TEN
KEY-CONCEPTS TO UNDERSTAND ITALIAN FORESTRY

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Presentation's main topics

- Environment and location
- Ownership
- Land use changes
- Forest management
- Plantations
- Products and services
- Wood industry & technology
- Public institutions

Conclusions

1. Various forest environments

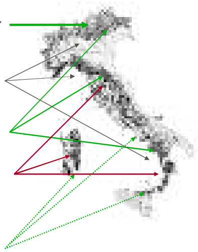
Forests: 10.4 M ha

Italian flora:
over 5,800 species
5,300 herbaceous and 500 woody

Europe: 7,500 species

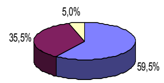
5 main forests types:

- Boreal coniferous forests (*Vaccinio-Piceetea*)
- Alps and Apennines Pine forests (*Erico-Pinetea, Junipero-Pinetea*)
- Montane Beech forests (*Querco-Fagetea*)
- Mixed Oak woods and other mesic forests (*Querco-Fagetea, Alnetea glutinosae, Salicetea purpureae*)
- Mediterranean evergreen forest (*Quercetea ilicis*)



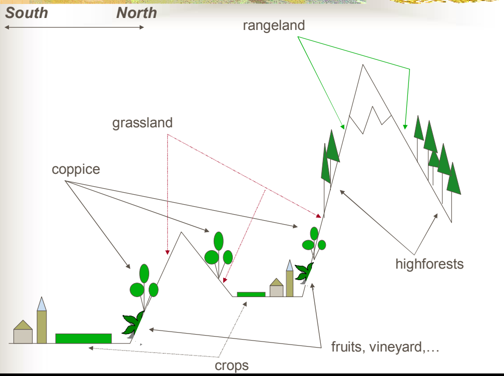
2. Forests = mountain

95% of the forests in hilly and mountain regions:
= less developed areas
(income = tourism and some quality farm products)



→ **multi-functional forests** (soil protection, water cycle regulation, fuelwood and timber production, recreation, landscape, …)

CORINE Land Cover



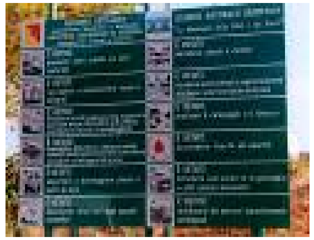
3. Local & small owners

Forestland ownership:

- **60% private (former farmers): 3 ha/firm**
- 40% public
  - Local municipalities
  - Local communities

→ **Local interests prevailing** on general ones

→ Strong public **"command and control" instruments**



4. Expansion of forest cover

2-3 million hectares under natural conversion to forests (mainly in mountain areas)

1950 = 5.5 M hectares

2000 = 10.4 M hectares

Pink areas = mountain

Black spots = land under conversion

5. Active management decreasing

Positive impacts:

- increased stock
- biodiversity

Negative impacts (mainly in Mediterranean areas):

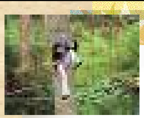
- fires
- un-controlled grazing
- homogeneous landscape (→ problems for tourism)
- loss of employment opportunities

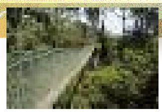
Wood production = 8 M cubic metres
(60% fuelwood)
NAI = 36 Millions cubic metres
Harvest/NAI = the lowest in Europe
(after Slovenia – source: FAO)

(but a lot of un-recorded small scale fuelwood harvest)

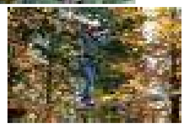
Too low profits for the forest owners

Environmental education
(Forest school, outdoor school, summer camps, …)





55 adventure parks



Sports and organized recreation

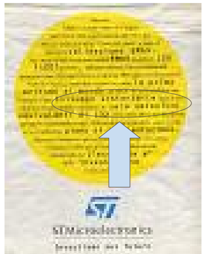
Forests concerts

www.isuonidelledolomiti.it

Forest museum
Arte Sella
(www.artesella.it)

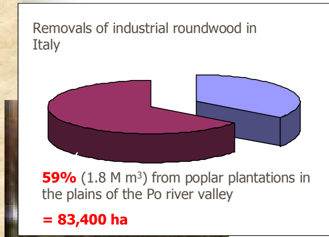
New marketing instruments

- Certification (FSC and PEFC)
- (Green) Public Procurement policies
- Use of bio-energy *(Green pricing,* "Green certificates")
- Carbon offset investments

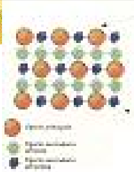


6. Fast growing plantations

Poplar plantations in the Po Valley:



41% from the remaining 10,300,000 ha of forest land



New plantations
of **walnut, cherry, ash, maple,...**

- **A clear trend: concentration of forest products supply**

	% on the total industrial wood	
	2000	*2050*
Primary forests	22	5
Secondary forests irregularly managed	14	10
Secondary forests regularly managed	30	10
Plantations with native species	24	25
Plantations with exotic species	10	50

Source: Sedjo, 2001 – FAO study

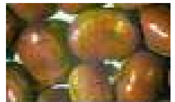
Within 2050, 75% of the total supply of industrial timber will come from plantations (50% p. with exotic species)

A risk of **excessive specialisation**:

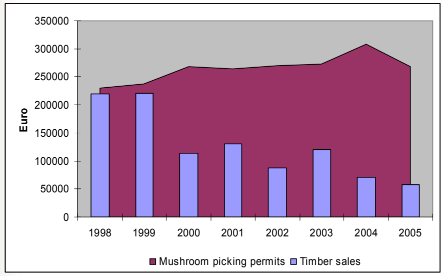
- Fast growing forests for timber production
- Abandoned or extensively used semi-natural forests

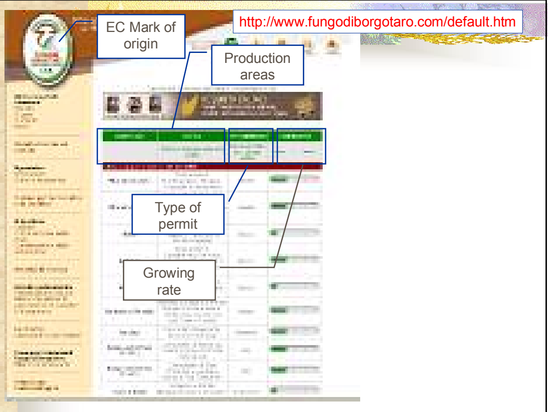
7. NWFPs = commercial products & recreational services

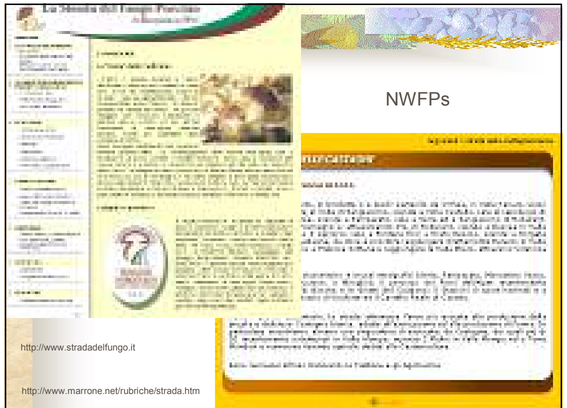
- Change of property rights for many NWFP: from public to private goods
- Income from mushrooms, chestnut, truffles >> than from timber production



Revenues from sales of timber (before felling) and mushroom-picking permits in the community forest of Asiago, north-east Italy (1998-2005)







NWFPs

http://www.stradadelfungo.it

http://www.marrone.net/rubriche/strada.htm

8. A strong, dynamic, flexible wood-working industry

Basic structural data (M US$)

Turnover	37,000	3-4% of the national industrial output
Exports	15,000	2nd world exporter of furniture (after China) (till 2002 it was the 1st)
Imports	11,000	2nd European importer of wood products
Employed	420,000	A very large forestry sector
Firms	90,000	

9. Large imports → enhanced substitution technology

- Medium Density Fibreboards (MDF)
- Particle-boards of recycled wood
- Recycled paper for high AV products
- Oriented Strand Board (OSB)
- Bi-laminated beams
- KVH (**KonstruktionsVollHolz:** Finger-jointed solid construction timber)
- Engeneered products like
  - "T-beams"
  - multi-laminar wood and veneer sheets, etc.

http://www.pannelloecologico.com

“Ecological” panel

from forest residues to wood working wastes

to recycling of final wood products

10. Decentralisation

- A federal administrative structure in the forestry sector **(21 Regions and Autonomous Provinces)**

… **but still the State maintain a forest police body (*Corpo Forestale dello Stato*)**

- Overlapping in some responsibilities

- **A strong bureaucracy**

Final considerations

Italy = a country of strong contrasts and contradictions:

- Abandoned forests vs. profitable plantations
- Non competitive timber production vs. advanced NWFP marketing
- Low domestic supply of ind. wood vs. export of finished products
- Outdated institutions/ dynamic civil society