

# The Value of Biodiversity and Ecosystem Services in the EU's Outermost Regions and Overseas Countries and Territories

#### **Publication**

Report

#### Citation

Gerdes, Holger; Zoritza Kiresiewa; Manuel Lago et. al. 2014: The value of biodiversity and ecosystem services in the EUâ∏s Outermost Regions and Overseas Countries and Territories.

The EU overseas entities are well-known hotspots of terrestrial, freshwater, and marine biodiversity. This report presents the result of a survey and anlysis of studies on the value of ecosystem services and biodiversity in the EU overseas entities. It includes investigation of case studies in Bonaire, St. Marten, and Belize in which valuation results were taken up by local policy makers, and discusses the factors which contributed to that uptake. The report is available for download

The EU overseas entities support unique ecosystems, which are home to an estimated one third of the globally threatened species, including many endemic species. However, their ecosystems are threatened by invasive species, climate change, and habitat loss â∏ the latter of which is often induced by human activities. In addition, biodiversity conservation in ORs/OCTs turns out to be challenging due to the complex jurisdictional matters among the EU, Member States, and overseas territories levels. The economic valuation of biodiversity and ecosystem services can be a tool to express the multiple societal benefits of intact ecosystems and their ecological functions. Estimated values can be used in awareness raising campaigns and in the design of policy instruments, such as payments for ecosystem services, at local and regional level.

Within this report, a total of 39 valuation studies containing 110 individual value estimates have been identified and evaluated, in order to provide an overview of the magnitude of the estimated economic value derived from (sub)tropical biodiversity in ORs ant OCTs. It was found that the value of individual ecosystem services differs widely among the covered regions and ecosystems. The reasons can be found in different value perceptions of the local populations and in the particularities (related to design and implementation) of the individual valuation studies. The policy impacts of environmental valuation studies depend on a range of aspects, including the reliability of the valuation methods applied, the integration of stakeholder perceptions into the study design, the communication and dissemination efforts by the researchers, and the receptivity of the targeted policy makers.

This report presents case studies from Bonaire, St. Maarten and Belize, where valuation results were taken up by local policy makers, and discusses the factors which contributed to that uptake. The case studies reveal that, in order to be perceived as relevant and useful by policy makers, valuation studies should be designed and implemented in a participatory manner. Taking into account of the

stakeholders' perceptions turns out to be essential, even more if the objective is to design or adapt policy instruments based on the results of the valuation study.

While more effective protection of biodiversity in ORs and OCTs will depend on a range of factors, particularly available funding mechanisms, the economic valuation of biodiversity and ecosystem services can provide arguments for the integration of biodiversity aspects into other policy domains, such as agriculture and tourism. By informing public debates and local and regional policy making, it holds potential for contributing to smarter and more sustainable management of tropical and subtropical biodiversity in ORs and OCTs.

# Language

English

# **Authorship**

Holger Gerdes
Dr. Zoritza Kiresiewa
Dr. Manuel Lago
Sandra Naumann
Michael Schock
Pablo Chavance (ADECAL)
Paul Hoetjes (MinEZ)

# **Funding**

European Commission, <u>Directorate-General Research & Innovation</u> (DG Research & Innovation), International

#### Year

2014

## **Dimension**

71 pp.

## **Project**

<u>Biodiversity and Sustainable Development in the EU's Outermost Regions and Overseas Countries and Territories (NetBiome-CSA)</u>

#### **Project ID**

**2727** 

# **Table of contents**

List of Tables

List of Figures

Part I â∏ Introduction

Part II â 🛮 Rationale behind the economic valuation of biodiversity and ecosystem services

- 1. Governance of natural resources in ORs/OCTs
- 2. Towards a new paradigm: the concept of ecosystem services
- 3. Environmental valuations in the policy process

Part III â Concepts and methods for the economic valuation of biodiversity and ecosystem services

1. The Total Economic Value (TEV) framework

- 2. Methods for the economic valuation of biodiversity and ecosystem services
- 2.1 Market valuation methods
- 2.2 Non-market valuation methods
- 2.3 Benefit Transfer
- 3. Concluding remarks

Part IV â□□ Evidence on the value of biodiversity and ecosystem services in ORs/OCTs

- 1. Data sources and uncertainty
- 2. Results of literature review
- 3. Analysis of results

Part V â∏∏ Good-practice examples

- 1. The policy impact of environmental valuations
- 2. Case Studies
- 2.1 The Economic Value of Bonaireâ∏s ecosystems and National Marine Park
- 2.2 The Economic Value of St. Maartenâ∏s Coral Reef Resources
- 2.3 The Economic Value of Belizeâ∏s Coral Reefs and Mangroves
- 3. Analysis of Case Studies

Part VI â∏∏ Conclusions

References

Annex 1 â∏∏ Overview of Identified Benefit Estimates

# **Keywords**

# **Biodiversity**

**International Development** 

biodiversity, ecosystem services, biodiversity valuation, ecosystem service valuation, biodiversity policy, biodiversity management, conservation

European Union, EU overseas entities, EU outermost region and overseas countries and territories

literature review

**Source URL:** https://www.ecologic.eu/13716