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NWFPs MARKETING: SOME EXPERIENCES FROM THE MEDITERRANEAN AREA

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Paper organization

- The driving forces
- The outcome
- Two case studies:
  - chestnut
  - truffles
    - Production chain
    - New management and marketing instruments
- Final remarks

Driving forces

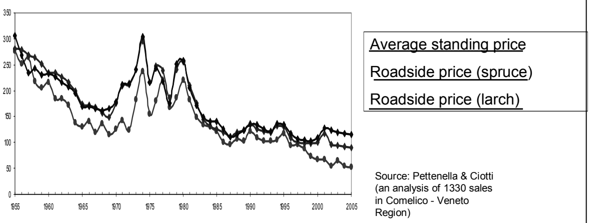
NWFPs development in Mediterranean area: **three driving forces**:

1. The collapse of profitability of the timber production
2. High population density: high urban demand for “natural food” and “green products”
3. Regional development policies

1. The collapse of the timber economy

Average real prices (standing tree) of conifer industrial roundwood in the Southern Alpine Region (1955-2005)

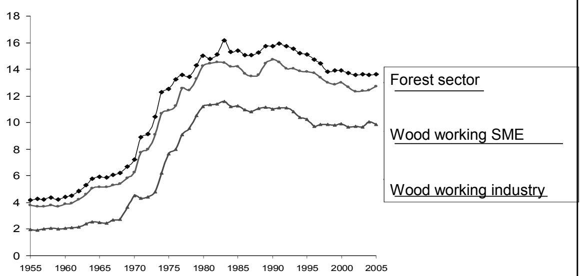
-82% standing prices (from **276** to **52** Euro/mc)
-68% spruce roundwood on the road side (from **282** to **90** Euro/mc)
-62,6% larch roundwood on the road side (from **306** to **114** Euro/mc)



Source: Pettenella & Ciotti (an analysis of 1330 sales in Comelico - Veneto Region)

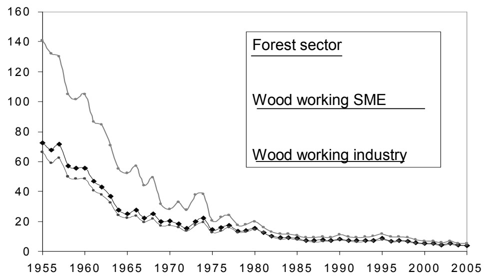
Labour costs (1995-2005)

+400% in the forest sector (from **1.97** to **9.87** Euro/h)
+232% in the wood working SME (craftsman) (from **3.82** to **12.69** Euro/h)
+227% in the wood working industrial sector (from **4.16** to **13.61** Euro/h)



Value (at market prices) of 1 cm of wood =

- **from 141 to a 5.3 hours of a forest worker**
- from 66.4 to 3.8 hours of a wood working SME
- from 72.3 to 4.1 hours in the wood working industry



2. An increased demand for 'natural' food and 'green' products

Some examples of "specialty" food products and drinks:

- Berries (fresh, frozen) for yogurt, ice-cream and juices
- Chestnut and marrons (fresh, dried, flour) for cakes and jams
- Mushrooms (dried, fresh) and truffles cooked with meat, rice, … or used for sauces
- Aromatic and medicinal herbs
- …

"Mediterranean diet"

ItalianSpanish/French traditional quality cooking

Organic products, natural cosmetics, cosmeto-food, aromo therapy, bio-architecture, …

"... leather processed with natural products and without the use of synthetic chemicals ..."

3. Rural development policies

- **CAP reform**: Agenda 2000 and Rural Development Programmes = diversification of rural activities and new sources of income (non-food production)
- **Other policies**: management of rural landscape, tourism development, culture heritage protection, …

In many Mediterranean countries: a strong link between

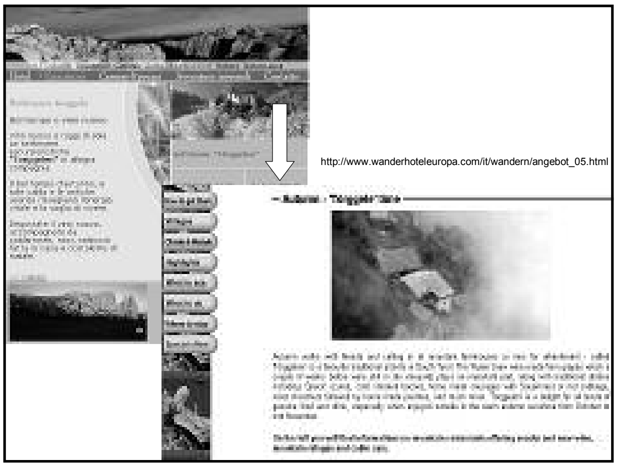
NWFPs marketing policies ⟺ Tourism, recreation and landscape protection policies

Leader EC project approach

Törggelen holydays: few days- one week holidays (normally for aged persons) based on

- roasted chestnut +
- walnut
- new red wine tasting +
- speck and the meat

organized in South Tyrol



The outcome

= NWFPs in Mediterranean areas have positive trends in supply and demand and an increasing economic importance in rural development

"*International trade increased significantly for natural cork, mosses and lichens for bouquets, truffles, mushrooms, chestnuts, bamboo, palm hearts and maple syrup. Interestingly, these NWFPs originate mainly from, and are traded among developed countries. Also, these commodities are processed locally into semi-finished products with raising unit prices. Of particular interest is the fast increasing value of trade in "specialty" food products (…) Specialty foods are among the fastest growing segment in the food catering business and several edible NWFP are ideally fit for niche marketing, such as pine nuts, bamboo shoots or wild edible mushrooms. The reduction (and/or elimination) of import tariffs, increasingly globally applicable (food) quality standards and changing consumer (food) preferences are creating global markets for products which previously were only locally available*" (Vantomme, FAO, 2005)

Average values of benefits from Mediterranean forest areas (Euro/ha/year)

	Wood	NWFP	Grazing	Recreation	Hunting	Total	TEV
- Southern	12	4	32	n.a.	-	46	67
- Eastern	22	5	10	1	1	40	48
- Northern	67	16	10	32	3	125	176
Total Mediter.	**47**	**12**	**13**	**21**	**2**	**95**	**133**
%	↓49.5	↑ 12.6	↓13.7	↑ 22.1	2.1	100	-
%	35.3	9.0	9.8	15.8	1.5	71.4	100

Merlo and Croitoru, 2005, p.62

Mediterranean NWFPs

13,000 endemic plant species, 250 arborescent species (150 endemic)

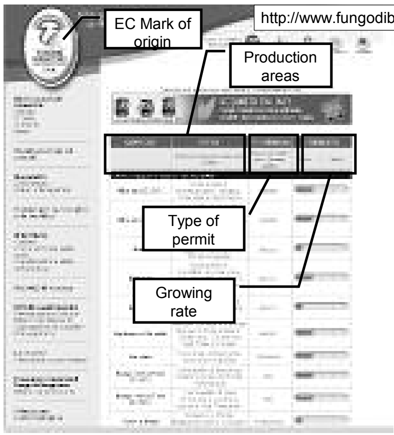
Global import values of key NWFPs for 1992 and 2002 (in USD 1000)

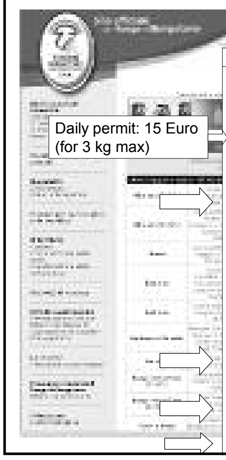
Source: Comtrade data (www.unsd.org/comtrade)

Commodity description	1992	2002
Mosses and lichens for bouquets, ornamental purposes	9 352	25 476
Truffles, fresh or chilled	4 201	23 656
Mushrooms other than *Agaricus*, fresh or chilled	n.a.	364 412
Mushrooms (excl. 071331/33) & truffles, dried	n.a.	219 458
Truffles, prepared or preserved, not in vinegar	3 049	11 012
Brazil nuts, fresh or dried	44 344	59 848
Chestnuts, fresh or dried	109 958	184 663
Acorns and horse-chestnuts for animal feed	1 216	7 380*
Shea nuts (karite nuts)	5 155	5 136*
Liquorice roots	33 455	24 310
Ginseng roots	389 345	221 435
Plants & parts, pharmacy, perfume, insecticide use nes	689 926	777 980
Locust beans, locust seeds	22 395	40 239
Lac	25 286	25 653
Gum Arabic	101 312	105 510
Natural gum, resin, gum-resin, balsam, not gum arabic	92 755	96 535
Balata, gutta-percha, guayule, chicle and similar gums	26 726	13 605
Pyrethrum, roots containing rotenone, extracts	27 865	26 173*
Bamboos used primarily for plaiting	37 562	50 054
Rattan used primarily for plaiting	118 987	51 327
Kapok	11 920	2 826*
Maple sugar and maple syrup	43 632	116 202
Palm hearts, otherwise prepared or preserved	16 082	67 514
Quebracho tanning extract	51 938	45 173
Wattle tanning extract	63 877	34 168
Oak or chestnut extract	8 653	917*
Natural cork, raw or simply prepared	7 874	110 702
Abaca fibre, raw (*Musa textilis*)	15 221	20 374

A revealing indicator**: the rising concern of forest owners in protecting their property rights**

Nuts, mushrooms and truffles in many Mediterranean countries are not any more public goods, like 15-20 years ago





http://www.fungodiborgotaro.com/default.htm

>> **TESSERINO VERDE**

Comunalie di Gotra, Buzzò, Albareto, Boschetto, Groppo, Tombeto e Montegroppo in Comune di Albareto.

Verranno rilasciati tesserini di colore verde con le seguenti caratteristiche:

* giornaliero (valido per il giorno indicato nel tesserino) :

costo: Euro 15,00 per i non residenti in Comune di Albareto; Euro 6,00 per i residenti nel Comune di Albareto nonché per i proprietari, ed affittuari con contratto almeno annuale, di seconde case nelle frazioni delle Comunalie ;

* semestrale (valido comunque non oltre il 15.11.2003):

costo: Euro 150,00 per i non residenti nei Comuni di Albareto Euro 67,00 per i residenti nel Comune di Albereto nonché per i proprietari, ed affittuari con contratto almeno annuale, di seconde case nelle frazioni delle Comunalie

Modalità di accesso: i tesserini saranno vidimati , nel punto di vendita, con il timbro della Comunalia di accesso, da personale incaricato dal Consiglio di Amministrazione.

Tale tesserino darà diritto all'accesso ad un'unica Comunalia, pur consentendo di percorrere a piedi e di esercitare la raccolta nel territorio di tutte le Comunalie facenti parte dell'area B) .

In considerazione dell'antica consuetudine di reciprocità fra le Comunalie confinanti di S.Vincenzo-Rovinaglia in Comune di Borgotaro e Gotra, Buzzò e Albareto in Comune di Albareto è consentito agli utenti lo sconfinamento;

Per evitare un eccesso di carico giornaliero di cercatori con effetti negativi sulla capacità di rigenerazione dell'ecosistema, viene stabilito un numero massimo giornaliero di persone a cui consentire l'accesso come a seguito specificato:

Comunalie di Gotra e Buzzò n.100
Comunalia di Albareto n.700
Comunalie di Boschetto e Tombeto n.120
Comunalia di Groppo n.100
Comunalia di Montegroppo n.200

Giorni e orario di raccolta : martedì, sabato e domenica; la raccolta può essere effettuata a partire da un'ora prima della levata del sole, mentre l'uscita dall'area B) deve avvenire entro e non oltre le ore 15.

Quantitativi: non oltre 3 Kg .

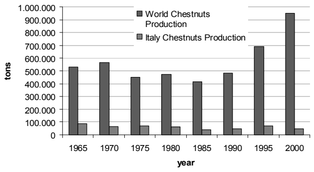
Two case studies

(two successful stories)

- Chestnut
- Truffles

A. Chestnut

- Decline of production (700 000 t beginning of 20th Century to 63 200 in 2000):
  - urbanisation processes and loss of traditional uses,
  - diseases



- 209 000 ha for chestnut production
- Varieties "Marrone" and "Chestnut"
- Regions: Campania 51%, Calabria 12%, Lazio 11%, Piemonte 9%, Toscana 7%

Chestnut – Marketing Characteristics

Positive	Negative
- good nutrient values - different final uses - high added value products through processing - easy storage (refrigeration) - various by-products (honey, mushrooms)	- Difficulties in obtaining a nut clean and of homogeneous size - Production variability - Fresh nuts quality maintenance problems - Fungal infection and insect attach to fresh fruits, weevil damage during storage and later - high harvesting costs and highly concentrated labour requirements

Chestnut – Production chain

- Low degree of mechanisation (aspirators, tree shakers), collection by hands or with nets
- 89 000 agricultural enterprises (76 000 ha orchards)

Distribution of consumption of chestnuts (Bellini, 2003)

	Chestnut	Marrons
Peeled, for animal feeding and other uses	5 %	< 5 %
Self consumption	5 %	10 - 15 %
Internal markets (fresh consumption)	**40 %**	20 - 30 %
Processing industry	10 %	**35 - 40 %**
Dried	10 %	
Export	30 %	15 - 20 %

Chestnut – Policy & Research

- Large incentives for restoration of chestnut orchards (financial support by Regional authorities)

- Access:
  - Private orchards, public access is forbidden
  - Gathering of wild chestnuts is allowed
- Research:
  - diseases, cultivation, graft and crown care
  - recovering of old chestnut orchards and transformation of chestnut coppice
  - harvest techniques

Chestnut – Marketing

marron from Castel del Rio, marron from Mugello, chestnut from Monte Amiata, chestnut from Montella

- Certification under EU regulations
  - Registration of Protected Designation of Origin (PDO) (Reg. 2081/92)
  - Protected Geographical Indication (PGI)
  - Traditional Speciality Guaranteed (TSG) (Reg. 2082/92)
  - Organic production (Reg. 2092/91 and IFOAM)

Marron from Mugello-Fano in Garfagnana

Chestnut – Marketing

- **Networking and promotion, e.g.** Association of valorisation of chestnut (www.marrone.net): → fairs, exibitions, museums, …

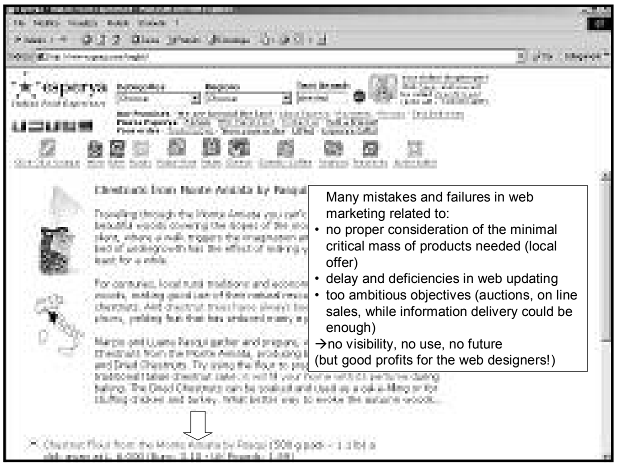
- Network of local municipalities (the Italian *Associazione Nazionale Città del Castagno*)

CASTAGNO ASSOCIAZIONE NAZIONALE CITTÀ DEL CASTAGNO NEWS

- *Strada del Castagno* (the Chestnut Road) in Tuscany (agri-tourism activities); similar initiative in Trentino

New selling systems

- Direct sales: “**Pick-up your chestnuts**”: selling directly to the consumers the right to collect chestnut (and making a pick-nick) for a fixed rate or in relation to the weight of collected fruits
- **e-business**:
  - B2B: fresh chestnuts, semi-finished products, …
  - B2C: jams, dried nuts,…



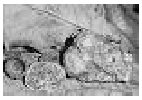
Many mistakes and failures in web marketing related to:
- no proper consideration of the minimal critical mass of products needed (local offer)
- delay and deficiencies in web updating
- too ambitious objectives (auctions, on line sales, while information delivery could be enough)

→no visibility, no use, no future
(but good profits for the web designers!)

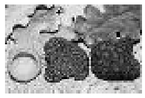
Lessons learned

- Vertical integration to sell the high AV products
- Direct sales to increase forest owners profits → investment in orchards amelioration
  → protection of property rights
- Public authorities: external support in promotion, technical assistance to forest owners

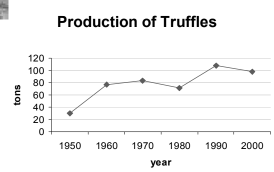
B. Truffles



White Truffle



Black Truffle

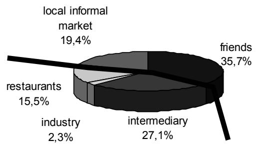


- Value: 400 Million €
- Regions: Piemonte, Umbria, Abruzzo, Marche, and Emilia-Romagna
- Large amounts sold unofficially

Truffles – Product Chain

- 200,000 truffle collectors in Italy
  - 16% members of associations
  - 78% > 50 years old with long family traditions
  - hobby, additional or entirely income
  - time consuming (up to 200 days, 4 hours per day)

Distribution of end-users of truffles in Toscana



(Marone and Mazzei, 1996)

Truffles – Product Chain

- around 40 middle men and companies (one – the Urbani company - is controlling 75% of world market)
- export to central and northern Europe and United States
- prices depend on:
  - truffle species (950 €/ kg black truffles, up to 3000 €/kg white truffles)
  - origin (e.g. high prices in Piedmont)
  - season
  - place in the market chain

Truffles – Policy framework

- National frame law about the truffles collection, cultivation and marketing (NL 752/1985)
  → responsibility is delegated to the Regions
- Law defines 3 different productive areas:
  - non cultivated areas
  - cultivated forests (forests with improvement for truffle production)
  - plantations for truffle production (forests planted with mycorrhized trees)
- Experts check these areas for the local authorities
- Agreements between collectors association and forest owners (e.g. Tuscany)
- Licence for truffle collectors

Truffles – Policy instruments & Research

- Certification: “Traditional products” (Reg. 2082/92)
- Networks:
  - National Association “Towns of Truffles”
- Research:
  - Mycorrhysation techniques
  - Cultivation (soil-water-species)
  - Production enhancement (seedlings quality standards)

Truffles – Fields of Innovation

- nursery/plantation (certification system to assure mycorrhization)
- mark of origin (no official trademark for truffels from Italy)
- distribution (e-commerce)

Lessons learned: territorial marketing

Willingness to cooperate among private operators

Private/public partnership in promotion

We sell the product, but also the associated history, monuments, events, farm tourism, …

(http://www.umbriadoc.com/eng/prodottotipico/generale/prodottotipicodoc_tartufo.htm)

Final remarks

- No room for competition in the mass market (Albanian aromatic herbs, Irish foliage, Danish Christmas trees, Finnish frozen or Croatian fresh mushrooms have too low prices!)
- Niches products development: high AV specialty food (strong links with the territory and the local history/culture)
- Synergies with other products/services (tourism, recreation), i.e. with other economic operators: human capital and partnership are key factors