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Country Fact Sheet **LITHUANIA**



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Country Fact Sheet: Lithuania (LT)

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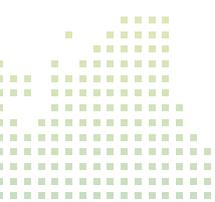
If you feel there are ongoing or upcoming research projects, policy initiatives or legislations, concerning the use of biodiversity, ecosystem condition and ecosystem services knowledge in decisions and policies, missing, please contact inge.lieken@vito.be and we will update the country fact sheet (until March 2027)

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Update on projects concerning biodiversity, ecosystem condition and ecosystem services assessment and accounting since 2022

The project Lithuanian National Ecosystem Services Assessment and Mapping (LINESAM) established the first MAES in Lithuania between 2018 and 2022. The project was developed at a national scale for terrestrial (Kalinauskas et al., 2023) and marine environments (Inácio et al., 2020), cropland (Gomes et al., 2021), woodland and forest, and urban environments. LINESAM considered different ES domains (e.g., regulation and maintenance, provisioning and cultural) and components (capacity, flow and demand). ES were also forecasted for terrestrial and coastal/marine environments (Gomes et al., 2021).

There are several ongoing or recently finished scientific projects concerning Ecosystem Services (ES) mapping, assessment or accounting. Project Lithuanian lake ecosystem services and impacts of climate and land-use

change (LACLAN) is focused on lake environments. Project Mapping and Assessment of Lithuanian national and regional Parks Ecosystem Services (MALPES) is focused on protected areas. The MAFESUR project is dedicated to mapping and forecasting ES in urban areas. Finally, the newest project System of Environmental-Economic Accounting – Ecosystem Accounting in Lithuania (SEEAL) is developing ecosystem accounts for ecosystem extent, condition and services.

For the moment State Data Agency and Ministry of Environment of the Republic of Lithuania are making an inventory to of all possible data sources for conditions accounts based on ecosystems defined so as identifying ecosystem services that could be evaluated regarding Natural Capital Accounting Regulation amendment.

2

Examples of uptake in decision processes, regulations and/or legislation

There are no obligations to perform ecosystem services mapping or assessment.



3

Perceived barriers and needs to enhance uptake

3.1 Barriers

- Lack of human resources working with ecosystem services in public authorities (e.g. in the Ministry of Environment), legislative base doesn't require consideration of the ES.

3.2 Needs

- Detailed recommendations how to implement ecosystem accounting into policy making (e.g. providing methodological guidance).

4

On the way to transformative change

The overall conclusion of the IPBES global assessment (IPBES 2019) was that Goals for conserving and sustainably using nature and achieving sustainability cannot be met by current trajectories, and goals for 2030 and beyond, may only be achieved through transformative changes across economic, social, political and technological factors.

Transformative or transformational change refers to “a fundamental, system-wide reorganization

across technological, economic and social factors, including paradigms, goals and values” (IPBES, 2019). Simply said, doing things differently, rather than doing less or optimising the system.

A means to enhance uptake is bringing people of the quadruple helix together and exchange information and learn from each other. Another is to establish projects that can show that it works and lead to possible pathways of transformative change.

4.1 Community of practice

The Community of Practice in Lithuania is supposed to help in analysing needs related to ecosystem services assessment, mapping and accounting; to clarify the barriers of uptake.

Communities of Practice (CoP) first workshop was held online through MsTeams platform on 30th November of 2023. Attended 16 participants. Participants represented different public institutions (e.g. State Data Agency of Lithuania, directorates of protected areas), NGO's (e.g. Center for Environmental Policy), universities.

In the plenary discussion several significant questions were raised, concerning projects outcomes, their contribution to better management, and best collaboration practices that could be applied to keep the community members in touch for prolonged collaboration. It was agreed to meet virtually twice a year to update on project activities and results. Based on the outputs of the CoP meeting in Lithuania a promotional video

was created. It was targeted to stakeholders and other interested parties that could not attend the meeting in November but wanted to join CoP's at latter stages.





4.2 Seeds of transformative change

4 projects were nominated.

- Interreg Latvija - Lithuania project “Optimal catch crop solutions to reduce pollution in the transboundary Venta and Lielupe river basins”.
 - The project was initiated with the aim to investigate catch crop potentials to reduce agricultural pollution in the transboundary Venta and Lielupe RBDs, extend the existing knowledge about catch crops and quantify their potential environmental effects and benefits, support farmers in decision making, and initiate a dialog between farmers, experts and stakeholders about future developments of agri-environmental measures in Latvia and Lithuania.
- Project EcoServe: Future Ecosystem Services in the Lithuanian Coastal Zone in the Context of Global Change (Ateities ekosisteminės paslaugos Lietuvos kranto zonoje globalios kaitos kontekste)
 - The aim of the project was to assess the future ecosystem services in the coastal area of Lithuania. Mapping, evaluation, and modelling of ecosystem services were carried out in the Nemunas delta and the Curonian Lagoon and in the rural areas located in the ~10 km zone from the coast under conditions of changing climate and future

socio-economic scenarios. We modelled the impact of climate change scenarios on ecosystem services. Based on these scenarios, we developed guidelines for adapting to the consequences of climate change. For cases of new ecosystem services, we have predicted possible economic activities that could provide jobs in the future and increase the demand for qualified workers.

- Analysis of opportunities for the development of organic seed production in Lithuania
- National study on integrating the valuation of ecosystems and their services into decision-making processes in public administration and economic sectors in Lithuania.
 - The study was prepared to demonstrate the benefits of integrating ecosystems and the services they provide and their socio-economic evaluation into public policy and decision-making processes in the public administration and economic sectors by increasing the efficiency, economy and sustainability of decisions in various areas of public policy and improving the state of ecosystems and the services they provide in Lithuania, as well while also ensuring public welfare and strengthening the understanding and support of state institutions and other interested parties by integrating the assessment of ecosystems and their services into decision-making.

5

References

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of the Total Environment, 855 (2023), Article 158590, <https://doi.org/10.1016/j.scitotenv.2022.158590>



Project duration: 1 July 2022 – 30 June 2027

Keywords: biodiversity, ecosystems, ecosystem services, natural capital accounting, evidence-based decision-making, transformative change

Project coordinator: Prof. Dr. Benjamin Burkhard, Leibniz University Hannover (LUH), Institute of Physical Geography and Landscape Ecology

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PROJECT PARTNERS

-  Leibniz University Hannover
-  Stichting Capitals Coalition
-  Ecostack Innovations Limited
-  University of Trento
-  Pensoft Publishers
-  Centre for Ecological Research
-  Mykolas Romeris University
-  Research Centre of the Slovenian Academy of Sciences and Arts
-  University of Patras
-  space4environment
-  National Institute of Geophysics, Geodesy and Geography
-  Rey Juan Carlos University
-  University of Salzburg
-  University of Bucharest
-  Flemish Institute for Technological Research
-  Foundation for Sustainable Development
-  Baltic Environmental Forum
-  Adam Mickiewicz University
-  National Research Institute for Agriculture, Food and the Environment
-  Copenhagen University
-  Norwegian Institute for Natural Research
-  Estonian University of Life Sciences
-  The Cyprus Institute
-  Wageningen University
-  The Finnish Environment Institute
-  Global Change Research Institute SarVision
-  Ministry of the Environment of the Slovak Republic
-  Gaspar Frutuoso Foundation
-  Flemish Agency for Nature and Forest
-  Municipality of Trento
-  Ministry of Environment of the Republic of Lithuania
-  Ministry of Environmental Protection and Regional Development of the Republic of Latvia
-  Research Centre in Biodiversity and Genetic Resources
-  University of Haifa
-  COHAB Initiative Secretariat
-  KTH Royal Institute of Technology
-  Croatian Forest Research Institute
-  SEAcoop
-  Macroplan
-  University of Reunion Island
-  Spatial Services
-  Asplan Viak
-  denkstatt
-  Wolfs Company, part of Grant Thornton
-  Ministry for the Ecological Transition and the Demographic Challenge
-  ETH Zürich
-  Joint Research Centre
-  UNEP-WCMC
-  South Atlantic Environmental Research Institute

