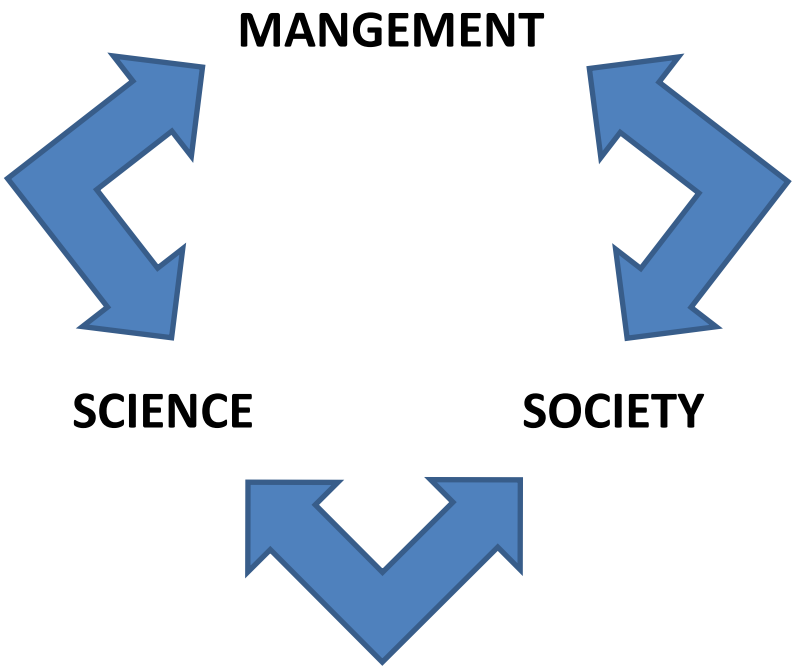
Good communication on ES within the field of EP and NC: the involvement of stakeholders in The Basque Country

Igone Palacios-Agundez, University of the Basque Country

ENCA/EPA IG Ecosystem Services
Interest group meeting March 31/ April 1 2014 in Peterborough, England

Biodiversity for Human well being

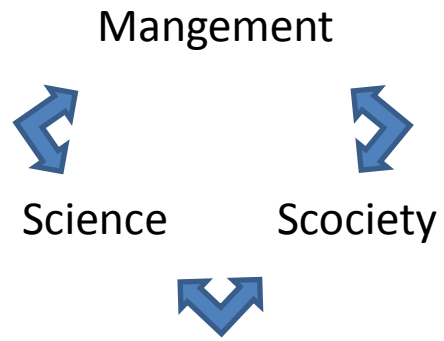
Ecosystem Service Framework provides a space for coordination and dialogue between scientist, managers/politicians and Stakeholders



INTEGRATIVE, ADAPTATIVE AND RESILIENT MANAGEMENT

Applicability of ecosystem services for management

PARTICIPATORY PROCESSES



Useful scientific knowledge emerges from the cooperation of scientists and practitioners

Nature,
basis
of well-being

Millennium EcosystemAssessment in the **Basque Country**

The Millennium Ecosystem Assessment in the Basque Country:

A local/regional integrative approach to enhance the link between science, policy-making and society.

Herri-baltzua
Sociedad Pública del
EUSKO JAURLARITZA
GOBIERNO VASCO
INGURUMEN ETA LURRALDE POLITIKA SAILA
DEPARTAMENTO DE MEDIO AMBIENTE Y POLÍTICA TERRITORIAL

BFA DFB
Bizkaiko Foru Aldundia
Diputación Foral de Bizkaia

Universidad del País Vasco
Euskal Herriko Unibertsitatea

Organización de las Naciones Unidas para la Educación, la Ciencia y la Cultura
Hezkuntza, Zientzia eta Kulturaleko Nazio Batuen Erakundea
Ingurumen Irizpideetarako Hezkuntzari buruzko UPV/EHUko UNESCO Katedra · Cátedra UNESCO sobre Desarrollo Sostenible y Educación Ambiental de la UPV/EHU

Organización de las Naciones Unidas para la Educación, la Ciencia y la Cultura
Hezkuntza, Zientzia eta Kulturaleko Nazio Batuen Erakundea
unesco etxea
centro unesco euskal herria
centre unesco pays basque
unesco centre basque country

Objective

Obtain scientific results integrating stakeholders participation that will be useful for landscape planning and nature conservation policies

The project is meant to serve as a tool to identify priority actions that can prevent or mitigate human impact on ecosystems and also to highlight the policies and actions that have a positive effect on the conservation and sustainable use of natural capital.

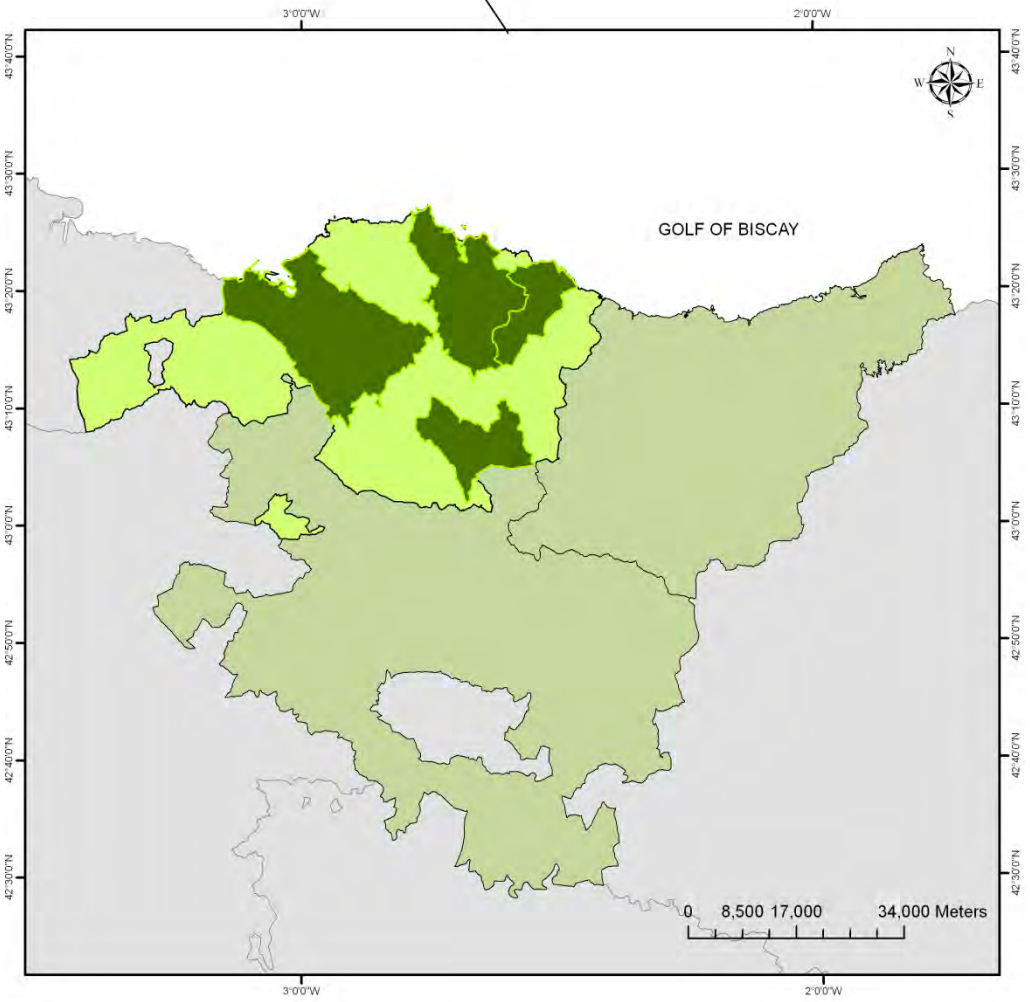
Key characteristics

- A clear **outreach and coordination strategy**
- Participation and implication of **local authorities** and **NGO's**
- Ensuring **stakeholder participation** from the outset
- Linked to national and international **multidisciplinary / transdisciplinary** teams and networks
- Availability of **high resolution data** at local scale

Study area

Different working scales

Basque Country
7.229 km²
2.18 M inhabitants
(302 inhab/km²)
BM 2.189 inhab/km²



EVALUACIÓN DE ECOSISTEMAS DEL MILENIO DE ESPAÑA

SGA NETWORK

ESP

UNESCO MaB

ipbes Science and Policy for People and Nature

Comprehensive participatory methodology

1. **Active transdisciplinar core group** integrated by: politicians, technicians of different administration bodies, researchers and NGO's
2. **Involving stakeholders at multiple stage of the assessment**
3. **Educational programmes**
4. **Encouraging direct contact, continuous communication and specific meetings** with different stakeholders (e.g. administration practitioners)
5. **Integration of participatory results** into scientific research and **into planning strategies**









Transversal: international inputs from different scales

- Data credibility (Peer review)
- Make it more relevant for local / regional policy-makers
- Engagement with the wider community and scaling of results





Specific examples of participatory research for Biodiversity and Ecosystem Services sustainable management policies

- Perception, demand and users contribution in the Bilbao Metropolitan Greenbelt
- Update process of the Urdaibai Biosphere Reserve Master Plan for Use and Management (MPUM)
- Participatory scenarios development

Perception, demand and users contribution in the Bilbao Metropolitan Greenbelt (BMG)

Participatory workshop

Direct in-person questionnaires (545)

Randomly selected population at different sites in the BMG

Specific groups of interest: e.g. teachers, university researchers and students, public-administration technicians and people from environmental associations

Feedback seminars with the research results

Bilbao Metropolitan: Results for management

Demand for ES in the BMG did not correspond to what users perceived these ecosystems to provide.

The interviewees were in favour of improvements to peri-urban rural areas, and the results suggested that the **authorities should highlight the role of the BMG ecosystems with respect to regulating services and historic and cultural values to improve people's awareness of the ecosystems' capacity to provide benefits to society**.

Casado et al., 2013. *Journal of Environmental Management* 129:33-43

Updated of the Urdaibai Master Plan for Use and Management (MPUM) using ES framework

Participatory process

- 4 Participatory workshops
- 120 participants -> 63 in each workshop
- 143 specific management proposals
- Participatory survey to prioritize actions

Research on Co-benefits and trade-off between biodiversity and ES

Seminar on applicability of ES in Biosphere Reserves

Urdaibai: Results for management

Natural forests are the ecosystems that most contribute to biodiversity, carbon storage and water flow regulation (overlap areas)

Conservation and restoration of biodiversity would ensure the provision of some important portions of other ecosystem services

Pine and eucalyptus plantations contribute to ecosystem services but have very low biodiversity (some negative effects)

Conservation based only in one ecosystem service might be detrimental to biodiversity. Integrative management is needed.

Onaindia et al., 2013. *Forest Ecology and Mangement 289:1-9*

Participatory scenario planning

Survey previous to the workshops

Two scenario workshops (66 stakeholders)

Development of local-regional scenarios and characterization of scenarios in terms of the provision of ES and human well-being

Description of the sustainable target scenario and definition of management strategies for Biscay

Identified research gap: on forest ES and on the synergies and trade-offs between biodiversity and carbon storage

Scenario planning: Results for management

A core aspect of the sustainable target scenario chosen by participants is that a real change in social values is proposed

Landscape multi-functionality was considered key in the sustainable target scenario for what other ES apart from timber production should be promoted

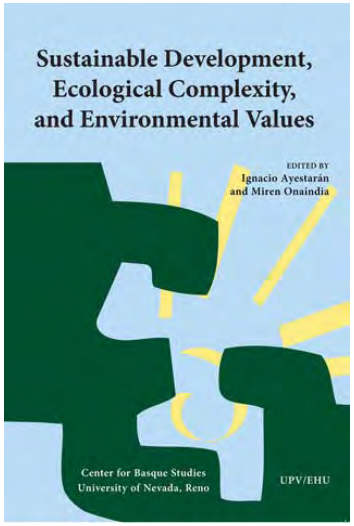
To achieve this scenario, participants identified the need for a strategic landscape planning and management

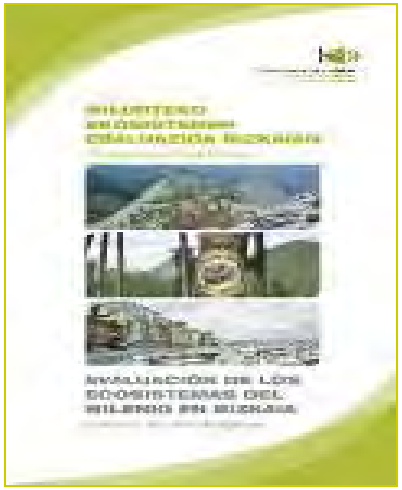
Participants also highlighted the necessity for coherent and coordinated policies.

Palacios et al,. 2013. *Ecology and Society* 18 (3): 7.

Outreach materials

Publications for the general public





Publications in specialised journals (ISI)

Landscape Ecol
DOI 10.1007/s10980-014-9994-1

RESEARCH ARTICLE

Integrating stakeholders' demands and scientific knowledge on ecosystem services in landscape planning

ENVIRONMENTAL SCIENCE & POLICY 33 (2013) 283–294

Available online at www.sciencedirect.com

SciVerse ScienceDirect

ELSEVIER

journal homepage: www.elsevier.com/locate/envsci

Participatory process to prioritize actions for a sustainable management in a biosphere reserve

Miren Onaindia [a,*], *Felipe Ballesteros* [a,1], *Germán Alonso* [b,2], *Manu Monge-Ganuzas* [c], *Lorena Peña* [a]

Journal of Environmental Management 129 (2013) 33–43

Contents lists available at SciVerse ScienceDirect

Journal of Environmental Management

journal homepage: www.elsevier.com/locate/jenvman

ELSEVIER

Perception, demand and user contribution to ecosystem services in the Bilbao Metropolitan Greenbelt

Izaskun Casado-Arzuaga [a,*], Iosu Madariaga [a,b], Miren Onaindia [a]

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Forest Ecology and Management 289 (2013) 1–9

Contents lists available at SciVerse ScienceDirect

Forest Ecology and Management

journal homepage: www.elsevier.com/locate/foreco

Co-benefits and trade-offs between biodiversity, carbon storage and water flow regulation

Miren Onaindia *, Beatriz Fernández de Manuel, Iosu Madariaga, Gloria Rodríguez-Loinaz

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Landscape Ecol
DOI 10.1007/s10980-013-9945-2

RESEARCH ARTICLE

Mapping recreation and aesthetic value of ecosystems in the Bilbao Metropolitan Greenbelt (northern Spain) to support landscape planning

Izaskun Casado-Arzuaga · Miren Onaindia · Iosu Madariaga · Peter H. Verburg

OPEN ACCESS Freely available online

PLOS one

Uncovering Ecosystem Service Bundles through Social Preferences

Berta Martín-López[1]*, Irene Iniesta-Arandia[1,2], Marina García-Llorente[1], Ignacio Palomo[1], Izaskun Casado-Arzuaga[3], David García Del Amo[1], Erik Gómez-Baggethun[1,4], Elisa Oteros-Rozas[1], Igone Palacios-Agundez[3], Bárbara Willaarts[5], José A. González[1], Fernando Santos-Martín[1], Miren Onaindia[3], Cesar López-Santiago[1], Carlos Montes[1]

1 Social-Ecological Systems Laboratory, Department of Ecology, Universidad Autónoma de Madrid, Madrid, Spain, 2 Department of Plant Biology and Ecology, Universidad de Almería, Almería, Spain, 3 Plant Biology and Ecology Department – Universidad del País Vasco UPV/EHU, Bizkaia, Spain, 4 Institute of Environmental Science and Technology, Faculty of Sciences, Universitat Autónoma de Barcelona, Bellaterra–Cerdanyola del Vallés, Spain, 5 Research Center for the Management of Agricultural and Environmental Risks (CEIGRAM), Universidad Politécnica de Madrid, Madrid, Spain

Abstract

Ecosystem service assessments have increasingly been used to support environmental management policies, mainly based on biophysical and economic indicators. However, few studies have coped with the social-cultural dimension of ecosystem services, despite being considered a research priority. We examined how ecosystem service bundles and trade-offs emerge from diverging social preferences toward ecosystem services delivered by various types of ecosystems in Spain. We conducted 3,379 direct face-to-face questionnaires in eight different case study sites from 2007 to 2011. Overall, 90.5% of

Palacios-Agundez, I., I. Casado-Arzuaga, I. Madariaga, and M. Onaindia. 2013. The relevance of local participatory scenario planning for ecosystem management policies in the Basque Country, northern Spain. *Ecology and Society* 18(3): 7. http://dx.doi.org/10.5751/ES-05619-180307

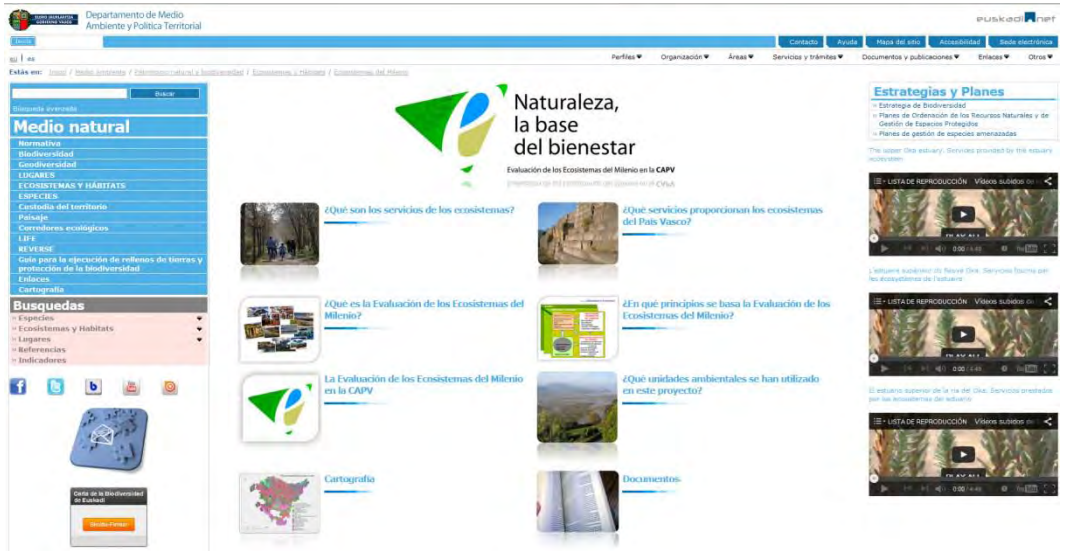
Research

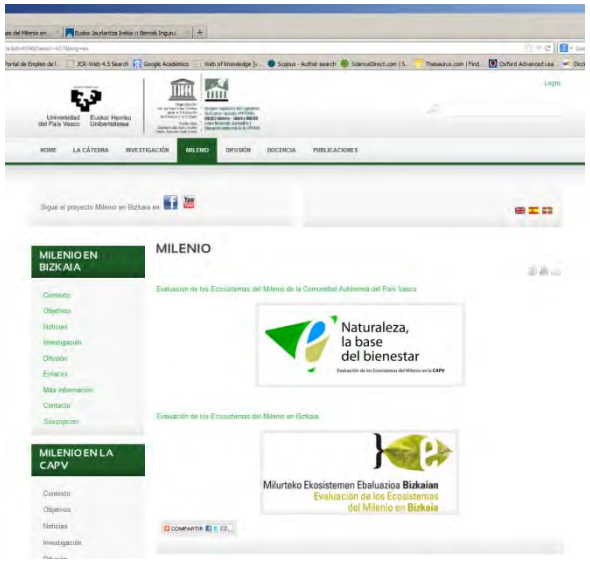
The Relevance of Local Participatory Scenario Planning for Ecosystem Management Policies in the Basque Country, Northern Spain

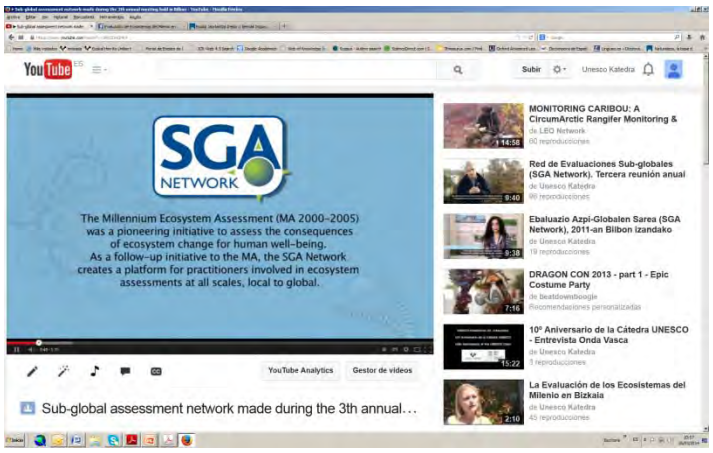
Igone Palacios-Agundez [1], *Izaskun Casado-Arzuaga* [1], *Iosu Madariaga* [1,2] *and Miren Onaindia* [1]

Internet and Audio-visual media

Radio, videos, facebook, websites..



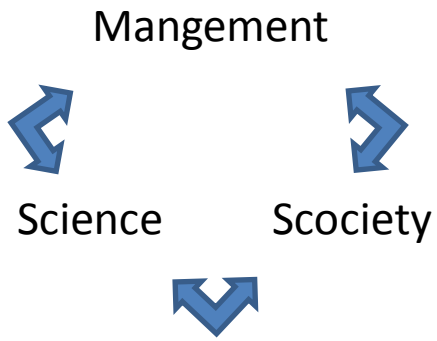




Integration of participatory results into scientific research and into planning strategies

Combining the results of different methodologies allows a broad analysis of the existing synergies and trade-offs and helps to deal with ES management in a more sustainable way

- Participatory processes
- Mapping ecosystem functions and services
- Studying conditions & trends of Biodiversity & ES
- Perception, demand and user contribution
- Applying valuation methodologies
- Synergies and trade-offs analysis
- Participatory scenarios
- Scenario mapping
- Identifying response options



INTEGRATIVE, ADAPTATIVE AND RESILIENT MANAGEMENT

Landscape Ecol
DOI 10.1007/s10980-014-9994-1

RESEARCH ARTICLE

Integrating stakeholders' demands and scientific knowledge on ecosystem services in landscape planning

Relevant implementations in the Basque Country

A. Environmental Framework Programme of the Basque Country (2015-2019)

B. Regional Planning Guidelines for the Basque Country

C. The Urdaibai Biosphere Reserve Master Plan for Use and Management (MPUM)

Other working fields:

A. Primary sector

B. Rural-Urban interactions

C. Water policies

Conclusions

The perspective of ecosystem services **can contribute to develop sound land-use policies and planning actions** at different scales; being the local-regional scale (linked to broader scales) very appropriate to lead the first steps from theory to **practise**

Key issues:

- Ensuring stakeholder participation and working in collaboration with technicians and politicians from the outset
- Development of technical tools (e.g. mapping to obtain spatially explicit accurate information) and combining different methodologies
- Engagement in Networks

The team:

- Ametzaga, Ibone[1]
- Arana, Xabier [2]
- Arana, Gorka [3]
- Barredo, Amaia [3]
- Casado, Izaskun[1,3]
- Caviedes, Paula[4]
- Fernández de Larrinoa, Mikel [2]
- Fernández de Manuel, Beatriz [1]
- Iturribarria, Marta [3]
- Madariaga, Iosu [1,2]
- Onaindia, Miren[1]
- Palacios, Igone [1]
- Peña, Lorena [1]
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Peer review: Salvatore Arico (UNESCO) and Henrique Pereira (Lisbon University, Portugal)

[1] *University of the Basque Country*
[2] *County Council of Biscay*
[3] *Basque Government*
[4] *Urdaibai Biosphere Reserve*
[5] *UNESCO Etxea*

And many active stakeholders

Nature,
basis
of well-being

Millennium EcosystemAssessment in the **Basque Country**

Thank you very much
Merci beaucoup
Muchas gracias
Eskerrik asko

A sustainable future is possible
working from local to global and vice-versa

Further information:
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