



incredible

Innovation Networks for Cork, Resins & Edibles
in the Mediterranean basin

**Policy Forum “Untapping the potential of
non-wood forest products for Europe's
green economy”**

#NWFPpolicy
www.incredibleforest.net

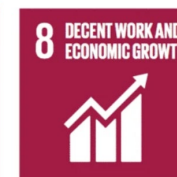
16th - 17th March 2021
Online event

**Competitive and equitable WFP value chains,
challenges and opportunities**

Davide Pettenella, Nicola Andrighetto & Enrico Vidale
University of Padova - Italy

Outline

- Definition and characteristics of WFP value chains
- Development paths in WFP value chain organization
 - a. Self-consumption
 - b. Local economy (stabilized and transitional)
 - c. Global Value Chains
 - d. Service-based value chain
- One final remarks



Outline

- **Definition and characteristics of WFP value chain**
- Development paths in WFP value chain organization
 - a. Self-consumption
 - b. Local economy (stabilized and transitional)
 - c. Global Value Chains
 - d. Service-based value chain
- One final remarks

Definition of value chain (from Kaplinsky and Morris, 2000 modif.)

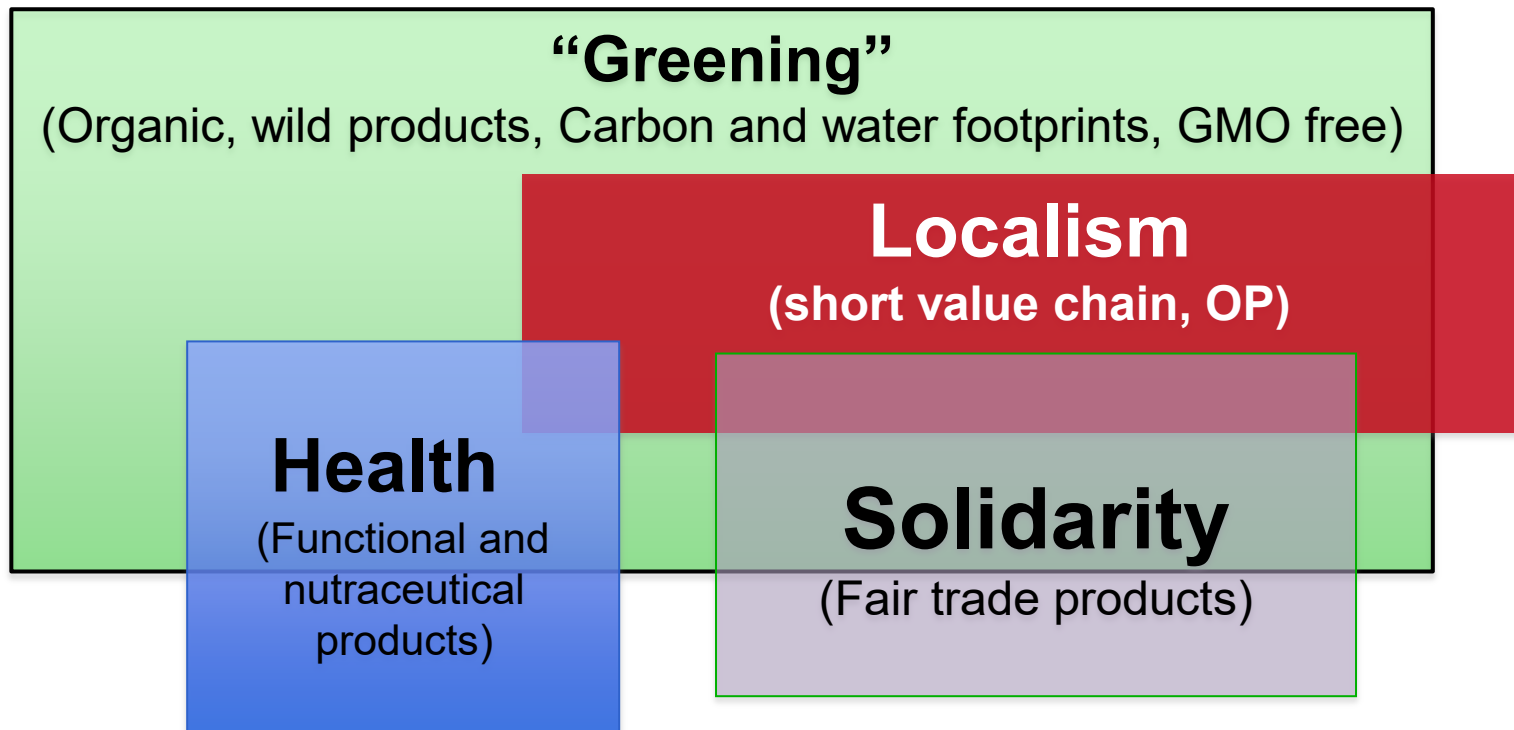
The *value chain* describes the full range of activities which are required to bring **a product or service from production**, through the different phases of harvesting, processing, delivery **to final consumers**, and final disposal after use.

Characteristics of WFP value chains

- The first step in the value chain (i.e., the **design**) is missed: Nature is designing WFP! (take it as a competitive advantage – wilderness – not as a limitation!)
- **Very diversified** value chain typologies
- Frequently Wild Forest Products are commodities associated to **regulatory and cultural services** (biodiversity protection, landscape conservation, recreation, tourism, ...)
- Special final **consumers** (in Europe)

LOHAS (Lifestyle Of Health And Sustainability) consumers:

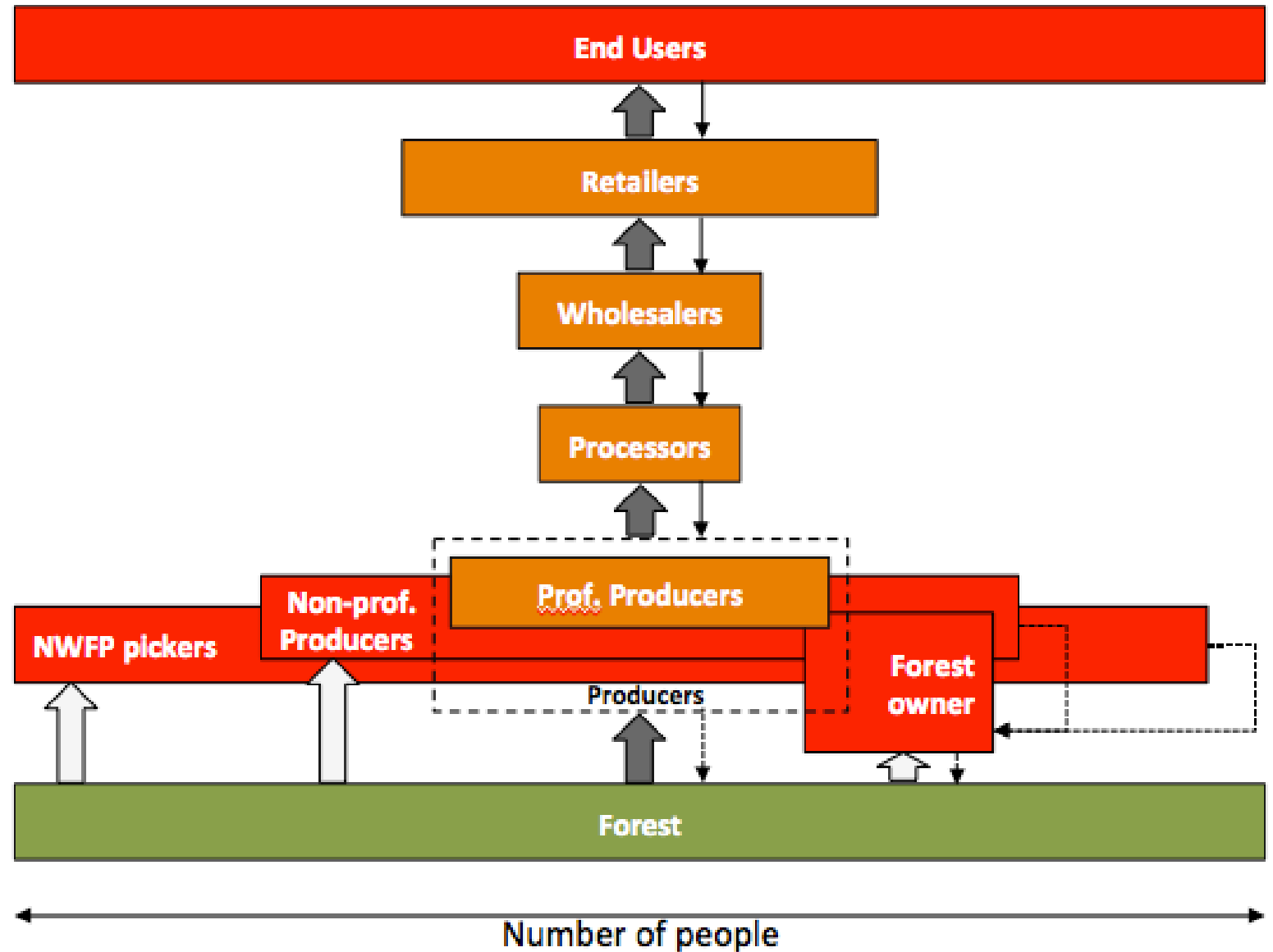
4 reference values

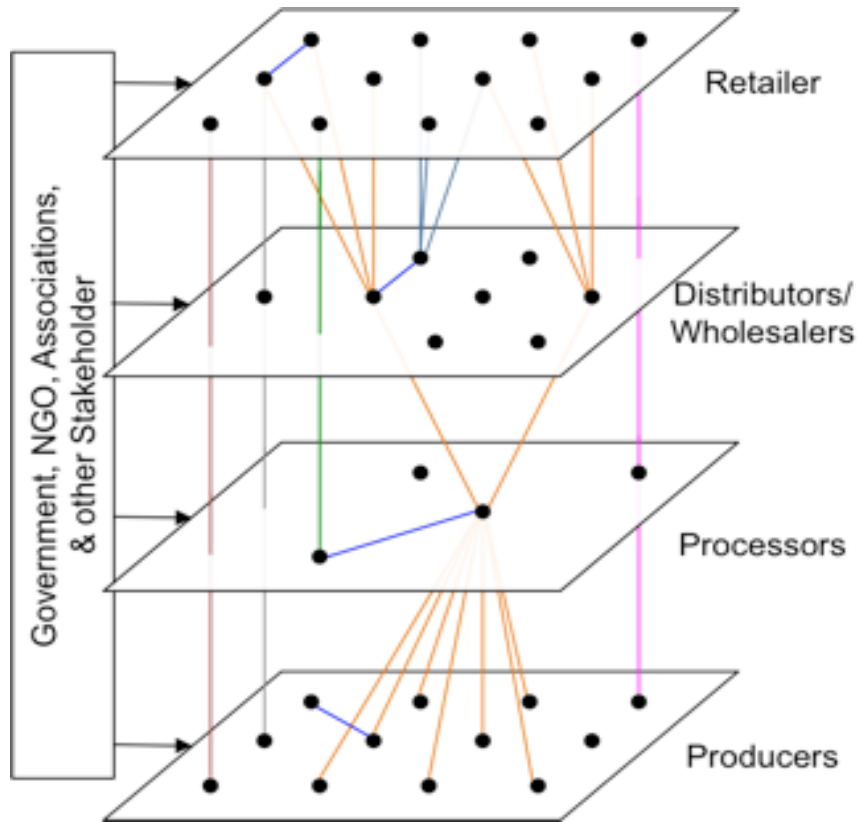


Why to work on supply chain?

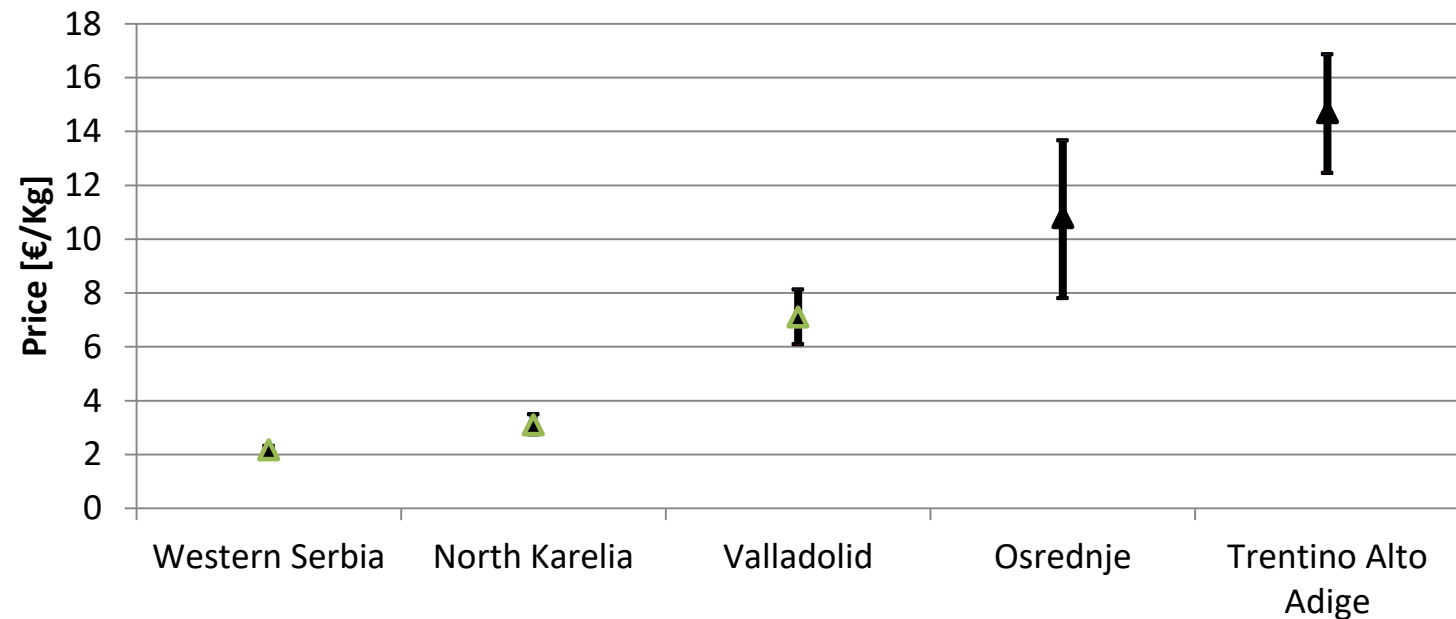
- **Positive analysis:** understanding the structure and dynamics of value chains, the distribution of revenues, the employment impacts in each link, the identification of activities subject to increasing/declining returns

The hourglass structure





Boletus mushroom pickers' selling prices



Source: Videle and Pettenella – StarTree project

Source: Gereffi *et al.* (2005) and Harland (1996), modified. Small arrows indicated the information flow for the price definition; large arrows define the information and power flow on the formation of the final product.

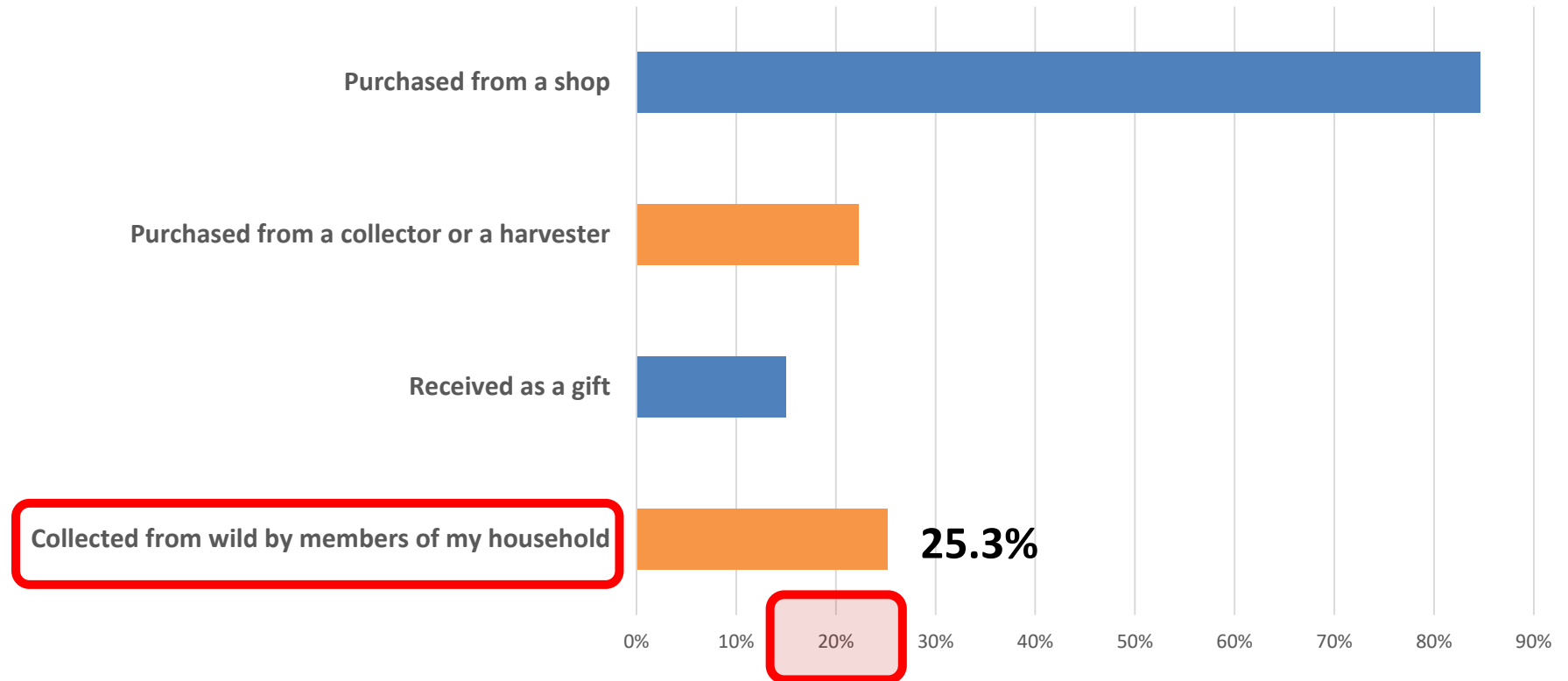
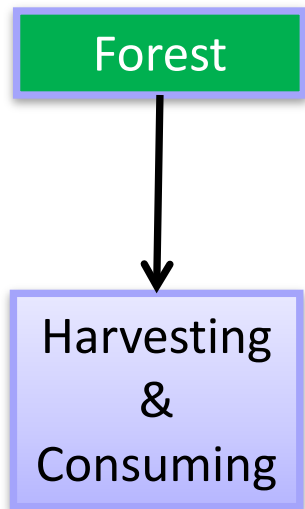
Why to work on supply chain?

- **Positive analysis:** understanding the structure and dynamics of value chains, the distribution of revenues, the employment impacts in each link, the identification of activities subject to increasing/declining returns
- **Normative analysis:** to identify new lines of action
 - For the policy makers: appropriate policy response
 - For the operators: investments, quality assurance: tracking corporate commitments to reducing costs and negative impacts in production and marketing

Outline

- Definition and characteristics of WFP value chains
- **Development paths in WFP value chain organization**
 - a. Self-consumption
 - b. Local economy (stabilized and transitional)
 - c. Global Value Chains
 - d. Service-based value chain
- One final remarks

Development paths in WFP value chain organization



a. Self consumption

Source: Lovric et al. (2020) (StarTree project)

How were WFP obtained?

Collected from wild by members of my household	25.33%
Received as a gift	15.08%
Purchased from a collector or a harvester	21.78%
Purchased from a shop	81.50%
Other	4.07%

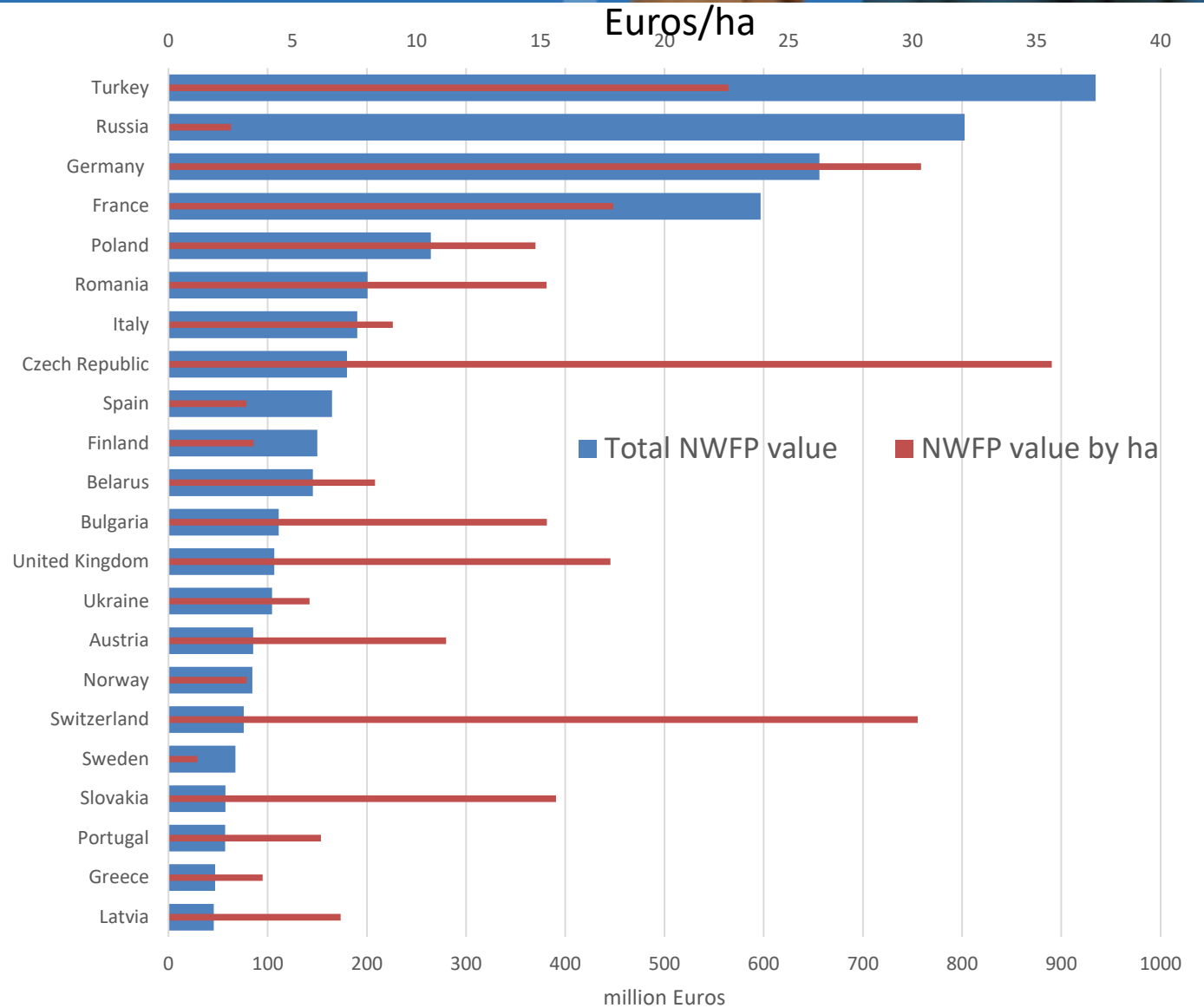
PERCENTAGE OF HH THAT PICK NWFPs

Latvia	67.88%	France	25.21%
Czech Republic	58.56%	Romania	24.17%
Slovenia	53.58%	Turkey	21.85%
Estonia	52.96%	Spain	18.32%
Slovakia	52.47%	Italy	17.35%
Finland	49.87%	Serbia	16.71%
Lithuania	49.58%	Denmark	14.92%
Poland	43.90%	Greece	13.41%
Russia	40.00%	Ireland	11.01%
Bulgaria	37.50%	Portugal	9.98%
Austria	36.65%	Hungary	9.79%
Sweden	34.07%	United Kingdom	8.25%
Croatia	32.43%	Belgium	7.57%
Germany	29.67%	Netherlands	4.33%

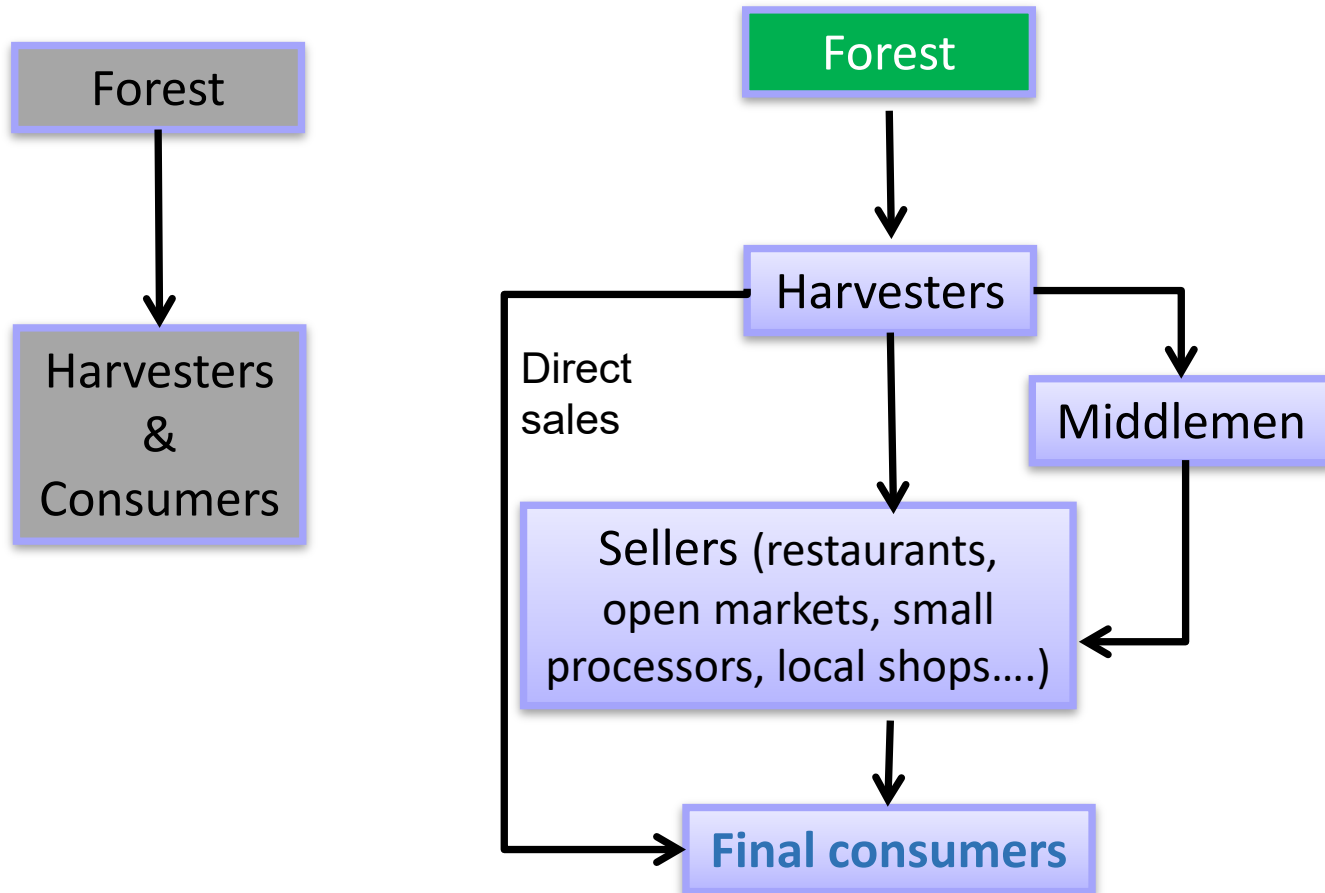
Source: Lovric et al. (2020) (ECOSTAR project)

Value of collected WFP for selected countries in Europe

Source: Lovric et al. (2020) (StarTree project)



Development paths in WFP value chain organization



Fresh products (herbs, berries, wild mushrooms, ...):

- “primitive” value chains: no standards, no labels
- frequent informal economy
- good local (food) traditions
- integrative revenues for rural people
- sometimes very lucrative

a. Self consumption

b. Local economy

uovodiselva

HOME **UOVODISELVA** LE GALLINE IL BOSCO ALIMENTAZIONE IMPATTO ZERO CONSEGNA

FOTO VIDEO

UOVODISELVA



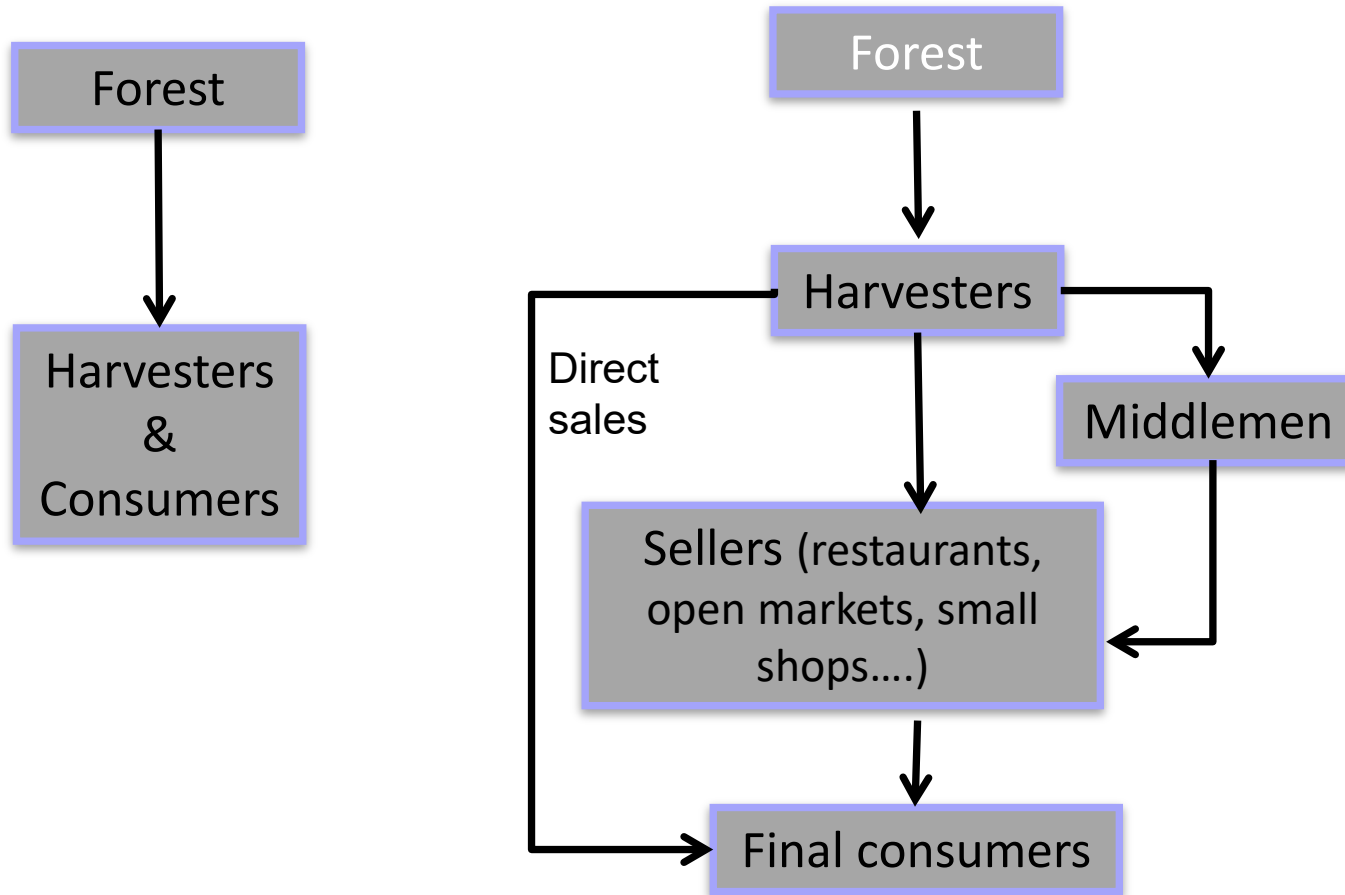
L'uovodiselva è un uovo biologico prodotto in Valtellina, nella Valle del Bitto in un bosco di castagni a 600 metri di altitudine.

«Forest eggs»

<http://www.uovodiselva.it>

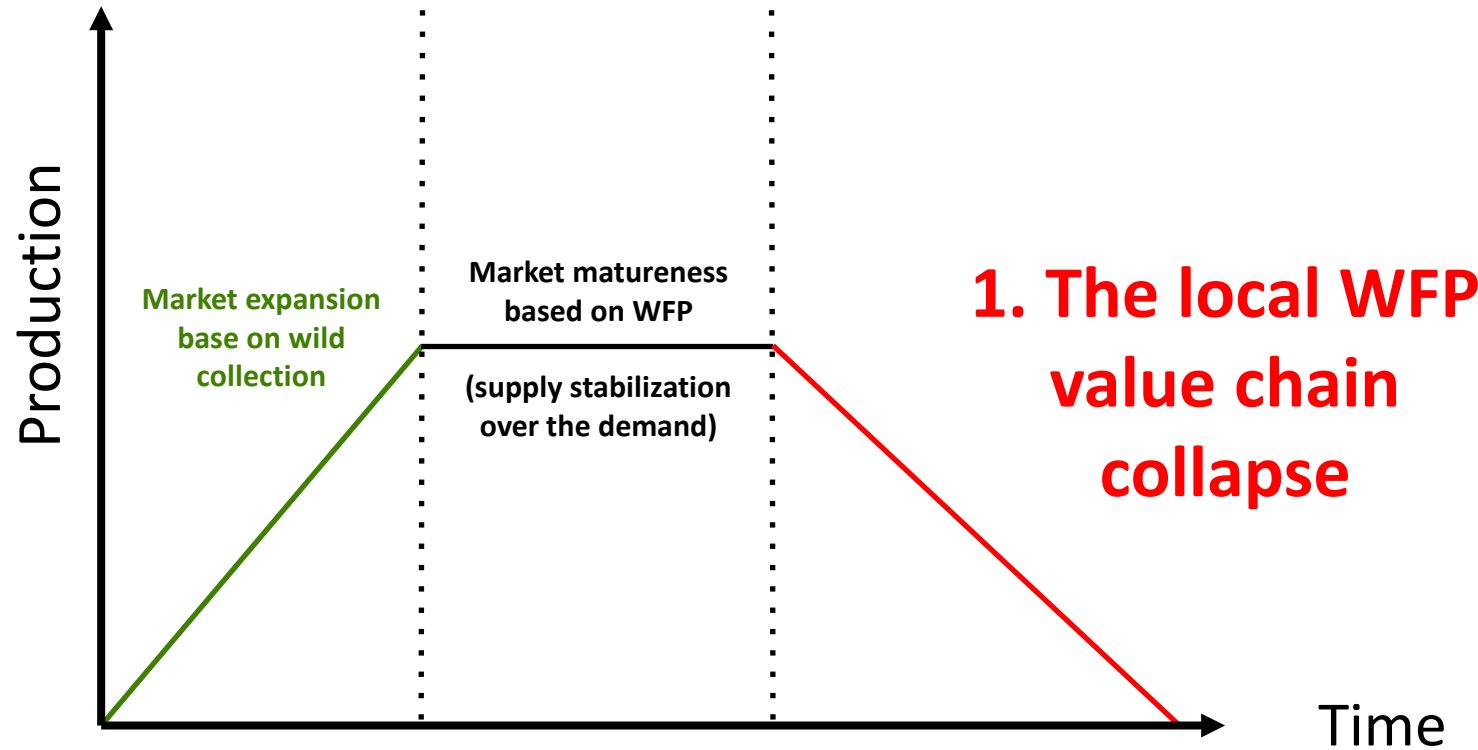


Development paths in WFP value chain organization



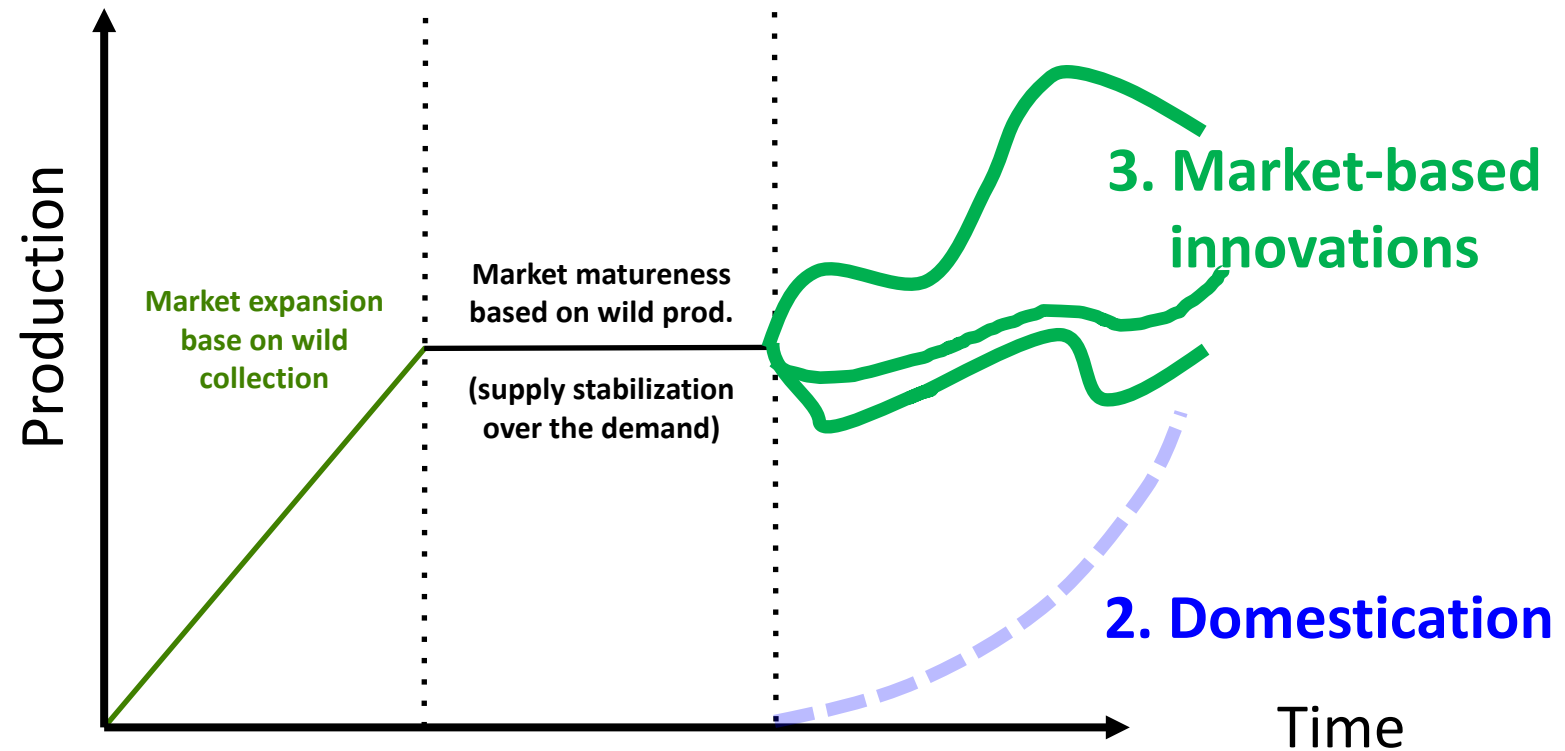
These two models, in their development, can face problems for the **carrying capacity of forest ecosystems** (high level of harvesting can bring to resources exhaustion and WFP scarcity) or for **substitution** with other more competitive products

**WFP value
chain
development:
3 paths
(the Homma's
model modif.)**



Examples: some rare medicinal
and aromatic herbs or (in the
past in Europe) tannin, resin, ...

... but there are
2 alternative paths



2. Domestication: many MAP, hazel nut, many berries, some mushrooms, Christmas trees, ... No more links with the forest environment, but always a source of rural development (farming, agro-forestry systems)

3. Market-based innovations: differentiation, integration, harvesting & processing technologies, standard development, ...

Governance-related solutions: property rights regulations, trade regulations, fiscal measures, R&D, training, ...: **White Paper**

Market-based innovations: differentiation

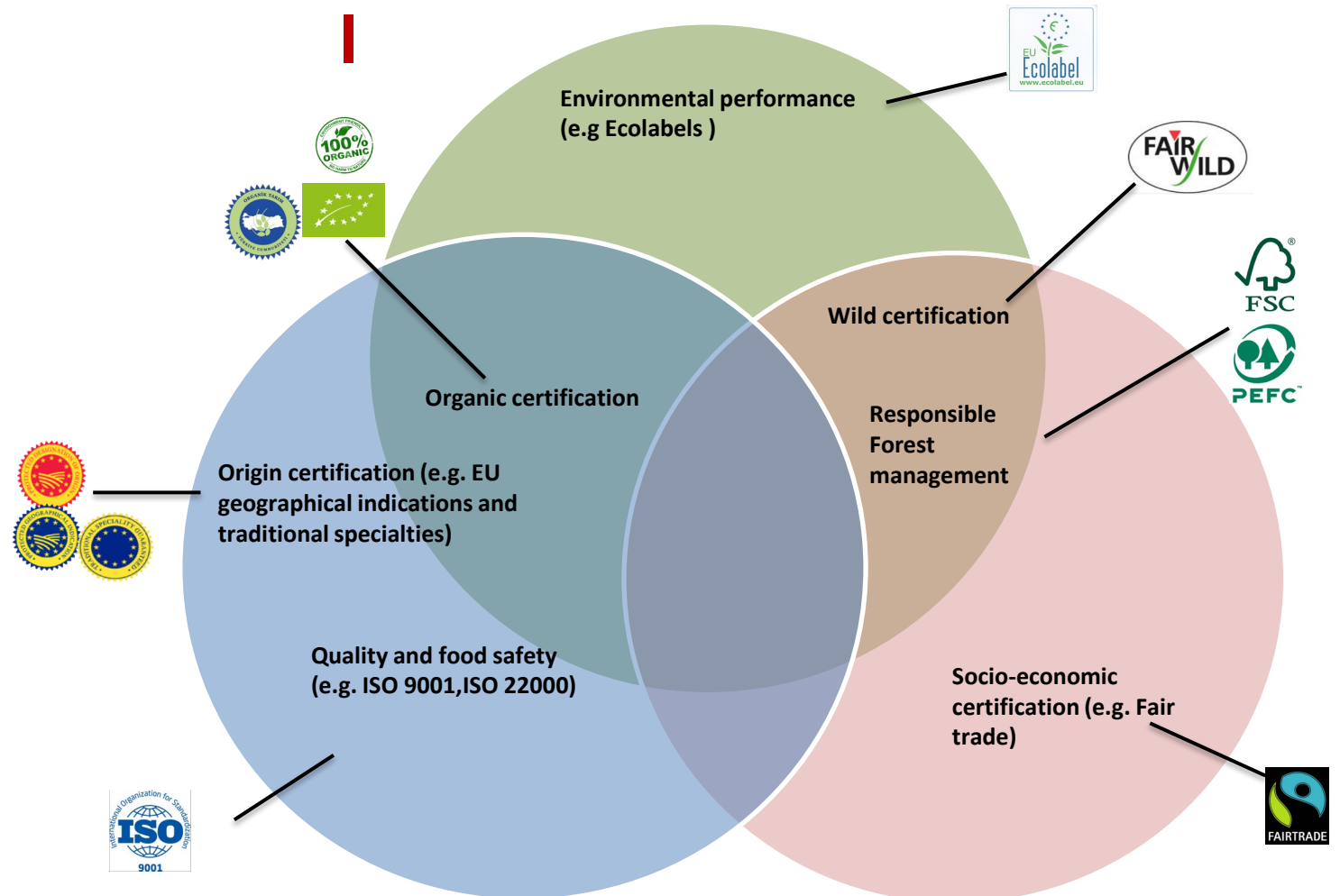
Attributes of origin products (van der Meulen, 2007)



- Territoriality: degree of physical connection with the place of origin;
- Typicity: place-specific peculiarities of the production process and the final product;
- Traditionality: rootedness of an OP's history in its place of origin, including eating culture;
- Communalinity: shared experience and practices, reflected in the presence of multiple producers and their collaboration.

Market-based innovations: differentiation through brand definition, umbrella labels and certification

Environmental/ecologica



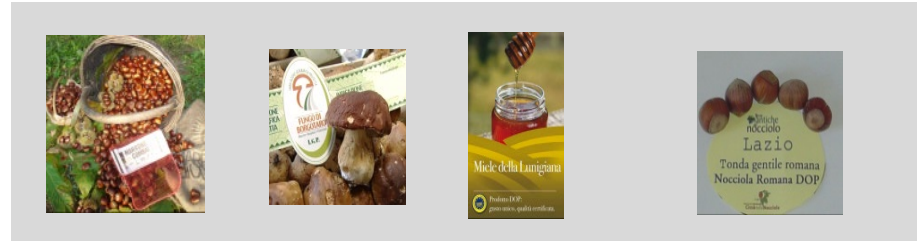
Quality/health

Socio-economic

The 5 main scopes of WFP certification

Origin and traditional specialties certified WCP

Assessment of the origin and the traditional know-how



Wild certified WCP

Assessment of sustainable wild harvesting



Sustainable Forest Management Certified WCP

Assessment of Sustainable Forest Management



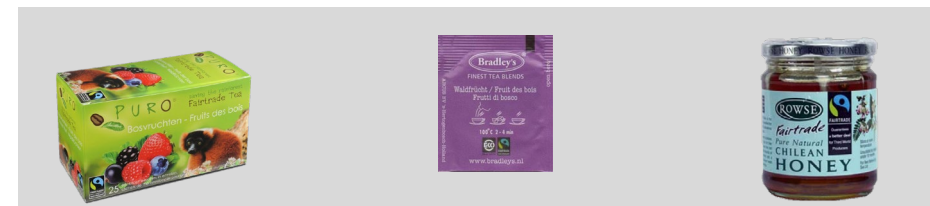
Organic certified WCP

Insurance of organic production (e.g. no use of pesticides, not contaminated areas)



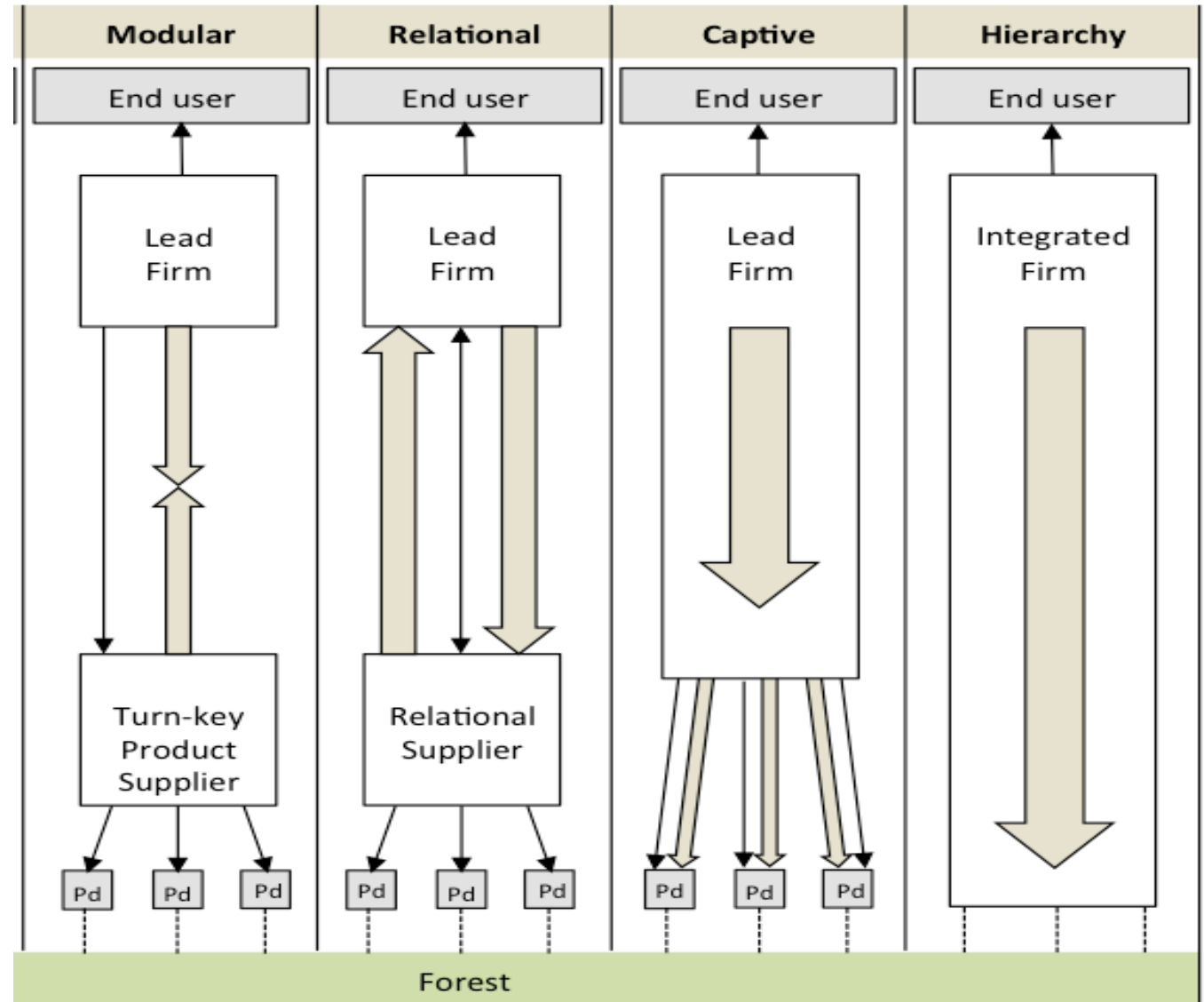
Fair Trade certified WCP

Assurance of fair prices and empowerment of producers



Market-based innovations: integration, collective contract agreements

Source: Vidale and Pettenella
Ecostar project



Market-based innovations: new products or rediscovery of old products



Stone pine new clones



Expanded cork



Resin



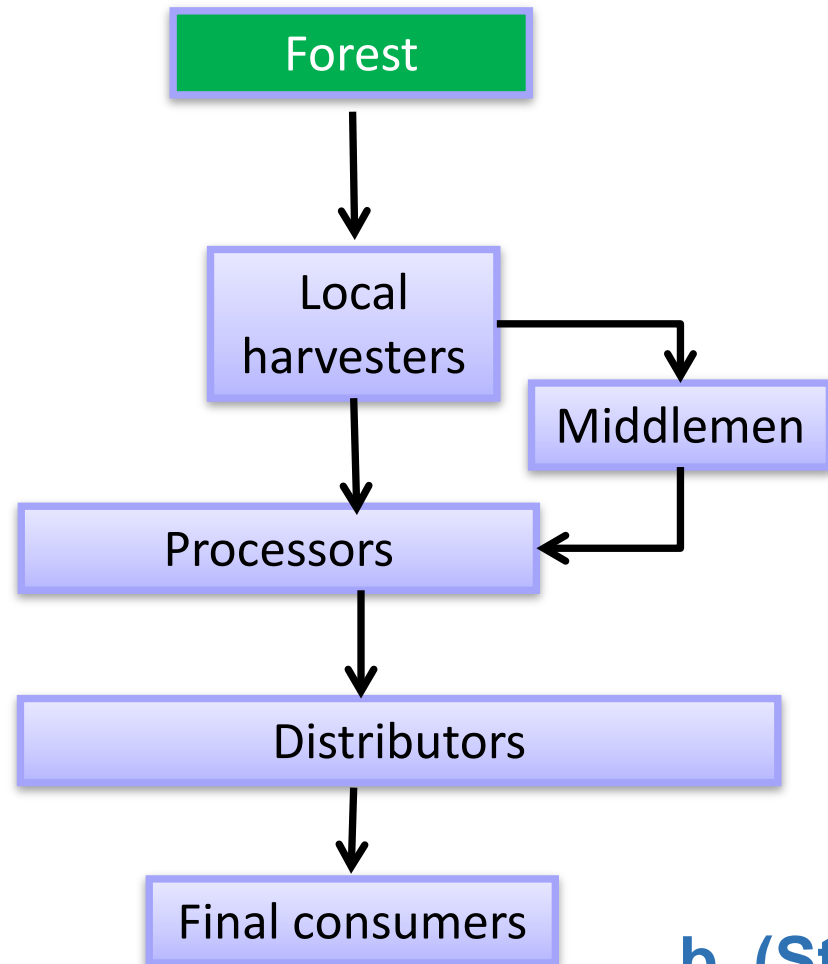
Birch sap

Truffle for cosmetic use



See: repository of <https://.incredibleforest.net>

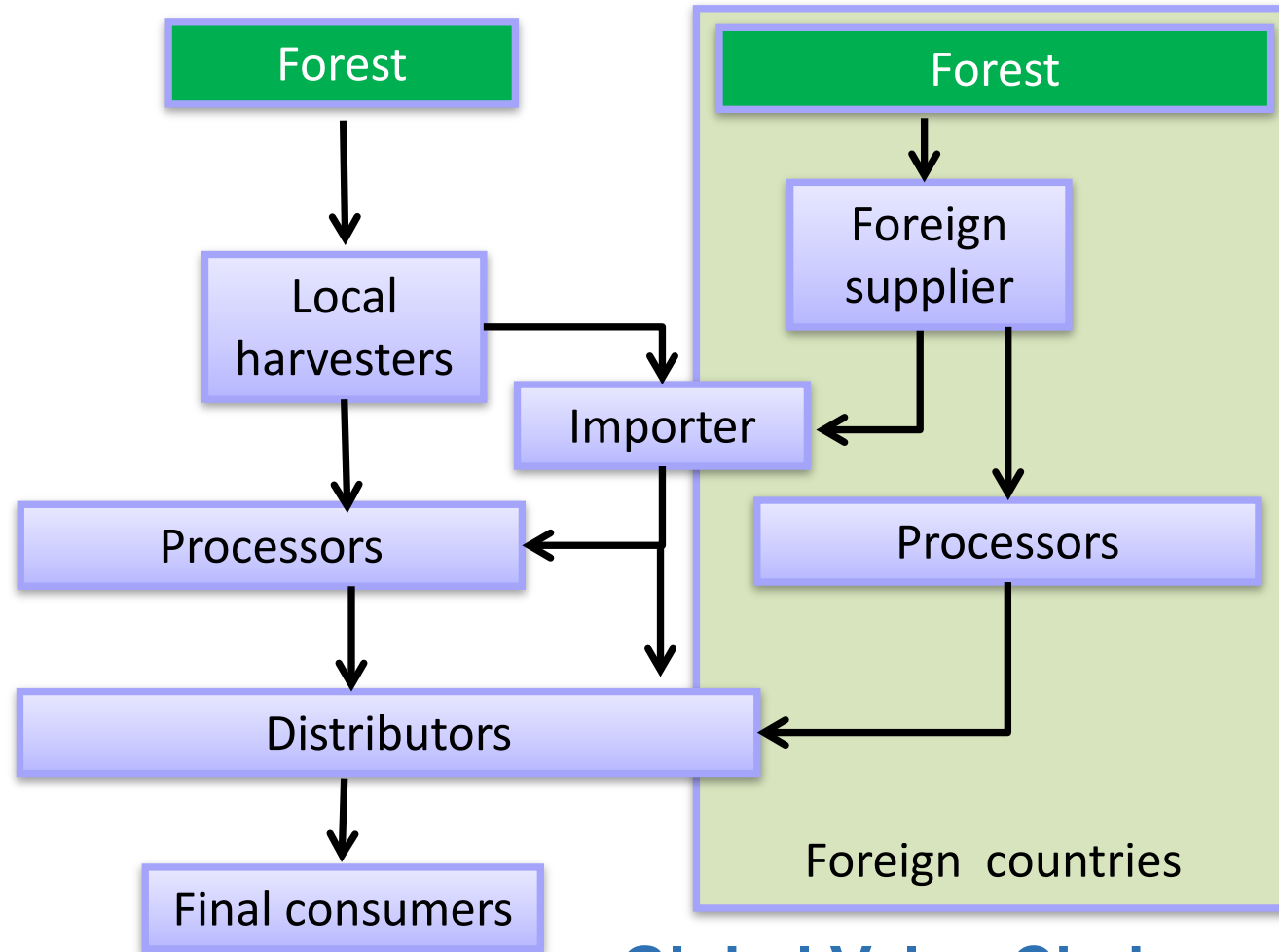
Development paths in WFP value chain organization



When WFP are not site specific neither differentiated, they are much exposed to the process of market globalization
→ **Global Value Chains (GVC)**

b. (Stabilized) local economy

Development paths in WFP value chain organization



c. Global Value Chain

GVCs entail a more efficient international division of labor (trade in parts and components, tasks) based on inter-firm and intra-firm transactions involving customized inputs and relational contracting (International Trade Centre 2011)

Examples: MAP, products for cosmetics, pine nuts, truffles, dried mushrooms, ...

Global Value Chains - Definition

A global value chain or GVC consists of a series of stages involved in producing a product or service that is sold to consumers, with each stage adding value, and with at least two stages being produced in different countries.

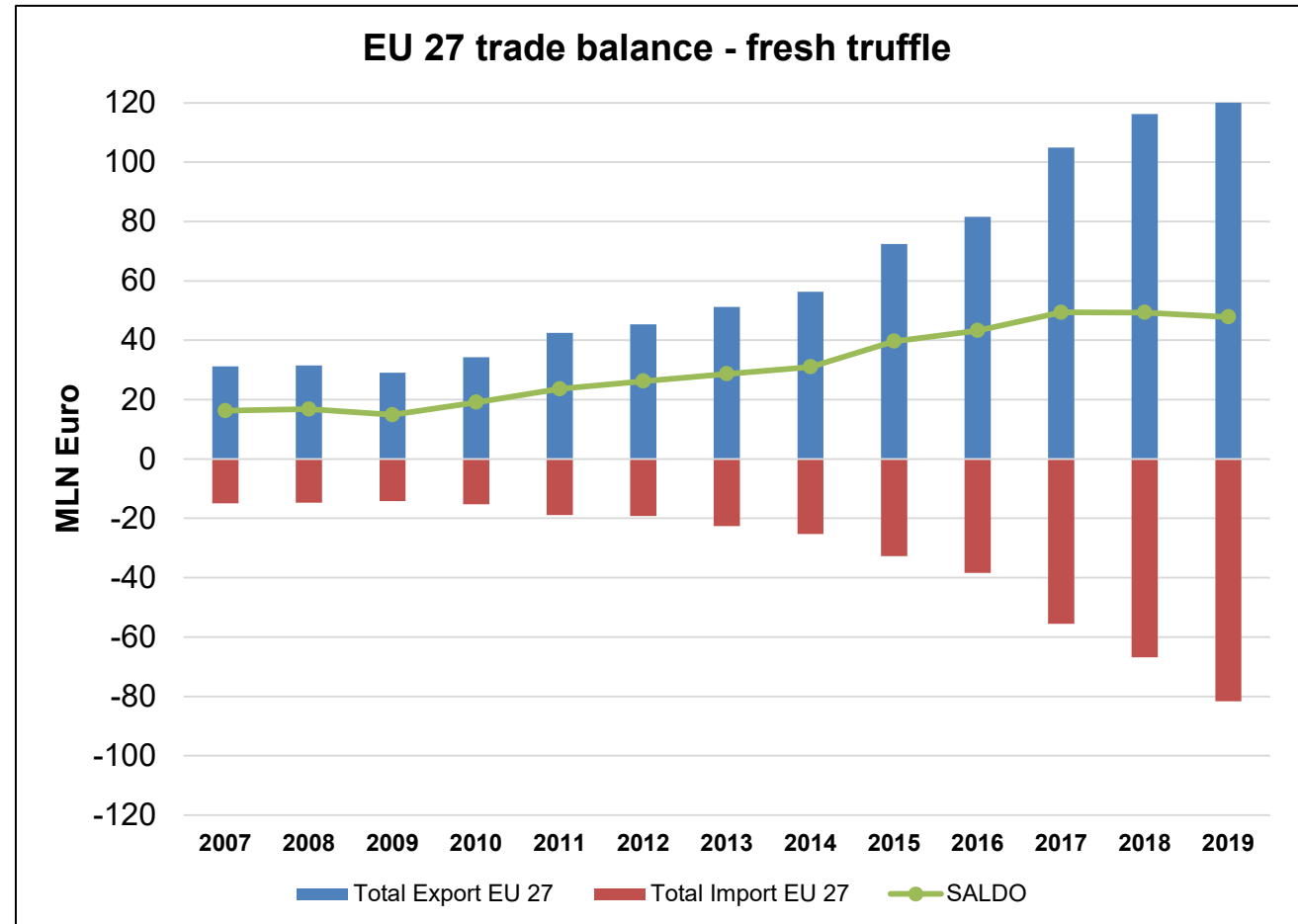
The typical «Made in» labels in manufactured goods have become archaic symbols of an old era.

These days, most goods are «Made in the World»

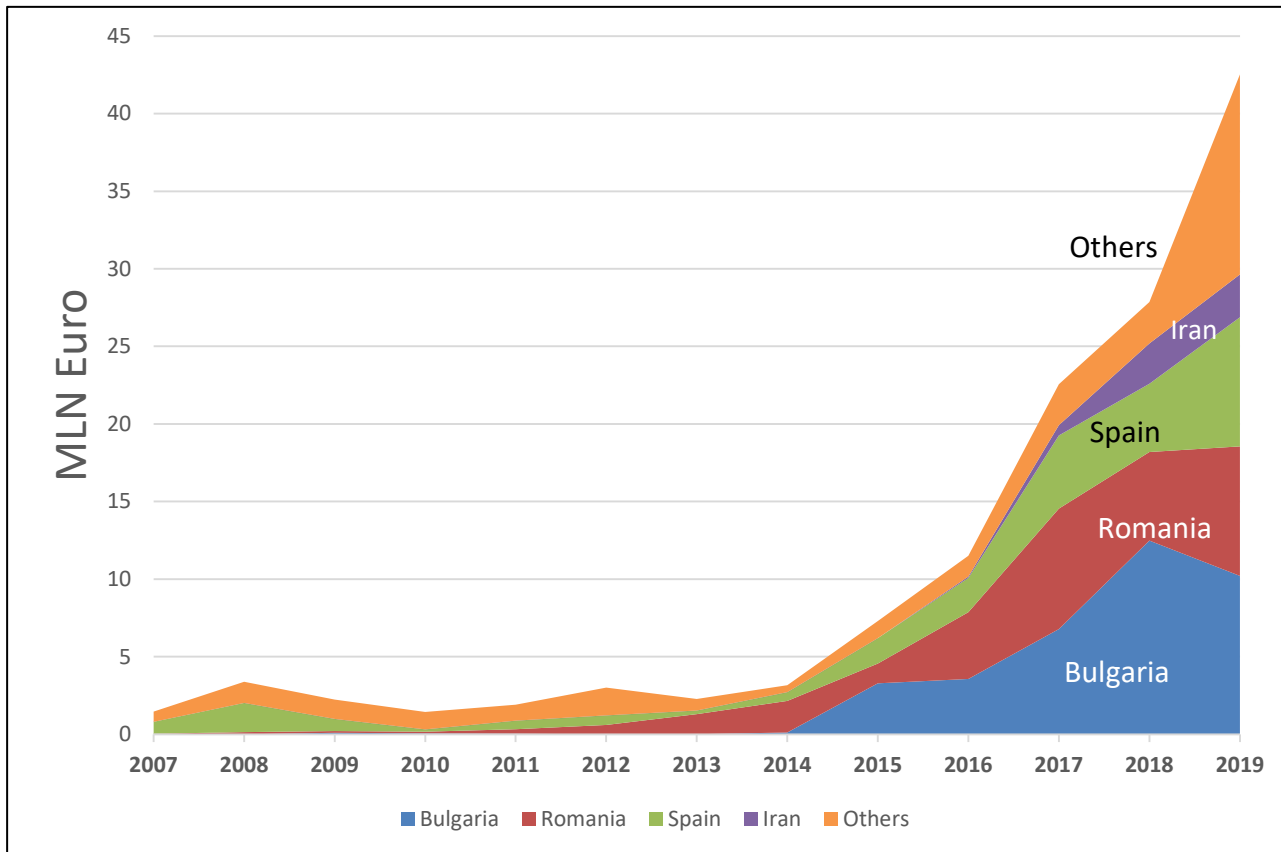
(Pol Antras, 2020)

Market globalization

Truffle trade: trend and data



Truffle trade: Italian import of fresh truffles



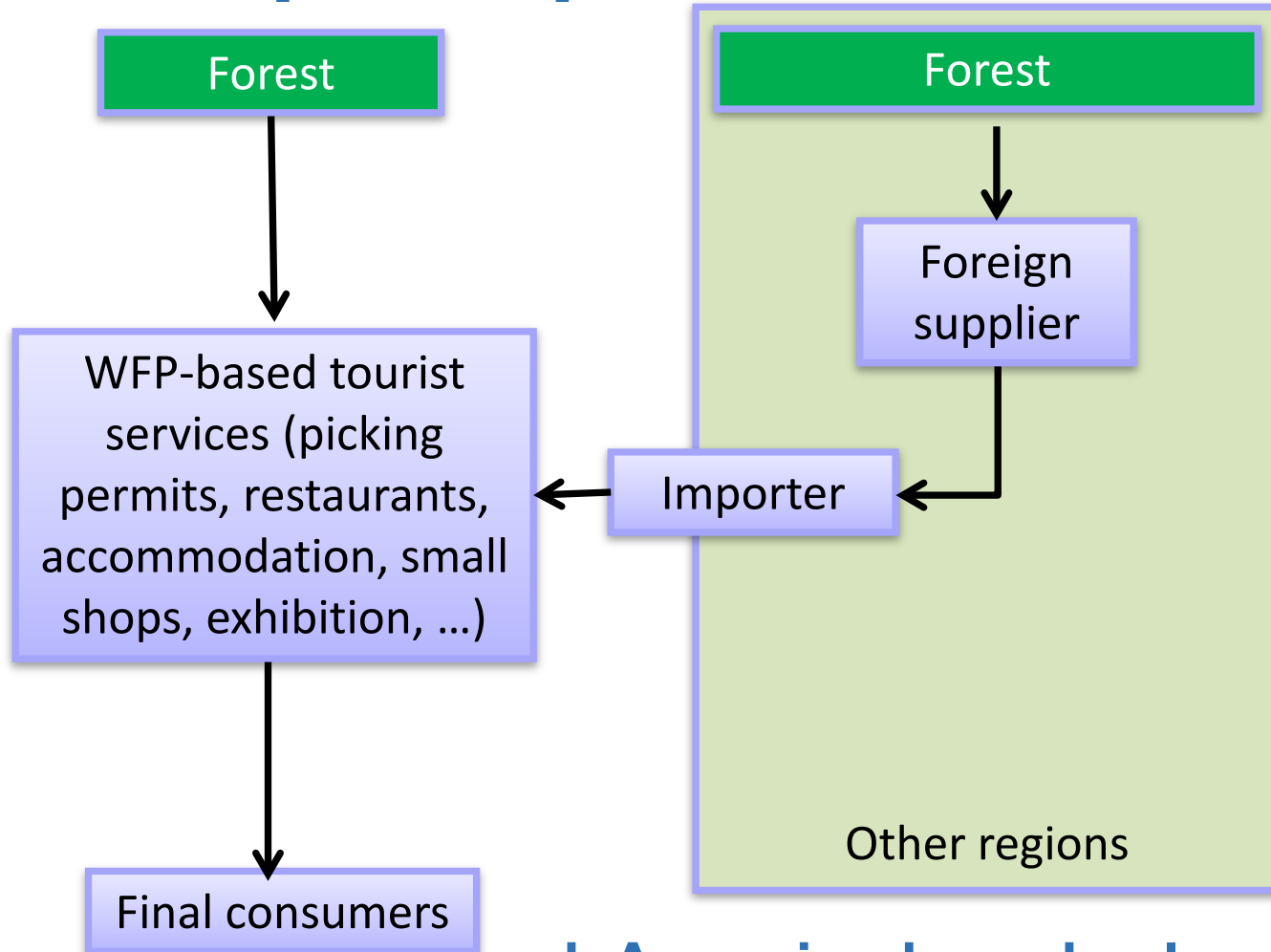
This is what it is declared... however “paperless trade” is at least 8 time higher.

i.e. Italy declared nearly 200 M€ out of 600 M€ of estimated traded value

Impacts of Global Value Chains

- Increasing EU import of WFPs: negative externalities? **embedded forest degradation?** We speak of the “big 5” (meat, palm oil, soybean, coffee, cocoa); should we speak also of the “500 small” WFP?
- The international integration through trade is affecting the **market power of the different operators**, also because logistics, stock keeping and traceability costs can be considerably higher in GVCs → **Uneven revenues distribution** may further increase along the value chain to the benefit of the retailers and processors
- Globalization = standardisation. The appropriation of the premium for **standard compliance** is normally larger by the retailers

Development paths in WFP value chain organization



An exit strategy from GVC: WFP sold as **cultural services** more than as **commodities** (with part of the products coming from outside the region)

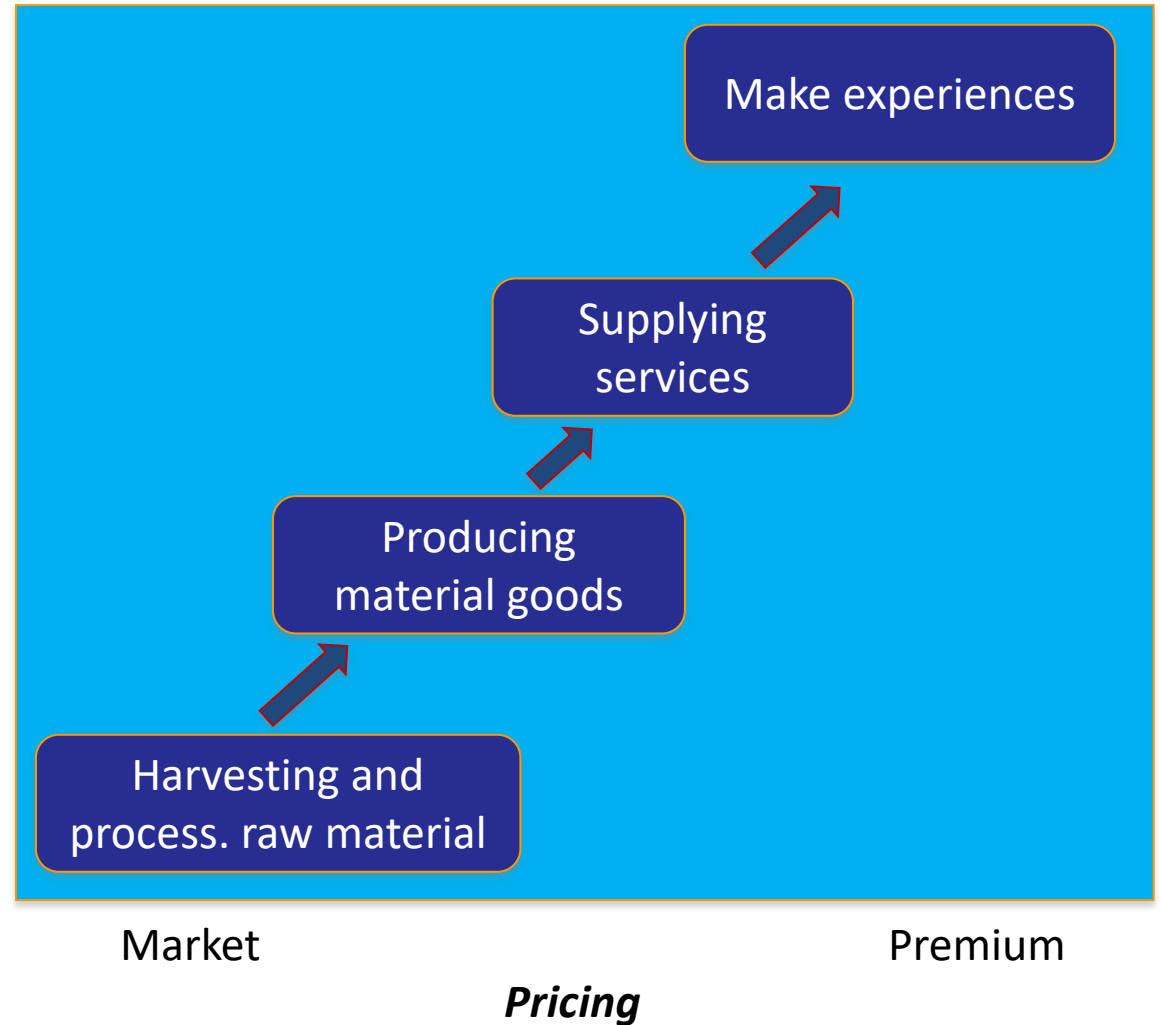
d. A service-based value chain

d. A service- based value chain: the theoretical background

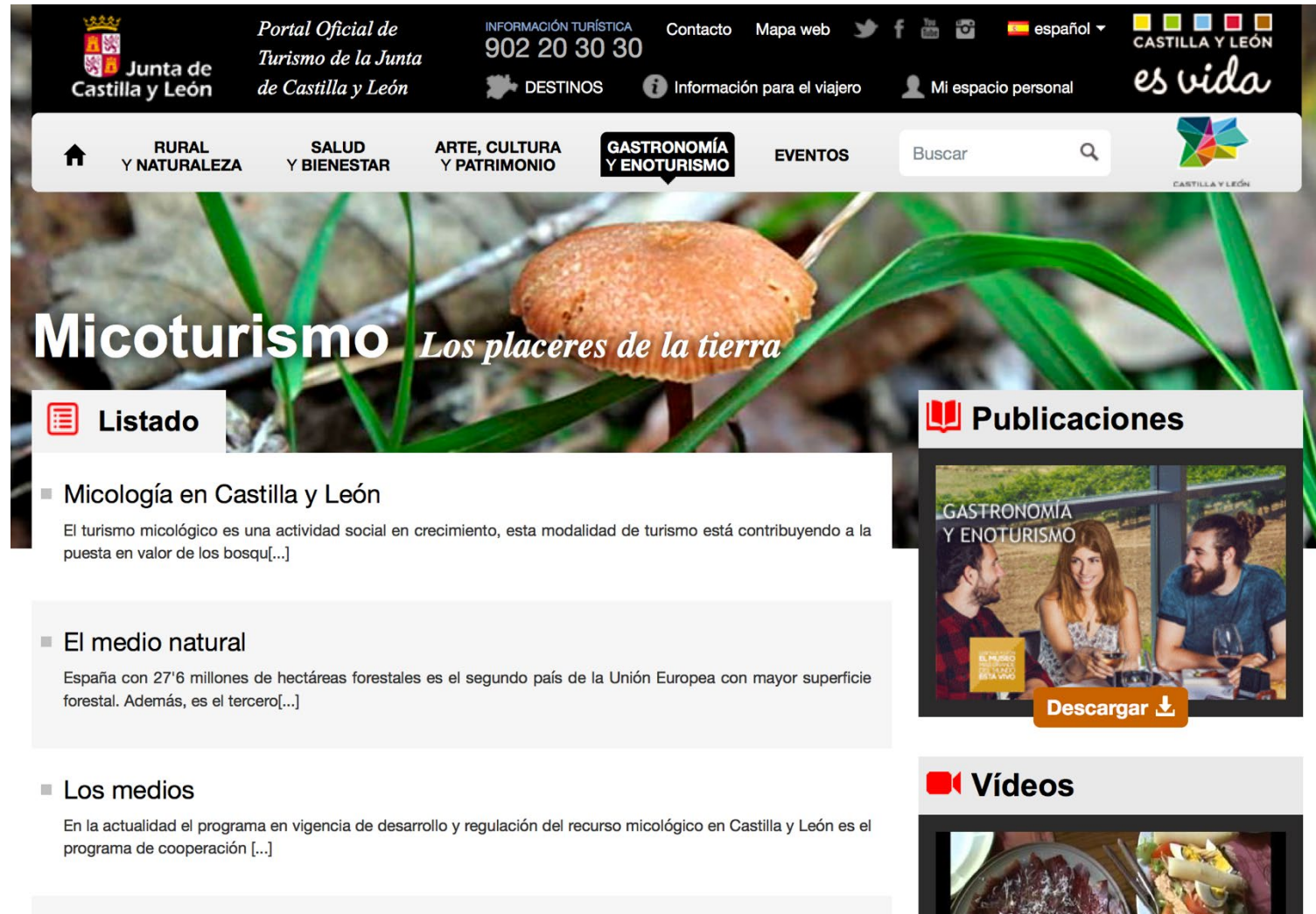
Differentiated
goods and services

Drivers for
competing

Non-differentiated
goods



Micotourism in Castilla y León (SP)



Portal Oficial de Turismo de la Junta de Castilla y León

INFORMACIÓN TURÍSTICA 902 20 30 30

español

CASTILLA Y LEÓN

es vida

RURAL Y NATURALEZA SALUD Y BIENESTAR ARTE, CULTURA Y PATRIMONIO **GASTRONOMÍA Y ENOTURISMO** EVENTOS

Buscar

Micoturismo *Los placeres de la tierra*

Listado

- Micología en Castilla y León**

El turismo micológico es una actividad social en crecimiento, esta modalidad de turismo está contribuyendo a la puesta en valor de los bosqu[...]
- El medio natural**

España con 27'6 millones de hectáreas forestales es el segundo país de la Unión Europea con mayor superficie forestal. Además, es el tercero[...]
- Los medios**

En la actualidad el programa en vigencia de desarrollo y regulación del recurso micológico en Castilla y León es el programa de cooperación [...]

Publicaciones

GASTRONOMÍA Y ENOTURISMO

Descargar ↓

Vídeos

d. A service-based value chain



- Enterprises: 62 (in 2008); > 100 in 2020
- 15 Agritourisms/ 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

The mushroom-based economy of Borgotato (Parma – IT)

Territorio

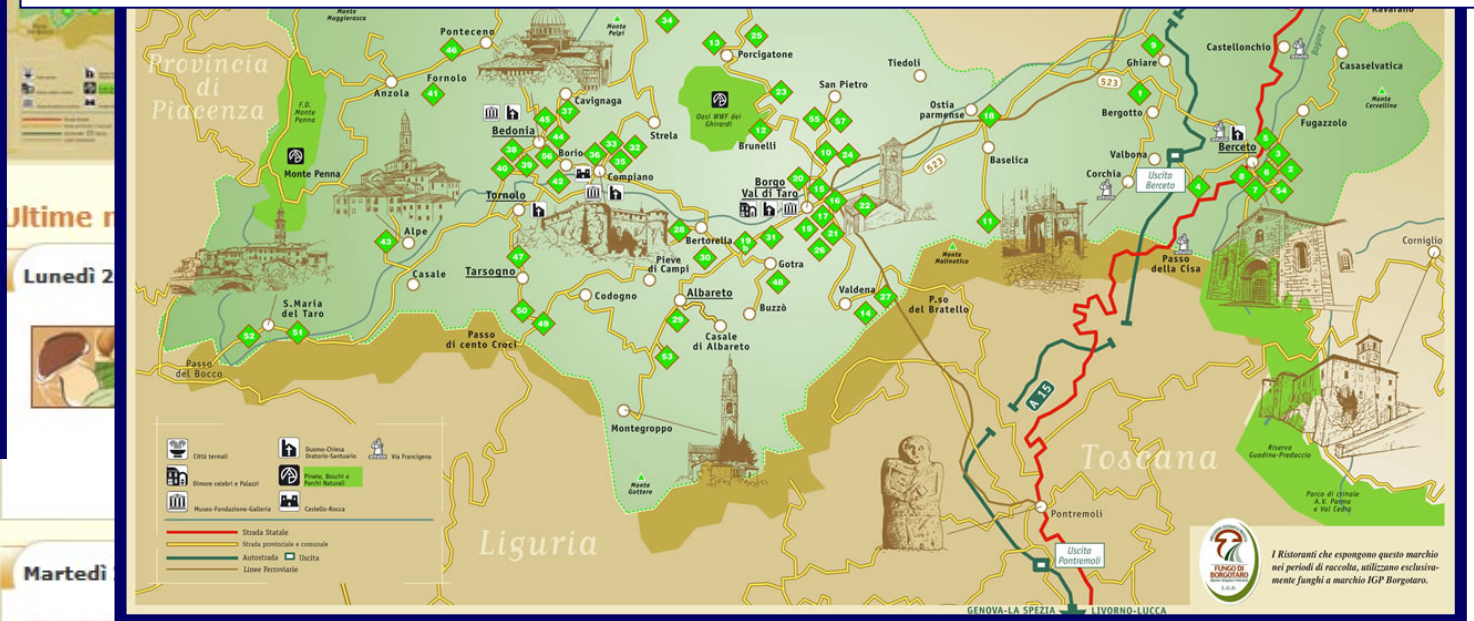
- THE TRAIL
- MAP OF THE TRAIL
- ITINERARI
- TOWNS ALONG THE TRAIL
- PARKS
- MUSEUMS
- TOURIST INFORMATION
- FOTOGALLERY

FIRMS

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

Link

- Fungo di Borgotato
- Meteo Apuane
- Strada del Prosciutto
- Emilia Romagna Turismo



d. A service-based value chain

<http://www.parcoappennino.it/campionato.mondiale.funghi/Eindex.php>



dal 15 luglio
al 15 ottobre 2020



Ecologia *Benessere* *Bellezza*

Latest news



World-class mushrooms: the challenge is back on the first weekend of October
Four successful editions, hundreds of enthusiasts, tens of teams coming from different count...

il Cerca Funghi



Regulation

Programme

Registration

You've never seen a world championship like this one!
From an idea by Fra Ranaldo, Appennino Tosco-Emiliano National Park, the Municipality of Ventasso and the cooperative "Briganti di Cerreto", together with the magazine "Passione Funghi e Tartufi" and the association "A Passeggio nel Bosco" organise the 7th edition of the World Mushroom Championship, that will take place on 12th and 13th October 2019 in Cerreto Laghi (Reggio Emilia).

The idea is to gather mushroom-lovers in Cerreto Laghi, to create a positive connection, to promote environmentally-friendly hunting and picking methods, to understand and to improve knowledge about woods and mushrooms, to happily celebrate together this gift of nature.

Participation to the information evening on Saturday, 12th October is required in order to take part in the competition, which will take place on Sunday, 13th October.

Its purpose is to create an event that has Porcino mushroom at its centre: Porcini to hunt for; Porcini to pick; porcini to study; porcini to tell; porcini to photograph; porcini to cook.

d. A service-based value chain

Road, trail, path... the tools for connecting different economic actors

Google search		hits
Strada della castagna	<i>Chestnut road</i>	35,200
Strada del tartufo	<i>Truffle road</i>	361,000
Strada del fungo	<i>Mushroom road</i>	265,000
Strada del porcino	<i>Porcino road</i>	58,900
Strada del marrone	<i>Marron road</i>	78,400

WFP: «imago» products or *genius loci* for marketing a territory



Strada del tartufo Bianco d'Alba nel Basso Piemonte

Home | Chi Siamo | Primo Piano | Press | Cibo e Bere | Iniziative | Eventi | Ospitalità | Link | Contatti | Info | Cucina | Foto | Area Riservata

Chi Siamo
La "Strada del Tartufo Bianco d'Alba nel Basso Piemonte" nasce con l'intento di valorizzare su scala nazionale ed internazionale un percorso eno-gastronomico di grande prestigio e fascino che si sviluppa su un ambito territoriale decisamente vasto e che coinvolge il territorio delle Province di Alessandria, Asti e Cuneo. La "Strada" si configura come un network di imprese (alberghi, ristoranti, negozi di prodotti tipici ecc.), di soggetti pubblici (Province, Regione, Comuni) che operano insieme per la promozione del territorio. Dal momento della costituzione (gennaio 2005) hanno aderito all'Associazione oltre 100 operatori ed enti pubblici delle Province di Alessandria ed Asti, tanto che oggi la "Strada" si configura a tutti gli effetti come un'istituto torinese.

Contatti
ASSOCIAZIONE STRADA DEL TARTUFO BIANCO D'ALBA NEL BASSO PIEMONTE
Segreteria Amministrativa "Strada del Tartufo bianco d'Alba nel Basso Piemonte"
C/o Amministrazione provinciale di Asti
Cabinetto di Presidenza
Piazza Affari
11100 ASTI

Outline

- Definition and characteristics of WFP value chains
- Development paths in WFP value chain organization
 - a. Self-consumption
 - b. Local economy (stabilized and transitional)
 - c. Global Value Chains
 - d. Service-based value chain
- **One final remarks**

A silent, fragmented world

- In Europe there are **14 M people** that rely on WFP gathering for at least **50% of their income** (Star-Tree Project Deliverable 3.3)
- Most of the activities connected to value chain are **informal** (i.e., by definition, not much visible)
- There is a need and large potential for creating **associations** among landowners and WFP producers, increasing their **market power, visibility and advocacy services**
- Foresters traditionally are **not skilful communicators**. In the WFP sector communication should be easy and can be effective (key attributes: natural, healthy, diverse, sustainable, traditional products)

How would you define a  ?

... and a Spanish citizen  ?

WFP?





UNIVERSITÀ
DEGLI STUDI
DI PADOVA

TESAF



E | T | I | F | O | R



**Enrico
Vidale**



**Nicola
Andrighetto**



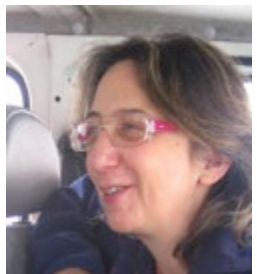
**Giulia
Corradini**



Laura Secco



Mauro Masiero



Paola Gatto



Elena Pisani