INTERNATIONAL CONGRESS ON CORK OAK TREES AND WOODLANDS
Sassari, 26 May 2017

Cork oak certification in the Mediterranean basin: state of the art and market trends

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Outline

- Introduction
- Global view (from STARTREE project)
- Marketing issues
- The case of FSC®
- Conclusion

Slides can be download from the web: search "pettenella"

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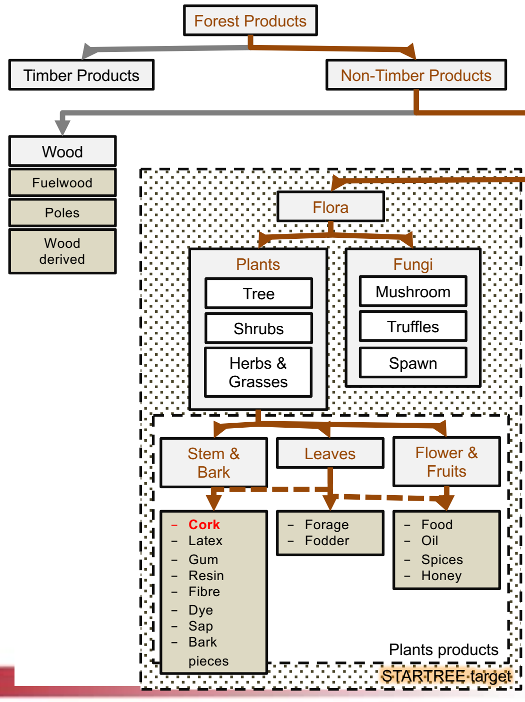
StarTree project (Working Package 3)

https://star-tree.eu

Forest products



No clear distinction between:

- wild harvested or cropped;
- raw or processed product;
- Production in the forest or in other lands.

Source: (FAO 1999 - mod)

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For more information

Project no. 311919

Star-Tree

Multipurpose trees and non-wood forest products: challenges and opportunities for policy makers

Start date of project: 1 November 2012

Duration of project: 4 years

Collaborative Project

FP7-KBBE-2012-6-singlestage

D3.1. NWFP in the international market: current situation and trends

Due date of deliverable: **30th November 2014**

Actual submission date: **5th December 2014**

Organisation name of lead contractor for this deliverable: **University of Padua**

Dissemination level: **Public**

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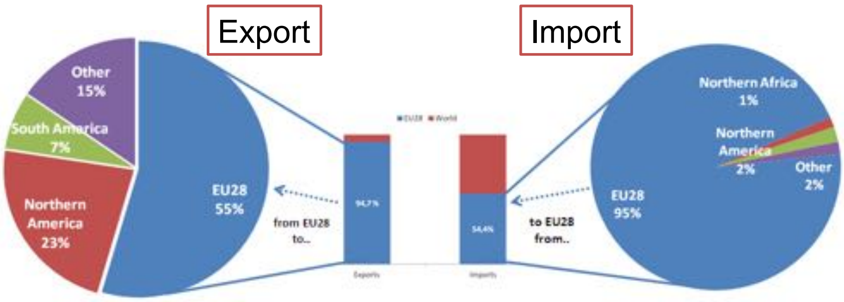
Cork production and productivity

Country	Forest Area[a] (1000 ha)	%	Alternative data (1000 ha)	Production (1,000 tons)[c]	%	Alternative data (1,0000 ton)	Productivity (ton/ha)
Portugal	737,000	34%		99,600	49.6%	187,000[d]	0.14
Spain	574,000	27%		61,300	30.5%		0.11
Morocco	383,000	18%		11,700	5.8%		0.03
Algeria	230,000	11%		9,800	4.9%		0.04
Tunisia	86,000	4%		7,000	3.5%		0.08
France	65,000	3%		6,200	3.1%		0.10
Italy	65,000	3%	160,000b	5,200	2.6%		0.08
TOTAL	**2,119,000**	**100%**		**201,000**	**100%**	**340,000[d]**	0.09

Sources:
a: Cork Quality Council https://www.corkqc.com/pages/industry-statistics
b: IMFC 2015
c. APCOR www.apcor.pt
d. Amorin web site http://www.amorim.com/en/why-cork/cork-oak-forest-area/

Imports and exports’ partners for stoppers with respect to global trade

Cork stopper is the most valuable cork product exported from EU28. It accounts for the **94.7%** of the **global export** of the cork in which **55% is traded within EU** (2011).



Source: own elaboration on COMTRADE DB

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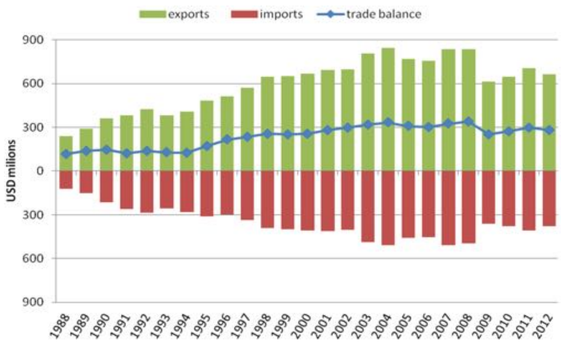
EU28 total imports, exports and trade balance for stoppers (million USD)

The EU28 trade balance accounts for **300 M US$,** a value quite stable over time



Source: own elaboration on COMTRADE DB

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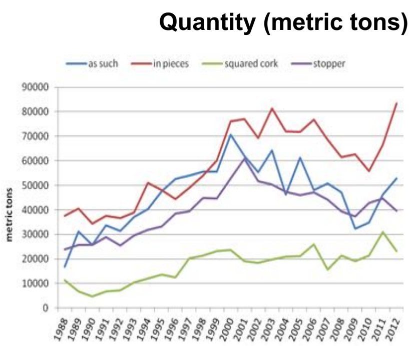
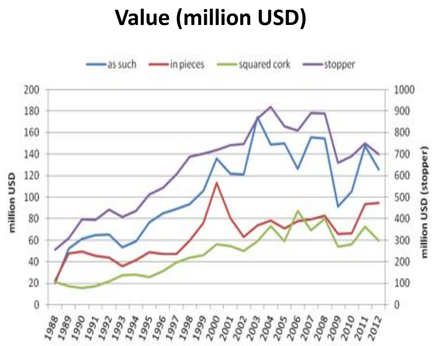
Global trade by cork product





Source: own elaboration on COMTRADE DB

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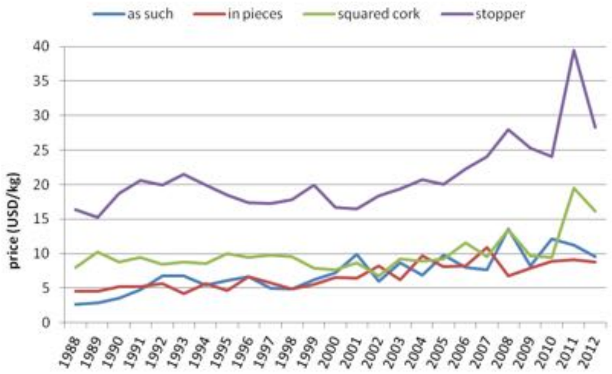
Global average cork prices
(prices of transaction of large quantities, above 100 metric tons)



Source: own elaboration on COMTRADE DB

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Bottle stoppers (>70% of the value of total production)

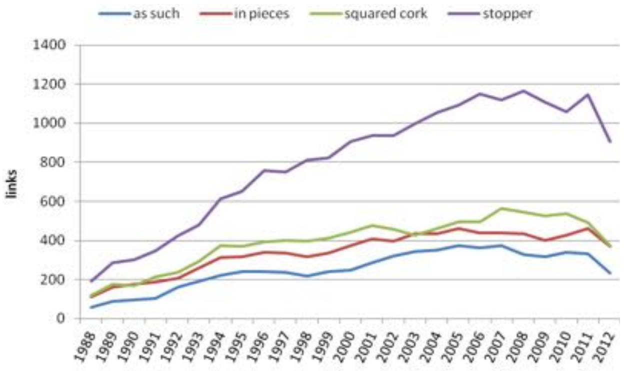
Since 2003 cork market prices have declined 30% due to the economic crisis

A comparison of the different segments of the cork industry based on Portuguese estimated revenue in 2015

	Value (M €)	%
Wine stoppers	€ 644	72%
Building materials	€ 228	25%
Raw materials	€ 9	1%
Other products	€ 18	2%
TOTAL	**€ 899**	**100%**

Source: Cork Quality Council
https://www.corkqc.com/pages/industry-statistics

Number of trade partnerships in global trade by cork product



Source: own elaboration on COMTRADE DB

Global export and import top 5 countries of cork stoppers

Portugal is the main exporter, followed by Spain, France and Italy, though Italy disappeared from the top 5, due to the internal demand of cost stoppers for the expanding wine sector. The main importers are France and US.

Export (million of USD)

2000		2005		2010		2012	
Portugal	502	Portugal	592,1	Portugal	483,1	Portugal	524,0
Spain	58,6	Spain	79	Spain	81,6	Spain	87,7
France	53,7	France	38	France	33,2	France	27,9
Italy	28,5	Italy	29,3	Italy	29,1	USA	17,5
Germany	16,2	Germany	18,9	USA	13,5	Germany	9,4

Import (million of USD)

2000		2005		2010		2012	
France	192,7	France	205,3	France	189,5	France	181,3
USA	115,6	USA	146,1	USA	137,4	USA	150,1
Australia	58,8	Spain	73,1	Spain	49,7	Spain	47,0
Spain	55,4	Australia	55,5	Italy	46,3	Italy	44,8
Germany	52,1	Italy	45,1	Chile	30	Portugal	38,0

Source: own elaboration on COMTRADE DB

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Marketing issues

- A **territorial concentration** (duopoly): P and SP (**61.2%** of the cork oak forests; **85.6%** of the production; **98.5%** of stopper production – CE Liege)
- A **regional specialization**: Alentejo,
- (P), Andalusia, Extremadura, Catalonia (SP) [Sardinia (I)] Cork oaks were planted in California, Chile, China, RSA and Australia but plantations in all these countries failed so far to produce cork of good quality
- In the **processing industry**, an even stronger concentration

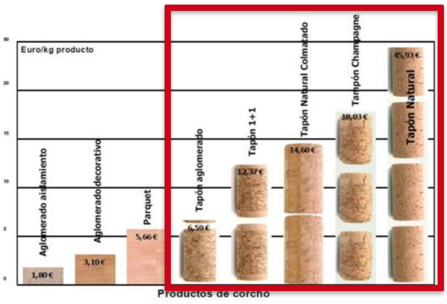
Marketing issues: a strongly competitive market

- External competition (plastic and metal stoppers), frequently based on ambiguous arguments (sustainability)

Marketing issues:
a strongly competitive market

- External competition (plastic and metal stoppers), frequently based on ambiguous arguments (sustainability)
- Internal competition

A “stopper-dependent sector”
(Maria Carolina Varela et al., 2107)



Fuente: IPROCOR

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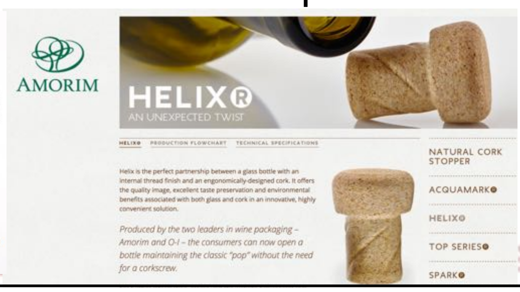
Marketing issues:
a strongly competitive market

- External competition (plastic and metal stoppers), frequently based on ambiguous arguments (sustainability)
- Internal competition
- Impressive product innovation patterns

(quite rare in other sectors of the rural economy)



Source: FSC. Market Info Pack 2016-17. A review of Forest Stewardship Council market developments, statistics, and trends. January 2017


Collaborating for responsible cork

Corticeira Amorim

FSC is an important partner in highlighting the sustainability of cork forests and the robust forest management practices of cork producer Grupo Amorim.

Among other products, the company produces cork stoppers for wine bottles. Consistent growth has contributed an extra billion stoppers to yearly sales in just five years, with totals now reaching 4.2 billion units. Amorim has also engaged with the FSC

sustainability of its offering. In 2016 the company launched the world's first natural cork stoppers guaranteed to have no detectable trichloroanisole (TCA) molecules that may taint flavours in wine.

applications have allowed Corticeira Amorim to compete in industries as diverse as transportation, sports applications or heavy construction units.

"FSC core values and the centuries-old cork forest and products management practices are extremely well aligned."

- Carlos de Jesus, Head of Marketing & Communication, Corticeira Amorim

TCA problem

Cork production + other services

much connected with the preservation and active management of traditional silvo-pastoral systems

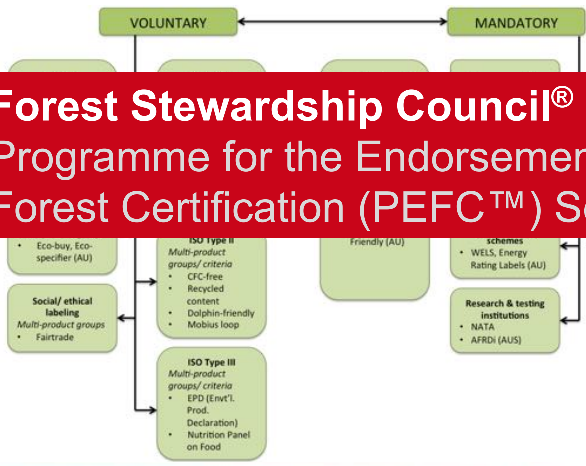
Provisioning	Livestock production
	Big/small game hunting
	Honey, herbs and other wild forest products
Regulating	Long-term carbon-storage
	Biodiversity conservation
	Water regulation and purification
	Pollination
Cultural	Landscape and cultural heritage preservation (*montado* – Portugal; *dehesa* - Spain)
	Recreational activities

→ Marketing of mixed, public-private goods (territorial marketing)

Contents of promotional aspects

3 values (from the InterCork communication campaigns by APCOR):
- **Culture** (high quality wines, traditions)
- **Nature** (sustainability of production, landscape)
- **Future** (technological innovation; new markets)

Among the most advanced marketing instruments: certification and labelling



- **Forest Stewardship Council® (FSC ®)**
- Programme for the Endorsement of Forest Certification (PEFC™) Schemes

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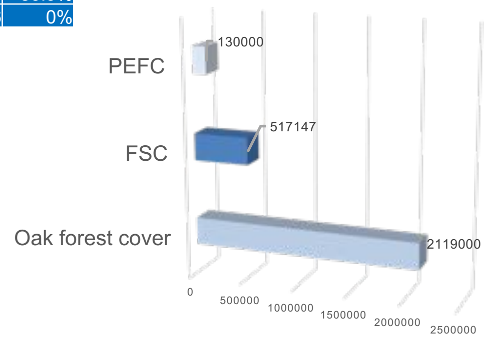
Certified cork oak forests in the world
(May 2017)

Oak forest cover	FSC certified (ha)	%	PEFC certified (ha)	%
2,119,000	517,147	24.4%	130,000	6.1%
2,500,000		20.7%		5.2%

	ha	%
Portugal	357,386	69.1%
Spain	159,695	30.9%
Italy	66	0%



Source: our elaboration on FSC DB

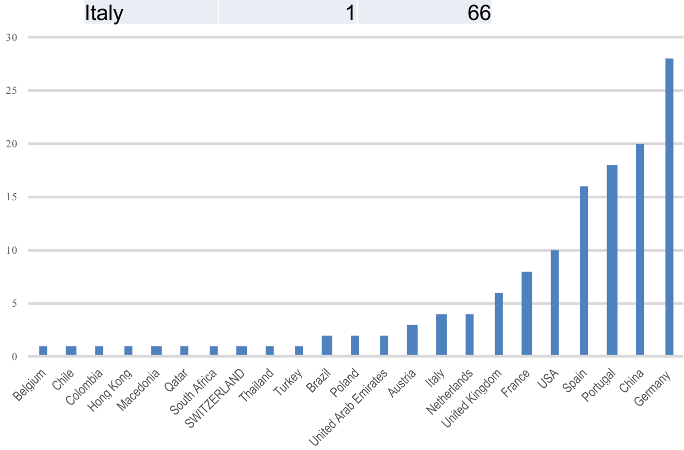
Main threats from the experience of FSC® certified cork forests

- Over-grazing
- Intensive shrub clearing to reduce wildfire risk (with the use of heavy machinery)
- Wildfires
- Shrub encroachment
- Expansion of exotic grasses
- Over-collection of acorns for human and animal consumption
- Cohorts of trees reaching age limits (ageing)
- Inadequate management practices

CoC FSC ® - Cork and articles of cork (May 2017)

	No. CoC
Belgium	1
Chile	1
Colombia	1
Hong Kong	1
Macedonia	1
Qatar	1
South Africa	1
Switzerland	1
Thailand	1
Turkey	1
Brazil	2
Poland	2
Denmark	2
UAE	2
Austria	3
Netherlands	4
Italy	5
United Kingdom	7
France	8
USA	10
Spain	14
Portugal	20
China	23
Germany	30
Total	**142**

	No. FM/CoC	ha
Portugal	20	390,000
Spain	8	159,695
Italy	1	66



Equivalent to 737 productive sites

New interesting marketing developments

3 case studies:

- **Cork certification and collective action**:
  the case study of ADEHFCO in Spain
- **Cork certification and PES**:
  The WWF Green Heart of Cork project in Portugal
- **Cork certification: from premium to mass markets**:
  The case of Amorin and Freschello in Italy
- **Cork certification: from one initiative to a structured and holistic approach to CSR**
  The case of Salcheto in Italy

Case study no. 1
Certification and collective action:
the case study of ADEHFCO in Spain

Asociación de Dehesas Ecológicas (ADEHECO): 120,000 ha, 425 members in the provinces of Huelva, Sevilla, Cádiz, Córdoba and Málaga.
FSC certification of cork oak forest is reinforcing the tourist immage of the area: "*Los que se dedican al turismo rural lo ven fundamental pues el turista extranjero valora mucho esta certificación. Para ellos, más que algo interesante es una necesidad*" as well as the sales of meat product (the ADEHFCO secretary)

Case study no. 2
Certification and PES:
The case of WWF Green Heart of Cork project (GHoC) in Portugal

Cork oak landscapes within the region of the Tagus and Sado watersheds: a WWF project where FSC® certification is used to validate **sustainable management practices in hotspot areas** and to support the implementation of a **water related Payment for Ecosystem Services** (PES) scheme.

Coca-Cola paid 17€/ha to the APFC forest landowners, in the 600ha identified and classified as HCV, located in sensitive areas for water recharge of aquifer T3 and certified by FSC.

WWF **The Green Heart of Cork project**

The Coca-Cola Portugal – APFCertifica PES case

Type:
Payment for bundle ecosystem services in voluntary market

- **Partner providing the service:** APFCertifica Group Scheme - Forests landowners formed an association and adopted sustainable forest management practices in order to receive Forest Stewardship Council (FSC) certification.
- **Beneficiaries:** Coca-Cola Portugal – Refrige, beverage factory, located over the Tagus Aquifer (T3), consuming 500.000m3/year of groundwater.

Services: Forest landowners committed to maintain good forest management practices within the 16.000 ha FSC certified areas. FSC certification places a strong focus in criteria related to biodiversity conservation and watershed protection. Approximately 600 hectares (ha) were considered to be of critical importance for biodiversity and water recharge of the aquifer T3 and therefore were considered High Conservation Value Areas.

HCV	High Conservation Value Areas (HCVA) identified by APFC (ha)
Seasonal Concentrations of Species	24,79
Watershed Protection	569,63

Location: Portugal, Alentejo and Ribatejo regions

TESAF Dipartimento Territorio e Sistemi Agro-Forestali

Case study no. 3
Certification: from premium price markets to mass markets
The case of Amorim and Freschetto in Italy

4/7/2017

Partnering wine industry leaders on sustainability at Vinitaly 2017

Join us at Enolitech stand 13 in Hall F.

UPM Raflatac is partnering with leading Italian wine producer **Cielo e Terra** and the world's largest natural cork supplier, **Amorim Cork**, to promote sustainability in the wine industry at the 'Freschello for Forests' event at Vinitaly 2017. Vinitaly is the world's largest wine exhibition and takes place in Verona, Italy on April 9-12.

The highlight of the event will be the launch of a Freschello wine bottle on the Cielo e Terra stand. The bottle incorporates an FSC® certified label and promotes UPM Raflatac's RafCycle® concept as a solution for recycling label waste.

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Case study no. 4
Certification: from one initiative to a structured and holistic approach to CSR
The case of Salcheto in Italy

Certified FSC® products: stoppers, packaging, labels, folders, business cards, paper.

SALCHETO
TOSCANA

SOSTENIBILITÀ

Gestiamo l'ambiente, la nostra impresa più importante

Alla Salcheto crediamo che un'impresa debba prefissarsi fin dal suo progetto iniziale obiettivi di continuo miglioramento della sua sostenibilità ambientale e sociale, oltre che economica.

Per questo stiliamo un Bilancio Sociale (secondo i criteri della norma SA8000) e per questo abbiamo sviluppato, anche grazie alle ricerche del Gruppo di Lavoro Salcheto Carbon Free, un attento controllo di gestione ambientale su tre indicatori:

- **Carbon Footprint:** per controllare energia e materia direttamente ed indirettamente consumate lungo il processo e ridurre le emissioni di gas clima-alteranti connesse.
- **Water Footprint:** per razionalizzare l'uso dell'acqua ed abbatterne qualsiasi inquinamento.
- **Indice Biodiversità:** in fase di sperimentazione applicata, monitora la qualità biologica del suolo e dell'ecosistema aziendale.

La continua ricerca di una migliore interazione con l'ambiente ci ha anche portati a:

- Operare in una cantina energeticamente autonoma ("off-grid", dove il risparmio di energia è la prima "fonte di approvvigionamento")
- Condurre e Certificare i nostri vigneti ed i nostri vini secondo il protocollo Biologico Europeo
- Autoprodurre i nostri concimi (dal compostaggio) e dinamizzare i terreni con Preparato Biodinamico 500
- Utilizzare materiali legnosi derivanti esclusivamente da fonti controllare e foreste gestite in maniera responsabile (certificazioni FSC)

Siamo orgogliosi di essere stata la prima azienda al mondo ad aver certificato la Carbon Footprint di una Bottiglia di Vino (secondo lo standard ISO 14064, nel 2011).

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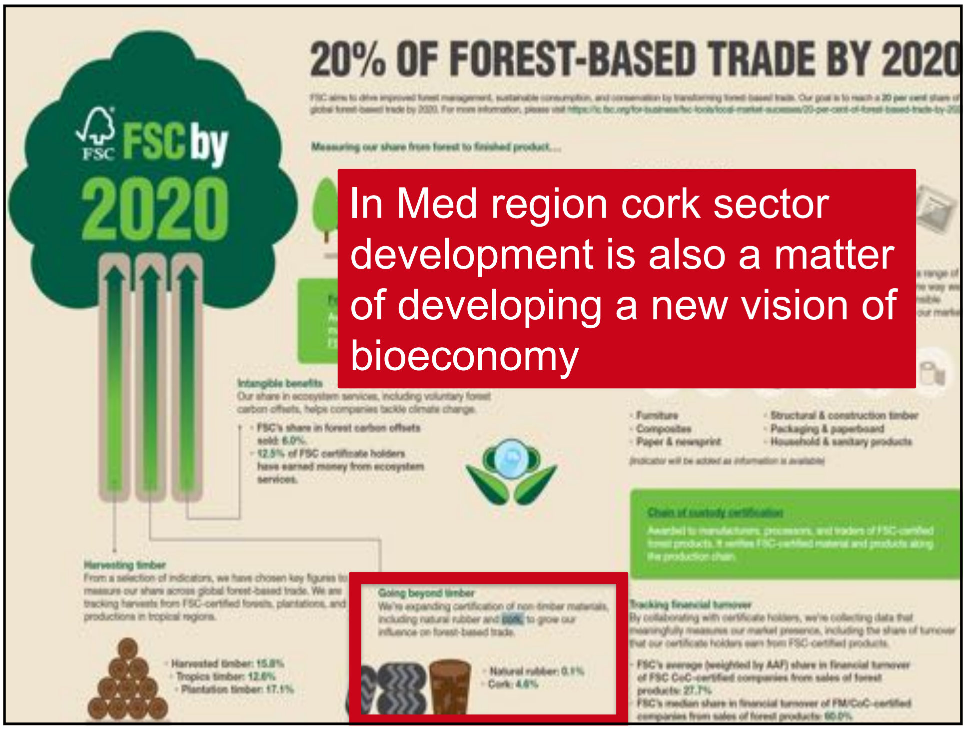

Technological approach vs. social approach in bioeconomy

	Technological approach	Social approach
Focus on	Technological innovations, large scale investments	Social innovations, small scale, high added value P&S (→ low risk)
Vertical vs. horizontal relations	value chain perspective; sectoral development; vertical integration	network economy, inter-sectoral development; horizontal integration
Diversification output and inputs	Industrial products as the main goal of production; diversification in outputs	Diversification in the use of inputs (wood, but also NWFP, ES, …) and not only of the outputs
Market power	Increased market power of the industrial companies controlling the advanced technologies (→ high risks connected to the companies consolidation trends)	Balanced market power among the various diversified operators (→ reduced risk due to diversification)
Model regions	UK, Scandinavian countries	Mediterranean countries, mountain regions
Examples	Innovation assessment approach by the EU Eco Innovation Observatory (http://www.eco-innovation.eu/)	Local Action Groups (Leader+ approach - http://enrd.ec.europa.eu/enrd-static/leader/en/leader_en.html)
Drivers	Patented (private) R&D initiatives, with public support	Public-private initiatives in education, training and non-patented innovations

Cork
can be both a
component
of the social and
economic
approach to
bioeconomy!