



ThinkForest High-level discussion forum on Payments for Environmental services: a way for Mediterranean forests?  
Bruxelles November 27, 2012

## The role of public authorities in PES implementation: the Italian experience

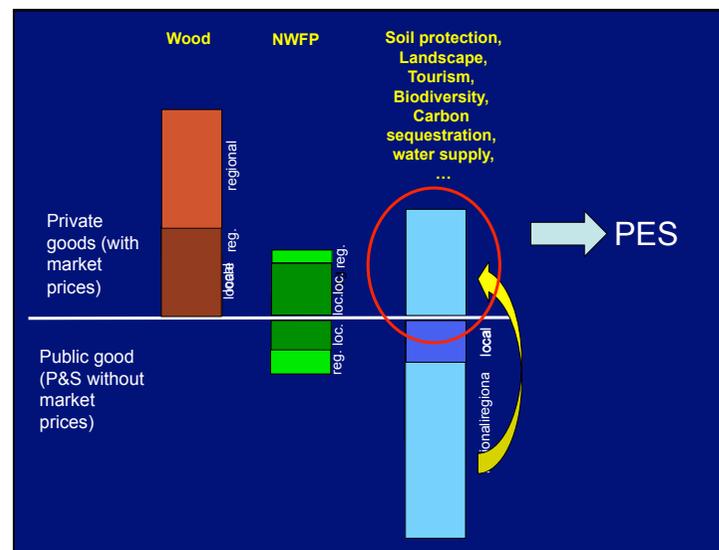
**es** **IAF** Davide Pettenella  
with Enrico Vidale, Paola Gatto and Laura Secco  
Dipartimento Territorio e Sistemi Agro-forestali  
Università di Padova

## Outline

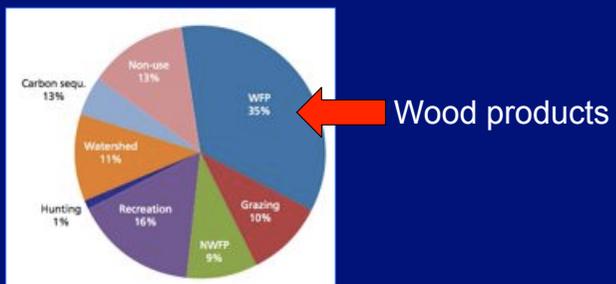
- 4 messages:
  - Economic importance of ES
  - Preference given to regulative instruments in the past
  - WTP for ES and scale
  - Importance of quasi-PES
- Final considerations



## 1st message: ES are playing a much more relevant role in Med region than in other regions

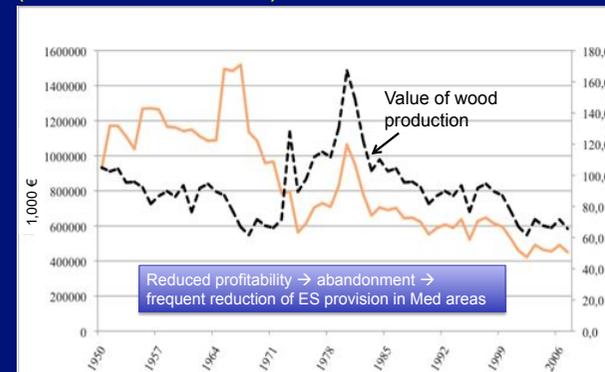


### Values of good and services provided by Med forests



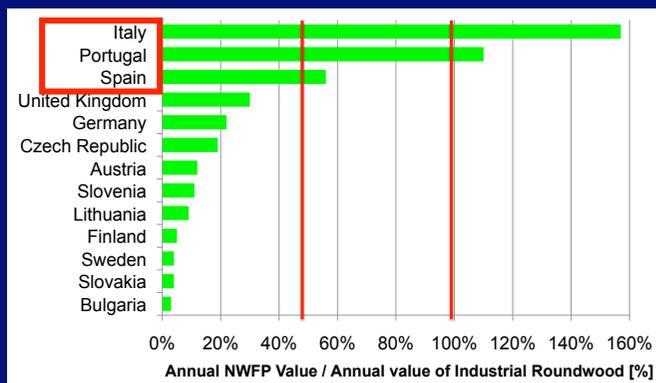
Source: Merlo and Croitoru, 2005 (p.52); Palahi *et al.*, 2008

### Wood removals and value of wood production in Italy (1950-2007; real values)



Source: ISTAT

### A changing market: EU NWFP production compared to round wood



Source: Forest Europe 2011, modif. (year 2007)

### Studies on forest externalities values

Average biodiversity and recreational values in European Forests (TEEB, 2009)  
(Values per hectare – methodology: value transfer)

	Mediterranean EU	Northern and Central-Northern EU	Scandinavian EU
	Latitude 45-65	Latitude 65-71	Latitude 35-45
Range US\$ (2000)	356-615	123-182	123-255
Average \$ (2000)	485.5	152.5	189.0
€ (2000)	379.3	119.1	147.7
€ (2008)	467.1	146.7	181.9

3.2      2.5

Source: TEEB Report; CLIBIO project cit. in Den Brink *et al.* (2009)



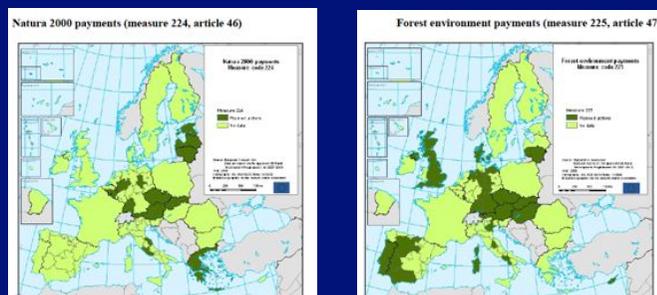
**2<sup>nd</sup> message:**  
In forest policies  
regulative instruments  
and direct control of the  
State have been favoured  
in the past

## Italy: a strong public control of the forestry sector

- **One third of the forest** owned by public bodies
- **No** significant examples of forest **concessions**
- **98%** of the forest cover under quite **strong land use prescriptions**
- **65-75,000 forest workers** reduced room for introducing PES schemes
- A strong **State forest police** (the only case in EU15)
- Production and service activities **under direct public control** (forest nurseries, management plan preparation, certification agencies, game enterprises, land restoration enterprises, environmental education activities, sawmills ...)

## Mechanisms of payment or compensation still to be developed in the Med region

### Payments for ES with the RDP



Source: DG AGRI, 2009, Report on implementation of forestry measures under the rural development regulation 1698/2005 for the period 2007-2013

## Water related PES



## Carbon PES

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## 3<sup>rd</sup> message:

### Willingness To Pay for ES at large scale is rather limited

Newforex New ways to value and market forest externalities

### CASE STUDIES

Across Europe there is a huge variation in forest types, landscapes in which forests are situated, degree of urbanisation, importance of forest goods and services, and socioeconomic context. Consequently, there are significant variations in the demand as well as the value of forest externalities, their cost of provision and options for their marketing. Therefore NEWFOREX will base its work on a set of carefully chosen European case studies representing a range of these variations, and in addition a developing country case study.

The case study regions serve four main purposes:

1. as working labs where we will collect among the relevant populations (e.g. general public, forest owners, stakeholders, etc.) the needed empirical data on forest externalities values, costs of provision, and assess market-based methods;
2. provide data and models for forest production and uses to assess, for example the role of trans-boundary effects for costs;
3. as test and demonstration labs for the application of the developed methods for valuation of forest externalities and assessment of costs of provision, and evaluation of the potential for implementing market-based methods for forest externalities provision;
4. as an excellent basis for communicating general guidelines and recommendations to the main stakeholder groups.

CASE STUDY	REGION	KEY FOREST SERVICES	KEY VALUES	MARKET-BASED METHODS
Mediterranean region	Catalonia (Spain)	biodiversity, recreation, wood production	high value of non-managed forest, low wood production, and high fire risk	CITIC EPARD
Atlantic urbanised	Eastern Danish forest (Denmark)	water quality, recreation	urbanisation forests in an old agriculture landscape	UCPH
Boreal region	Finland	biodiversity, recreation, tourism, carbon	timber production important, recreation and nature tourism increasing importance	METLA
Mediterranean region	Veneto (Italy)	recreation forest products, biodiversity, recreation	multipurpose olive landscape/forest management, timber production is no longer competitive	IGP
Central European region	Baltic region (Poland)	biodiversity, carbon	natural forest reserve under pressure from production forestry	WU
Developing country	Amazon (Brazil)	carbon, biodiversity, watercourse		CIFOR

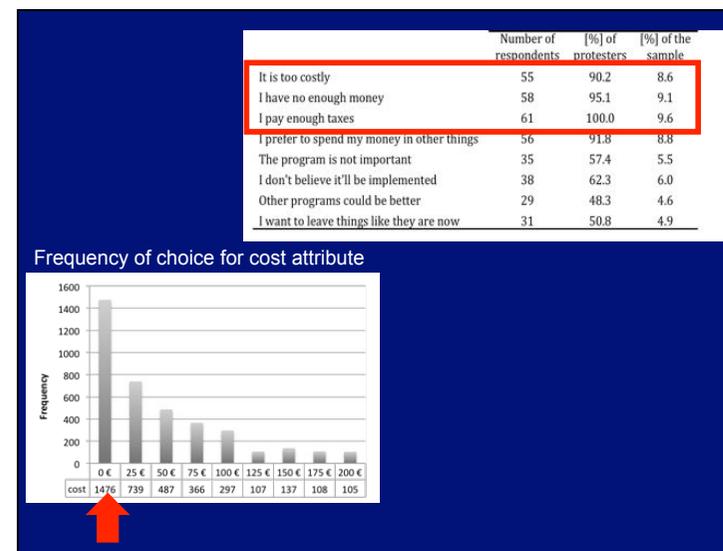
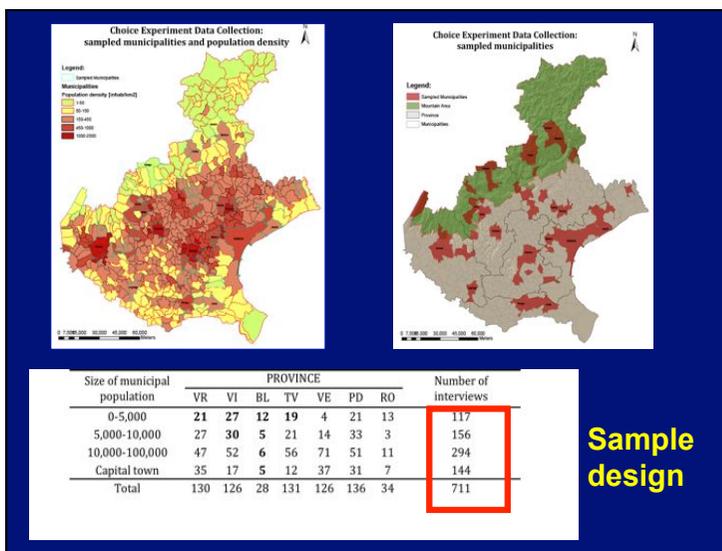
6 case studies

<http://www.newforex.org>

## A survey on WTP for 5 ES

### Method: Choice Experiment

1. Forest structure
2. Carbon sequestration
3. Biodiversity
4. Landscape
5. Recreation in forest



**Main results**

- **Biodiversity** protection, **landscape** conservation and maintenance of **forest structure** should be provided at **zero cost** for the beneficiaries
- Some **positive WTP** for **Carbon** sequestration and organized **recreation**
- WTP is highly influenced by the **level of education** (not always correlated to income)

→ As proved by other surveys, positive WTP is much higher in the **small-scale PES systems**

**4<sup>th</sup> message:**  
**there are good examples (and room for expanding) of quasi-PES**

A frame regulation introducing some general obligations and defining the "rules of the game"

## 1. Mushrooms and truffle picking permits

National frame law, Regional Acts and local regulations → daily permits of 5-15 €/persons per max 2-3 kg

**A case-study: Borgotaro Forest Community** (Parma province – Emilia-Romagna Region)

- Total number of permits sold: 25-36,000 €/year
- Annual revenue from permits: 300-420,000 €
- Revenues from PES: 15-19 €/ha/year
- Revenues reinvested in forest maintenance and local development policies



Enterprises: 62 (in 2008); > 100 in 2011

- 15 Agritourisms/ Farm businesses
- 12 Hotels/Guest quarters
- 8 Bed&Breakfasts/Inns/Hostels
- 9 Cheese, sausage and wine producing factories
- 2 Didactic farms
- 3 Museums/Private collections
- 30 Restaurants/Porterhouses
- 26 Typical products sellers

## 2. Hydro power generation

- The **first source of renewable** energy in Italy (5.1% of total final consumption)
- National frame law: no. 959 in 1953
- PES is based on power of hydroelectric plant (>220 kW/h): **28 €/kWh installed/year** (in 2011)
- Beneficiaries: Municipalities, frequently organised in **Consortia** (BIM – *Bacini Imbriferi Montani*)
- Numbers: **69 BIMs**; **1,684 Municipalities** involved; **252 dams**; **518 power plants**

## 3. Drinking water provision

An exemplary case: *Romagna Acque* and the Ridracoli dam

- Dam built in the 1982; capacity of **33 M m<sup>3</sup>**; more than **100 M m<sup>3</sup>** of high quality drinking water provided/year
- Managers: a **public company** controlled by the local administrations
- From 1982 to 2007: 25 years of constant investments in the catchment basin area (mainly forest area): an almost fixed amount of **4%** of the total company revenues from water tariff, equal to a annual **PES of 5-600,000 €**
- The cost of removing the soil from the dam-bed could have been **10 times higher** in the same period

## Final considerations

- The regulative framework allows the establishment of (quasi) PES schemes, but **implementation is lacking** behind
- Public administration has the responsibility of **changing its culture** and general approach ...

... from a passive role in  
controlling the resources ...



... to an active partnership in  
the rural development path ...

