

Ownership and the multifunctional role of forests

Pablo Almarcha Bethencourt
Confederation of Spanish Forest Owners - COSE

 European Rural Days

- 1.CEPF
- 2.COSE
- 3.Forests in Europe
- 4.Forests in Spain
- 5.Multifunctional role of forests
- 6.Resin, Dehesas and cork



PRINCIPAL ACTIVITIES

- Advisory Groups of the European Commission
 - Forest and Cork
 - Rural Development
 - Forestry Industries
 - Biodiversity and Nature
- Lobbying at European Level
 - DG Agriculture and Rural Development
 - DG Environment
 - European Parliament



PRINCIPAL ACTIVITIES

- Working Groups
 - CEPI and CEI-Bois
 - COPA-COGECA
 - Natura 2000: ELO, FACE, BirdLife, WWF
- European Forestry House (Brussels)
 - EUSTAFOR (European State Forest Association)
 - EFI (European Forest Institute)
 - FTP (Forest-based Sector Technology Platform)
 - ENFE (European Network of Forest Entrepreneurs)
 - FECOF (European Federation of Municipal and Local Community Forests)



ISSUES OF INTEREST OF CEPF

- Renewable Energies Directive
- Emissions Trade Directive
- FLEGT: Forest Law Enforcement, Governance and Trade Action Plan
- Illegal logging and Due-Diligence
- CAP reform and CAP post 2013
- Natura2000 network



COSE

Confederation of Spanish Forest Owners



- 54,7% of Spain cover with forests
- 67% of the forest area manage by private forest owners
- COSE represents 27% of the Spanish private forest area and 25.000 private forest owners
- Small scale forest holdings: average size 2-50 ha



COSE is a Confederation of Regional Private Forest Owners Organizations from 16 of 17 Spanish Autonomous Communities

PRINCIPAL ACTIVITIES

- **National level representation of the Spanish forest owners, relationships with Central Government and its consultative bodies and rest of stakeholders.**
- **International and European representation of the Spanish forest owners.**
- **Support and coordination to the autonomic and sectorial organizations of COSE and reinforcement of the autonomic network of forest owners associations.**
- **Strengthening of the inter-professional cooperation with wood based and cork industries in order to improve the effectiveness of the wood chain.**
- **Contribute to improving forest owner training**

ISSUES OF INTEREST OF COSE

- **Promotion of the certification of sustainable forest management by PEFC System**
- **Promotion of the correct application of Natura 2000 Network**
- **Promotion of the forest as carbon sinks to contribute to the fight against climate change.**
- **Promotion of the use of energy from forest biomass as a clean and renewable alternative against the use of fossil fuels.**

ISSUES OF INTEREST OF COSE

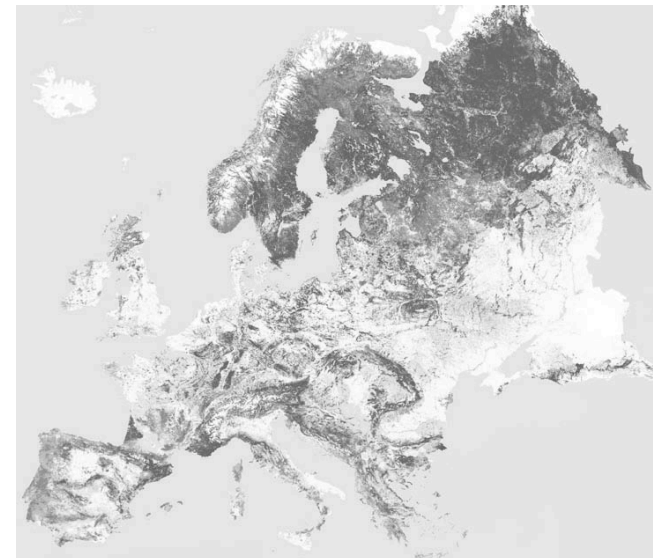
- **Promotion of the forest association.**
- **Inclusion of an Statute of the Private Forest Ownership in the Forest Law.**
- **Promotion of the valuation of the goods and services offer by the forests to the society: Positive externalities.**

EUROPEAN AND INTERNATIONAL ACTIVITIES

- **CEPF (Confederation of European Forest Owners)**
 - Board Member
- **IFFA (International Family Forestry Alliance)**
 - Founder member
- Active participation in international and European Working Groups:
 - ✓ Advisory Group of Forestry and Cork in CE (DG- Agri)
 - ✓ Advisory Group of Rural Development in CE (DG-Agri)
 - ✓ Working Groups of Cork (AGF& C) and non wood products (NWP) of UE.
 - ✓ Working Groups of the EU: European Climate Change Program (ECCP), Forestry an Forest Based Products (FFBP) and Sinks.



Forests in Europe



Forest ownership in Europe

- In the EU-27, forests and other wooded land covered 177 million hectares, or 42% of the land area in 2005
- 60% of forests owned by families
- 16 millions family forest owners
- Small scale forest holdings: average size 2-50 ha

Productivity of Forests in Europe



Forests in Europe

- The forest available for wood supply produced a net annual increment of 764 million m³ in the EU, of which 69% were felled in 2005

Productivity of Forests in Europe

Country	Forest Area	Forest timber
Sweden	31 million ha (75%)	70 million m ³ /year
France	17 million ha (30%)	59 million m ³ /year
Spain	28 million ha (54%)	17 million m ³ /year

Eurostat, 2008



Forests in Spain

Land use in Spain



Land use in Spain

USES OF TERRITORY

	AREA (ha)
FOREST AREA	27.872.829 ha (54,7%)
NON FOREST AREA	22.722.676 ha (45,3%)

TOTAL 50.595.505

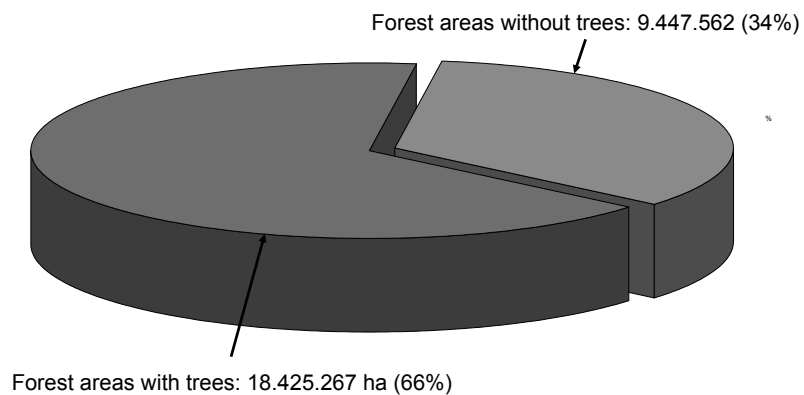
FOREST AREA

	AREA (ha)
FOREST AREA WITH TREES	18.425.267 ha (66%)
FOREST AREA WITHOUT TREES	9.447.562 ha (34%)

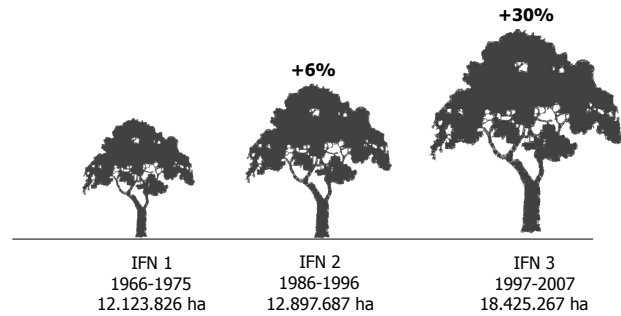
TOTAL 26.273.235 ha

Land use in Spain

Total Forest Area (ha) 27.872.829 ha (54,7% of land)



Forest Land evolution: from 1966 to 2007



Forest biomass has grown in the last 10 years 296 millions of m³: 33%

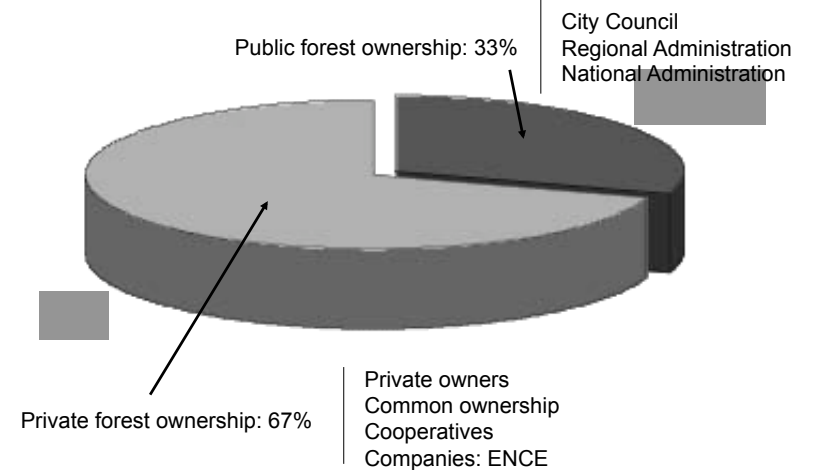
Forest ownership in Spain

- Private Forest Owners manage 67% of the forest area, approximately one third of the total surface of the Spanish territory.
- There are approximately 2 - 5 million of private forest owners in Spain.
- The average surface of forest ownership is 2-3 ha.
 - 0,5 ha in Galicia
 - 600 ha in Extremadura

Forest ownership



Forest ownership



Productivity of Spanish forests

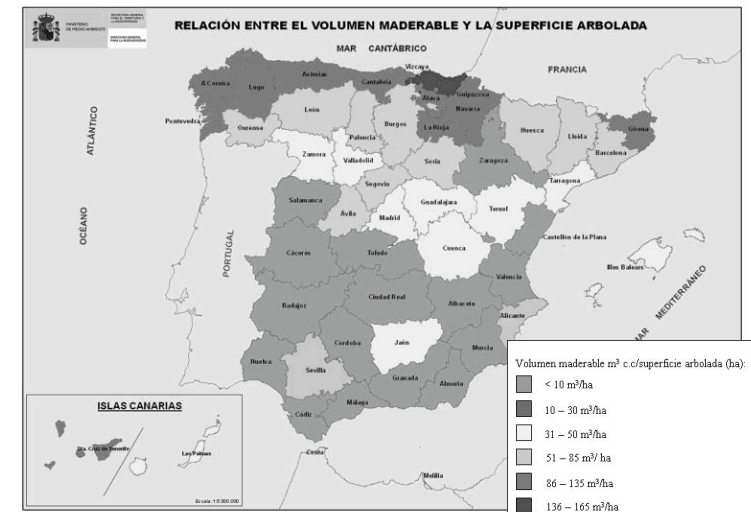
Low productivity of Spanish forests

The average productivity of European forests: 13m³/ha/year

The average productivity of Spanish forests: 2m³/ha/year

The average productivity of North Spanish forests (Vasque Country and Galicia): 10m³/ha/year

Wood Harvest

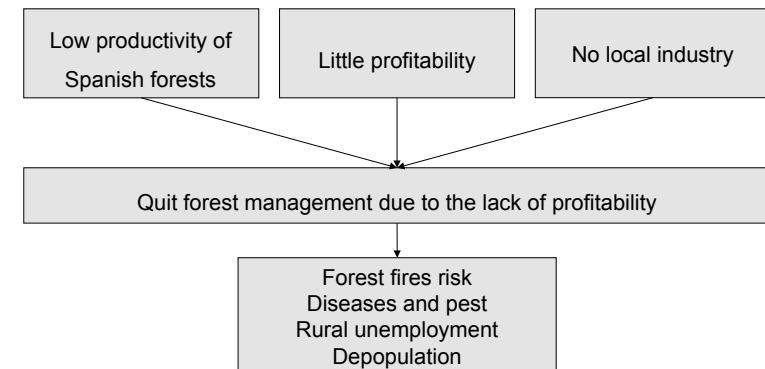


Forest Sector in Spain

Wood Market

- **Growing: 52 million of m³/year**
- **Wood consume: 30 millions of m³/year**
- **Wood supply: 16, 3 millions of m³ roundwood/year**
- **Wood importations: 15 millions of m³/year**
- **The extraction is 36% of annual growth while the average in the EU is 69%.**

Forest Sector in Spain





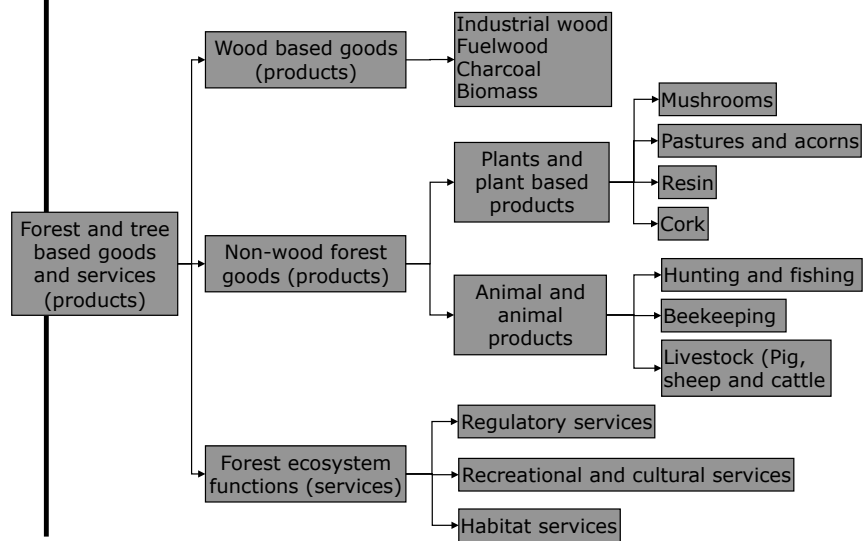
Forests sustainability depends directly on generated incomes. With these incomes, the forest owners are able to run the necessary forest operations in order to assure a

SUSTAINABLE FOREST MANAGEMENT

Multifunctionality of forests

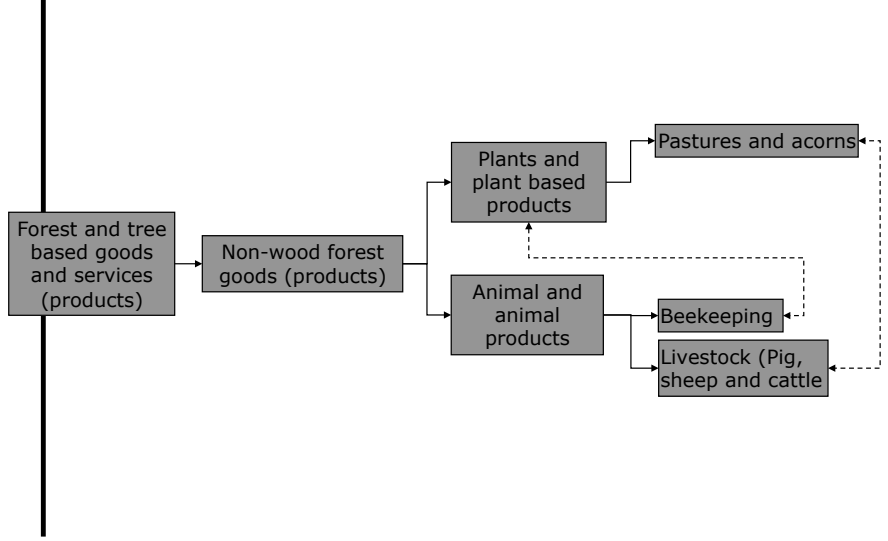
- Wood based products
- Non-wood based products
- Environmental goods and services

Multifunctionality of forests



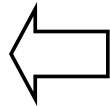
Classification of forest and tree products (modification based on FAO NWFP Program and de Groot et al 2002)

Multifunctionality of forests



Classification of forest and tree products (modification based on FAO NWFP Program and de Groot et al 2002)

Forest and tree based goods and services (products)



Sustainable
Forest
Management

• **Environmental goods and services**

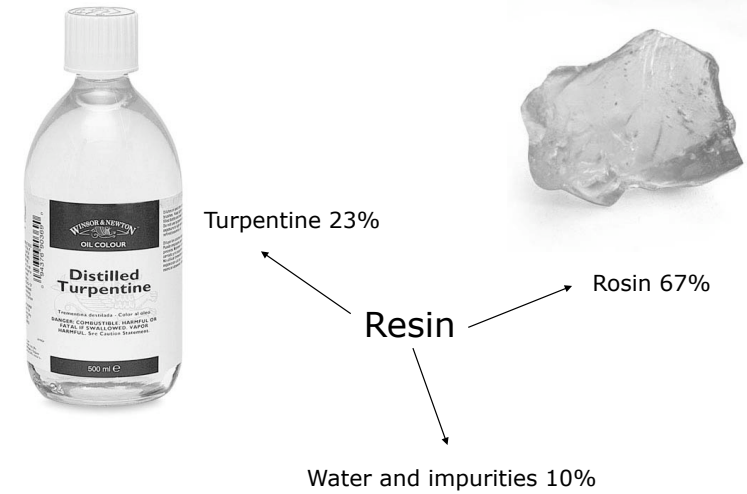
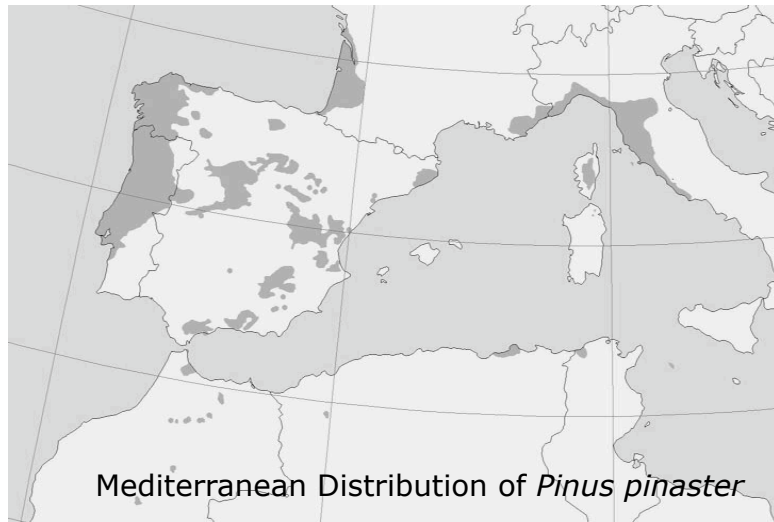
- Hydrological Protection
- Carbon Sequestration – Combating Climate Change
- Biodiversity – Natura 2000 Network
- Rural Tourism
- Bird watching
- Landscape
- Recreation and leisure

• **Wood based products**

- Wood veneer
- Sawn timber
- Wood chips
- Pulp
- Poles
- Fuelwood
- Charcoal
- Biomass**

• **Non-wood based products**

- Hunting and Fishing
- Pastures and acorns: **Livestock** (Pig, sheep and cattle)
- **Cork**
- Mushroom cultivation
- Medicinal plants
- Beekeeping
- Pine nuts
- Chestnuts
- **Resin**



Uses of rosin

- Paint, varnish, wax, glue
- Printing ink
- Pharmaceuticals and cosmetics

Europe accounts for 10% of the world rosin production

Europe consumes 24% of the global rosin production

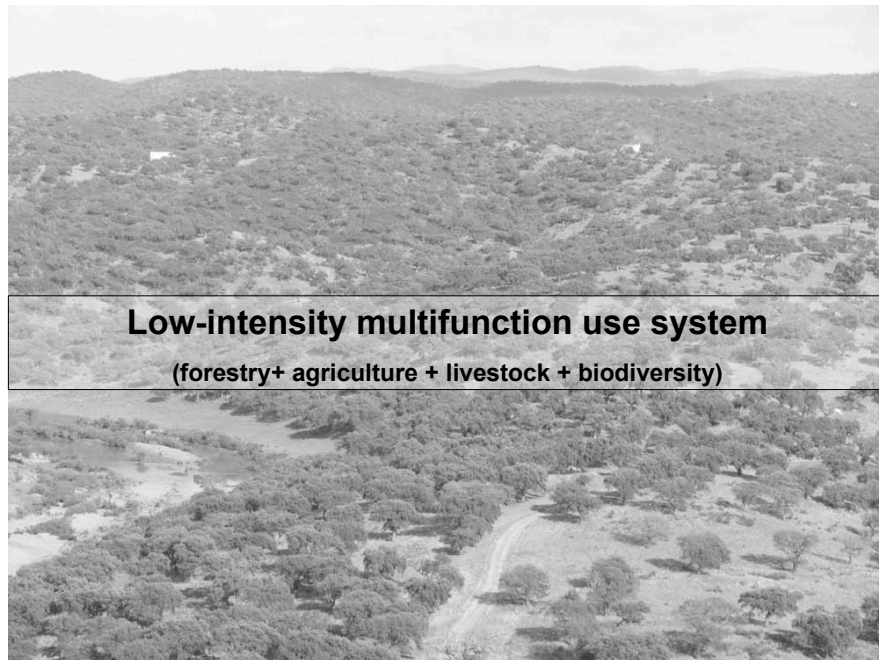
Benefits from the use of natural resin

- Sustainable forest management
- Forest fire risk reduction
- Less dependence on oil
- CO2 sink and storage
- Chemicals terpenes from natural resin

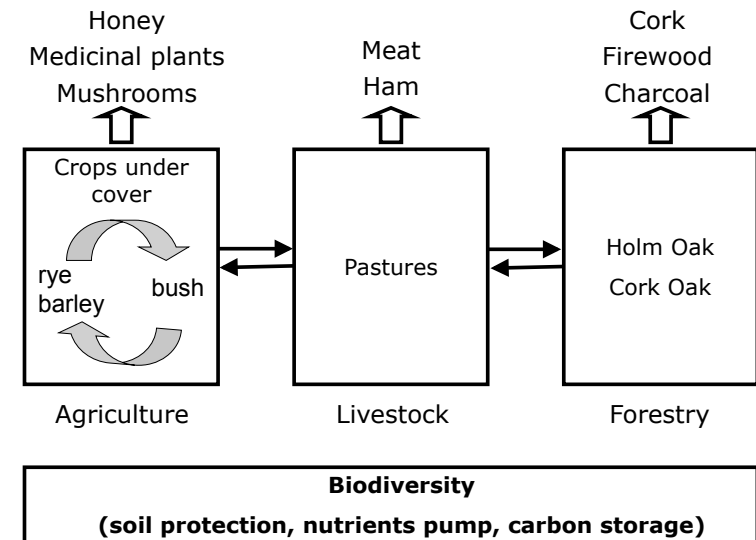


Dehesas

- The dehesa is a type of Mediterranean forest man-made ecosystem consisting of Quercus (holm oak, cork oak) or other species such as ash (Fraxinus) or pine with an herbaceous layer to graze.
- 20,000 km³ in the Iberian Peninsula.
- Combined forestry-agricultural-livestock management from which multiple resources are obtained simultaneously.



Low-intensity multifunction use system
(forestry+ agriculture + livestock + biodiversity)



	Sheep	Cattle	Pig
€/ha of dehesa (no subsidy)	-26,12€	5,60€	62,25€
Animal/ha for sustainability	2,1 sheep/ha	0,35 cow/ha	0,5 pig/ha
Break-even minimum flock	362 heads	37 heads	48 heads
Break-even surface	172 ha	111 ha	96 ha

CORK OAK FOREST

Quercus suber L.

2,5 million Hectares covered by cork oak forests in the world

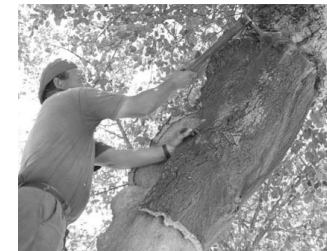
Unique for its biodiversity, and its effects as a natural barrier to desertification and forests fires

Endemic to Mediterranean woodlands: Portugal, Spain, Algeria, Morocco, France, Tunisia and Italy



Descorche

- Every 9-10 years
- Mid May to Mid August



First Descorche

- Taking out the bornizo (first cork)
- At 20th year
- Uses: agglomerate
- Not use for cork stoppers

**Second Descorche**

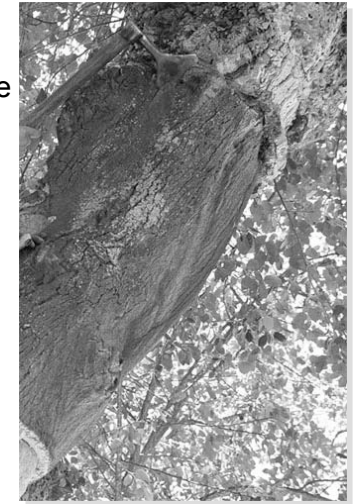
- 9 years after (29 years old)
- Uses: agglomerate; agglomerate stoppers

Third Descorche

- 9 years after (38 years old)
- Uses: cork stoppers

Next Descorches

- Every 9 years



- **Density:**
 - 50 - 120 cork oaks/ha
- **Productivity**
 - 45 - 200 @/ha/9 years (1 @ = 15 kg)
- **Industry**
 - 3.000 - 6.000 cork stoppers / 100 Kg cork (raw material)
- **Profitability**
 - 375 - 4.000 €/ha/9 years

The use of cork stoppers in wine bottles is one of the simplest ways to contribute to the preservation of cork oak forests, their biodiversity and the economic network in many rural areas of South Europe

