## FARMERS AND CITIZENS PERCEPTIONS OF ECOSYSTEM SERVICES AND SUSTAINABILITY OF MOUNTAIN FARMING

Bernués A., Ripoll-Bosch R., Rodríguez-Ortega T., Casasús I.

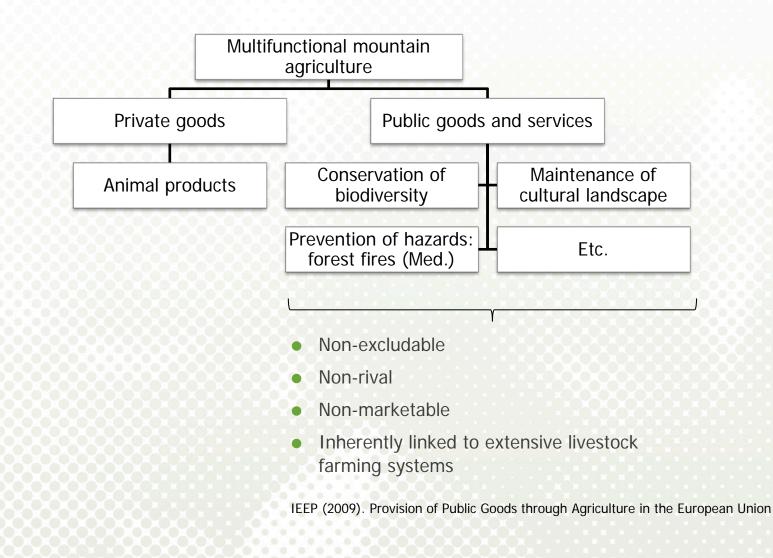








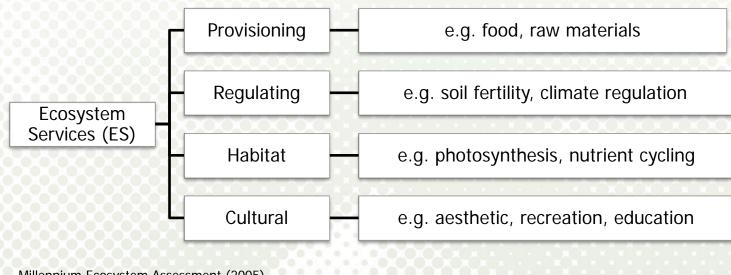
#### **INTRODUCTION:** private and public goods



www.umb.no

### **INTRODUCTION:** ecosystem services (ES)

- Direct or indirect benefits that humans get from nature
- Good link: (agro) ecosystem functioning " human wellbeing
- Widely adopted by policy makers and managers
- Few studies on the delivery of ES by pasture-based animal agriculture (biophysical, economical or socio-cultural)



Millennium Ecosystem Assessment (2005)

# иче со 10 ст. 1

### OBJECTIVE

- To gain information on the spontaneous knowledge and perceptions of farmers and citizens on relationships between mountain animal agriculture and the environment
  - Delivery of Ecosystem Services
  - Other sustainability issues



#### METHODOLOGY

- 5 focus groups (FG) about relationships between pasture-based mountain livestock and the environment
  - 2 FG (n=11) livestock farmers
  - 3 FG (n=22) citizens
- Moderator + general questions:
  - Do you know the term "ecosystem services"?



- How do you think livestock production affects the environment and vice versa?
- How these relationships between livestock production and the environment affect you?
- What geographical areas/places can you identify that show the effect of livestock on the environment?
- Should society pay for the delivery of environmental services? Who? In what way?
- Video-recording, transcription, text analysis
- Categorization and quantification





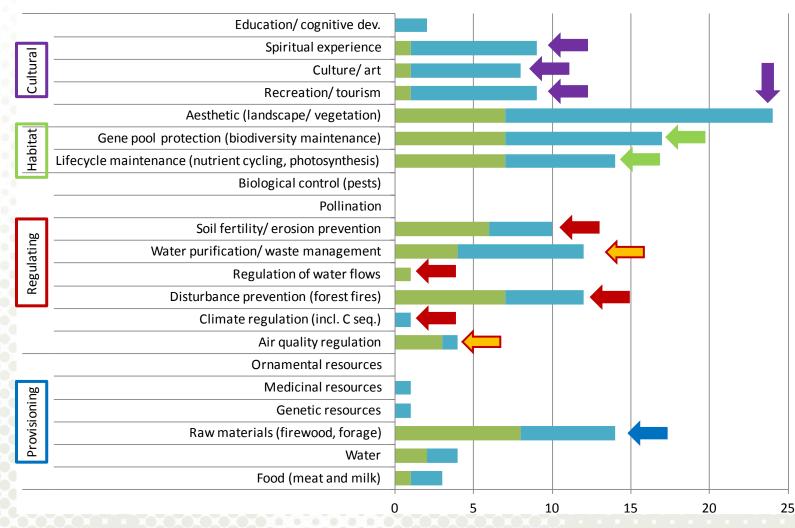
#### No participant knew the term "Ecosystem Service"

Citizens

Farmers

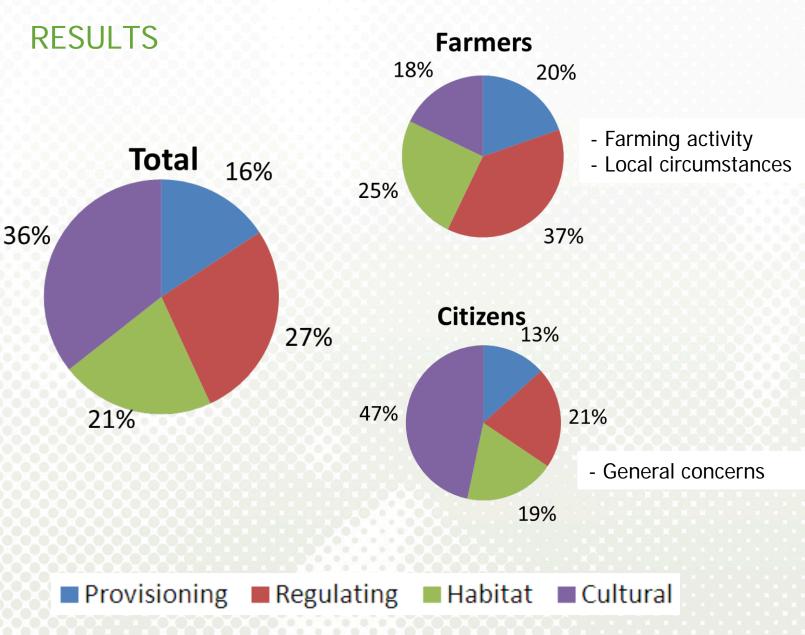
#### RESULTS

#### Ecosystem services (mentioned)



www.umb.no





www.umb.no



### RESULTS

#### **Oher sustainabity issues (mentioned)**



WWWW.UIIID.IIU

Citizens

Farmers



### REMARKS

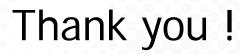
- ES more visible or familiar to humans are more easily identified and valued.
- Different stakeholders (farmers and citizens) valued differently some ES according to their capacity to satisfy individual needs or interests.
- But also shared a large number of concerns on the relationships between mountain farming and the environment.

## 411000 and 1111

## **IMPLICATIONS**

- Agri-environmental policies in mountain areas should take into account the views and demands of stakeholders with different interests (citizens pay and farmers implement policies).
- Payments for ES: "public money for public goods"
  - Biophysical relations between agricultural practices and delivery of ES (indicators)
  - Quantitative monetary and socio-cultural valuation of ES

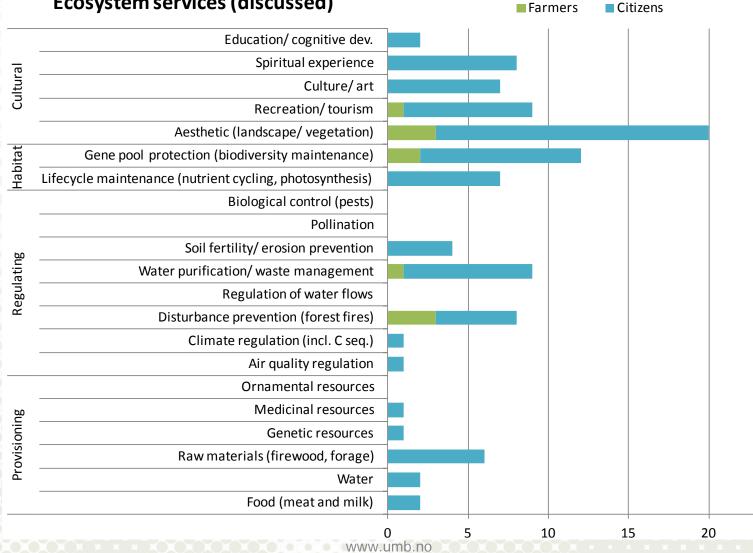






#### RESULTS

#### **Ecosystem services (discussed)**



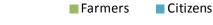
25

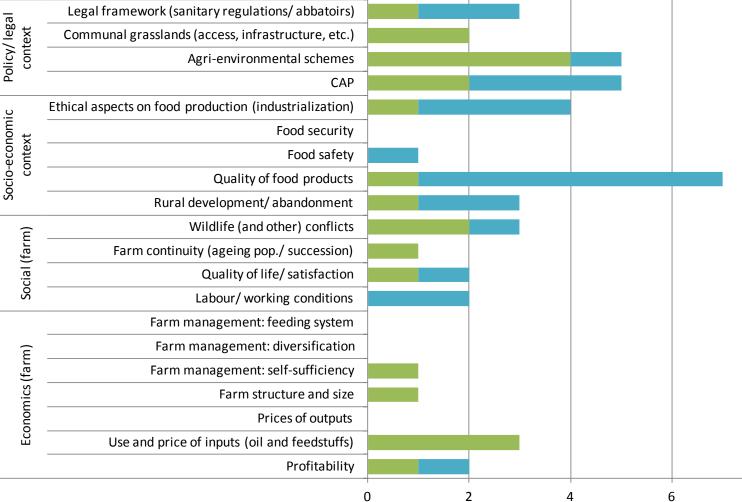




#### RESULTS

#### Oher sustainabity issues (discussed)





8