



**Acceleration Service**  
**«Entrepreneurship in the NWFPs sector»**  
Legnaro, 17<sup>th</sup> January 2020

# Wild forest products: a hidden sector and underestimated sector

**Davide Pettenella**



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## Welcome to Padova University





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## A cluster of products A complex issue to deal



A picture made by Enrico Vidale (StarTree H2020 project)

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## NWFP economic role

- FAO estimates that NWFPs generated **US\$88 billion** in 2011 ([SOFO, 2014](#)).
- **76 million tonnes** of food from the forest were consumed on average in 2011 ([SOFO, 2014](#)).
- **1 billion people** are thought to depend on *wild* foods ([Burlingame, 2000](#)).
- **80%** of the population of developing countries rely on traditional medicines, mostly plant drugs, for primary health care.

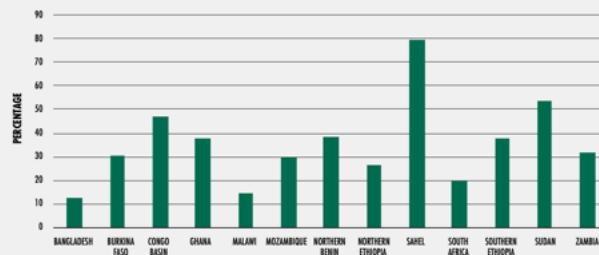
## NWFP economic role

- In **SOFO 2018**: no data, only case studies

A focus only on the role of NWFP in DC



PERCENTAGE OF HOUSEHOLD INCOME FROM NON-WOOD FOREST PRODUCTS (NWFPs)



SOURCE: Adapted from Vero et al., 2015.

## NWFP economic role

- NWFP in Europe: a market segment of the rural economy perceived as marginal and declining:
  - No clear definition

## Definitions (source: Muir, 2018)

### Non-wood forest products

NWFPs consist of goods of biological origin other than wood, derived from forests, other wooded land and trees outside forests. (FAO, 1999)

### Non-timber forest products

The term NTFP encompasses all biological materials other than timber which are extracted from forests for human use (DeBeer & McDermott, 1989)

### Wild forest products

"Wild product" results from the "collection of edible plants and parts thereof, growing naturally in natural areas, forests and agricultural areas" (EU Art. 12, comma 2, Reg. 834/07 "organic law")

### Minor forest produce

All non-timber forest produce of plant origin including bamboo, brush wood, stumps, cane, tussar, cocoons, honey, wax, lac, or kendu leaves, medicinal plants, and herbs, roots, tubers and the like. (Government of India)

### Secondary or side use of forests

All kinds of use in forests and forest lands not covered by forest, except for timber and minor forest materials, including: animal breeding, beekeeping, farming, processing of wood and wild fruits and berries, medicinal plants; placement of apiaries, collection of wild food resources, medicinal plants, technical raw materials and other; procurement of secondary forest resources (stumps, bark, etc.) Kyrgyzstan Forest Law

### Forest by-products

E.g. berries, mushrooms, herbs, decorative plants as well as hunting, bee-keeping and the grazing of cattle. Categories of forest use: wood production, resin production, secondary forest materials and technological raw materials, the use of forest by-products, scientific research, cultural and social purposes, hunting economy, recreation (including tourism) and other forest uses not prohibited by law. Estonia Forest Law

### Natural forest produce



Refers to wild or semi-cultivated plants or mushrooms which can be used as such or with some processing. This also includes the by-products of trees and soil materials. (Finland's National Forest Programme 2015)



### Wild food

Wild food is defined as anything edible that requires no human input to increase its production (ACF, USA, 2008; ACF, 2012; FAO, 2004; FAO, 1999.)

### Wild meat (bushmeat)/game meat

All meat from animals hunted or trapped for meat that is available for consumption; meat from game that roams in farms (a farm has an enclosed space) is excluded (UNECE, 2017).



 <p>A non-4 wheels vehicle</p>	
<p><b>NWFP</b></p>	<p><b>WFP</b></p>
<ul style="list-style-type: none"> <li>• Weak component of the society</li> <li>• Defensive attitude in marketing</li> <li>• Definition based on negative attributes</li> </ul>	<ul style="list-style-type: none"> <li>• Modern segment of an affluent society</li> <li>• Aggressive attitude in marketing</li> <li>• Definition based on positive attributes</li> </ul>

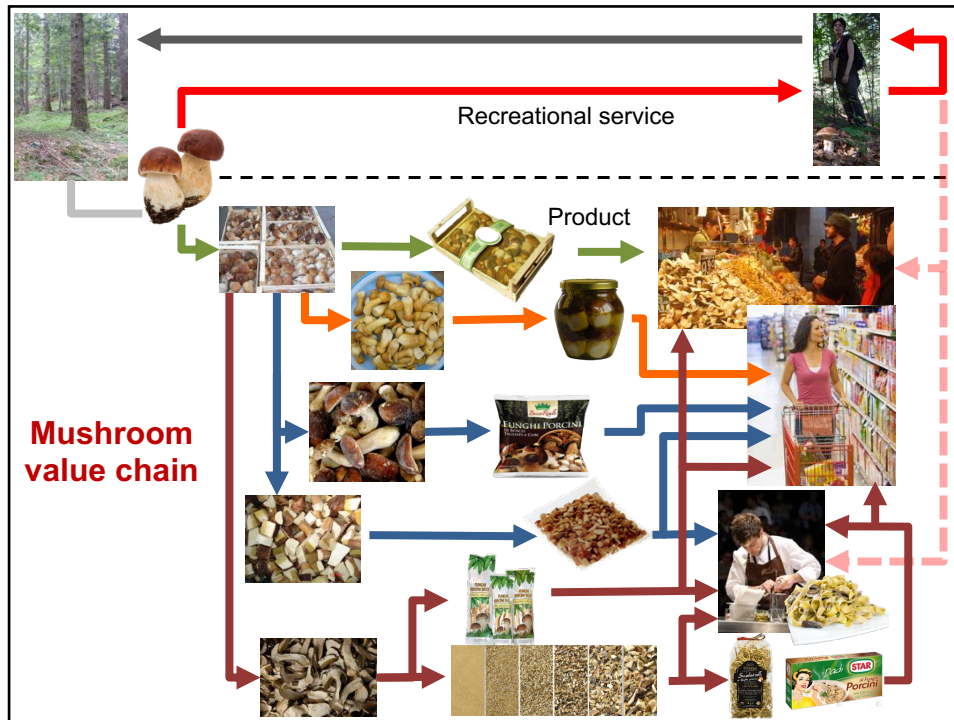
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## WFP economic role

- NWFP in Europe: a market segment of the rural economy perceived as marginal and declining:
  - No clear definition
  - No data, also due to the complexity of the value chain

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## WFP economic role

- NWFP in Europe: a market segment of the rural economy perceived as marginal and declining:
  - No clear definition
  - No data, also due to the complexity of the value chain
  - No innovation
  - Informal (black) economy

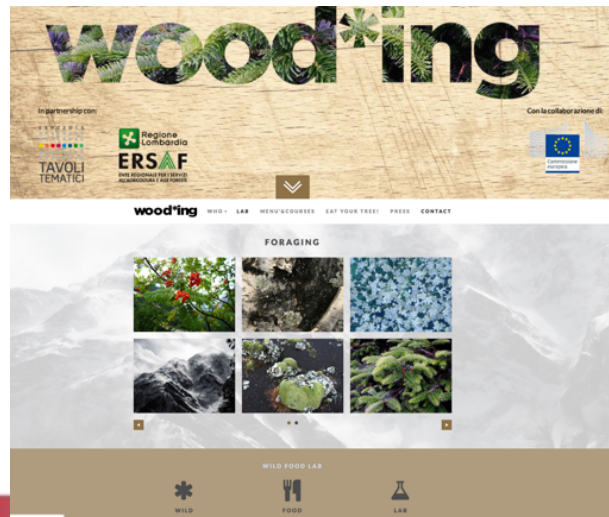
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## Dynamic market conditions

### Some examples: *foraging*

<http://www.wood-ing.org/>



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## Sap water



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## Resins



**RESINAS<sup>®</sup>**  
NAVAS DE ORO

INICIO LA RESINA EMPRESA INSTALACIONES PRODUCTOS NOTICIAS

**LA EMPRESA MEMORIA**

RESINAS NAVAS DE ORO se crea con el fin de dar cobertura y viabilidad al momento actual (la demanda del mercado internacional ha creado nuevas oportunidades para el sector de la resinación) que se está viviendo en **España**, en especial en **Castilla y León** y poder facilitar con su creación el aprovechamiento y el desarrollo del sector de la **industria de la resinación y destilación** dentro de la región donde se produce.


<https://resinasnavasdeoro.es/>

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## «Forest eggs»



**uovodiselva**

HOME UOVODISELVA LE GALLINE IL BOSCO ALIMENTAZIONE IMPATTO ZERO CONSEGNA

FOTO VIDEO

**UOVODISELVA**

**uovo biologico**  
prodotto certificato n° 037716

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

<http://www.uovodiselva.it>

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## Many (new) links with tourism: micotourism in Castilla y León

<http://www.turismocastillayleon.com/es/gastronomia-enoturismo/micoturismo>



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**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  
Masso / Collezione privata  
Restaurant  
Sale of local products

**Link**  
Fungo di Borgotaro  
Meteo Aquane  
Strada del Prosciutto  
Emilia Romagna Turismo

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 growing and producing factories
- 2 Didactic farms
- 3 Museums/Private collections
- 30 Restaurants/Porterhouses
- 26 Typical products sellers

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## Networking



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



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



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## A WFP as imago product for presenting a territory

- Traditional local products
- “Green” products
- “Slow food” culture



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## E-marketing

News > Cronaca > Il tartufo da 900 grammi a un magnate cinese per 330.000 dollari

La cifra record in beneficenza

### Il tartufo da 900 grammi a un magnate cinese per 330.000 dollari



ultimo aggiornamento: 27 novembre, ore 18:42

Roma - (Adnkronos/ign) - Stanley Ho si porta a casa il tartufo toscano più grande del 2010 e uno molisano da 350 grammi. Ha superato ogni offerta ma l'Italia "si è battuta bene". L'evento all'hotel Cavalieri Hilton in collegamento satellitare con Londra e Macao (FOTO). All'asta il tartufo più grande dell'anno. Divisi in Parlamento, uniti a tavola. Sul tartufo l'accordo è bipartisan



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INIZIATIVE REGIONALI

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*Associazione Nazionale* **Città del Castagno**

*Sede legale e amm.: Castelnuevo di Garfagnana (LU)*

**L'Associazione Città del Castagno: 110 members**

In the Italian farming sector, chestnut is in the 5<sup>th</sup> position in terms of no. of local associations

Rank	Association	Members
1	Città del Vino	524
2	dell'Olio	358
3	della Nocciola	225
4	del Bio	194
5	del Castagno	158
6	dei Sapori	114
7	delle Ciliegie	68
8	del Tartufo	62
9	del Miele	59
10	del Pane	42

Source: Corriere della Sera (2015)

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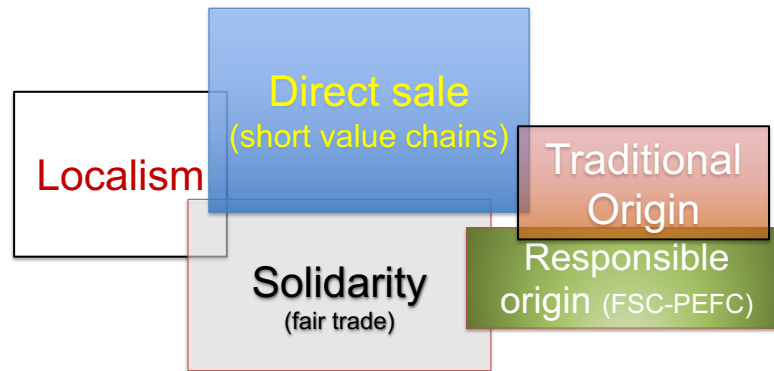
## New selling systems

- Direct sales: **“Pick-up your chestnuts”**: selling directly to the consumers the right to collect chestnut for a fixed rate or in relation to the weight of collected fruits
- **“Adopt your own chestnut tree”**: chestnuts picking and organised picnics under the chestnut tree
- **e-business**:
  - B2B: fresh chestnuts, semi-finished products, ...
  - B2C: jams, dried nuts,...

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WFP for emerging segments of consumers:  
**LOHAS** (Life Style Of Health and Sustainability)



But how many?

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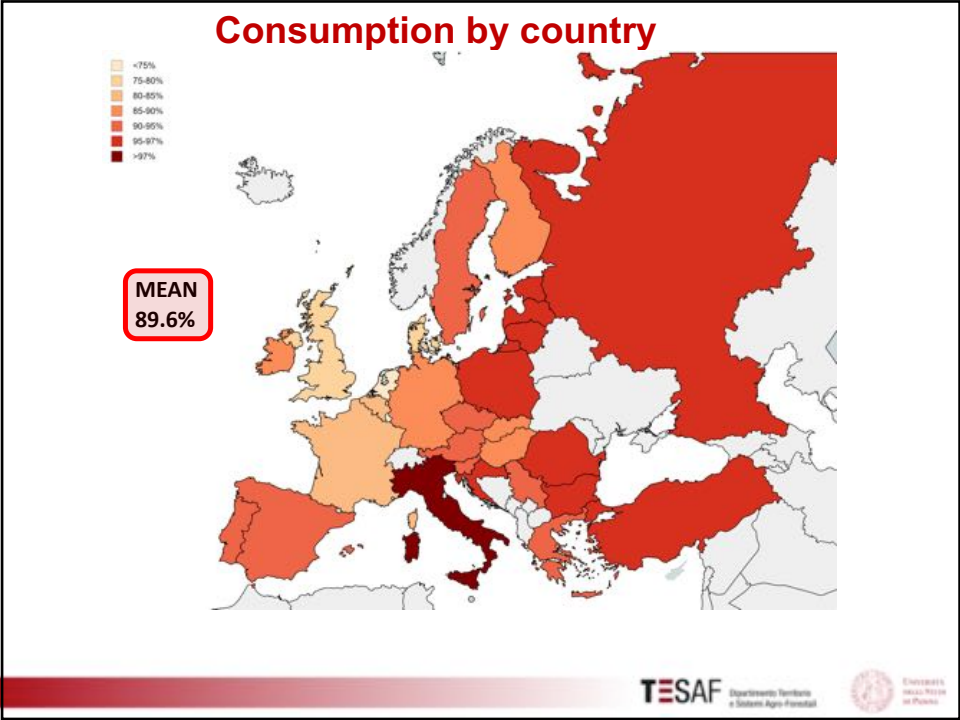
**A survey carried out under the StarTree H2020 project**

by DP, Giulia Corradini, Riccardo Da Re, Marko Lovrić and Enrico Vidale

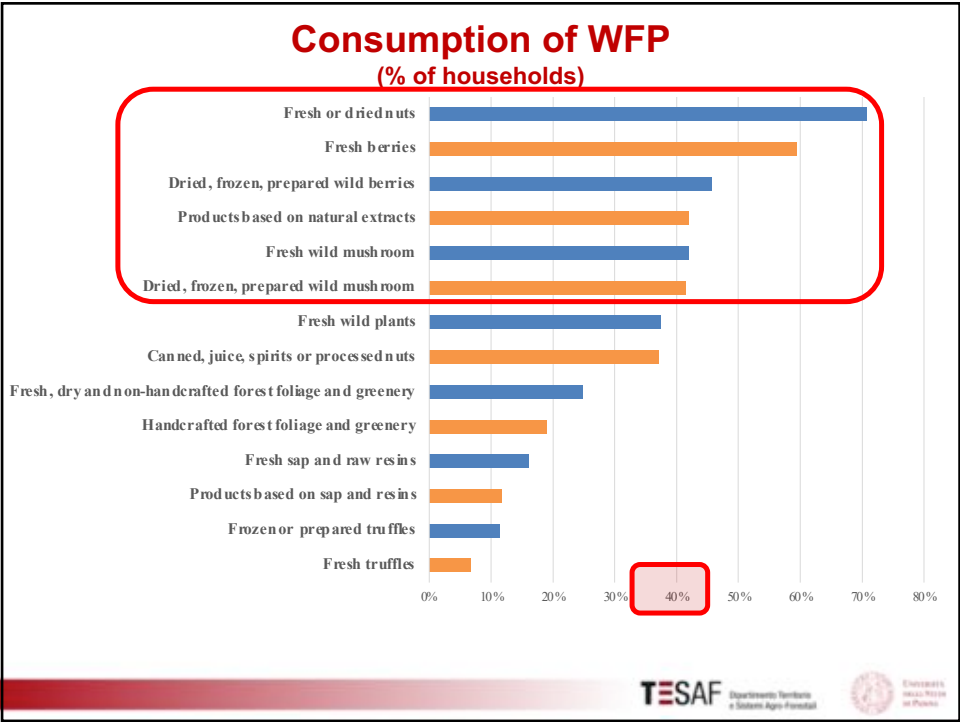
- **Objective:** to assess the **consumption** and **collection** of WFPs in Europe
- **Design:**
  - Unit of analysis: household
  - **Scale: EU28** (no Malta, Luxembourg and Cyprus) with Serbia, Turkey and European part of Russian Federation
  - Panel study (distributed by a polling agency)
- **Sample:** respondents: **17,346** (95% confidence level,  $\approx 4.21\%$  confidence interval).

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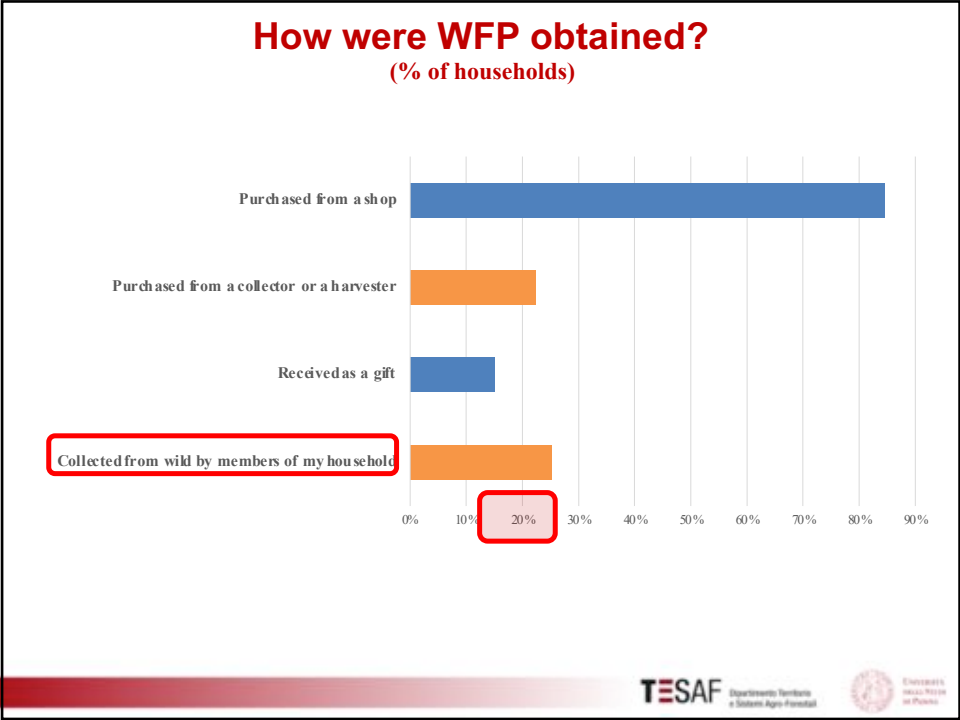




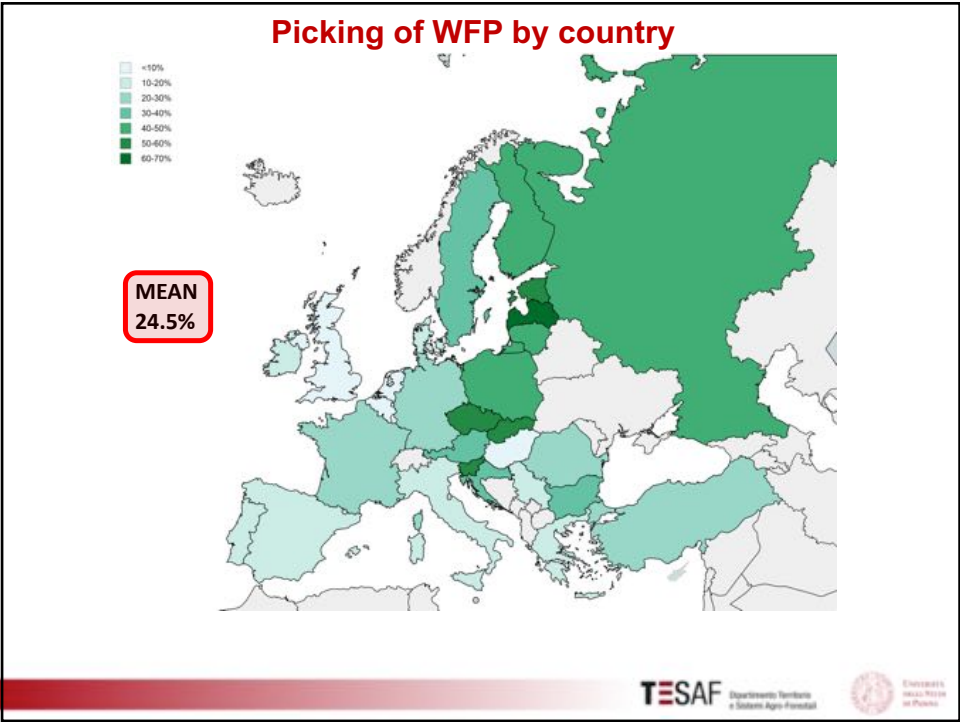
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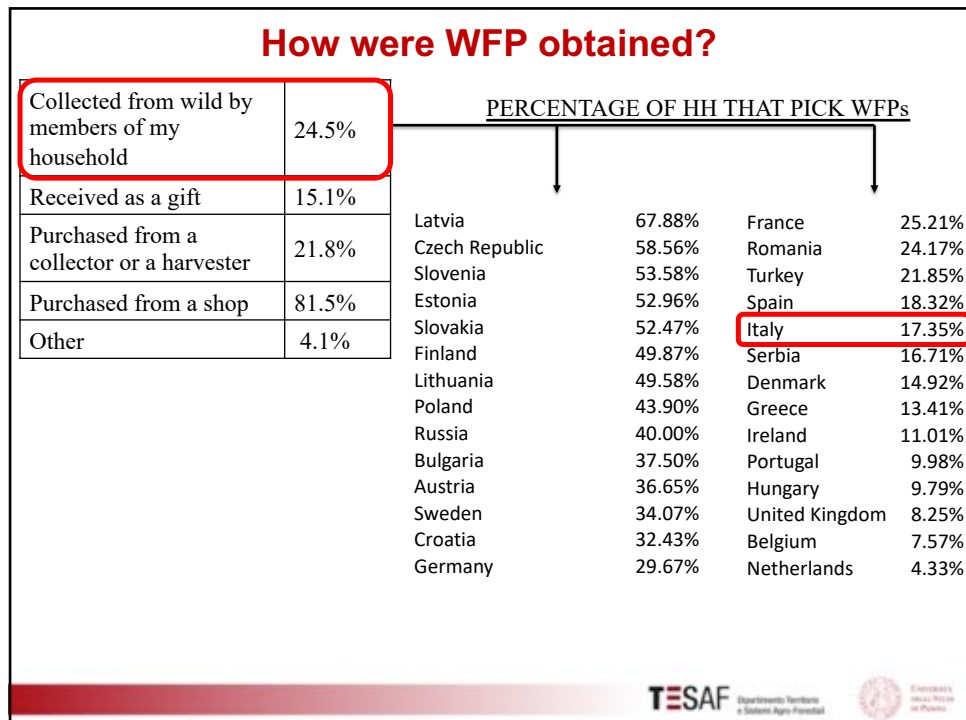
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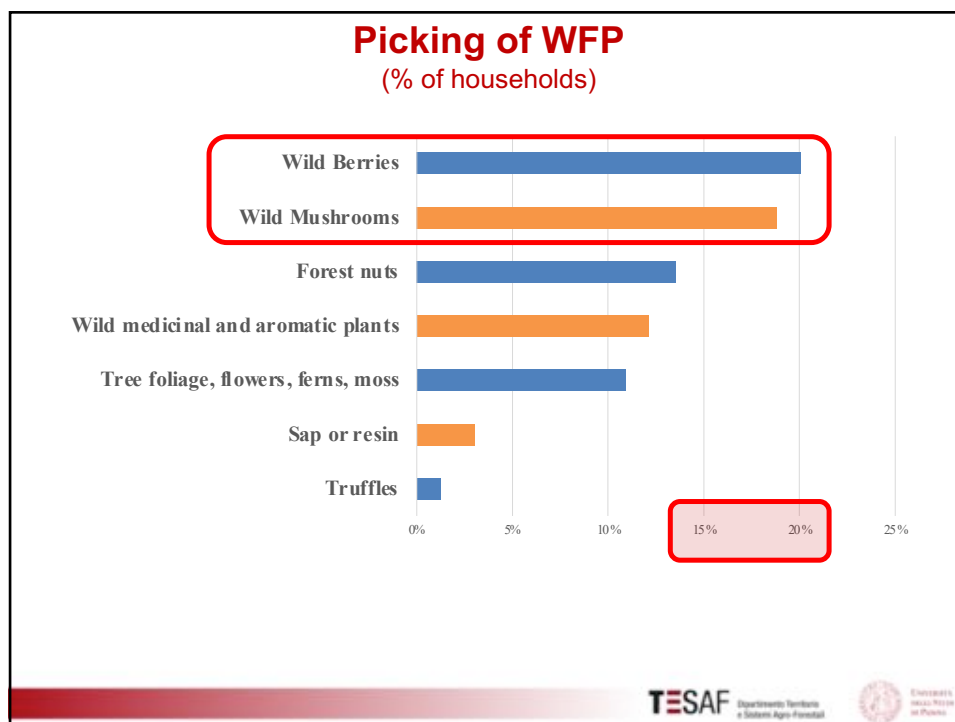
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## Still a lot to do to make the sector vital and stable



Monitoring  
and assessment

R&S, dissemination  
and communication

Creation of a fair, transparent and traceable market

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## We are working in this direction



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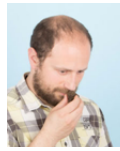
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E | T | I | F | O | R



**Davide  
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**Enrico  
Vidale**



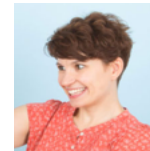
**Nicola  
Andrighetto**



**Riccardo  
Da Re**



**Giulia  
Corradini**



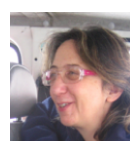
**Arianna  
Ruberto**



**Laura Secco**



**Mauro Masiero**



**Paola Gatto**



**Elena Pisani**



**Diego Gallo**



**Lucio Brotto**

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