























## EIP-AGRI WORKSHOP NEW VALUE CHAINS FROM MULTIFUNCTIONAL FORESTS NOVEMBER 2016 - VIENNA, AUSTRIA



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**Operational Group**



**Food products**



**Non-food products**



**Agroforestry**



**Leisure and recreational uses**





## Operational Group:

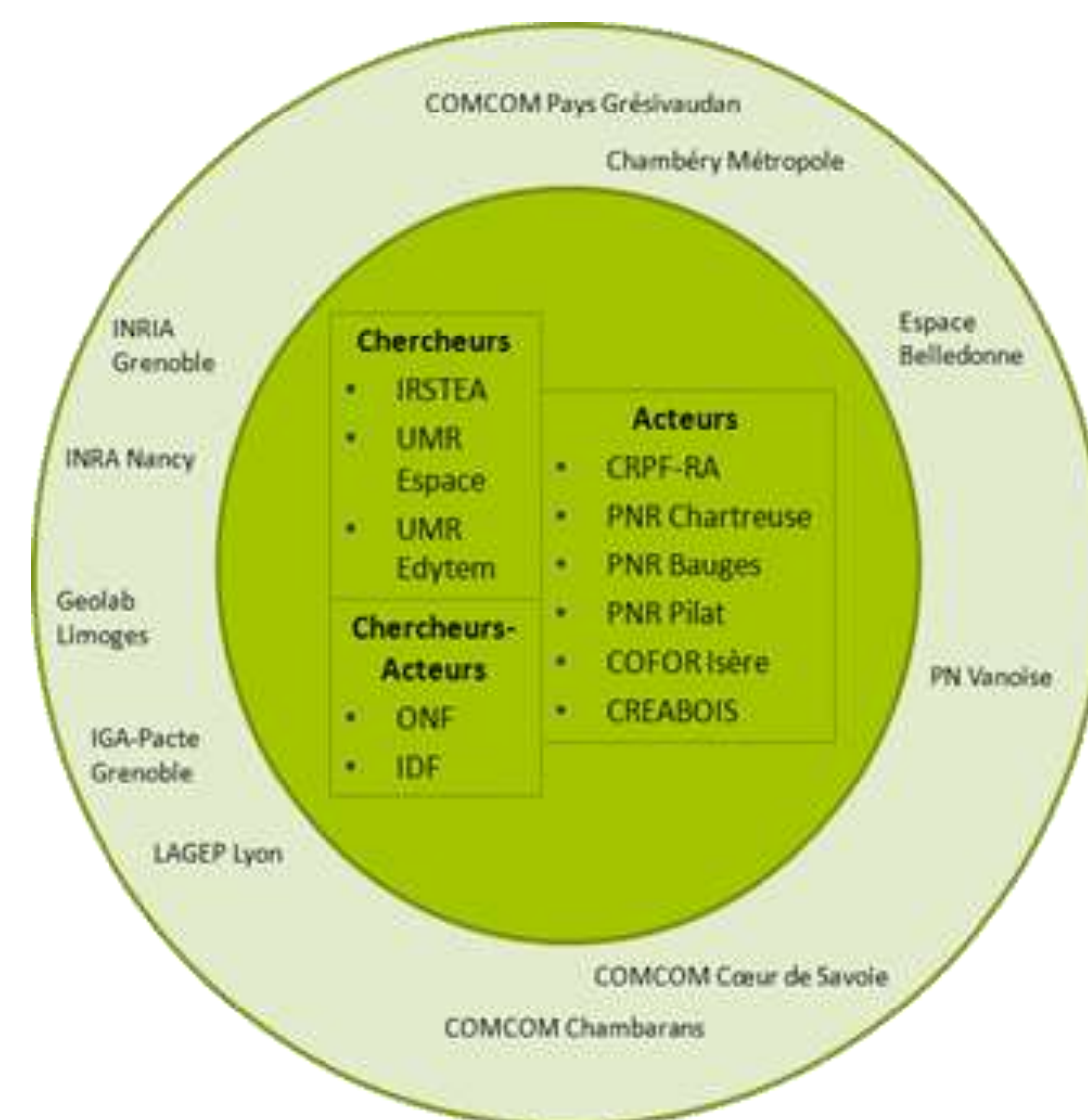


## Innovative tools for collaborative forest management

### Practical problem

The OUI-GEF Operational Group aims at developing technical and organisational innovations that help to build territorial forest strategies. In a context of increasing pressure on wood resources, it should promote a sustainable management that warrants the diversity of ecosystem services.

### Partners



Researchers and territorial managers work together within 7 Work Packages

- WP1: Forest resources assessment
- WP2: Ecosystem services assessment
- WP3: Wood resources mobilisation
- WP4: Wood chains analysis
- WP5: Territorial governance
- WP6: Demonstration
- WP7: Technical and scientific valorisation

### Project proposal

#### Project idea

OUI-GEF comes from a brain-storming between local development structures (regional parks), forest managers, and researchers of both forestry and social sciences. It was initiated by forest researchers.

#### Developing the idea

The discussion was initiated by the collaborative regional research programme PSDR ("For and about regional development"), which is partly funded by the Rural Development Plan (FEADER funds).

### Implementation

#### Good practices

- Collaboration between social and biotechnical sciences
- Collaboration between stakeholders and researchers, equally represented in the steering committee
- Collaboration between local development actors, forester managers and researchers, through the interactive improvement of knowledge tools

#### Challenges

- Foster a common culture on forests and forestry at a local territory scale
- Provide local actors with measurement tools and indicators on forest resource and services, and on their economic valorisation
- Ensure a fair share of the knowledge
- In the long run, provide tools and methods for a collaborative forest planning at the territory scale.

#### First results

- An inquiry on existing local wood supply chains, in the scope of a diagnosis of their sustainability.
- A set of indicators to assess contradictorily the quality of multifunctional cuttings in their field implementation



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# Value chain: “Rigoni di Asiago” CoC PEFC certified honeydew honey



## Product

**Main product:**

“Mielbio-Miele del Cansiglio”. Blend of organic - certified honeys from PEFC “SFM” certified forest

**Origin of product:**

Contractors place beehives and harvest honeys within/from Forest of Cansiglio that are processed by “Rigoni di Asiago”.

**Market/consumers:**

It is sold mainly to Italy and to a lesser extent to EU countries (F, D, NL). End users can buy it mainly in supermarkets, hypermarkets, discounts. It makes use of direct sales force and agents as well as online by its own and retailers’ webshop.



## Resources

**Raw materials:**

Honeydew and blossoms’ nectar from Norway Spruce trees/stands.

**Land owner involvement:**

Beekeepers sign an agreement with Veneto Agricoltura (Forest Management Company owned by Veneto Region) to install beehives in Veneto Region forest owned land (they pay a fee). A further agreement for the exclusive supply of the above raw materials that processes, commercialises and markets the blend under the trademark “Mielbio-Miele del Cansiglio”.



## People

**Main actors involved:**

Private contractors (beekeepers). Rigoni di Asiago’s in Foza (VI) and in Albaredo d’Adige (VR) premises. External analytical laboratory. CoC PEFC Certification Body. Retailers.

**Value chain organisation:**

Beekeepers supply honeys. Inbound logistics, operations, outbound logistics, marketing and sales, service, procurement, human resource, technological development and infrastructure are managed by “Rigoni di Asiago”

**Where they are from:**

Beekeepers and “Rigoni di Asiago” (Veneto North East-Italy). External Laboratory and Certification Body (Italy)



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## Success factors

- “Rigoni di Asiago’s” brand. ISO 9001, BRC, IFS certifications for retailers.
- First CoC PEFC-certified honey (traceability of the sustainable management of the source) on the market. Reputation as “cru honey”. Elegant and reusable packaging.





# Value chain: Wood, honey and aromatic plants



## Product

Main product:

Wood, honey and aromatic plants

Origin of product:

Cooperativa Agrícola de Fafe - COFAFE is a Cooperative in the north of Portugal, a strong cooperative with more than 15 employees, and Cooperativa Social e Agro-Florestal de Vila Nova runs Ceira - Coop VN Ceira, in the centre of Portugal, with less than 5 permanent employees

Market/consumers:

Internal market throughout Portugal but essential from 20 km around



## Resources

Raw materials:

Wood, honey and aromatic plants

Land owner involvement:

2 cooperatives 2 different models. One connected with honey (Coop VN Ceira) and another connected with aromatic plants (COFAFE). The forest owner has it own forest land, but at the same time these cooperatives were made with the support of Rural Development Programme - a group application



## People

Main actors involved:

The forest value chain starts with the producer (small in our case - less than 3ha), then the cooperative aggregates the production and ends (selling) with the consumer (internal or external market)

Value chain organisation:

In a cooperative model

Where they are from:

North of Portugal - Fafe  
Centre of Portugal - near Coimbra - Vila Nova do Ceira

## Success factors

Small forest producers even though they receive more money from the products with the cooperative, they don't need to invest time, contract people that have knowledge to sell, how and where to sell, because the cooperatives do that job. Also, the moving back of the demand for differentiated quality products and creating short chains, and all the benefits that is involved in this process.



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# Value chain: Truffles from Mycoforest



## Product

Main product:

Truffles, Processed truffles (truffle oil canned or frozen truffles), Nuts, Wood, Ecosystem services, Education, Restored soil

Origin of product:

- Truffles are the underground fruiting bodies of symbiotic truffle fungi with trees
- Wild harvest
- Traditional truffle orchards
- Mycoforest on set a side land where farmers look for new opportunities for their land
- Mycoforest on forest land where owners look for new opportunities

Market/consumers:

Restaurants, Culinary people, Wholesalers, Processing industry

## Resources

Raw materials:

- Inoculated tree seedlings from specialised nurseries
- Trees: oak, hazel, beech, pecan tree
- Soil, water, nutrients

Land owner involvement:

- Lender of the land
- Initiator/cultivator of the mycoforest
- People involved in PR/education/ecosystem services

## People

Main actors involved:

Seedling growers, Truffle growers, Local consumers and restaurants, Wholesalers, Retailers

Value chain organisation:

The truffle world has been mysterious since time immemorial. Cultivation is now possible by better understanding of the process. Could consumer driven demand introduce transparency? If each takes responsibility for quality in the chain, the truffle as forest product could be symbol of care for nature.

Where they are from:

Truffle growers (local), Local consumers and restaurants, Wholesalers (national and international)

## Success factors

- Climate and soil conditions.
- Prepared for long term investment.
- Transparency in the chain.



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# Value chain: Via Delicia- Local utilisation of edible non-wood forest products



## Product

**Main product:** Jam, syrup, venison pate, roasted version, poached trout.

**Origin of product:** Products of local processing company Via Delicia from Zabreh na Morave Czech Republic

**Market/consumers:** Products are sold via net of shops in 13 regions in the Czech Republic and in 5 regions in Slovakia. Company use own e-shop with their products.

## Resources

**Raw materials:** Forest berries, mushrooms, venison, Jeseniky mountains forests, local trout producers.

**Land owner involvement:** Forest land owners can harvest and deliver forest berries and mushrooms directly to Via Delicia company which purchase non-wood forest products for their processing. Hunting clubs deliver venison needed for meet products.

## People

**Main actors involved:** Forest land owners, people in countryside, hunting clubs, local trout producers.

**Value chain organisation:** Forest land owners are not organised. Company has net of cooperating shops in regions of the Czech Republic and Slovakia.

**Where they are from:** Jeseniky region, town Zabreh na Morave, local producers.

## Success factors

Company utilised local product from Jeseniky forests and owner of company uses his long experience in culinary activities. **He uses traditional recipes and traditional way of conservation.** Company sells products via e-shop and cooperating shops in bigger cities.



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# Value chain: EcoSpruce: new added value products from spruce needles



## Product

**Main product:** Spruce needle juice and derived products (food & drink, pharmaceutical & cosmetics, energy, biochemistry)

**Origin of product:** Spruce needles (product rich in antioxidants, phytoestrogens, vitamins and other valuable substances)

**Market/consumers:** Health-conscious consumers of all ages who are aware of the benefits of super-foods

## Resources

**Raw materials:** Spruce needles coming from pruning, thinning, felling and other forest management activities. They can also be directly harvested. Cheap, virtually unlimited and almost entirely overlooked resource

**Land owner involvement:** Needles can be harvested from all possible locations and as they are a byproduct of forestry and usually discarded, no additional land or forest owner agreements are required.

## People

**Main actors involved:** Forest owners and forest companies (Estonian)  
University of Life Sciences for R&D  
Organic food stores

**Value chain organisation:**

- Forest owners and forest companies for harvesting and providing technology
- University for testing the physical and chemical properties of spruce juice
- Organic stores and other resellers for commercialisation

**Where they are from:** Estonia

## Success factors

Spruce needle juice is an extremely potent superfood with few real rivals. The resource is virtually unlimited, extremely plentiful and cheap, it can be harvested all year round, and it is local, organic and environment friendly.



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# Value chain: Mediterranean pine nuts from forests and agroforestry



## Product

Main product:	Mediterranean pine nut kernels (one of the most expensive nuts in the world - gourmet food)
Origin of product:	Stone pine forests and plantations in Mediterranean countries (Portugal, Spain, Italy, Turkey, Lebanon, Tunisia, etc.).
Market/consumers:	Food end consumers (households and gastronomy) worldwide

## Resources

Raw materials:	Cones harvested from pine forests and plantations (innovation: grafted orchards for enhanced sourcing)
Land owner involvement:	<ul style="list-style-type: none"> <li>• <i>Public forest owners</i> (mainly municipalities): annual auctions of harvest tenancies to cone picker enterprises.</li> <li>• <i>Private landowners</i>: several exploitation models (self-harvesting, cone harvest by third parties, etc.). Increasingly, open-grown plantations for forest farming or intensive orchards (grafting, fertilisation, irrigation, etc.).</li> </ul>



## People

Main actors involved:	Forest owners and <i>pine farmers</i> , cone pickers (self employed operators or family enterprises), cone traders & processors, pine nut traders, wholesalers, exporters, retailers.
Value chain organisation:	<ul style="list-style-type: none"> <li>• Numerous local SMEs for cone harvesting, stocking and first processing (pine nut extraction).</li> <li>• Several enterprises (often cooperatives of the former), for further processing (shelling and cleaning the kernels).</li> <li>• A few retailers dominating international markets.</li> </ul>



Where they are from:	ES: Valladolid, Andalusia, Catalonia; IT: Napoles; PT: Alcácer do Sal, Coruche; TR: Izmir, Aydin
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## Success factors

Currently decreasing cone crop from natural pine forests due to ongoing climate change and lack of pest control can be made up by new productive plantations with ten-fold per-hectare yields (2-3 t/ha).

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# Value chain: Finnish Pakuri: Speciality mushrooms



## Product

**Main product:** Speciality/medicinal mushrooms - Finnish Pakuri and Reishi

**Origin of product:** Wild forest of Finland - certified as Organic, mushrooms from either natural harvest or semi-cultivation

**Market/consumers:** Target markets are consumer product refiners in Europe. On market of "super- foods" and healthy products the users are high-end product consumers, especially the far eastern growing economy.



## Resources

**Raw materials:** Raw material (Pakuri, Reishi) is derived from Organic certified Arctic forests of Finland by handpicking.

**Land owner involvement:** Forest owners are holders of resource and raw material. They sell picking rights or raw material directly. Forest owner association ProPakuri harbor cooperation between forest owners, producers and refining industry and improve the conditions for production and commercialisation



## People

**Main actors involved:** Forest owners, spawn producers, mushroom processing and wholesale companies, beverage, nutraceutical and cosmetic product companies



**Value chain organisation:** Processing companies either rent picking rights or buy material from forest owner. Retail products or bulk products or extracts. ProPakuri initiates developing livelihood and earning models for non-wood based products by networking authorities, forest owners, refiners and exporters.

**Where they are from:** Producers, representing the 632000 private forest owners in Finland, coming from the whole country between 60<sup>th</sup> and 70<sup>th</sup> degrees north latitude. Nearly 50% of these live in towns. Private people own 60% of the 22,8 million hectares of forest in Finland.

## Success factors

- Wide interest of the market in healthy products.
- Clean Nordic production forest which can be certified.
- Forest owners interest to gain additional income independently of the wood price.
- Multi functional forest use for youth and elder.

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# Value chain: Amycoforest: mushroom production and forestry



## Product

### Main product:

Wild mushrooms and truffle combined with timber production and forest biodiversity. Species with an economic value are Boletus, Cantharellus, Tuber.

### Origin of product:

Edible mushrooms from managed forests, but also from plots with low wood production. In France, a majority of forests belong to private owners.

### Market/consumers:

- While the resource is present locally, there is a context of massive import of wild mushrooms.
- Many people like picking mushrooms to eat.
- Strong demand for local produce, from restaurant owners and chefs.

## Resources

### Raw materials:

Wild mushrooms (Boletus sps., Cantharellus sps., Hydnum sps., Lactarius sps.) which are frequent in French forests (beech, spruce, fir, oak, pine...).

### Land owner involvement:

Landowners are involved in: changing their forest management models, organizing the harvest and promoting local and legal produces. In several territories, conflicts could appear in case of illegal harvest and black market.

## People

### Main actors involved:

The pickers are landowners, associations of forest owners. Individual and some professional pickers. Wholesalers and retailers. Restaurant owners.

### Value chain organisation:

Producers hold the resource. They can gather their forests to propose a concession for a legal harvest. A wholesaler can employ seasonal workers or buy the produce on the market. Restaurant owners buy directly from pickers.

### Where they are from:

Forest owners, a majority of pickers, restaurants and consumers are local.

## Success factors

Promoting good forestry practices, offering good quality produces and involving the public authorities



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# Value chain: Profitability of birch sap tapping in Finland



Pictures: Erkki Oksanen/LUKE

## Product

**Main product:** Birch sap, joint production with timber production (sawlogs and pulpwood)

**Origin of product:** Organic certified wild birch forest

**Market/consumers:** High-end product consumers, especially far eastern growing economies. Finland and North Karelia in Finland is a region where a big share of birch sap for world markets is produced. Birch sap from Finland is exported to Central Europe and Asia.

## Resources

**Raw materials:** Birch sap is collected by tapping the trees to induce sap flow from birch trunk to containers.

**Land owner involvement:** Forest owners can either rent their forest to sap processing company for tapping and collecting the sap with 1-10 year contracts or they can themselves collect the sap and sell onwards to refining companies.

## People

**Main actors involved:** Forest owners, sap processing companies, beverage- and cosmetic product companies

**Value chain organisation:** Sap processing companies either rent forests from forest owners or buy sap collected by forest owners - sap processing companies have their own retail products or sell the raw sap to beverage or cosmetic companies

**Where they are from:** Sap production engage forest owners from rural areas. Also some of the refining industry is located in rural areas of eastern Finland

## Success factors

Growing demand in expanding tree water markets for birch sap products.  
Ability to produce Organic birch sap- over 97% of Finnish forests could be certified as Organic.  
Good logistics and infrastructure ensuring short transportation of raw materials and high end quality of product.







# Value chain: The concept of complete forest utilisation



## Product

Main product:

- *Product*: Timber and fuelwood from the product point of view
- *Services*: fodder, hunting, soil protection, water etc.

Origin of product:

Private forests which constitute more than 15% of the total forest coverage of Greece

Market/consumers:

Sawmills, Panel factories, Wood wholesalers and retailers, Private persons

## Resources

Raw materials:

Presently from the entire harvest only timber and fuelwood is utilised while a considerable part of potentially useful volume is wasted. At this stage we are dealing only with the private forest production.

Land owner involvement:

Through the Greek Forest Owners Organisation nationally and through the European Landowners Organization at the European level.

## People

Main actors involved:

- Forest owners
- Processors
- Merchants
- Consumers

Value chain organisation:

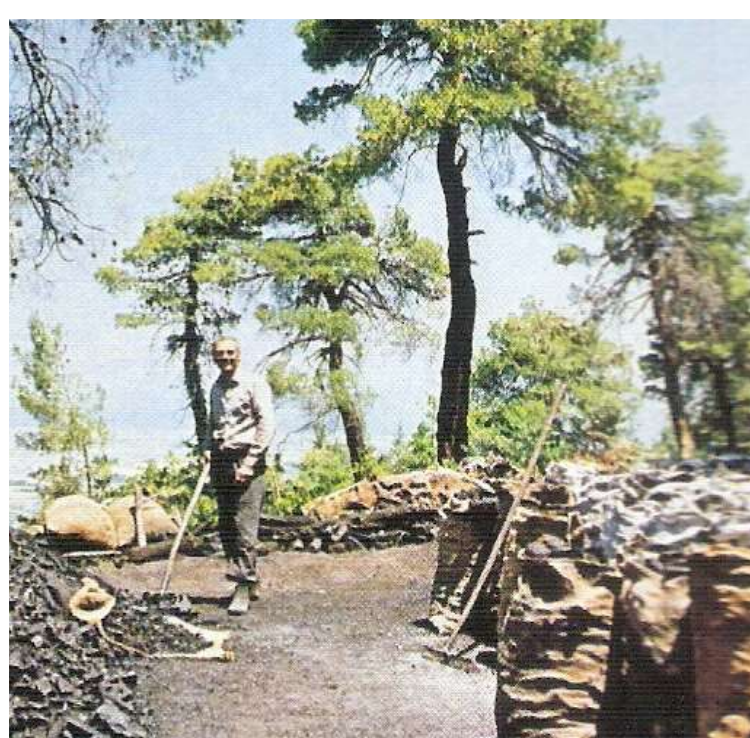
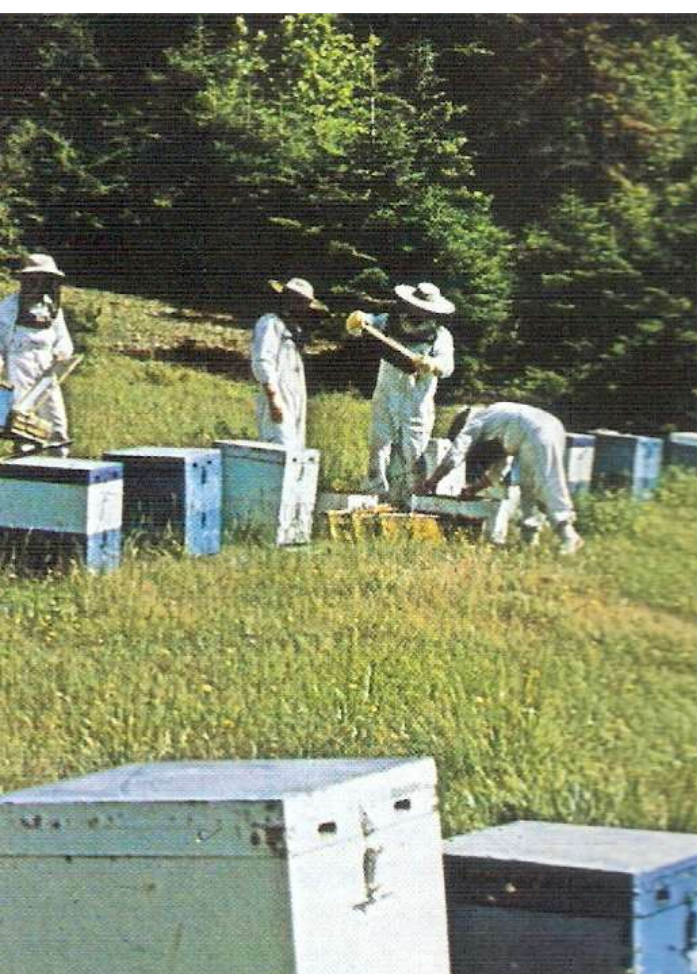
Through the professional associations of the actors. Forest owners commercialise the products themselves although they may receive some technical assistance

Where they are from:

Greece

## Success factors

The economic viability of the small forest enterprises can be assured by exploring all potential products coming from trees besides timber. Foliage for fodder, small branches for charcoal, honey from flowers, resin from trunks and bark from saw logs can be exploited and the success factors should be measured by the utilisation of those products currently left behind.



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# Value chain: ResiVal: gumming and other NWFP in the sustainable management of the maritime pine ecosystem



## Product

**Main product:** Resin and other Non Wood Forest Products (NWFP), like pine cones and mushrooms

**Origin of product:** Portugal

**Market/consumers:**

- Industry
- Final consumers

## Resources

**Raw materials:** Resin from pine forests of *Pinus pinaster*

**Land owner involvement:**

- Private; Community; Associations
- Traditionally the owners establish lease agreements with gumming companies for resin extraction. It is intended that in the future these contracts are mainly set by the exchange of services



## People

**Main actors involved:**

- Owners: provide forest areas
- Local population: work
- Forest managers: Exchange of services / products
- Resin industry: Resin purchase for processing and support to harvest and transport



**Value chain organisation:** Association of resin producers and first transformation industry

**Where they are from:** North and central Portugal

## Success factors

- Improve and rationalise protection against forest fires, based on the creation of local jobs for the rational exploitation of natural resources, with financial return in the short and medium term.
- Decreased minimum area of sustainable intervention and increase the efficiency of forestry operational teams by integrating the management of the exploitation of NTFPs, particularly resin.



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# Value chain: Phytoremediation services

## Product

Main product:

Environmental service to reuse Bio-char from municipal waste water treatment sludge and biomass ashes

Origin of product:

- *Bio-char*: dried sludge from municipal waste water treatment plants (EU funded sludge treatment facilities)
- *Ashes* from municipal and private biomass boilers

Market/consumers:

Municipal water supply companies and biomass boilers. Landowners (biomass growers) can provide sizeable services for treatment of all the country's municipal water treatment sludge and biomass ashes.

## Resources

Raw materials:

Waste with adverse factor (risk of heavy metals pollution). No pathogens involved and there is no negative smell as municipal water treatment sludge is dried and granulated before application as fertiliser.

Land owner involvement:

Landowners plant fast growing tree species on not fertile land. They increase biomass yield thanks to the high content of carbon (bio-char) and the nutrients that ashes and sludge have. Furthermore they get extra revenues for providing an environmental service.

## People

Main actors involved:

Municipal water treatment plants, biomass boilers, research institutions, laboratories, consultants, municipalities, national authorities, environmental authorities, transportation companies, farmers/service providers, forest/land owners

Value chain organisation:

Circular value chains -waste with nutrients - biomass - heat/power  
*The service is under intensive development with national authorities to develop proper legislation to mitigate environmental risks.*

Where they are from:

Local, regional and national

## Success factors

- Good practice
- Appropriate (R&D based and less bureaucratic) legislation
- Communication within value chain







# Value chain: High value 3D printed products from low quality cork raw materials



## Product

**Main product:**

Mixture of granulated cork and plastic biopolymer used in additive printing, extrusion, injection and other processes of manufacture.

**Origin of product:**

Low quality cork raw materials like burnt cork or first extraction cork bark and byproducts of the cork stopper industry.

**Market/consumers:**

- Users of 3D printers who want a sustainable product, mainly in filament form cork
- Any company that uses the technique of injection, molding or extrusion to manufacture any type of piece

*Cork properties include its low density, high mechanical strength and fire, low thermal and electrical conductivity, as well as being a good thermal and acoustic insulation and possess a high elasticity.*



## Resources

**Raw materials:**

- Low quality cork raw materials like burnt cork or first extraction cork bark
- Byproducts of the cork stopper industry



**Land owner involvement:**

The use of low quality cork raw materials through some uses of greater value would increase the economic value of cork not suitable for manufacturing cork stoppers encouraging forest owners to manage their forests, which are left in Catalonia at 50%.

## People

**Main actors involved:**

- Cork Stoppers companies
- 3D printer manufacturers
- Manufacturers of binders products
- Forest owners' associations
- Catalan Institute of Cork

**Value chain organisation:**

Forest owner -> Forest owner's association -> Cork stopper companies -> RAW MATERIAL -> 3D material manufacturing -> commercialisation

**Where they are from:**

Palafrugell - Catalonia (Spain)

## Success factors

Obtaining a reliable product, commitment provisioning of forest owners, obtaining appropriate sales channels.

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# Value chain: Beealia: low input agroforestry system to produce high added value lamb and kid meat



## Product

Main product:	Lamb and kid meat
Origin of product:	Sheep and goat herds bred in forest and agriculture land, Meira (Lugo), Spain
Market/consumers:	Responsible consumers: Restaurants, butcheries and the general public all over Spain

## Resources

Raw materials:	Grass and forest woody understory from our grasslands rented from the Banco de Terras de Galicia (Land bank of Galicia) and from forest/agriculture land owners respectively
Land owner involvement:	Specific agreements with forest/agriculture land owners (rent the land or use it for free in exchange of keeping it clean)

## People

Main actors involved:	<ul style="list-style-type: none"> <li>• Producers organised under the Beealia brand</li> <li>• Forest/agriculture land owners who rent their land to producers</li> <li>• Local slaughter house for processing and packaging the product</li> <li>• Consumers (direct sells, restaurants, local butchers)</li> </ul>
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Value chain organisation:	Producers comply with the specifications of our quality label "Cordeiro e Cabrito Atlántico" (Atlantic lamb and kid). Beealia receives and organises costumers orders. Agreement with local slaughter house where Beealia processes and packs the product to be delivered. Delivery may be done by own Beealia means or a carrier company.
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Where they are from:	Meira, Lugo, Galicia.
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## Success factors

- Access to land by renting or agreements with land owners (some will cede their land for free in exchange of having the goats sheep keeping the undergrowth controlled)
- Extensive low input production system, meat which can be easily differenced in the market from other products (high added value)
- Flexibility in product processing and delivery



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# Value chain: Livestock agroforestry - combining forestry with livestock husbandry: woodland eggs and poultry



## Product

Main product:

Woodland eggs and poultry, wood for construction, fiber wood, fuel wood

Origin of product:

- Woodland eggs and poultry are produced on a commercial scale on farms in the UK, the Netherlands, Germany and France
- Mainly on agricultural land (grassland or arable) with planted trees, short-rotation coppice or fruit tree orchards

Market/consumers:

Supermarkets (e.g. Sainsbury's, Aldi, Albert Heijn) and restaurants

## Resources

Raw materials:

- *Livestock*: The chicken are fed with normal (organic) chicken feed and get additional nutrition from natural forage
- *Trees*: fruit (apple, pear, plum, cherry) or forestry products (timber, pulp or energy wood) are harvested after 5-80 years depending on the tree species and the farmers' objectives

Land owner involvement: Normally the chicken are kept on the farmers' own land. Often this farming practice requires cooperation between a chicken farmer and tree grower .

## People

Main actors involved:

Farmers, meat processing, meat and egg packaging, wholesalers, retailers, restaurants

Value chain organisation: Often the farmer sells directly to the wholesaler or the supermarket. The eggs are sold as woodland eggs or are labelled as free-range eggs or organic eggs. Poultry is sold as "orchard chicken".

Where they are from:

Local, regional and national

## Success factors

- The proportion of eggs with poor quality shells is reduced when hens are given access to a woodland
- There is a market and consumers are willing to pay a premium
- Access to trees improves animal welfare. Research is still needed to quantify these welfare benefits to ensure clear communication to producers and consumers



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# Value chain: Herdade do Freixo do Meio, Montado System as an ancestral Agroecologic model



## Product

Main product:

Mediterranean food (any kind except fish: meats and cold cuts, cereals, pulses, acorns, wine, olive oil, fresh vegetables), Cork, and Wood. Some tourist activities to attract consumers.

Origin of product:

All from the multifunctional Montado (holm oak savannah) agro-forest-pastoral system

Market/consumers:

Products are sold: in a shop in Lisbon, at the farm, trough and online shop ([www.herdadedofreixodomeio.pt](http://www.herdadedofreixodomeio.pt)) and a Consumer Supported Agriculture (CSA) programme

## Resources

Raw materials:

Almost self sufficient system. May sometimes incorporate some external sources of protein for animals. One-off agreements with other producers to diversify baskets of products.

Land owner involvement:

The farm owns the land

## People

Main actors involved:

The farm, Other producers, Universities, Consumers, International volunteers

Value chain organisation:

The farm produces most of the food baskets it offers. The farm also works as incubator of initiatives within its philosophy, to generate knowledge. Knowledge is also generated through cooperation with universities. The sustainable and ecological philosophy that adds value to the products is promoted through the CSA programme and organising touristic activities and guided visits. The farm works with international volunteers.

Where they are from:

Portugal, Alentejo, Montemor-o-Novo

## Success factors

- Low input management model
- Adapted system to local conditions.
- Cooperation with consumers (CSA programme), other initiatives, universities

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# Value chain: How create sustainable tourism products



## Product

**Main product:**

Sustainable tourism products based on outdoor activities at a local level

**Origin of product:**

Tourism is an important economic sector (sea and spa tourism) but news consumers expectations are appearing. New social expectations in link with a strong demographic growth. An increase in the number of conflicts of use, these conflicts are seriously restricting the growth of these tourism products

**Market/consumers:**

Inhabitants  
Tourists

## Resources

**Raw materials:**

A fantastic playground: with 73,790 ha forest represents 49% of the land cover.

**Land owner involvement:**

We created a consolation platform where owners and tourism actors can meet together. But it was easier to start with public owners.

## People

**Main actors involved:**

Owners (private and public)  
Professional trades and organisations  
Public authorities  
Tourist information  
Tourist professionals

**Value chain organisation:**

- We create and facilitate a network where various actors can meet together
- The idea is to create an economic add value at each level: paid activities, accommodation, catering,...
- Forest is not only a decor, it is also an opportunity to create wealth
- These activities will be eco compatible to avoid a gap between the natural decor and the activities

**Where they are from:**

Local actors involved in our LAG (Local level)

## Success factors

Shared value, time...



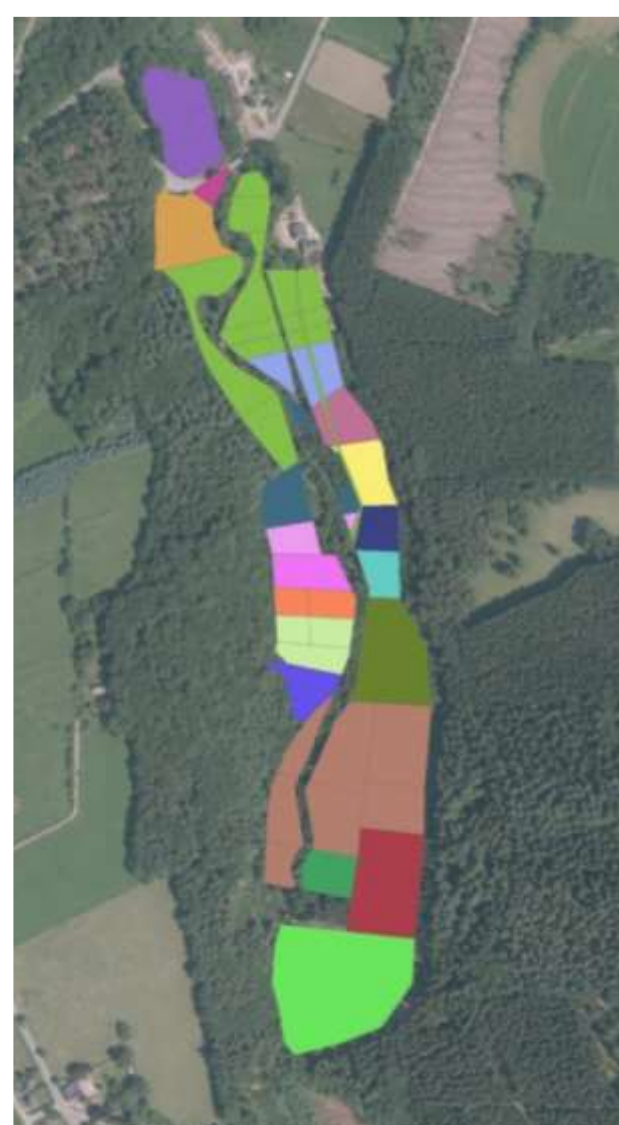
Contact:  
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# Value chain: Trekking trail and forest exploitation in a fragmented forest



## Product

Main product:

The Høegne valley is still mainly exploited for its wood.  
New tourism product - a new trekking trail.

Origin of product:

Recent years, interest for marked trekking trails has really increased in this region which is popular with tourists. This sector is progressively growing.

Market/consumers:

- Many hikers cross the valley:
- Daily tourists
  - Holiday-makers lodging in neighbouring villages

## Resources

Raw materials:

The valley is 1 km long and the area zone is 12 ha divided in 19 separate properties. The path along the river is not public.

Land owner involvement: Owners were contacted separately to join the collective project. Their authorisation was needed to mark the path. Concerning the forest management, there was the opportunity for owners to join a grouped wood sale.

## People

Main actors involved:

- 19 private owners
- A municipality and a local tourism organism
- The "support unit for small private forests"
- A forest logger
- An association leading a "Life project"

Value chain organisation: The municipality reclaimed the path. The "support unit for small private forest" organised the grouped wood sale for interested owners. The "Life project" negotiate management agreement with owners. Those do not receive monetary compensation for the recreational activities as Walloon trekking trails are free for tourists, but they get benefits in their agreement like the path maintenance.

Where they are from:

Regional actors in private and public sectors

## Success factors

The main success factor was to take into account the land fragmentation. Contact with owners was crucial for the project. Development in grouped forest management could formalise a real owners association.

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# Value chain: Payments for recreational and commercial mushroom picking permits



## Product

Main product:

Recreational and commercial mushroom picking in Albarracín (Spain)

Type of pickers	Permit price	Allowed Kg/day
Local regular	5 €/season	12
Local commercial	30 €/season	30
Outsider	5 €/day, 10€/week, 60 €/season	10

Origin of product:

Mushrooms often as externalities of current forest management, but mycosilviculture can be applied to increase fungal yield

Market/consumers:

Increasing recreational and commercial national demand

## Resources

Raw materials:

Edible mushrooms: *Boletus edulis*, *Lactarius deliciosus*, *Cantharellus cibarius*, *Craterellus cornucopioides*...

Land owner involvement:

NWFP picking permits require coordination for their effective management. Hence, groupings of small forest owners are preferable for scale economies

## People

Main actors involved:

Producers (land managers), Middleman, Payers/beneficiaries

Value chain organisation:

Mushroom pickers pay to get the permit. A middleman coordinates the landowners and interfaces payers; he manages the governance, technical and administrative system.

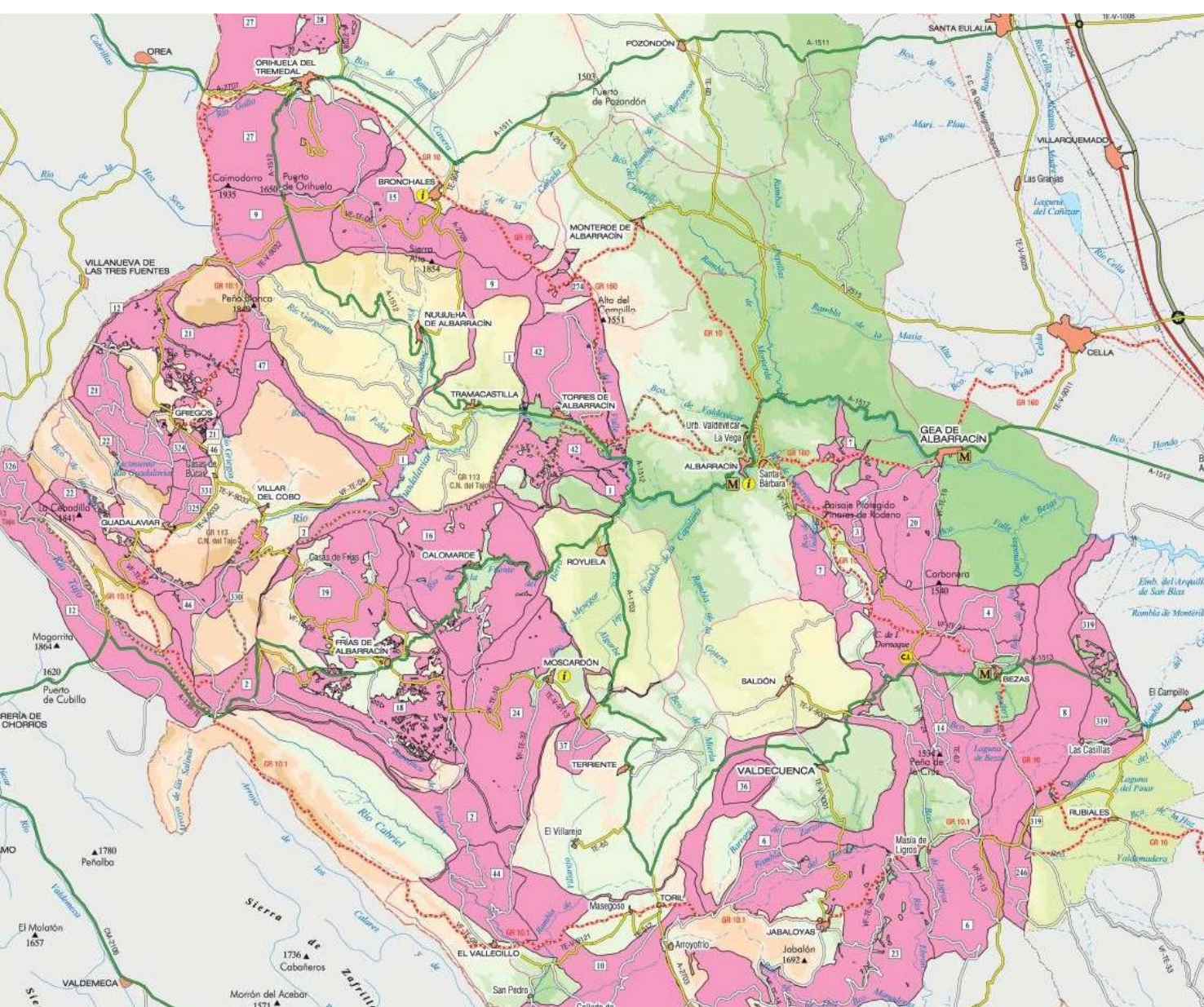
27% field signs + 9% taxes + 25% 4 field informants + 13% forest reinvestment + 19% technician + 8% permit logistics

Where they are from:

Pickers are from Aragón, Catalonia and Valencia regions. The middleman covers multiple municipalities

## Success factors

- ES with strong demand: well-known area, large frequency of pickers
- Trustworthy and efficient middleman: local technician & low transaction costs
- Forest owners' coordination: 18 municipalities, 60,000 ha. Approximately 0.7 €/ha
- Simple but robust technical study
- County government support & regulatory framework



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