



TESAF



REGIONE DEL VENETO



The implementation of Payments for Ecosystem Services (PES) in forest areas: empirical evidences from a case-study in Veneto Region, Italy

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Outline

1. Background and objectives
2. The case-studies areas
3. Methodology
4. Results:
5. Conclusions

1. Background and objectives

Veneto region:

- **Forest cover:** 410,000 ha (**23%** of the land area), **almost all in mountain areas**
- **Strict regulations** for any forest operation (clearcut area < 2 ha, natural regeneration, ...) to prevent negative externalities connected to wood extraction → **forestland abandonment**
- **1/3 public land**; private land **fragmentation**; almost no forest owners' association
- Average growing stock: **204 m³/ha**
- NAI: **5.5 m³/ha/yr**
- Wood harvesting: **1.2 m³/ha/yr (22% of NAI)**

Objectives

- a. **To understand the WTP by Veneto citizens for the ES provided by the mountain areas** (NEWFOREX project funded by the 7FP)
 - b. **To identify potentials for PES implementation in Veneto regional parks:**
 - M&V of existing initiatives,
 - identification of most promising ES in selected sites,
 - understanding attitudes of local actors towards PES implementation,
 - defining governance structures and the supporting factors or constraints
- ... and to develop an easy/quick methodology** to be replicated in other sites for identifying their potential PES (A project funded by Veneto Region)

Field work carried out in 2011-2012

2. The case studies areas: a survey at 2 scales:

- Veneto region
- Lessinia Natural Regional Park



The small scale case-study:

Lessinia Natural Regional Park

- 15 Municipalities; 20,000 residents
- very closed to urban, flat area
- app. 10,000 ha of protected area (50% forests)
- Park established in the Nineties



Photo: <http://www.verona360.info>

- Main activity: **grazing and milk-cheese production**
- **Eno-gastronomic-based tourism**, but potentials explored also for other ES (biodiversity, water, landscape and C sequestration)

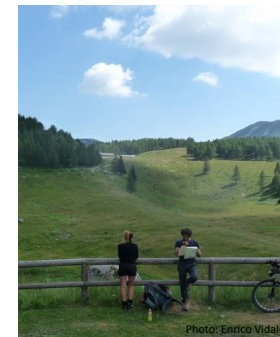


Photo: Enrico Vidale

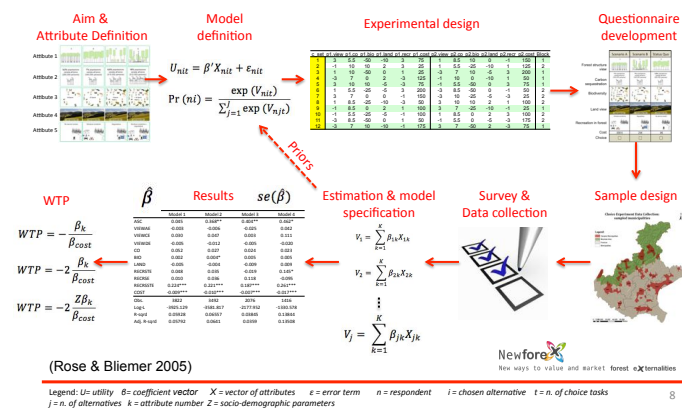
3. Methodology

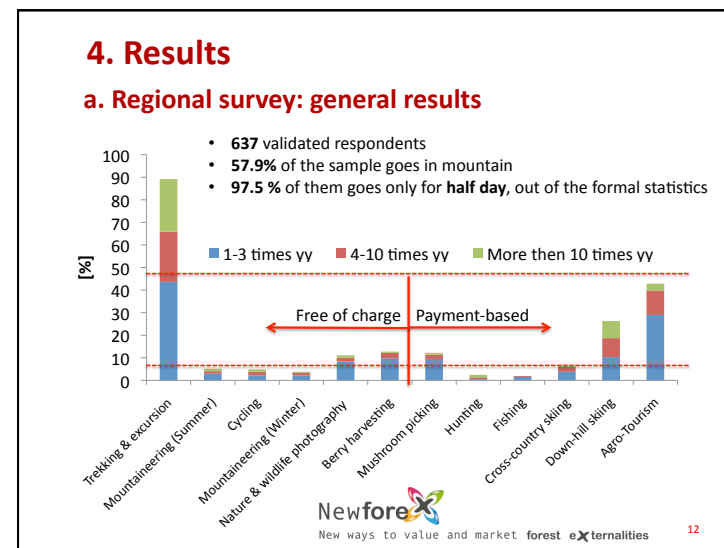
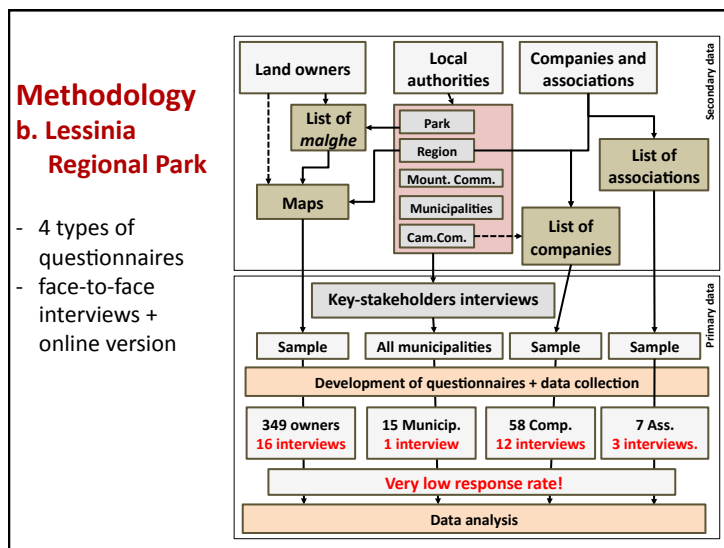
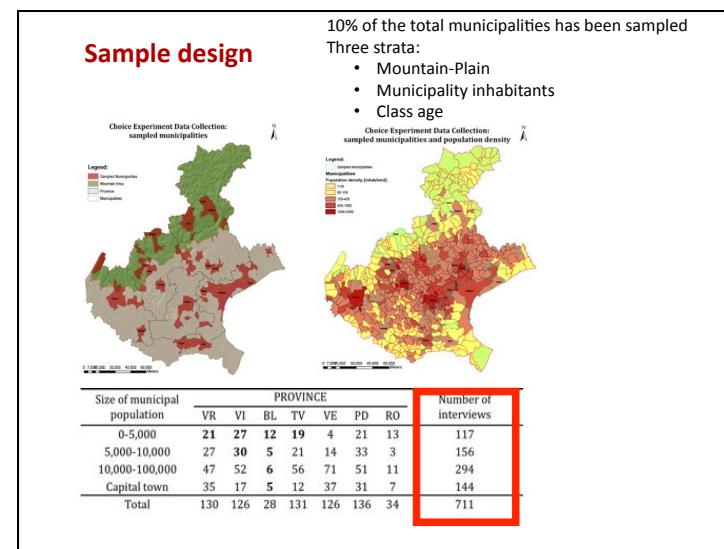
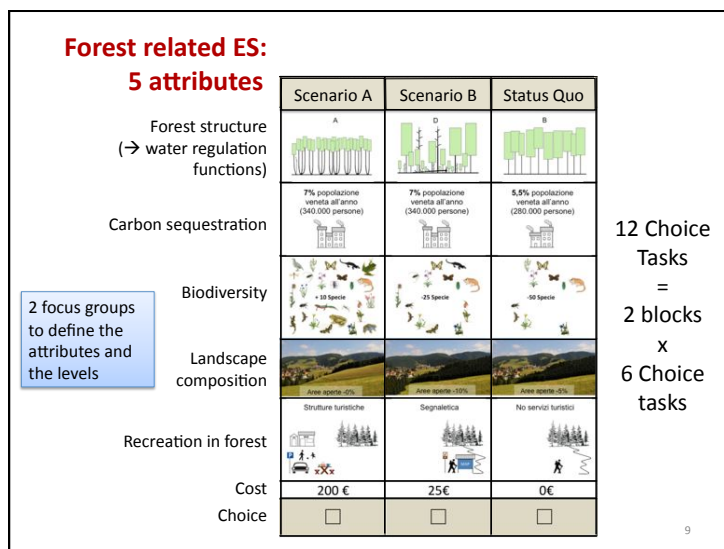
a. Survey at regional scale: Choice Experiment application

b. Survey at small scale (Lessinia Regional Park)
Questionnaire and direct interview
Social capital analysis ← Network analysis

Methodology

a. Survey at regional scale: Choice Experiment application





4. Results

a. Regional survey: WTP results

	Mod. 1	Mod. 2	Mod. 3	Mod. 4	Mod. 5
ASC	0	0	0	0	0
Ceduo	0	0	0	0	0
Biplano	0	0	0	0	31.77
Multiplano	0	0	0	0	0
CO 7% zero em.	59.11	71.47	0	85.02	40.74
CO 8.5% zero em	0	0	0	0	0
CO 10% zero em.	80.88	0	191.61	96.18	0
Est. -25 specie	0	0	0	75.82	0
Est. 0 specie	0	36.42	0	0	28.95
+10 specie	0	0	0	0	23.00
Aree aperte -10%	0	0	0	0	0
Aree aperte +0%	0	0	0	0	0
Aree aperte +2%	0	0	0	0	0
Tavoli, parcheggi, pick-nick	0	0	0	0	0
Sentieristica	0	0	0	0	207.34
Tav. parc. p-n + sent.	71.90	63.70	113.33	95.75	242.54
	All population	Without protest replies	Users of mountain resources	Non users of mountain resources	Answers weighted for the educational level

Results

- Large number of protest replies
- WTP \approx 50 €/year/HH
- Forest structure, landscape diversification: ES with no WTP
- Very low WTP for biodiversity protection
- WTP for C sequestration \approx 40 €
- WTP for structured recreation \approx 9-10 €
- WTP strongly correlated to education level (not so much to income)

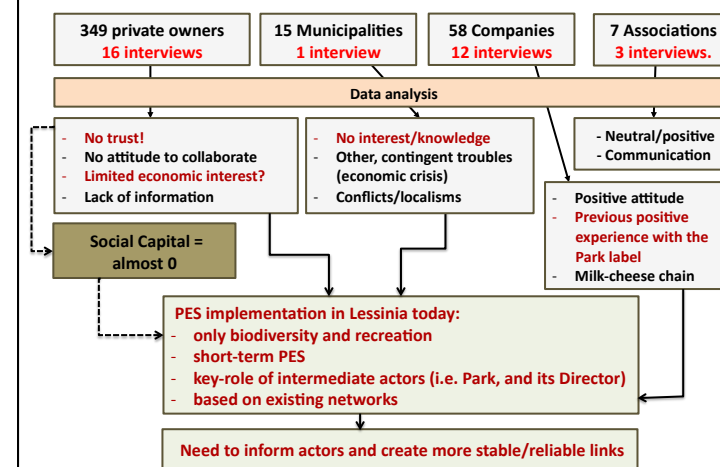
→ No space for PES at large scale. Maybe at local scale?

Results for the Lessinia Regional Park

- general observations
- 2 examples of PES



First general observations in Lessinia case-study



However, there are examples of PES implemented in Lessinia...

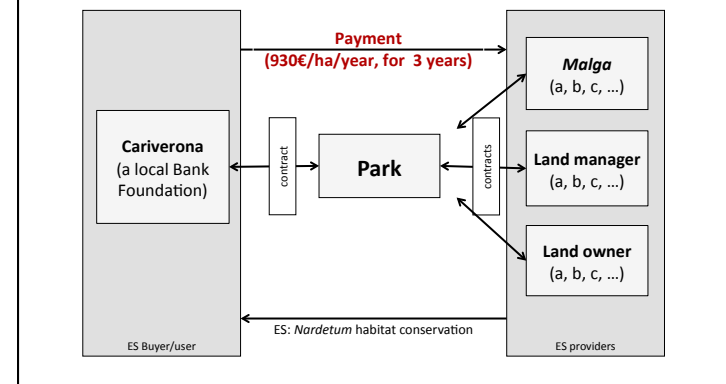
Example 1: biodiversity
 → protection of *Nardetum* Nature 2000 priority habitat



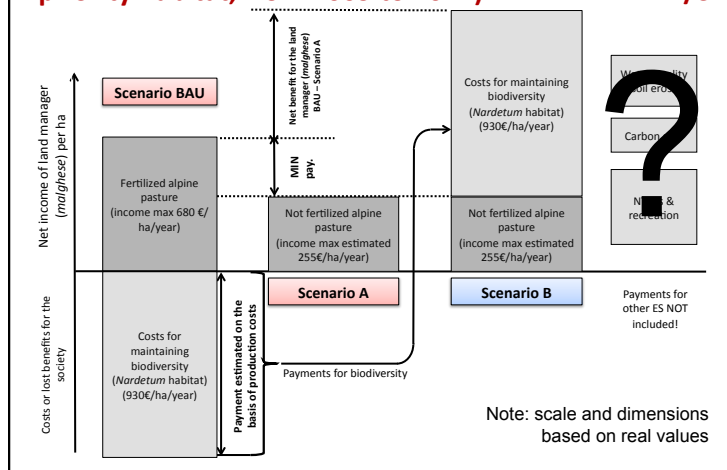
Example 2: recreation/tourism
 → territorial marketing initiative based on the creation and use of the Lessinia Park label on local specialties (Monte Veronese cheese, ...) and NTFPs (truffles, honey, ...)



Example 1: protection of *Nardetum* (Nature 2000 priority habitat, from 2009 to 2011) 1/3



Example 1: protection of *Nardetum* (Nature 2000 priority habitat, from 2009 to 2011) 2/3



Example 1: protection of *Nardetum* (Nature 2000 priority habitat, from 2009 to 2011) 3/3

Supporting factors:

- **Key positive (pro-active) role of the Park Director** (acting as an intermediate in defining contracts between the buyer and the land owners and the rules)
- **High economic value assigned to the ES** (based on costs of *nardetum* habitat maintenance)
- **Lack of other instruments to cover the costs** (i.e. lack of Nature 2000 public compensation to land owners)

Constraints:

- **Few suppliers** (land managers), fragmented and acting individually
- **No other buyers** available for supporting the PES after the Bank Foundation interrupted the flow of payment: problem of permanence

Example 2: Park label on Lessinia specialties and NTFPs

1/3

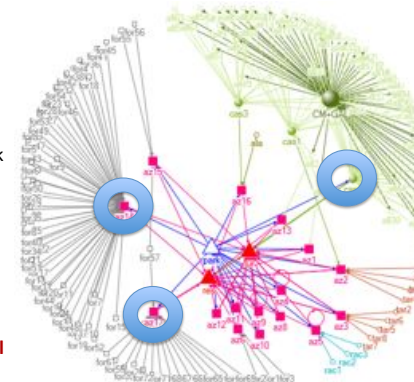
- Park label **created in 2006**
- the Park authority provides the authorization to use the label to those companies requiring it; the **companies should pay an annual fee** for the label use (**but in practice these payments are not regular**)
- **several types of products**: speck, nettle soup, cheese, honey, pasta with truffles, alcoholic chestnuts, herbs liquors, ...
- **limited direct economic benefits to the companies** (only 4 out of 17 companies stated having positive economic effects, 6 no benefits and 6 did not know), **but positive effects on the local economy** (9 out of 17)
- labeling perceived as an **effective tool for attracting more tourists and improve the Park image**
- **not enough investments on label communication** (12 out of 17 companies)

Example 2: Park label on Lessinia specialties and NTFPs

2/3

Existing commercial network of suppliers and buyers of local products labelled with the Lessinia Park label:

- 20 companies in total (most are dairies)
- **3 key companies** able to influence the initiative:
animators of rural development



Legend: for-x = suppliers of local products/raw materials; rac-x = pickers; tar-x = truffle-pickers; all-x = farmers; az-x = companies (dairies); ala= Ala Company S.r.l.; park = Lessinia park authority; res = residents; tur = tourists

Example 2: Park label on Lessinia specialties and NTFPs

3/3

Supporting factors:

- **well-known, long-term labeling initiative** launched by the Park
- **existing commercial networks**
- **positive attitude of companies (dairies) towards the introduction of other PES** (71% available to assume pro-active role in communication, 47% available to increase the products price of about 0.5-1.0 Euro to create a special fund to be managed by the Park)
- **existing image-products quite well known in the regional market** (e.g. MonteVeronese DOP cheese)
- **closed to urban, flat area** (weekend tourism from Verona, Padova,...)

Constraints:

- unclear rules and/or **not regular annual payments for the use of Park label (lack of systematic monitoring)**
- limited communication about labelled products outside the area
- **pickers and producers (farmers) prefer to act individually**, no attitude towards collaboration with other private actors

Conclusions

(1/2)

a. At regional scale:

- limited potentials for PES implementation. **WTP very low** for most of the ES
- Problems connected to **asymmetric information** between providers and users

b. At local level:

- lack of interest and mutual trust among most of the actors, especially private forest owners: **social capital as a key factor**
- sometimes **few key actors** are able to create a **effective social network** of ES providers
- limited knowledge and and fragmented interest by **local public authorities**
- existing examples = **quasi-PES** (more than "pure" PES)

Conclusions

(2/2)

But ...

- **high economic value assigned to some ES** (e.g. 930 €/ha/year, based on costs of *nardetum* habitat maintenance)
- **positive attitudes by some key-actors** (Park, companies, associations)
- significant (and potentially increasing) **role of rural tourism/ recreation**
- possibilities to link new PES with existing **labeling initiative**