1. Develop a **national ES mapping and assessment framework** to improve the understanding of the
 relationships between ecosystems, biodiversity and
 human wellbeing and how drivers of change may
 affect ES supply in Lithuania
- 2. Support the **development of planning and management strategies** grounded on socio-ecological principles of ecosystems and biodiversity
- 3. Create a common knowledge baseline on ES

TIMELINE

- Interim report second half 2019
- Project end second half 2021

DELIVERABLES

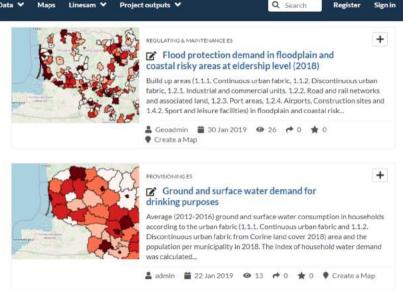
- Geoportal (maps, layers)
- Scientific publications

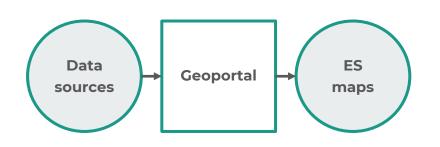


LINESAM Methodology

NATIONAL LEVEL AND CASE STUDY SPECIFIC

- Assessing and mapping ecosystem services
 - FS based on CICES
 - Which $ES \Rightarrow$ expert selection
 - Modelling ⇒ ES potential (following MAES framework)
- 4 case studies across selected ecosystems:
 - Forest Alytus region
 - **Urban** Vilnius region
 - **Cropland** Šiauliai region
 - Coastal Klaipėda region
- Stakeholder engagement process to identify beneficiaries of ES and their power relations





LINESAM First results

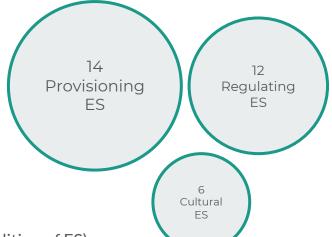
Finalised list of ecosystem services to be assessed

- 32 ecosystem services (supply, demand and in some cases condition of ES)
- **Examples**: timber production (P), pollination (R), natural and cultural heritage (C), etc.

For maps and other data, visit GeoPortal: <u>linesam.mruni.eu</u>

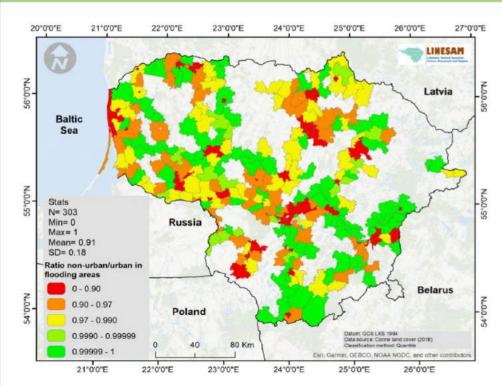


- 39 data layers (as of now, continuously updated)
- **Examples**: Mediation of waste, toxics, and other nuisances (supply), Flood protection (supply), Crop supply (cereals and grains), etc.



Flood protection supply





Ratio between area between flood protection area supply in flood plain and coastal risky areas (1.4.1. Green urban areas, 2.2.2. Fruit trees and berry plantations 2.3.1. Pastures; 2.4.2. Complex cultivation patterns; 2.4.3. Land principally occupied by agriculture, with significant areas of natural vegetation; 3.1.1. Broad-leaved forest, 3.1.2. Coniferous forest, 3.1.3. Mixed forest, 3.2.1. Natural grassland, 3.2.2. Moors and heathland, 3.2.4. Transitional woodland shrub, 3.3.1. Beaches, dunes, and sand plains, 3.3.3. Sparsely vegetated areas, 4.1.1. Inland marshes and 4.1.2. Peatbogs) and the total flooded area

Metrics: Index

Data source: Lithuanian Environmental Protection Agency and Corine land cover (2018).

Level: Eldership.

Method source: Syrbe, R.U., Grunewald, K. (2017) Ecosystem supply and demand – the challenge to balance spatial mismatches. International Journal of Biodiversity, Ecosystem Services & Management, 13, 148-161.

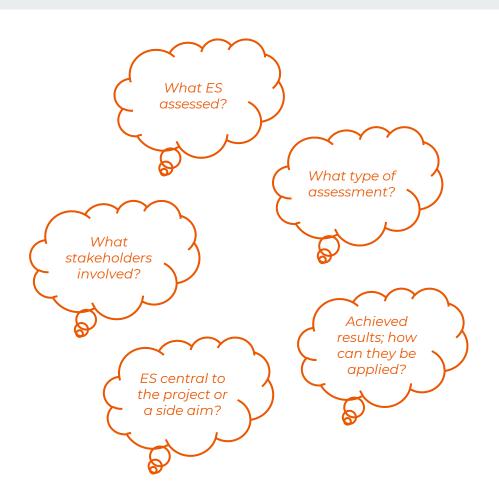
Other projects

Known projects:

- VivaGrass grassland ES
- EcoServe coastal and marine ES
- FOREstRESS forest ES
- RETRO rivers and lakes ES
- Wetlife2 wetland ES

More projects and initiatives?

Project database + more engagement needed!



2) Application of MAES results, integration into decision-making and other activities



Other activities

- 1. Communication, stakeholder engagement
- 2. ES concept advocacy
 - Integration in reports and strategies (e.g. LRBP 2030)
 - Fill in the gaps
- 3. National study for ES integration (2020)
 - Policy areas integration priorities
 - Integration models and tools
 - Economic valuation of ES
 - Increased competencies



LRBP 2030 Comprehensive territorial plan and ES

- Plan 2030 will outline national spatial development directions:
 - How will the Lithuanian territory be used?
 - Natural heritage, ecosystems considerations including socio-economic aspects
- Plan 2030 will be the document to combine different sectors and their interests and ensure the integrity of the multitude of different national strategies
- ES touched upon in the Current state analysis in preparation for the Plan development
 - Success! But what's next?
 - How ES concept could successfully and beneficially be integrated in the Plan or in the SEA?

bendrasis planas

Thank you for your attention!

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