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XI SISEF Congress - Rome 12th October 2017

Are nature-based businesses really innovative?

Lessons learnt from a preliminary assessment of EU entrepreneurial initiatives

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Outline:

1. Ecostar project in a nutshell
2. Some preliminary considerations
3. Research objectives and methodology
4. Results
5. Conclusions and recommendations

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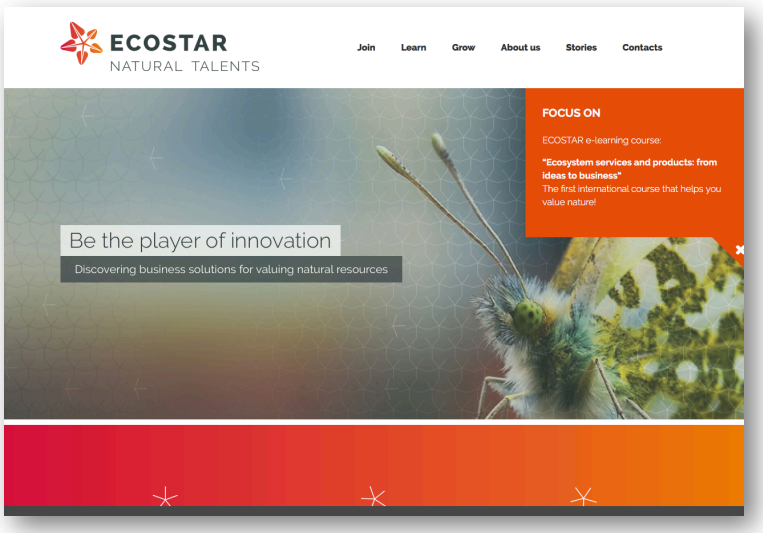

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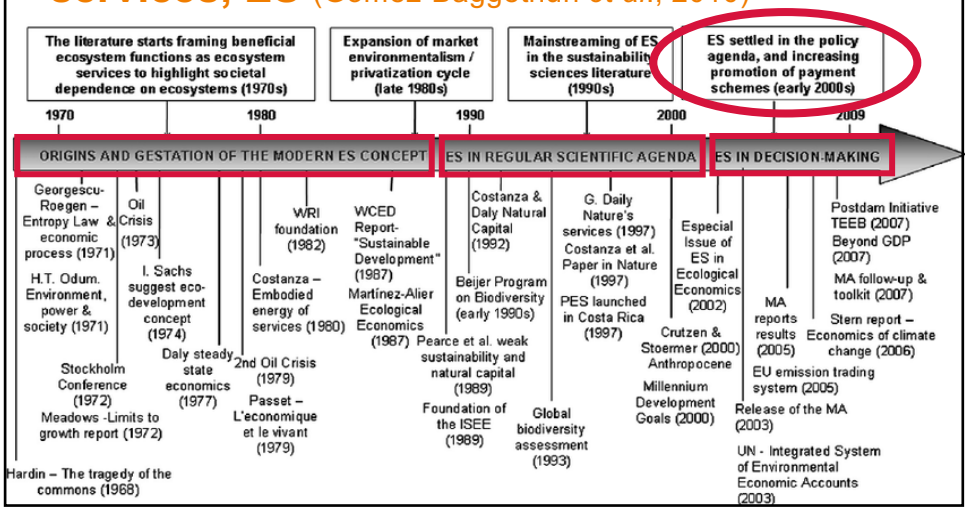
Stages in the modern history of ecosystem services, ES (Gómez-Baggethun *et al.*, 2010)



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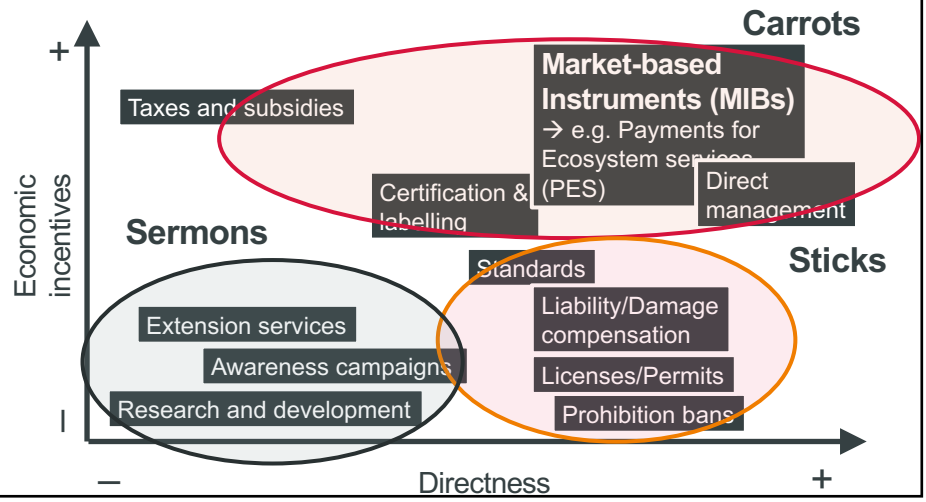
Policy instruments to ensure the provision of ES (mod. from OECD, 2006 and Wunder, 2006)



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Market-based Instruments (MIBs) for ES

(mod. from Pirard, 2012; Pirard and Lapeyre, 2014)

Category	Characteristics	Examples of applications
Direct markets	Environmental product directly traded between producers and consumers (or processors)	Genetic resources, non-timber forest products (NTFP), ecotourism
Tradable permits	Users of an environmental resources need to purchase "permits" that can be further exchanged among resource users	Mitigation banking for biodiversity, tradable development rights for land, voluntary carbon markets…
Reverse auctions	Candidates to ES provision set the level of payment (if accepted) in response to a call by public authorities to remunerate landholders	Quasi-PES
Coasean-type agreements	Voluntary ES transactions (free of public intervention)	Pure PES (Wunder, 2005), conservation concessions
Regulatory price signals	Regulatory measures leading to higher or lower relative prices	Agro-environmental measures
Voluntary price signals	Evidence of positive impacts on ecosystems and possible premium-price	Forest/Organic agriculture certification and labelling

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Some considerations

- Command and control tools/approaches alone often ineffective in promoting active management and valuing of natural resources
- Call for a stronger involvement of private actors (incl. entrepreneurs) (PPP, private donors, PES…)
- Great emphasis on MBIs as an alternative and innovative tools…**but still limited implementation and assessment of their degree of innovation and current/future development trends**

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Research objectives (Ecostar Task 3.3)

1. To identify/assess a set of EU-based nature-based business models investing in natural capital to promote/enhance ES
2. To assess their degree of innovation based on a custom-made innovation framework
3. To discuss findings and gain insights for future developments of MBIs

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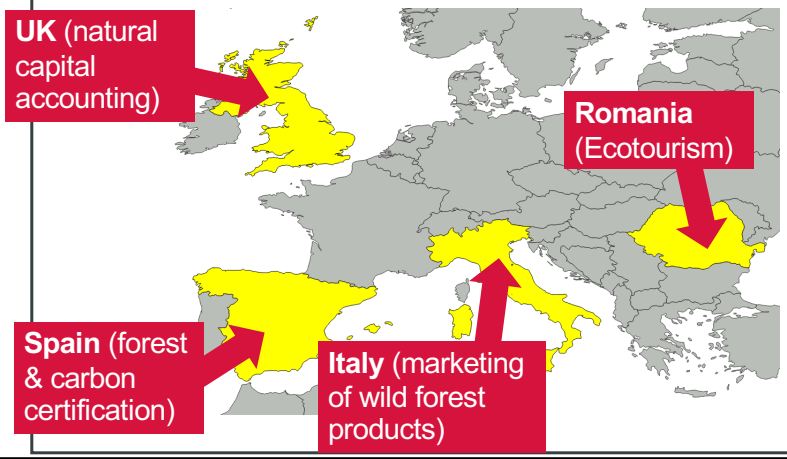
Methodological approach (1/3)

1. Choice of study areas, thematic areas and sample number:



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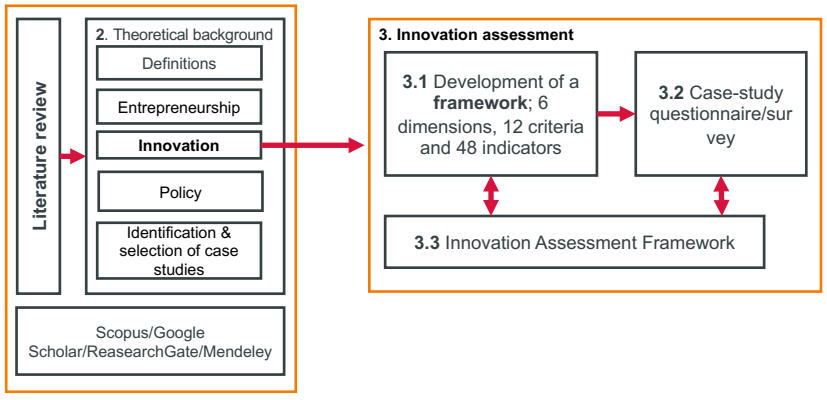
Methodological approach (2/3)

1. Choice of study areas, thematic areas and sample number: four different EU countries; United Kingdom (natural capital accounting) Italy (wild forest product marketing), Spain (forest and carbon certification), Romania (ecotourism).



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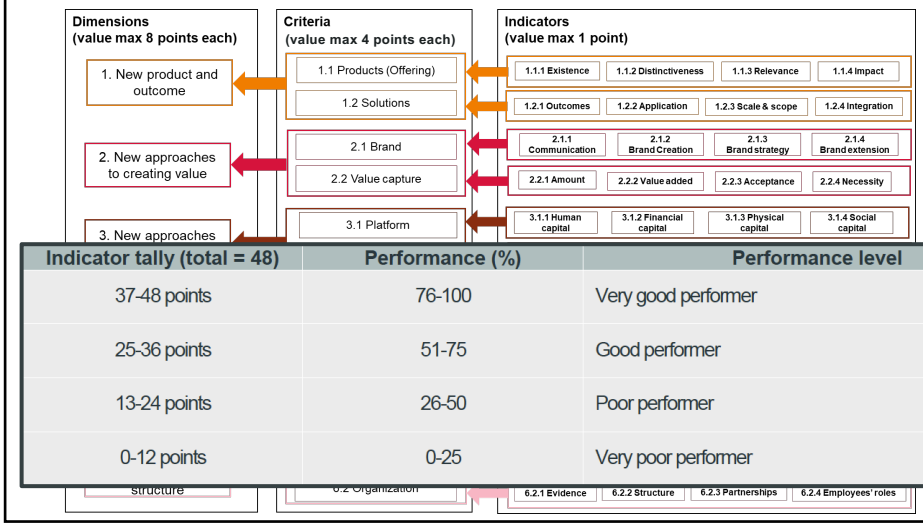
Innovation assessment framework



Indicator tally (total = 48)	Performance (%)	Performance level
37-48 points	76-100	Very good performer
25-36 points	51-75	Good performer
13-24 points	26-50	Poor performer
0-12 points	0-25	Very poor performer

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Results (1/3)
Selected nature-based businesses (a)

40 case studies pre-assessed → **16** selected for further analysis

Thematic areas	MBI types	Instruments	Initiatives
1. Natural capital accounting (UK)	Coasean-type agreem.	Catchment investment	First milk
	Direct markets	Environm. accounting	Kering
	Coasean-type agreem.	Environm. accounting	National Grid
	Reverse auctions	Catchment investment	Upstream thinking
2. Wild forest products marketing (Italy)	Direct markets	Certific. & labeling	Fungo Borgotaro
	Direct markets	Certific. & labeling	Bergila
	Direct markets	License fees	Magnifica CF
	Voluntary market signals	Certific. & labeling	Trentinerbe

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Results (1/3)
Selected nature-based businesses (b)

Thematic areas	MBI types	Instruments	Initiatives
3. Forest & carbon certification (Spain)	Voluntary market signals	Certification & labeling	Adeheco
	Tradable permits	Certification & labeling	Biomasa forestal
	Tradable permits	C-credits scheme	Refo-resta CO_2
	Direct markets	Direct fees, Certification	Treedom
4. Ecotourism (Romania)	Direct markets	Ecotourism; park fees	Parc Aventura
	Direct markets	Ecotourism; park fees	Equus Silvania
	Direct markets	Ecotourism; park fees	Libearty
	Direct markets	Ecotourism; park fees	Ultima Frontiera

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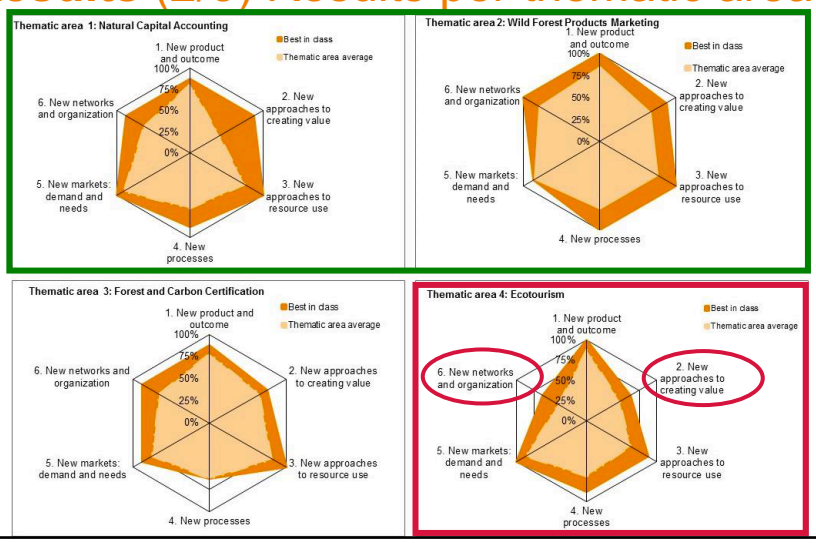
Results (2/3) Results per thematic area



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Results (2/3) Results per thematic area

Best and poorest in classes for each of the thematic areas

Thematic area	Best-performing initiatives	Overall score %	Poorest initiatives in class	Overall score %
Natural Capital Accounting	Upstream Thinking	71	National Grid	50
Wild Forest Products Marketing	Fungo di Borgotaro	79	Magnifica Comunità di Fiemme	57
Forest and Carbon Certification	Adeheco	64	Refo-resta CO_2	50
Ecotourism	Parc Aventura	65	Equus Silvania	47

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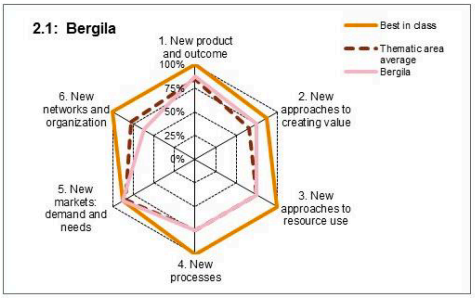

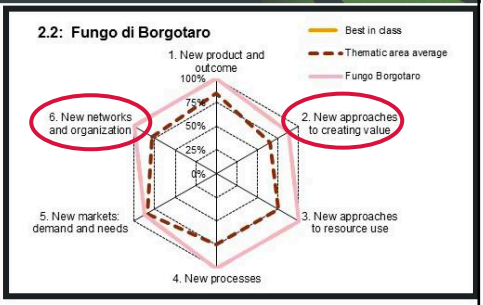

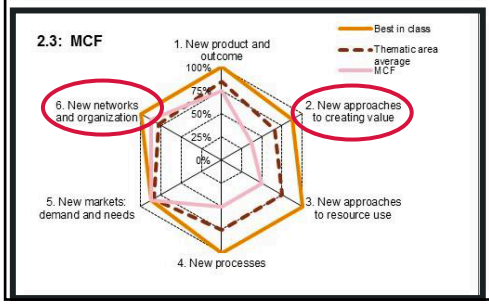

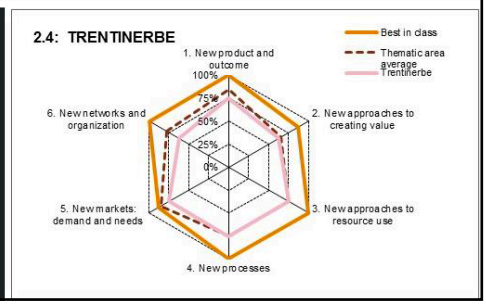

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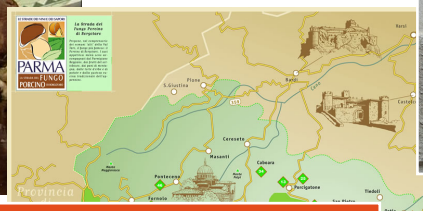

A Network of 62 Companies (mushroom trail):

- **15** Agritourism
- **12** Hotels
- **8** B&B
- **9** Farms performing direct sales (cheese, wine, …)
- **2** Farms offering environmental education services
- **3** Museums/Private Collections
- **30** Restaurants
- **26** Local/Typical products shops

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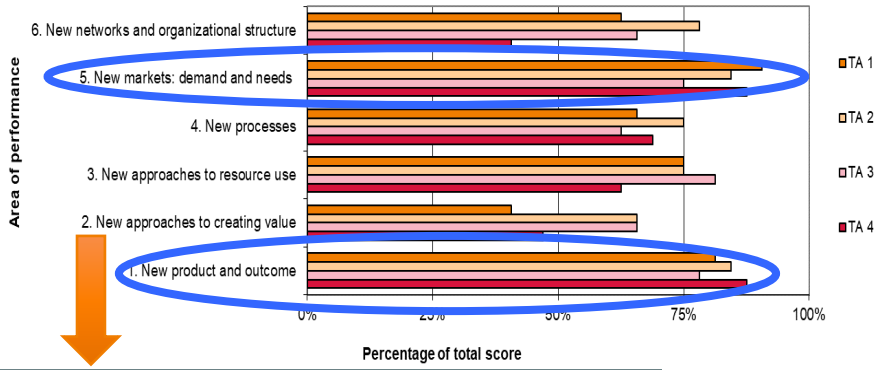
Results (3/3)
Results per dimension



Lack of marketing strategies (brand creation, brand strategy and brand extension…) for almost all thematic area types

TA = Thematic area

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Conclusions

- Existing gaps in assessing innovation in the field of nature-based initiatives → a preliminary framework developed
- Quick identification of where a specific initiative, or area, is lacking innovation (e.g. branding and networking)
- Possibility to transfer/adapt best practices within and among thematic areas
- Further fine-tuning and development/testing needed

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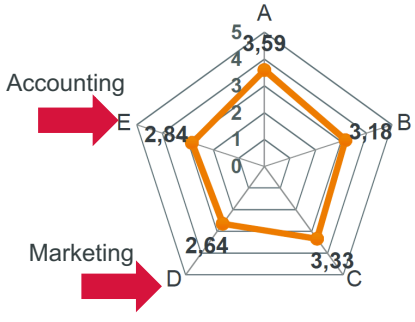
One final consideration…(Ecostar Task 3.1)

Declared skills on different ES-relted issues by forestry students in EU Universities (weighted average values; 1 = very low; 5 = very high)



Declared **higher skill levels** for:

A. ES identification/physical estimation
C. Identification of FM solutions

Lower skill levels for:

D. Development of marketing strategies and E. Accounting

+ specific technical/professional skills
(e.g. performing a carbon-footprint assessment, estimating investments needed for wild products business…)

Can you…
A. identify potential bundles of ecosystem services delivered by a forest?
B. assess potential trade-offs within ecosystem services delivered by a forest?
C. assess alternative forest management scenarios in terms of ecosystem service delivery?
D. develop marketing strategies for trading ecosystem services from a forest?
E. develop/manage an accounting system for ecosystem services from a forest?

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…and one on-going initiative to start filling the gap

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This report and presentation are part of a MSc thesis in Forest Science (TESAF Dept., University of Padova) currently under development by Colm O'Driscoll