Workshop (2.1.A)

Title of workshop: "Communicating Ecosystem Services from Mountains"

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Moderators	Johannes Rüdisser, Georg Leitinger, Stefan Marzelli
Participants*	Gottardelli, Simone , Stotten, Rike, Humer-Gruber, Heidi, Marshall, Kathryn, Pachoud, Carine, Calderon, Sandoval, Rüdisser, Johannes, Gsottbauer, Elisabeth

* Workshop participants that have submitted contributions to the workshop

Session Abstract

Ecosystem services describe goods and benefits humans receive from ecosystems. The ecosystem service framework, which focuses on the interface between ecosystems and the society, not only stimulates interdisciplinary research, but is also an advantageous concept to build support for environmental conservation and to promote the societal relevance of intact ecosystems. Although the ecosystem service concept gained some attention following the Millennium Ecosystem Assessment, public awareness about ecosystem services is still very limited. An increasing number of applications show that well designed ecosystem service indicators can be a useful tool to facilitate the understanding of highly complex human-environmental systems. In this inter- and transdisciplinary session, we focus on new and innovative communication approaches to disseminate the ecosystem service concept in general, and distinct ecosystem services in specific. Application can range from science communication tools to new indicators or indicator frameworks addressing specific stakeholders or the public.

Question 1: How can we foster public awareness and understanding for ecosystem services?

Question 2: How can ecosystem service assessment support the development and execution of sustainable policies and environmental conservation strategies?

General questions to please be answered in the workshop reporting

1) What was the focus of the workshop? Methodological issues and advancements or thematic issues (systems knowledge, transformation knowledge, target knowledge). Please check and fill in the matrix in the output section.

Methodological issues and advancements	Thematic issues		
	System knowledge	Transformation knowledge	Target Knowledge
		X	

1) Which key points were discussed in the workshop as a whole? (This should be more a synthesis and not simply a summary of the key points in each presentation)

The participants raised key points (see also the reflections of the whole auditorium in the questions):
- The diversity of stakeholders need to be considered in terms of languages, knowledge level and interactive offers
- Links between ecosystem services (ES) and land use is not always obvious

- The potential misuse of the ES concept might occur as a potential threat for its credibility
- The importance of ES may be perceived differently by stakeholder depending on the visibility of ES
- In particular cultural ecosystem services require good visualization tools for their communication
- Scientific information might need to be referred to a spatial framework or to be transferred to a better touchable format in order to be perceived by non-scientific stakeholders
- Economic valuation - and payment for ES in particular - are mainly carried out for individual ES but groups of ES (on common property) and accordingly group payment are rarely considered so far

2) What is your opinion on the current state of knowledge concerning your topic(s) (focusing on mountain regions)? *Please check and fill in the matrix on the following page.*

Overall assessment of the state of: Communicating Ecosystem Services in Mountains

What is your personal opinion on the current state of knowledge concerning the topic(s) addressed in your workshop. Please tick the appropriate field. Brief explanations are appreciated.

State of knowledge	Very good	Good	Poor	Very poor	Not appropriate	Comments
Global			x			*If the measure is the perception of Mountain Ecosystem services on a global scale, the knowledge of people is considered poor.*
Regional					x	*Very hard to tell, probably knowledge is increasing in different mountain regions; certainly in the Alps there is the debate about ES accelerating.*
Scattered case study-based knowledge		x				*Ongoing research offers increasing knowledge from single case studies*
Knowledge about past states/trends			x			*Only little knowledge exists about past communication on ES in mountains*
Knowledge about current situation			x			*There is rather not a systematic knowledge or survey on ES communication.*
Knowledge about future states/trends/thresholds					x	*Knowledge on communication is difficult to estimate for future states / trends*
Knowledge about the system					X	*Not sure, whether a "communication system" exists; might be a research area how traditional knowledge aboutES has been communicated in customs*
Knowledge about shaping pathways to more sustainable development (transformation knowledge)		x				*Increasing knowledge about transforming scientific insights into communication about ES in mountains;*
Knowledge about envisaged goals (target knowledge)					X	*Difficult to tell, what communication goals are in terms of communication; may be this are the implementation in decision-making processes; in this case knowledge is rather poor.*

Q1: How can we foster public awareness and understanding for ecosystem services?
Workshop participants identified research topics and fields for action in terms of communication about ecosystem services

- in general school and education are considered important fields, they could be supported by offering direct experiences of ES, place-based education , didactic material, web applications and the development of concrete actions, particularly addressing invisible ES
- the involvement of local enterprises in the provision and maintenance of ES
- communication concepts for the dissemination of the ES concept in terms of target groups, media, multiplicators, appropriate language and vocabulary (taking advantage from target-group tailored language in nature conservation topics), story telling formats and the way of visualization and experiencability
- different ways of communication such as identification of appropriate indicators, develop a communication with concrete examples linking actions and consequences, adapted training and dissemination formats and mainstreaming the ES concept through the presentation in institutions and networks.

Q2: How can ecosystem service assessment support the development and execution of sustainable policies and environmental conservation strategies?

The workshop participants raised the issues of

- the requirement of an appropriate quality of ES assessments, regarding scale and precision of ES mapping, particularly when dealing with land use management issues
- the chances the holistic approach of the ES concept offers for decision making and for policy reaction if changes are expected, such as in agricultural schemes
- the need for a tool kit for practitioners to implement sustainable solutions
- a focus on the importance of ES themselves rather than to focus on payments for ecosystem services only
- a cost-benefit analysis of policies which shows how to develop policies within limited budgets.

Common consensus

The ES concept offers the opportunity for cross-sectoral communication as a basis for constructive dialogues, pro-active planning and taken over responsibility by different stakeholders. By this the concept fosters the communication between science, economy, administration, policy and civil society.

There is a high potential for the application of the ES concept, however the scientific community carries responsibility for the well-defined use of ES concept to prevent the inflationary generalization of the concept (as it happened to the sustainability concept).

Objectives of ES analysis and assessment should be clarified; the communication should be adapted according to these objectives in particular for education purposes. Communication should be an objective itself for promoting the ES concept.