



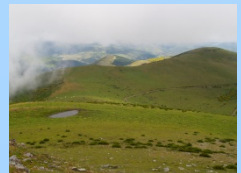
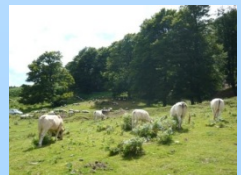
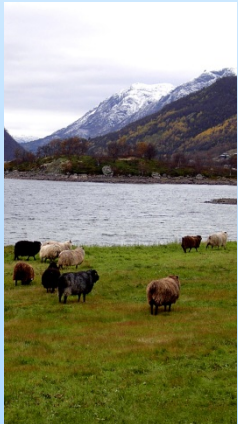
# Ecosystem services in mountain areas

How to assess their value  
and set policy instruments for compensation

Birte VIETOR

Euromontana

14 December 2010, Rome





# Content

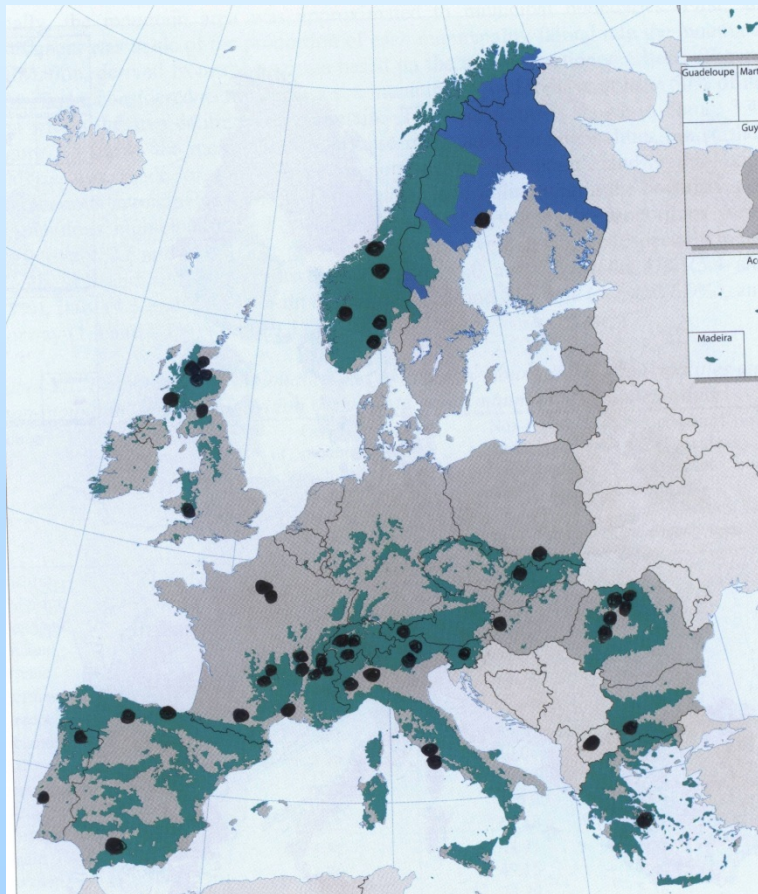
- **About Euromontana**
- Euromontana's approach
- Pricing and Remuneration of positive externalities (good practices)
- Recommendations





# What is Euromontana?

- European **multisectoral** association for cooperation and development of mountain areas (since 1996)
- Around 70 members from 15 countries
- **Comprising :**
  - regional development agencies,
  - regional authorities,
  - chambers of commerce and industry
  - agricultural organisations,
  - environmental organisations,
  - research organisations...





# Our vision of European mountains

- **Our mountains are territories with a future and opportunities for Europe**
  - Mountain areas are distinctive areas of Europe which need to be **addressed specifically**
  - We call for **private and public investment** in these areas. The return on investments might be longer but will be **more sustainable**
  - 36% of European territory, 118 million inhabitants



# Building on our strengths

## Overcoming our weaknesses

- **Strengths:**

- The **positive image** of mountain areas
- Intense community life
- Very **rich culture**, traditions and heritage
- **The quality of life** of mountain population
- Rare, preserved and **renewable resources**
- Production of **quality goods and services**
- Modern and often **dynamic governance**
- ...

- **Weaknesses:**

- **Remoteness and accessibility**
- **Sparseness** of businesses and population
- **Competition** between economic development and environment
- Sensitivity to **climate change**





# Euromontana's activities on positive externalities



1997	Study for DG Environment on „Integration of environmental issues in mountain farming“
2005	High level symposium on positive externalities „Policies releasing the potential of mountain and remoter areas of Europe“ (Aviemore, Scotland)
2006-2009	SARD-M Project (FAO)
2009	Arantzazu Conference „Europe's Mountain Bonus – how mountain communities and land management provide positive externalities and the related policies and opportunities“



# Content

- About Euromontana
- **Euromontana's approach**
- Pricing and Remuneration of positive externalities (good practices)
- Recommendations



Private Goods

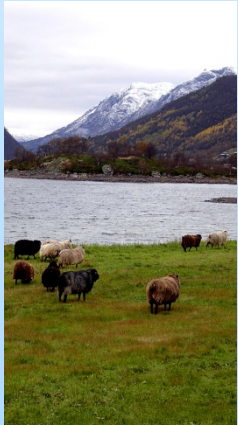
Farmers/ Agriculture



Private Goods  
e.g. Sheep



**Consumer  
Market Goods**



# Externalities in mountain areas



Positive	Negative
Biodiversity	
Flood and soil protection	Flooding and erosion/sedimentation
Water quality and supply	Pollution
Carbon sequestration	
Avalanche protection	
Fire protection	Fire
Cultural landscapes	
Outdoor recreation	
Rural communities and cultural traditions	Out-migration to urban poverty; Cost of supporting viable mountain communities



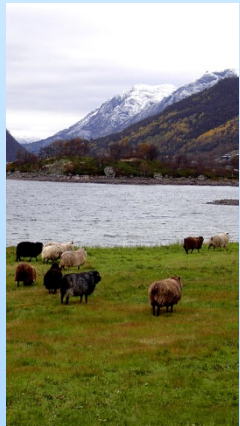
# Content

- About Euromontana
- Euromontana's approach
- **Pricing and Remuneration of positive externalities (good practices)**
- Recommendations



# Improving support for positive externalities

- Public goods are being damaged by the intensification of agricultural practices, structural changes, land use pressure or transport.
- To prevent from damage → need to organise schemes offering incentives to increase the provision of +ext (market mechanisms, public policies)
- Challenge:



**How to assess the value of a +ext provided?**

# Assessing the value of +ext

## Various methods:

- Evaluate the cost that would have to be paid if these externalities were not generated
- Assessment of price that consumers are willing to pay to benefit from positive externalities

→ Very complex

- Example: MEDFOREX



# Positive externalities of forest

- Evaluation of mountain forest's positive externalities – example of mediterranean forests. Project MEDFOREX (financed by Catalan government)
- Results from project 1999-2003: valuation of mediterranean forest using the method of TEV (total economical value). Average value = 133€/ha
  - Direct value: about 70% of TEV
    - From 5 to 130€/ha for wood products
    - From 1 to 143€/ha for non-wood products
  - Indirect use value: about 15%
    - up to 50% of TEV (45 to 150€/ha) in Syria, Greece, Italy
  - Dominance of direct use values in total forest benefits does not mean that direct use values are most important, but that they are much easier to estimate.

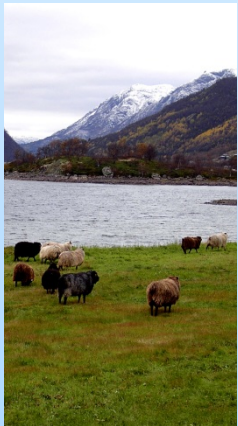




# Remuneration of positive externalities

Two methods to remunerate positive externalities:

1. Public Policies when market failure
2. Market Mechanisms



# Public Policies

## - Compensate market failures:

- System of compensation in the frame of compensatory payments for the production of positive externalities
- LFA payments, included in the Rural development pillar of the Common Agricultural Policy

→ They support agriculture to continue in disadvantaged areas, where the type of farming is much more a producer of positive externalities

It is in the interest of producers and society to promote the remuneration and the production of positive externalities via

→ PES

→ Added value through area's image



Market mechanisms



# Market mechanisms

## 1. Payments for ecosystem services (PES)

- Communities contractualize directly with producers to produce defined services



### Definition of PES

Wunder (2005) defines PES as a voluntary transaction where a well-defined environmental service (ES) (...) is 'bought' by a minimum of one ES buyer from a minimum of one ES provider if, and only if, the ES provider securing ES provision (conditionality) was taken as the main reference throughout the discussion.



# Examples of PES



- Maintaining watercourses and trails by farmers and foresters (Italy)



- Forest fire and avalanche protection through pastoralism (France)





# Maintaining watercourses and trails by farmers and foresters (Italy)



- Farmers and agro-forestry cooperatives are contracted to maintain watercourses and trails
- Use of income from a water tax, which is returned to mountain communities in return for maintenance work on watercourses and the surrounding landscapes
- The scheme combines national and regional laws and local implementation, with land managers invited to tender for work contracts drawn up locally.
- Unlike other interventions studied, funding for this initiative is available in perpetuity

# Forest fire and avalanche protection through pastoralism



- Initiative adopted by the Commune of Loudervielle in the Pyrenees (France)
- Aim: facilitate the reintroduction of pastoralism as a means of preventing forest fires and avalanches around the ski resort of Peyragudes
- No monetary support to the farmers
- Involves facilitating their return to the land and their access to grazing resources.
- Much more cost-effective way of preventing risk for the commune than the heavy investments in infrastructure made in the past
- 300.000 € : works undertaken to prevent from avalanches between 1994-1998
- 13.800€ : investments in pastoralism practices (fences)



# Content

- About Euromontana
- Euromontana's approach
- Pricing and Remuneration of positive externalities (good practices)
- **Recommendations**





# Euromontana recommendations

- Balancing the need for **tailor-made measures** that address the **reality of each farm**, make measures environmentally very efficient and justifiable with the need for **simple and accessible schemes** that would address a significant proportion of the farming community at reduces transaction costs.
- Provide providers and buyers of environmental services with **easy and quick methods** for quantifying on-cost of production of a higher level of public goods and **benefits to society** of this higher level
- Achieving **political support** from authorities at different levels for the development of market-based approaches to support positive externalities





Thank you!

CONTACT DETAILS OF EUROMONTANA

[Info@euromontana.org](mailto:Info@euromontana.org)

