SELINA

SCIENCE FOR EVIDENCE-BASED
AND SUSTAINABLE DECISIONS
ABOUT NATURAL CAPITAL

Country Fact Sheet
MALTA

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Country Fact Sheet: Malta (MT)

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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.liekens@vito.be and we update the country fact sheet (until March 2027)

Contents

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

A qualitative assessment of the ecosystem services delivered by ecosystems in Malta has been carried out by MEPA for Malta's [Fifth National Report to the CBD](#), for which a preliminary identification of key ecosystems and ecosystem services for Malta was carried out.

Following a period of trial mapping, which focused on determining the appropriate mapping resolution and scale for use in policy and the mapping effort required, as well as discussions with national experts, an amended ecosystem typology was adopted. Furthermore, the official mapping of ecosystems commenced in Q4 of 2017 and continues to date. Following this work, ecosystem service assessment and mapping will be carried out as part of the national ecosystem service assessment. We are aware of the following biodiversity and ecosystem service assessment research projects:

- Modern Approaches to the Monitoring of Biodiversity (MAMBO). Grant agreement ID: 101060639. Partners Involved: Ecostack Innovations. MAMBO will combine the technical expertise of computer science, remote sensing, social science expertise on human-technology interactions, environmental economy, citizen science, and biological expertise on species, ecology, and conservation biology. The project will engage stakeholders in identifying biodiversity monitoring needs and investigate the establishment of a virtual lab to automate workflow deployment and efficient computing of the vast data streams.
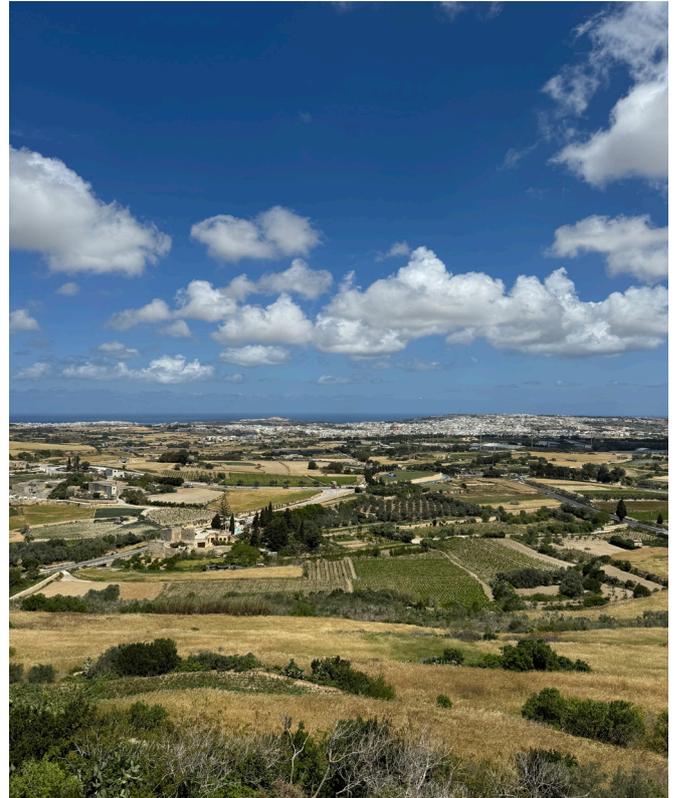
- Malta Pollinators Monitoring Scheme (MPOMS): The MPOMS is part of the EU Pollinators Monitoring Scheme (EUPOMS) has been started in 2023 by the Environment and Resources Authority (ERA), University of Malta and the Malta College of Arts, Science and Technology. Pollinator monitoring is carried out by citizen scientists under the supervision of experts from the mentioned institutions.

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

The National Biodiversity Strategy and Action Plan (NBSAP) is a national policy that aims at providing strategic direction at a national level on the management and protection of biodiversity. It also streamlines various sectoral aspects to ensure sustainable use of natural resources; this ensures a better quality of life and the reduction in biodiversity loss. Two actions relevant to ecosystem services are identified:

- **ACTION 4.4:** Indicators and genetic methods for analysing and monitoring genetic variation in species of special concern for ecosystem services or conservation are developed and implemented. This is supported by scientific research that addresses knowledge gaps.

- **ACTION 16.1:** The values of biodiversity and ecosystem services are further integrated in national policies, and planning processes, such that biodiversity is increasingly mainstreamed.

Biodiversity information is an obligation for various legislative and regulatory purposes. Amongst other, this is the case with Environmental Impact Assessment, protected area designation and management, development permitting, etc.

If the focus is on ecosystem service mapping and assessment, to our best knowledge, there has been one illustrative case of the uptake of ES in decision-making and this is related to the development of the river basin management which is currently being supported by the **LIFE 16 IPE MT 008 projec**t.

In 2019, Ecostack Innovations carried out an ecosystem services assessment for the main water catchments in Malta. Indicator data and expert assessment were used to assess and map ecosystem services in the main water catchment**.** A total of 17 ecosystem services were assessed and mapped. Provisioning services included cultivated crops, reared animals and their outputs, wild plants, algae and their outputs, groundwater for drinking purposes, groundwater for non-drinking purposes and surface waters for non-drinking purposes. Maintenance and regulation services included micro and regional climate regulation, global climate regulation by reduction of greenhouse gases, regulating chemical condition of freshwaters, flood protection, maintaining nursery populations and habitats, pollination and mass stabilisation and control of erosion rates. With regard to cultural services, aesthetic, scientific and educational; physical and experiential, heritage and cultural services were considered. Final results were made available via a dedicated **Geoportal**.

This assessment has informed the development of valley management plans for several key valleys in Malta.

3 Perceived barriers and needs to enhance uptake

3.1 Barriers

In Malta, the uptake of biodiversity information into decision-making faces several challenges:

- Political Landscape: Environmental policies can be politically contentious, with economic growth often prioritized over environmental sustainability.

- Data Availability: Limited availability and accessibility of high-quality, up-to-date biodiversity data can impede informed decision-making.

- Funding Constraints: Adequate funding for biodiversity projects is often lacking, limiting the scope and effectiveness of conservation efforts.

- Public Engagement: Low levels of public awareness and engagement with biodiversity issues can reduce the perceived importance of these initiatives.

To improve the integration of biodiversity information into decision-making, the following measures could be beneficial:

- Political willingness to undertake a formal national ecosystem assessment to support future decision-making.

- Increased Funding: Securing more funding from national budgets and EU programmes to support biodiversity research and conservation projects.

- Capacity Building: Training and capacity-building programs for stakeholders involved in biodiversity and ecosystem services assessments.

- Public Awareness Campaigns: Increasing public awareness and engagement through education and outreach programs, emphasizing the importance of biodiversity and ecosystem services.

3.2 Needs

- Funding: More consistent and substantial funding to support biodiversity research and conservation initiatives.

- Data and Research: Improved data collection, management, and open access sharing practices to ensure that researchers, decision-makers,

and the public have access to the best available information.

- Stakeholder engagement, networking and capacity-building: Enhanced collaboration among government agencies, NGOs, the private sector, and the public to ensure a holistic approach to biodiversity conservation.

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

Malta Living Lab on Resilience through Nature is a Community of Practice that has been established as part of the SELINA project, and includes participants from various sectors, including government agencies, academic institutions, non-governmental organizations (NGOs), and private sector stakeholders involved in tourism and environmental management. The Living Lab aims to bring innovation closer to practice and to involve different stakeholder categories. Examples of relevant stakeholders include:

- **Government Agencies:** Environment & Resources Authority, Energy & Water Agency, Ambjent Malta, Planning Authority, Project Green, Ministry for the Environment, Energy and Regeneration of the Grand Harbour, and others.

- **Academic Institutions:** University of Malta, Malta College of Arts, Science and Technology

- **NGOs:** Nature Trust Malta, Friends of the Earth Malta, BirdLife Malta.

- Private Sector: Malta Business Bureau, hotels, land managers, transport companies, tourism operators.

The primary purpose of this CoP is to enhance the integration of ecosystem services (ES) into decision-making processes, particularly within the tourism sector. This involves:

1. **Mapping and Assessing Ecosystem Services:** Identifying and evaluating sites with high natural capital value.

2. **Stakeholder Engagement:** Building a robust network of stakeholders from various sectors to collaborate on nature-based tourism initiatives.

3. **Digital Tool Development:** Creating an online platform to promote and market nature-based tourism experiences in Malta.

4. **Sustainable Tourism Promotion:** Encouraging sustainable tourism practices that benefit both the environment and local economies.

First Outcomes:

- Initial Assessments: Conducting preliminary assessments of nature-based tourism using crowd-sourced data.

- Stakeholder Network: Establishing connections between key stakeholders in the tourism and environmental sectors.

- Interactive Mapping: Developing the first comprehensive map of sites and experiences with high natural capital value.

4.2 Seeds of transformative change

Characterising nature-based tourism/ recreation in Malta

The primary goal of this project under the SELINA (Sustainable Ecosystem Services in Nature Areas) framework is to enhance the understanding of nature-based tourism in Malta by identifying the specific experiences and locations preferred by tourists. Key targets include developing a network of stakeholders from both the public and private sectors who are involved in nature-based tourism and creating an online tool to boost the market for such tourism. This tool aims to support the growth of nature-based tourism, fostering economic development and promoting sustainable practices.

The project will demonstrate the value of ecosystem services (ES) approaches by developing methodologies and tools that align with the objectives of the tourism sector. By emphasising the significance of nature-based tourism, the project aims to highlight its contribution to the broader economic landscape and the creation of green jobs. Additionally, this initiative will provide practical applications of Mapping and Assessment of Ecosystems and their Services (MAES) outcomes, which have previously been underutilised in tourism. The tools developed will help shift tourism focus from over-visited sites to areas with high natural capital, educating visitors about the importance of preserving natural environments.

The project also aims to address several challenges, including the mapping and assessment of sites with high natural capital value and unique social-ecological importance. By developing an interactive map and digital marketing tool, the project will promote these areas and experiences, involving businesses such as hotels, land managers, and transport companies. The digital solution will also support national authorities in planning and environmental management, contributing to the EU Biodiversity Strategy for 2030 and potentially providing significant economic benefits.

Project duration: 1 July 2022 – 30 June 2027

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

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- Centre for Ecological Research
- Mykolas Romeris University
- Research Centre of the Slovenian Academy of Sciences and Arts
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