

**Improving governance of cross-sectoral
policy effects on forests
by improving accounting systems.
A proposal based on a preliminary analysis in
some Northern Mediterranean countries.**

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Outline

- Background
- Objectives and scope (→ Med Forests)
- Methodology
- Results
- Conclusions (constraints and potentials)

Background (1/2)

- **External sectors' policies** (e.g. agriculture, energy, water, tourism, urban, rural development...) directly or indirectly **influence forest management** (Dubé et al. 2007, Janse, 2007).
- Several advantages from cross-sectoral coordination: knowledge and expertise exchange, **networking, resources sharing**, added credibility, complexity incorporated in the agenda (Hay and Kitcher, 2004), as well as enhanced governance in terms of collaboration, **transparency, effectiveness, accountability, efficiency...**

Background (2/2)

- **Analysis of cross-sectoral policy effects/impacts** as an instrument to improve **knowledge/data on potential ground impacts, inter-linkages mechanisms, risks...** may help:
 - to **optimize multiple uses** of natural resources
 - to **prevent policy failures** and overcome possible threats
 - to **enhance the overall governance** of the sector

Research objectives

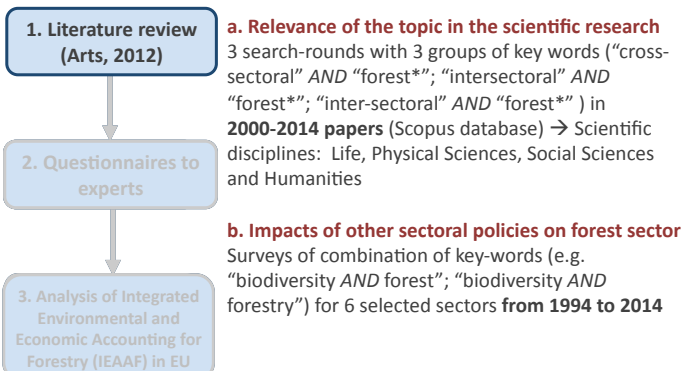
Two main goals:

- To provide an update **state-of-the-art** about knowledge on **cross-sectoral forest policy** issues
- To identify **key issues that can be improved in forest accounting** (e.g. type of data, at which scale, etc.) in order to increase cross-sectoral forest policy impacts analysis and governance

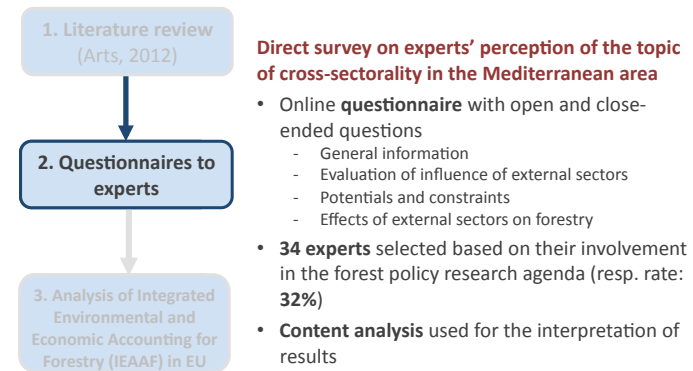
Scope: Mediterranean forests

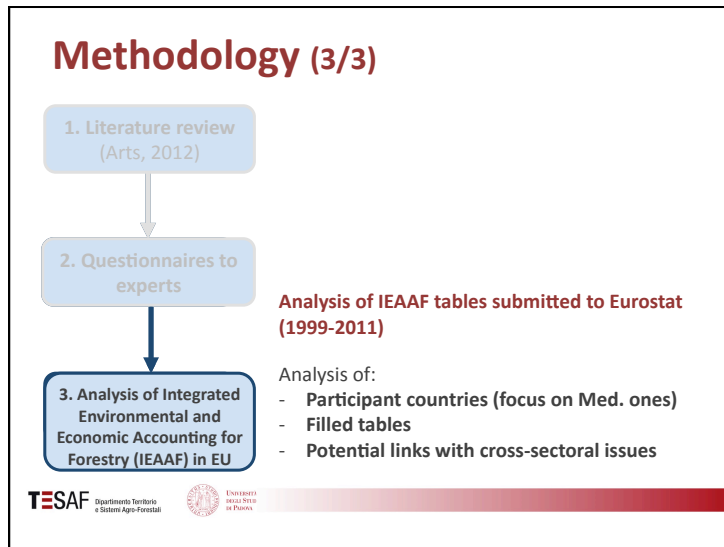
- One of the most **vulnerable ecosystems** (Plan Bleu, 2009; EFI, 2012)
- High level of **multi-functionality** (Merlo and Croitoru, 2005; FAO, 2013)
- Significant **disparities** between Countries in terms of:
 - **forest cover** → differences in national/local forest policies
 - **forest accounting** → N. Med. vs. S-E Med.
- **Forest policies** for Med. forests often **included in cross-cutting programs** (e.g. multi-functionality of forests, biodiversity and public participation)
- In S-E Med. Forests addressed mostly/only in **intersectoral policies** (e.g. Rural Development Program) (Pettenella, 1994; FAO, 2013)

Methodology (1/3)



Methodology (2/3)





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Climate change impacts, vulnerability and adaptation

CLIMSAVE is a pan-European project that is developing a user-friendly, interactive web-based tool that will allow stakeholders to assess climate change impacts and vulnerabilities for a range of sectors, including agriculture, forests, biodiversity, coasts, water resources and urban development.

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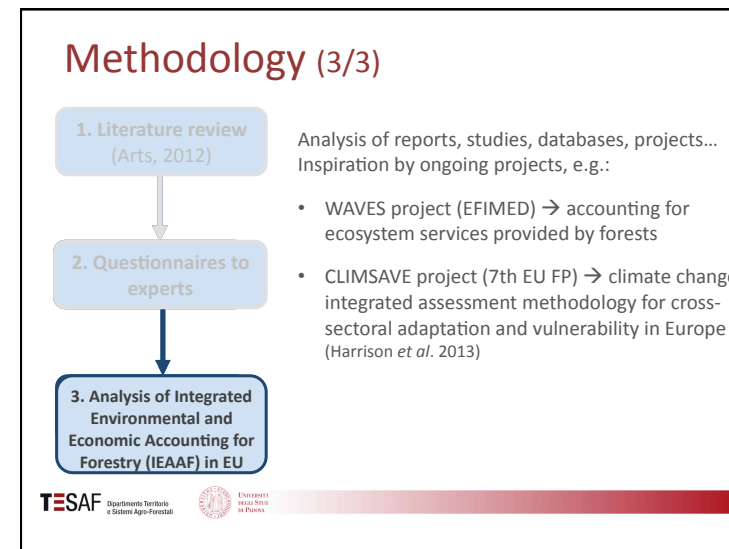
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Results (1/6)

1a. Relevance of the topic in the scientific research

2000-2014 papers gathered from Scopus database based on Arts (2012):

#	Key words	Total N. of papers	EU-level papers	Non-EU or generalized papers
1	"cross-sectoral" AND "forest*"	25	7	18
2	"intersectoral" AND "forest*"	13	7	6
3	"inter-sectoral" AND "forest*"	10	6	4
4	Total (1 + 2 +3)	48	20	28

Results (2/6)

1b. Influence of other sector policies

1994-2014 papers gathered from Scopus database based on Arts (2012):

#	Sector	Key words	no of papers
1	Biodiversity protection	"biodiversity" AND "forest*"	16,209
2	Climate change	"climate change" AND "forest*"	11,755
3	Agriculture and Rural development	"agriculture" AND "forest*" AND "rural development" AND "forest*"	9,442
4	Energy	"bioenergy" AND "forest*"	1,109
5	Water management	"water management" AND "forest*"	955
6	Mining	"mining" AND "forest*" AND "mining AND forest*"	2,792

Results (3/6)

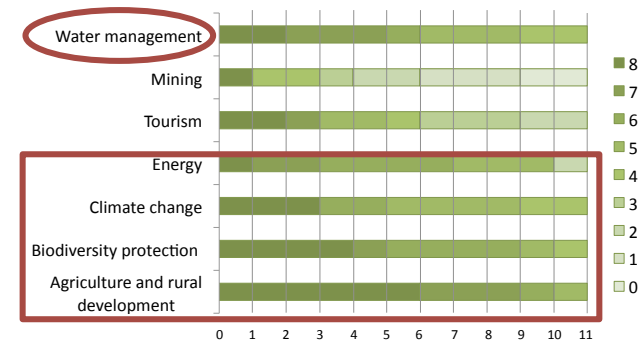
- Literature and analysis still limited and mostly theoretical, i.e. **very few empirical data available on other sectors impacts on forests and vice versa, spot data** (e.g. Lange, 2004; Dubé and Schmithüsen, 2007;)
- Positive and negative impacts reported in literature, e.g. Biodiversity:

Positive: Increased amounts of protected units (e.g. Natura 2000)

Negative: Higher wild-fire risk (Carreiras *et al.*, 2014)

Results (4/6)

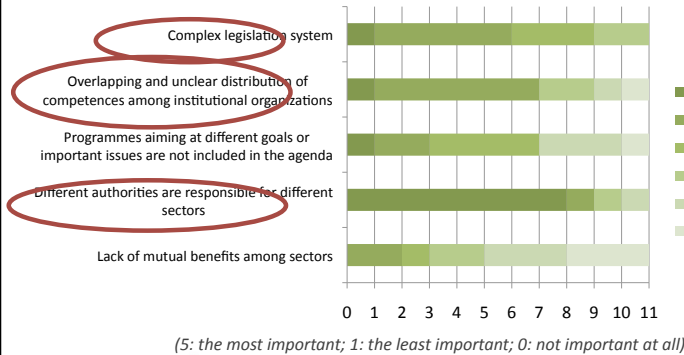
2. Influence of other sectors: experts' perception



(8: the most important; 1: the least important; 0: not important at all)

Results (5/6)

2. Constraints for cross-sectoral coordination: experts' view



Results (6/6)

2. Facilitating cross-sectoral policy implementation: experts' view

- Better understanding of specificities of each sector and **interconnections** within sectors
- Increased **communication and dialogue** at each level and among policy actors, stakeholders and different sectors
- **Events at regional scale** to increase an inter-sectoral dialogue (e.g. Mediterranean Forest Week)
- Programs/strategies identifying **responsible bodies** with enough power to make different organizations working
- General strategies translated into specific projects, programs, plans and **reporting & monitoring** actions/tools
- **Lack of data and methodologies** to implement many of these actions

Cross-sectoral policies and accounting

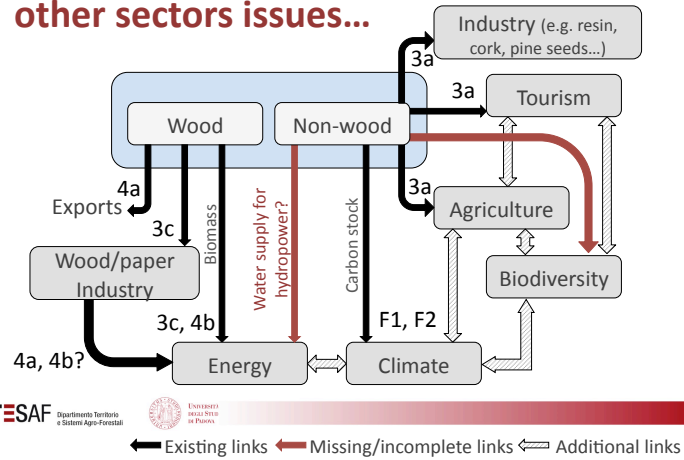
Literature and analysis still limited, not systematic and mostly theoretical; lack of empirical data; some key-sectoral policy missing (e.g. water) → **which contribution from/to accounting?**

- Forestry accounting in satellites accounts of the **Systems of Environmental-Economic Accounting (SEEA)**
- **Integrated Environmental and Economic Accounting for Forestry (IEEAF)**

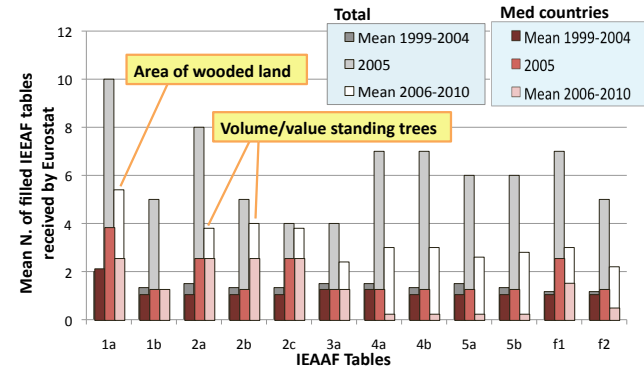
IEEAF Tables and variables

Table	Variables
Table 1a Forest balance: area of wooded land	Closing area, afforestation, deforestation.
Table 1b Forest balance: value of wooded land	Closing area, afforestation, deforestation, natural changes, changes in use, changes in classification, revaluation
Table 2a Forest balance: volume of standing timber	Closing stocks, gross increment, total removals.
Table 2b Forest balance: value of standing timber	Closing stocks, gross increment, total removals.
Table 2c Defoliation	Conifers, Broadleaves, Total
Table 3a Output related to wooded land by industry and type of output	Products of forestry and logging, Other products related to wooded land
Table 3c Economic accounts for forestry and logging	Main variables (output, gross value added etc.) for the forestry and logging industry.
Table 4a Supply-Use physical table: use	Exports and total use by product.
Table 4b Supply-Use physical table: supply	Output, imports and total supply by product.
Table 5a Supply-Use monetary table: use	Exports and total use by product. Main variables (output, gross value added etc.) by industry.
Table 5b Supply-Use monetary table: supply	Output, imports and total supply by product.
Table F1 Carbon balance for woody biomass	Closing stocks, gross increment, total removals.
Table F2 Carbon balance for the forest ecosystem	Standing timber, Other woody biomass, Other biomass in forest, Forest soils

IEAAF Tables and potential links to other sectors issues...



N. of IEAAF tables (other than 3c) received by Eurostat from 14 EU/EFTA countries (BG, CY, DK, EE, FI, FR, DE, EL, HU, LV, LT, NO, PL, SK)

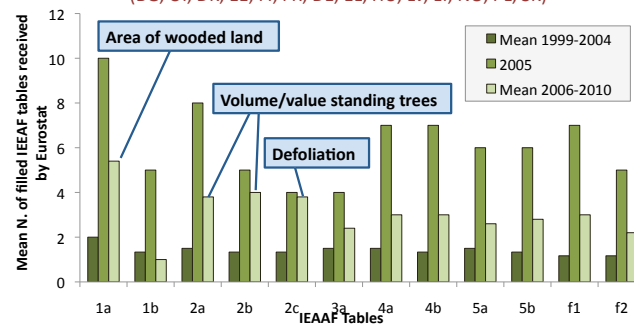


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Source: Eurostat – Forestry Statistics and Accounts WG, 2011 and 2013; Hedley and Sekot, 2014

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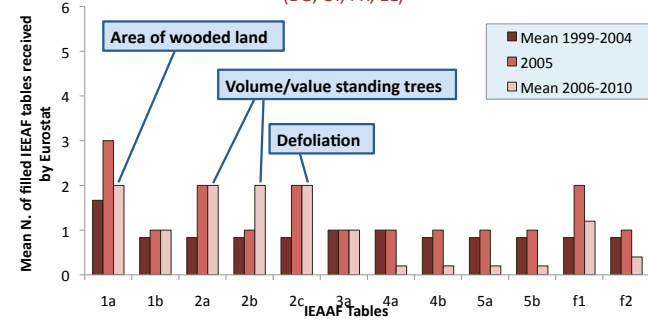


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Source: Eurostat – Forestry Statistics and Accounts WG, 2011 and 2013; Hedley and Sekot, 2014

N. of IEAAF tables (other than 3c) received by Eurostat from 4 EU Med. Countries (BG, CY, FR, EL)



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Source: Eurostat – Forestry Statistics and Accounts WG, 2011 and 2013

In brief

- **24 countries** have submitted data for **table 3c** at some point before 2011 (max 20/year in 2005, 19 in 2010) → high turnover rates
- **14 countries** have submitted at least **1 table other than 3c** before 2011; 2 countries (FRA, SK) filled all non-3c tables for at least 2 consecutive years → limited and intermittent participation
- Aggregated numbers of participants/year did not increase
- **Limited participation by Mediterranean countries** (exc. France)

Conclusions (1/4)

To summarize, in principle:

- **Mediterranean forests = multifunctionality**
- **Evidences** (empirical, experts opinions, ...) of **cross-sectoral impacts** (forest vs. other sectors policies)
- **Cross-sectoral policies** are required
- **Effective cross-sectoral policies require accounting/monitoring...**

Conclusions (2/4)

However, from our observations:

- Still **limited attention** paid to **cross-sectoral policies in connection to forestry**
- **Research is not completely aligned with expert's perception** (e.g. links with Water sector policies still under-investigated)
- **Missing, unclear data** and lack of methodological guidelines perceived as key-constraints

Conclusions (3/4)

- Regular data only available for table 3c of the IEEAF → **almost no data for non-wood issues**
- Some **inter-sectoral links missing** in current accounting system (e.g. **forestry → water issues**)
- Quality and consistency of data (what is requested vs. what is available) and time span constraints (annual accounting vs. periodic inventories)

Conclusions (4/4)

- Countries: High turnover, limited participation → an effect of voluntary filling of IEEAF?
- For Northern Med. Countries: land value compulsory from September 2014 + Regulation (EU) No 99/2013 → **development of a coherent system of satellite accounts (energy, water, natural resources and forestry) for 2013-2017 (utopia?)**
- What about Southern Med. Countries?

