

IUFRO International Symposium

“How to both harvest and preserve forests more or better?”

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Comparing profitability and governance for recreational wild mushroom picking in forest and timber production



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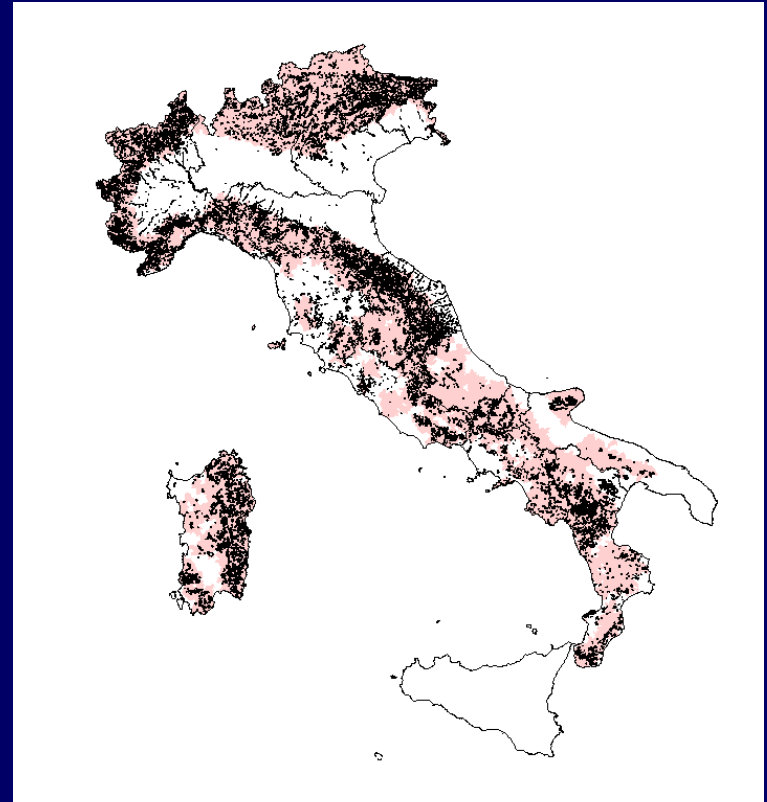


Outline

1. The context: Italy
2. **Wild Mushroom Picking** as recreational environmental service (source of income)
3. Timber production vs. Wild Mushroom Picking in **4 case studies**: governance mechanisms and profitability
4. Conclusions

1. The Italian forestry context: an overview

- Italy: **rich of poor forest (95% in mountain-hills)**
- Forest area increasing:
5.5 M ha in 1950
10.4 M ha in 2000
(2-3 M in natural conversion)
- Forestland ownership:
60% private (former farmers): 3 ha/firm
40% public (local municipalities, community-forests)

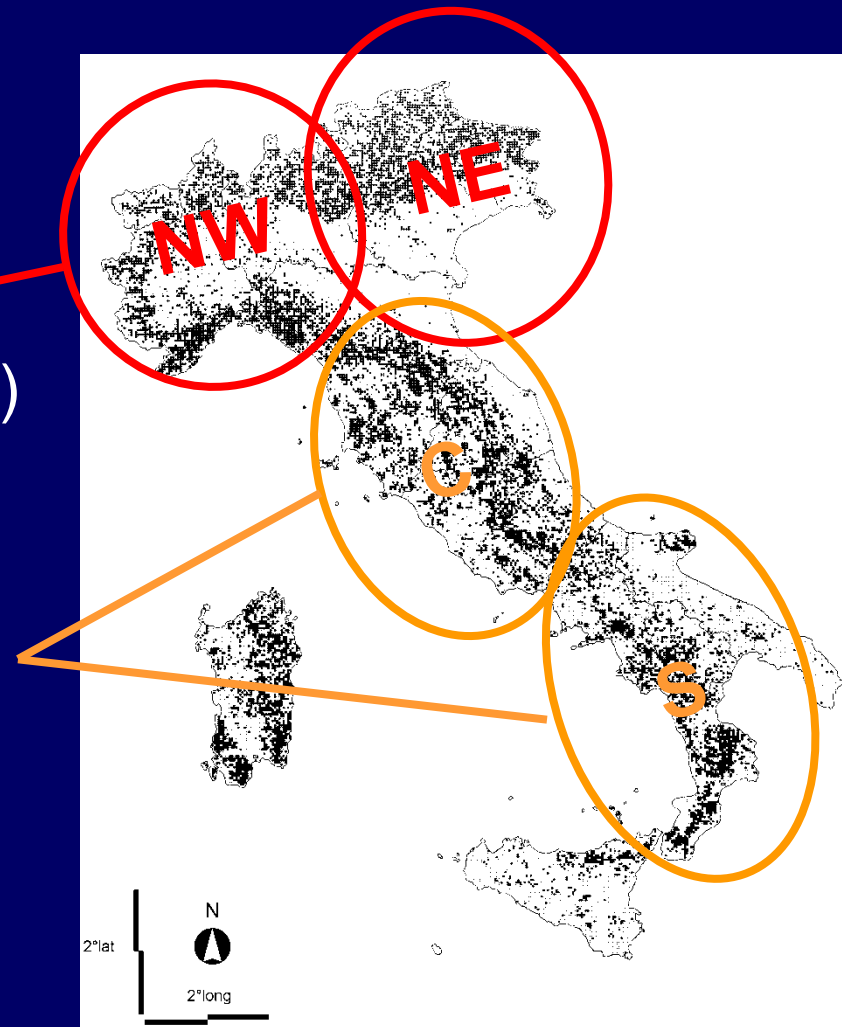


Pink areas = mountain

Black spots = land under conversion

1. The Italian timber production: an overview

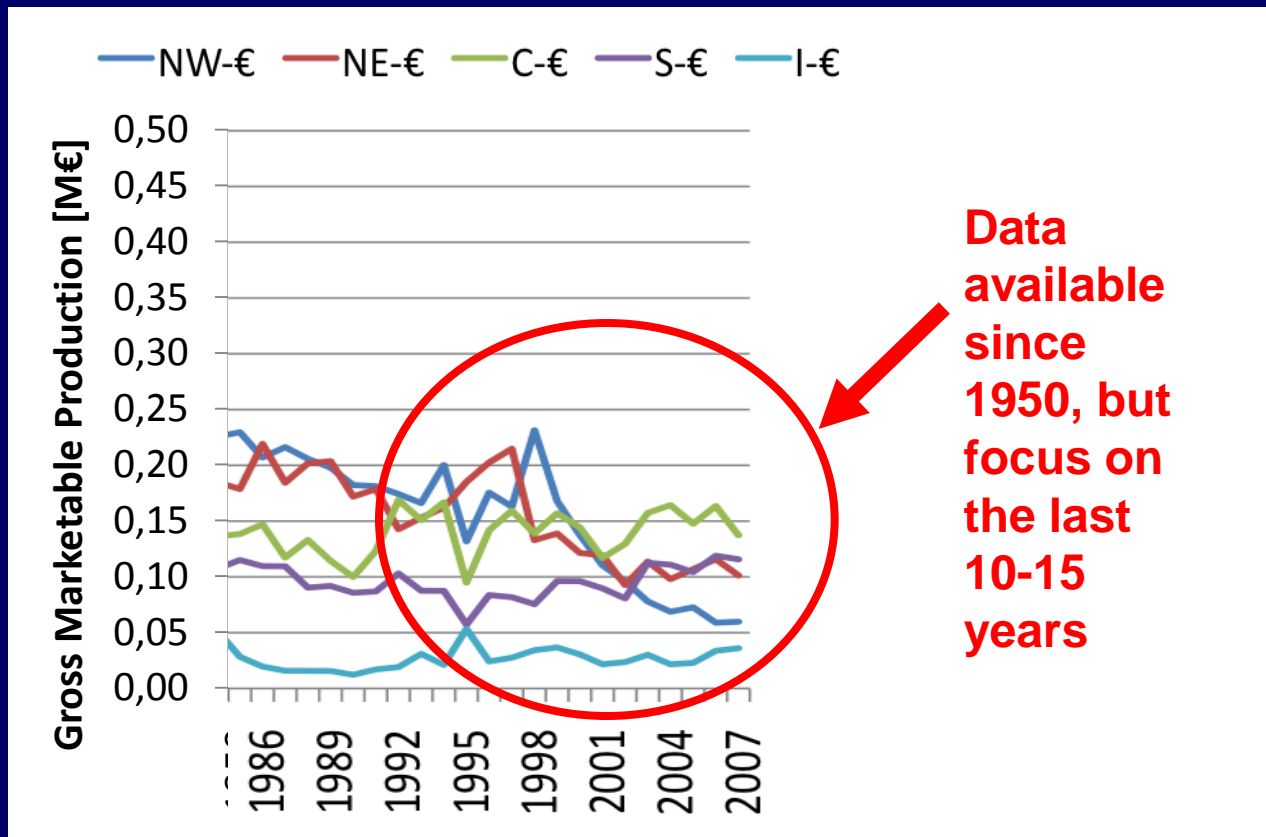
- **Industrial roundwood:** mainly in the North (high forests) (and plantations)
- **Firewood:** main timber output in the Central-South Italy (coppices)
- **Low productivity**



(NUTS 1)

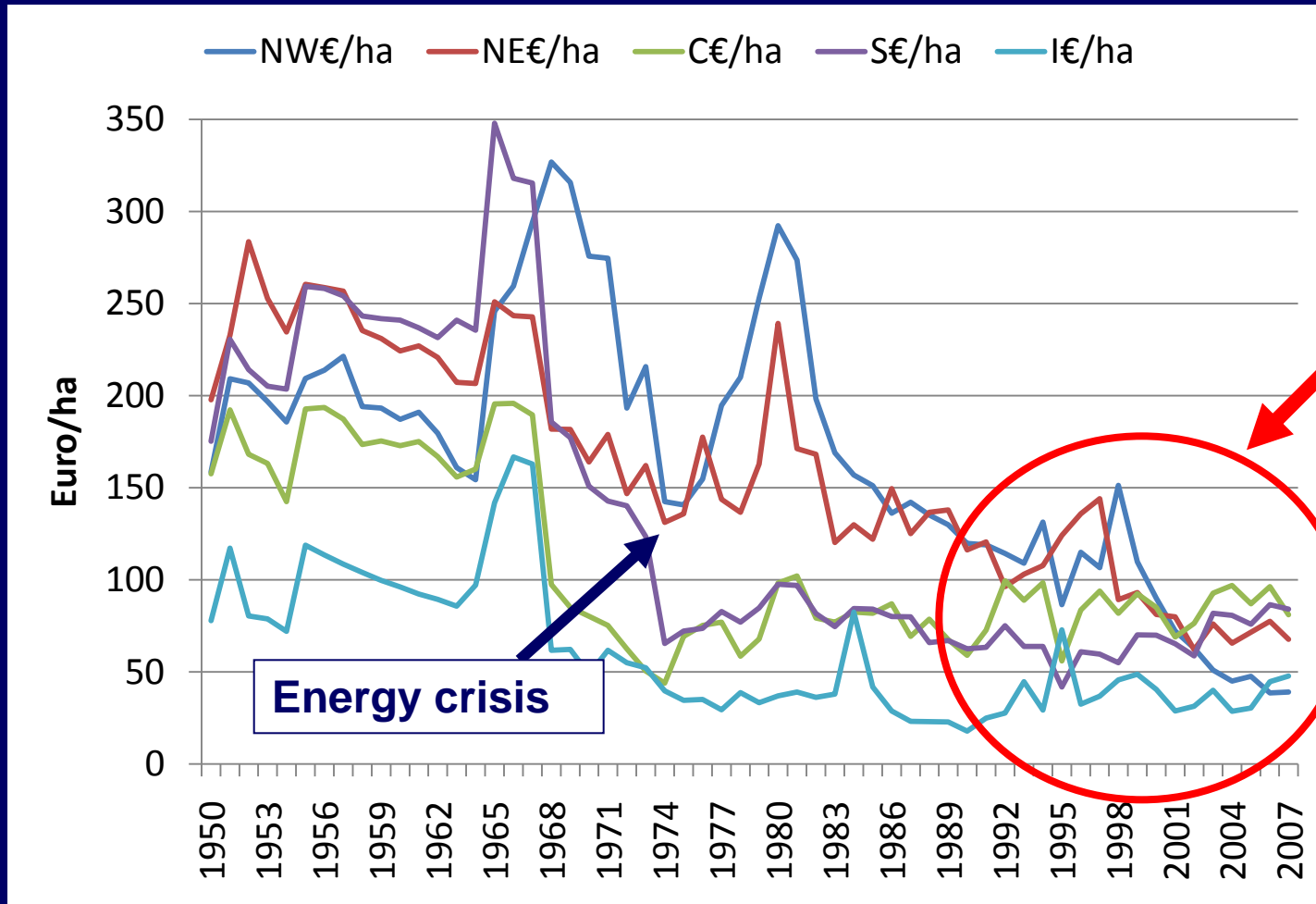
1. Macro-areas: GMP

- Centre and South: constant trend → fuelwood
- **NW-NE-I: decrease** → globalization of roundwood market



- **Reduction of high quality (high value) timber**
- **Lack of a NFP** (but 21 local forest programs)

1. Macro-areas: productivity [€/ha]



2. The key-point

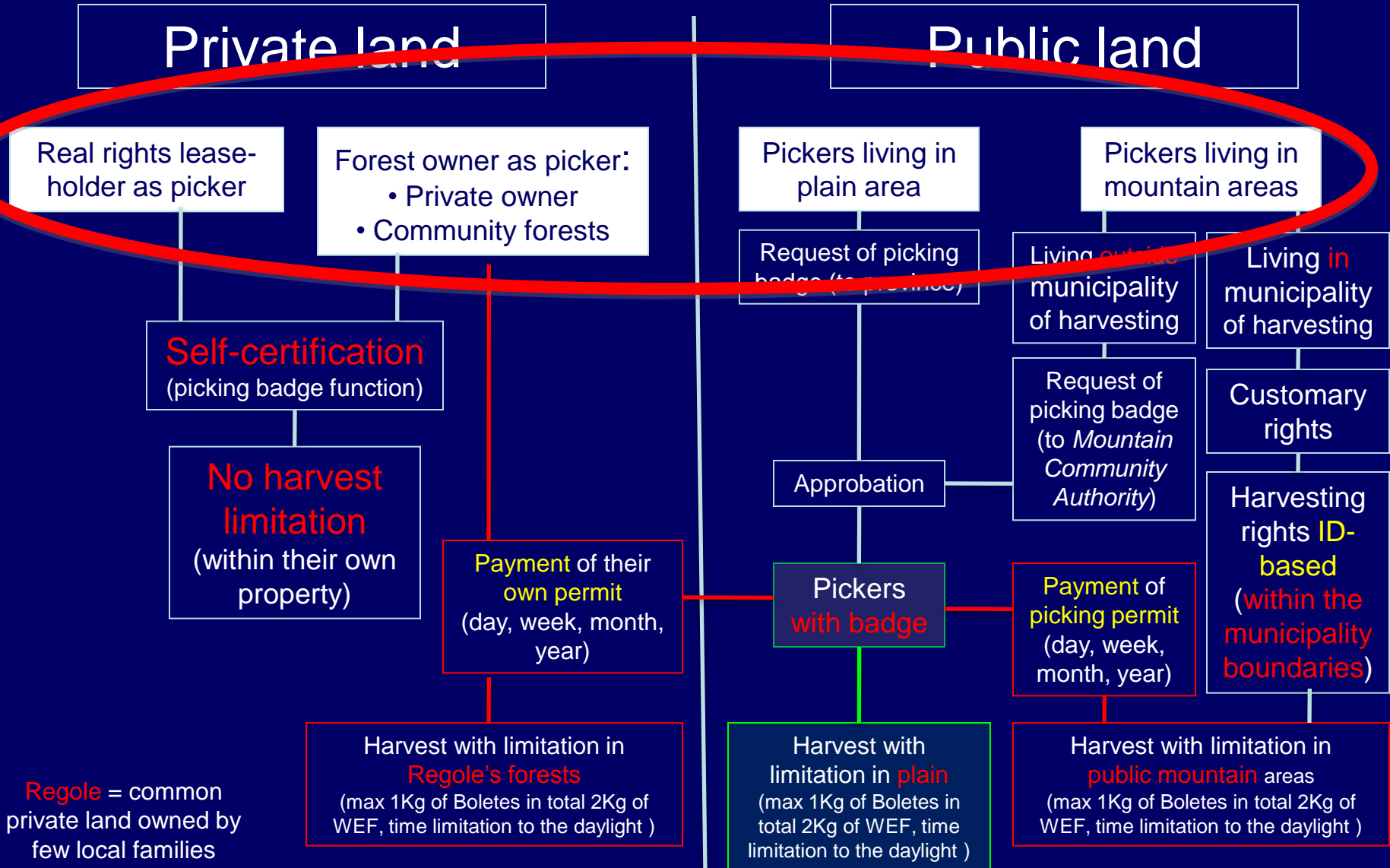
- In a market where timber supply is becoming less profitable, can **payments for NWFPs** be an instrument for enhancing the forest value and **providing income for local population**?

→ NEWFOREX project (2010-2012) (7th FP)

2. Wild Mushroom Picking: recreational activity as a source of income from the forest

1. The most **extensive** forest activity in the Alps
2. **Directly** linked to the forest output
3. Activity **involving** thousands of people
4. Possibility to have a **direct transaction** between the user (picker) and the provider (forest owner).

2. Wild Mushroom property rights regulation



3. Three governance mechanisms based on 4 Wild Mushroom Picking case-studies

Pre-Alpine mountains (2 cases)

a. Rent use without re-investment

Asiago plateau

b. Limited internal re-investment

Borgotaro

c. Network-based WEF supply

a. Rent use without re-investment

2 Mountain Authorities (municipalities' associations):

Case-study a.1 = "Astico-Brenta" (10,800 ha)

Case-study a.2 = "Astico-Posina" (23,400 ha)

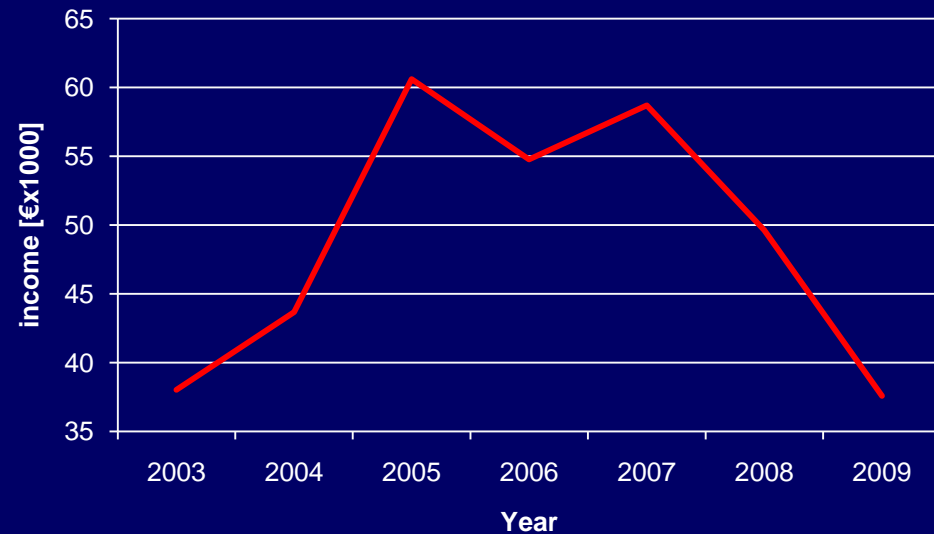
- Appr. 3,500 - 4,000 picker badges
- **Lack of control**
- Low investment on WEF res.

Permit cost: daily 6€; monthly 17€ - 30€; annually 32€-77 €

Permit income [€x1000]



Permit income [€x1000]



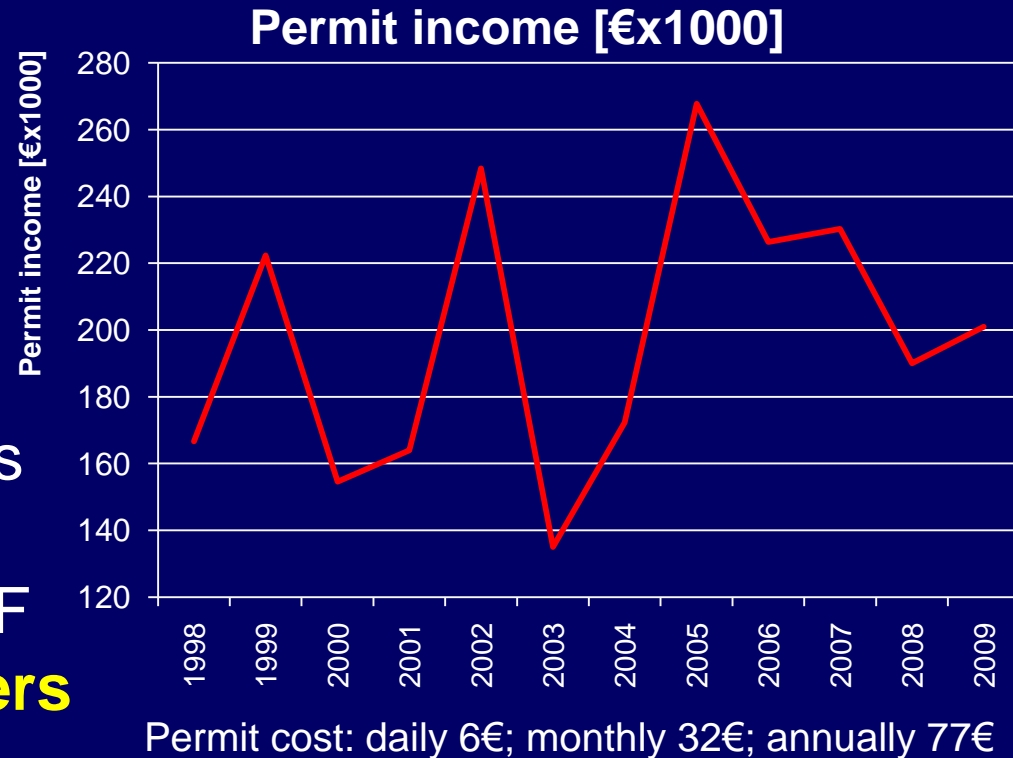
b. Limited internal re-investment

One Community Forest:

“Spettabile reggenza”

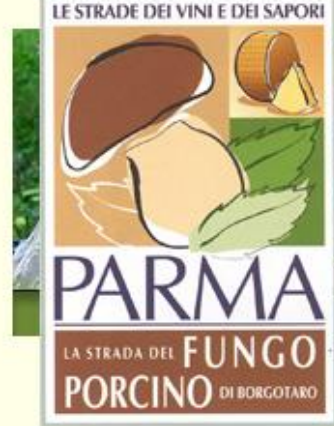
49,000 ha

- Appr. 10,000 picker badges
- > 20,000 permits/yy
- Limited investment on WEF
- **Some external WEF buyers**



• **Presence of other recreational forest activities**

- First approach on territorial marketing:
 - ✓ WEF among the local specialty products (i.e. Asiago cheese)
 - ✓ Link to the local handcraft shops
 - ✓ Picking tourism

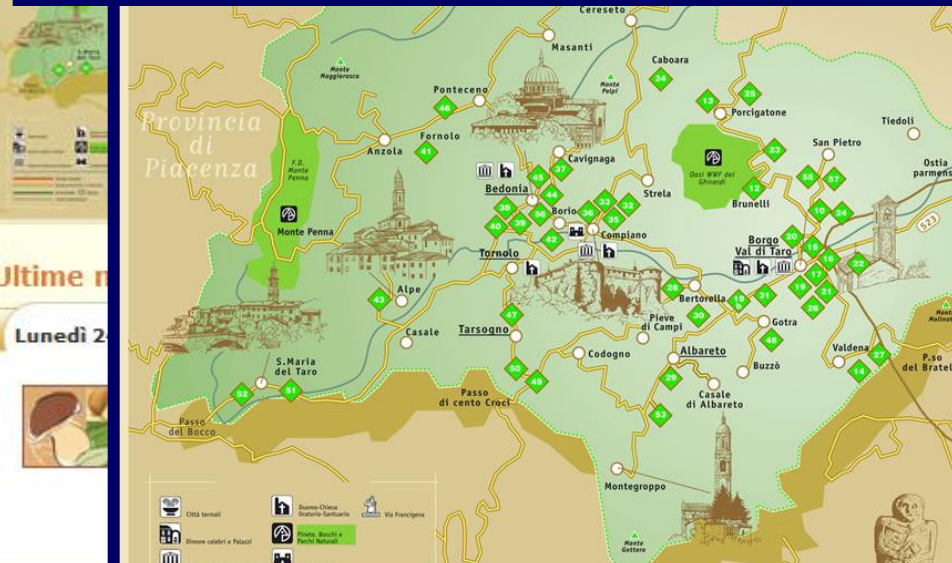


Imago product:
PGI Borgotaro
Boletus

- Enterprises: 62 (in 2008)
- 15 Agro-tourisms/ Farm businesses
 - 12 Hotels/Guest quarters
 - 8 Bed&Breakfasts/Inns/Hostels
 - 9 Cheese, sausage and wine growing and producing factories
 - 2 Didactic farms
 - 3 Museums/Private collections
 - 30 Restaurants/Porterhouses
 - 26 Typical products sellers

- Territorio**
- THE TRAIL
 - MAP OF THE TRAIL
 - ITINERARI
 - TOWNS ALONG THE TRAIL
 - PARKS
 - MUSEUMS
 - TOURIST INFORMATION
 - FOTOGALLERY

- FIRMS**
- Bed & Breakfast
 - Caseificio / Salumificio / Az. Vitivinicola
 - Farmhouse holidays
 - Fattoria Didattica
 - Hotel
 - Museo / Collezione privata
 - Restaurant
 - Sale of local products



c. Network-based WEF supply

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WEF are much more than a commodity or recreational service → the key-component (imago product) of a larger **network** (Human and Provan, 1997 – mod) based on the concept of “**territory**”

➡ a consistent **portfolio of products and services**

➡ **coordinated marketing efforts**

- **420,000 € per year from WEF permits selling** on 33,000 ha of forest
- **2.8 M€ total income** (estimated) from Wild Mushroom tourism (in 2006)

3. Profitability: timber vs. WEF

| Case study | Timber | WEF |
|---|--|--|
| One authority, no control, re-investments (a.1, a.2) | 7.8 €/ha (2000-2008) 15.3 €/ha (2000-2008) | 1.1 €/ha (2000-2008) 3.5 €/ha (2003-2009) |
| Few actors, limited control, low re-investments (b) | 47.3 €/ha (2000-2009) | 6.6 €/ha (2000-2009) |
| Network, high control, significant re-investments (c) | n.a. | 12.7 €/ha by permits selling (but 84.8 €/ha considering all the WEF-based activities) (2006) |

* Firewood for self consumption by the members of the Consortium

4. Conclusions

1/2

- **Profitability from NWFPs is comparable** (or higher) to that from traditional timber production
- **Property rights** regulations are important for pickers & forest owners, but more important is the chance of **entrepreneurial innovation**
- **Profitability levels depend on the form of governance** (bottom-up/voluntary/market-based initiatives reduce control costs and make it more effective + directly increase forest output ← investments on special silviculture measures)

4. Conclusions

2/2

The most advanced level of profitability from NWFPs marketing are reached through **networks models**, based on 2 key-components:

- **(contractual) coordination** of economical stakeholders for the supply of products and services to increase profit and/or stability
- **mutual trust**
 - ← input = **social capital**
 - output = not only market products are supplied but also “**relational goods**”

www.fungodiborgotaro.com/ita/gallery



Thank you!

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