

Innovation in Forestry for Biodiversity and Biosecurity

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Association of Austrian Land and Forest Owners

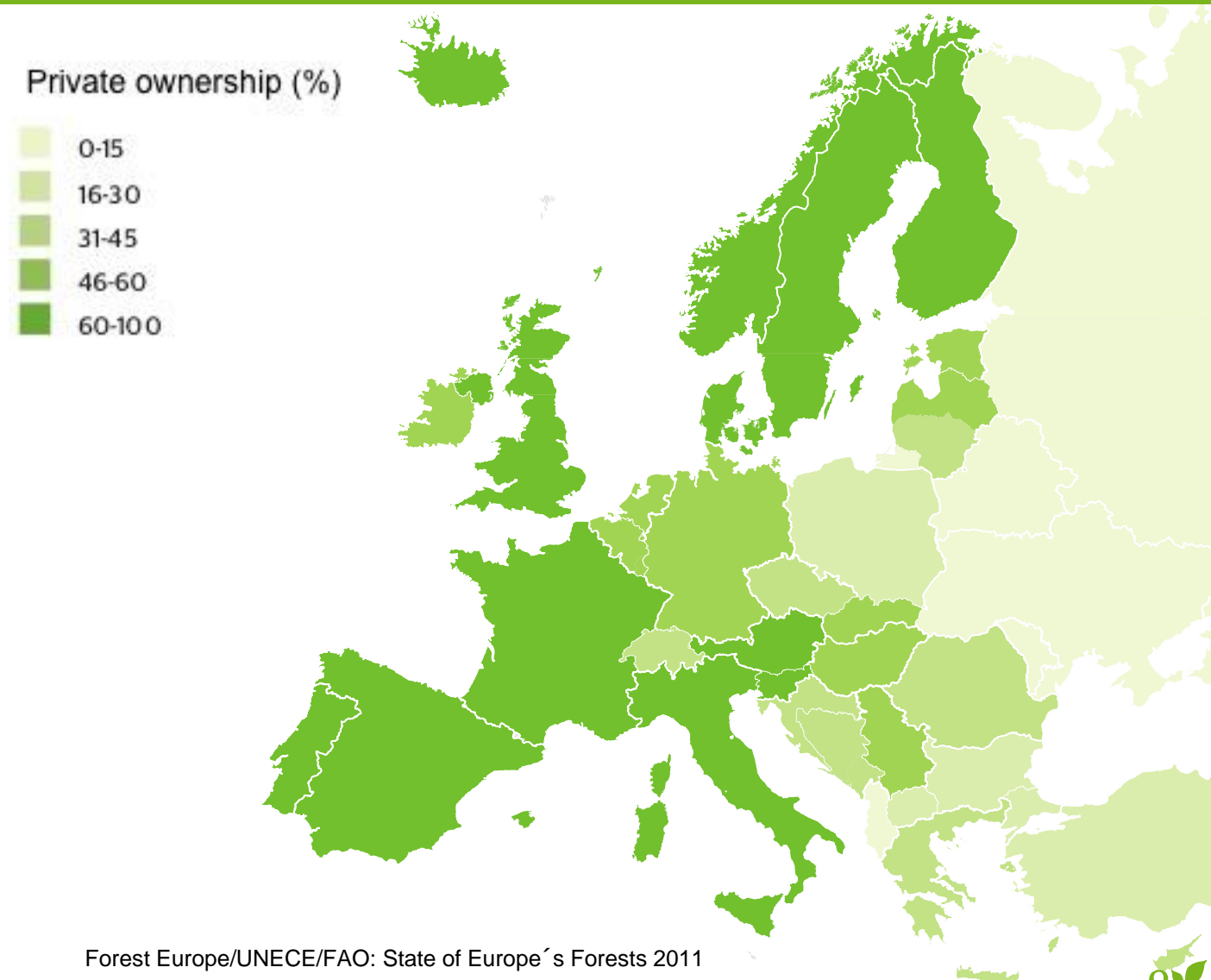
- **Voluntary membership based on Society for Agriculture from 1860**
- **Members with more than 100 ha of land (up to 27.000 ha)**
- **83 % of the members mainly have forestry production (timber and biomass)**
- **17 % with predominantly agricultural production (mainly cereals)**
- **Main task→ accompanying political processes**
- **Member of European and International umbrella organisations like ELO, CEPF or IFFA**

Forests in Europe

- 16 million family forest owners in EU
- Small scale forest holdings average 2-50 ha
- over 40 % of EU's land area forested
- forest cover increasing by 0,5 mio ha/a
- Growing stock increase by 1,2 %/a
- 64% of the annual increment harvested
- 90% of the within the EU processed timber is domestic timber
- Forest based value chain provides an annual turnover of 400 Billion EUR (9 % GDP)
- 4 mio employees in forest based value chain
- Key habitat with high biodiversity, providing multiple ecosystem services



Private ownership & forest area



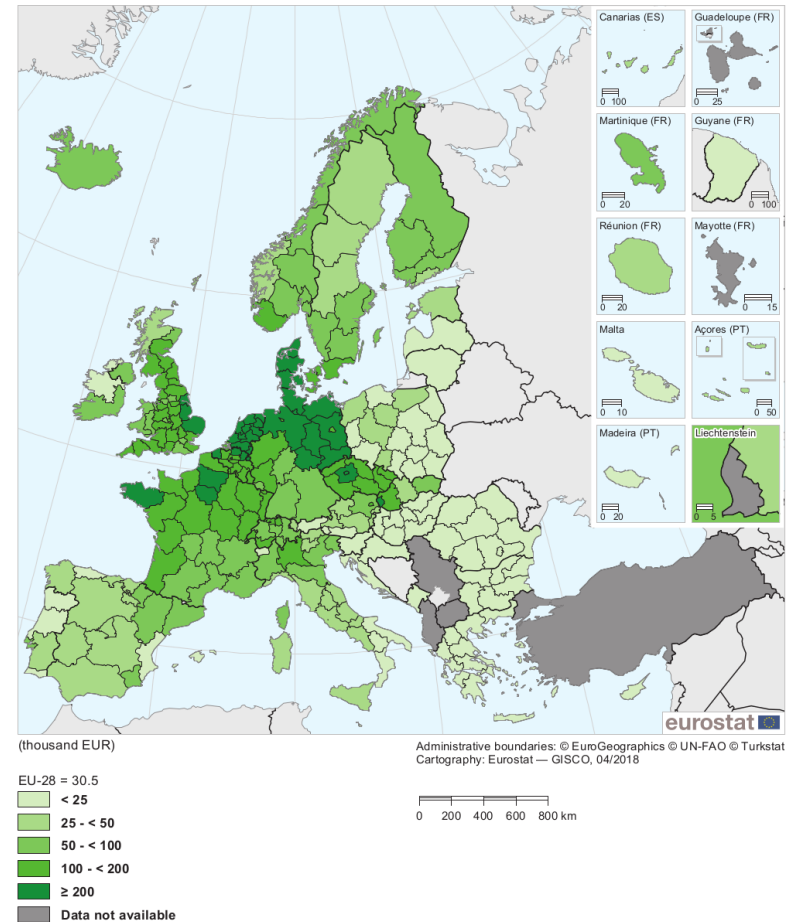
Forest Europe/UNECE/FAO: State of Europe's Forests 2011

European Agriculture

- 10,8 mio agricultural holdings
- 175 mio ha agricultural area
(40% of the total land area)
 - 59,8 % Arable land
 - 34,2 % Permanent grassland
 - 5,9 % Permanent crops
- 9,5 mio annual working units
- 130 mio livestock units
- Agricultural products: 392.281 mio EUR
 - 52% Arable production
 - 43% Animal production

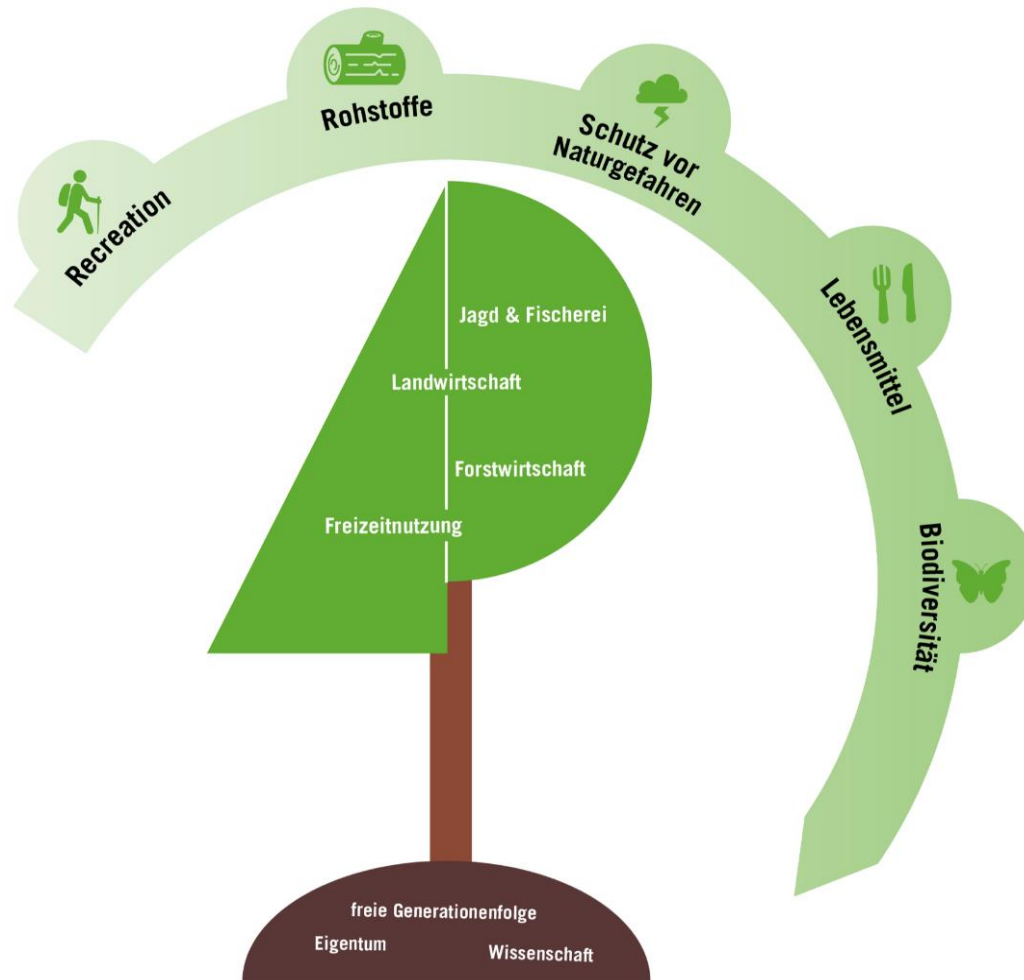
Quelle: https://ec.europa.eu/eurostat/statistics-explained/index.php?title=Farm_structure_statistics/de

Average economic size of farm holdings, by NUTS 2 regions, 2013
(thousand EUR)



Note: Germany and London (UK): NUTS level 1. Slovenia: national data. Iceland, Switzerland and Montenegro: 2010.
Source: Eurostat (online data code: ef_kvecsleg)

Expectations are rising



Opposing approaches in EU-policies

- Raw material supply vs climate protection
 - Utilization of wood is providing CO2 storage and substitution possibilities
- Renewable energy vs natural reserve
 - Biomass power plants are top key to reach the COP 21 goals
- Biodiversity vs eco system services (ESS)
 - Majority of ESS are provided by SFM, not by non-utilization systems
 - Biodiversity in cultural landscape has to be based on sustainable managed forests
- Natural reserve vs recreation/tourism
 - Risk of accidents by dead wood; disturbance of game and ecosystem
- Liberal markets vs cascadic principle
 - Liberal markets based on private property has to be the goal

Main drivers

➤ Climate change

- increasing temperatures and decreasing moisture causes significant changes

➤ Short term oriented politics

- agricultural and forestry business needs long term perspectives

➤ Urbanization

- decreasing interest, knowledge and appreciation in society
- “urban” decisions by politics

➤ Volatil markets

- ecosystem services, including care for biodiversity, needs monetary income to be provided

EU/EC policies and strategies

- Europe 2020
- CAP & Rural Development programme
- 2030 Energy strategy
- EU-Forest strategy
- Biodiversity strategy
- Bioeconomy strategy
- Natura 2000 directives
- Water-framework-directive
- Wilderness discussion
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Solution: Concept of sustainable and integrated land management

3 dimensions of sustainability:

→ ecological, economical, social (acceptance)

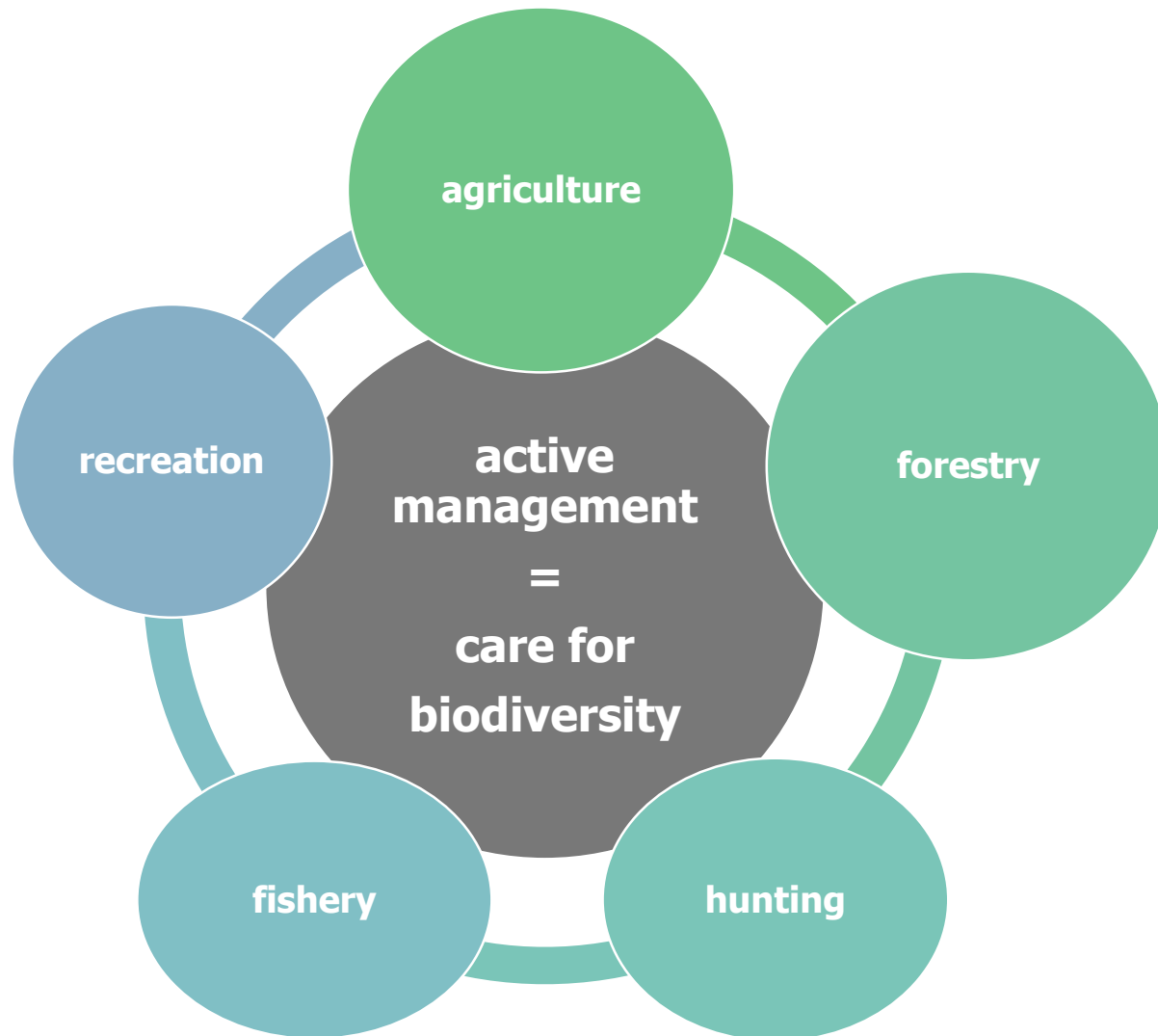
4 forms of land use:

→ agriculture, forestry, hunting/fishery, recreation

5 objectives:

→ food, raw materials, protection, biodiversity, recreation

Integrative approach



Nature is a dynamic process

- Nature and Ecosystems are constantly developing
- New species compositions and habitats need adaptations
- Sustainable land management supports animal and plant protection and fosters biodiversity
- Landscape in Europe has multifunctional tasks and missions
- Strategic partners (like PEFC) are helpful to succeed
- “BIOSA”-Concept or “Wildlife Estate” Initiative are e.g. right Instruments with positive approach

Biodiversity - a key issue

- High biodiversity is essential factor for healthy and integrative land management
- Climate change needs to be considered
- Current survey methods are often focused on single-sided indicators
- Multifunctionality is best solution for future perspective of cultural landscape

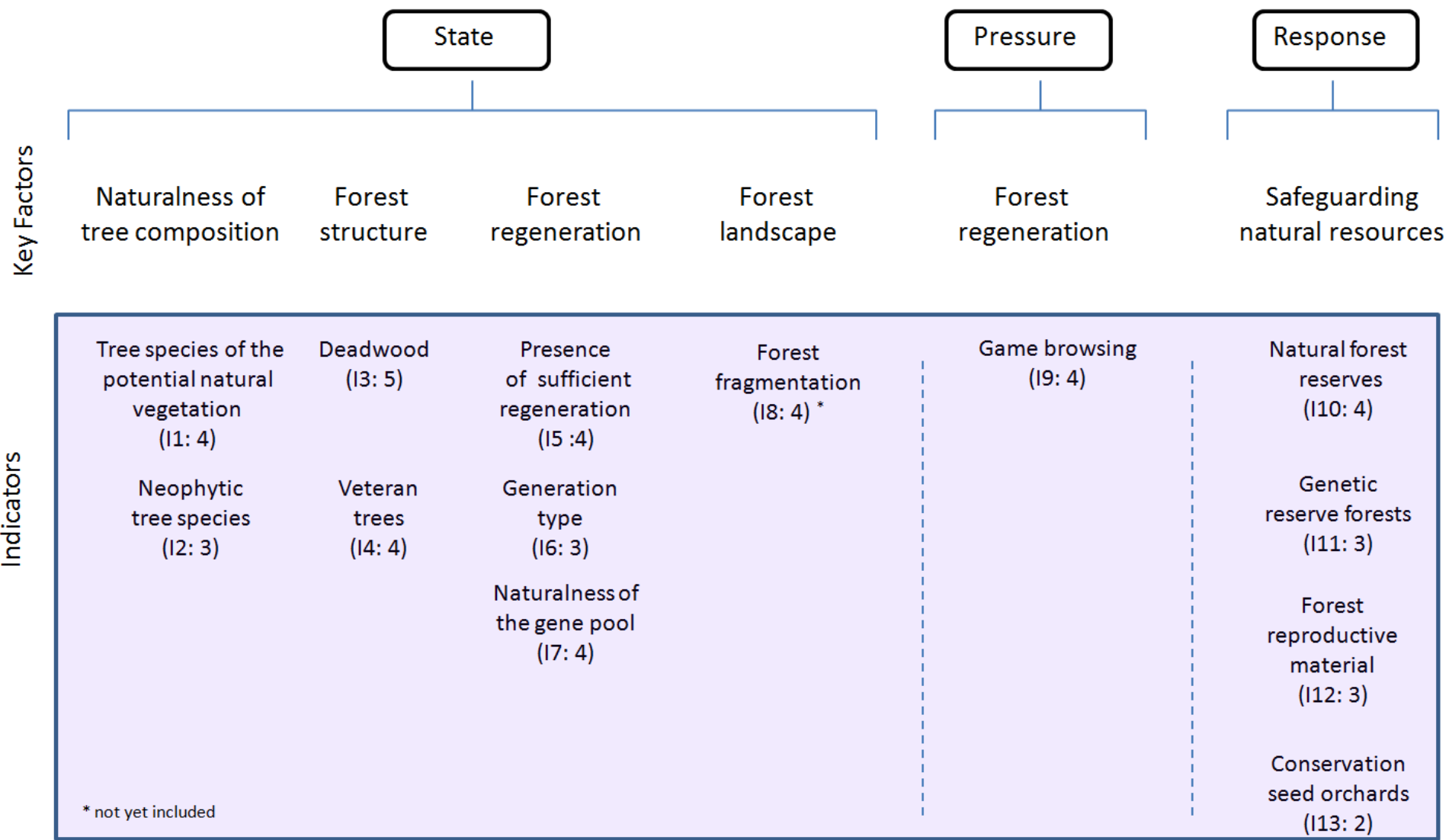
Biodiversity needs an holistic approach

Best Practise Example:

→ The Austrian Forest Biodiversity Index (AFBI)

- Combines separate components into a composite index
- Goal: a biologically meaningful, very cost efficient scientific based monitoring system providing easy-to-communicate results to political stakeholders and general public
- Data sources:
 - Austrian Forest Inventory
 - National Nature Reserve Programme
 - Austrian Genetic Inventory
 - European Information System on Forest Genetic Resources
 - Federal Office for Forests
 - Conservation Seed Orchards Programme

Key factors based on 13 Indicators



Components of the AFBI; indicators are linked to their key factors; indicator weights are given in brackets

Pros and cons

Pros:

- Nationwide
- Holistic approach by consideration of diverse indicators
- Composite index based on reference values
- Easy to communicate
- High value for political consulting
- Very cost efficient

Cons:

- Scientific baseline data are often missing proper reference
- Diversity measures do not directly consider non-tree species

Successful role model

Best Practise Example:

➤ „BIOSA – Concept“

- ➔ Based on contractual nature conservation
- ➔ Landowners are positively involved
- Protection of valuable biotopes
- Ideally with remuneration
- Combining the conservation of nature with the knowledge and support of the landowners
- Individual projects for each area, developed in cooperation with the owners, scientists, and further experts
- Workable alternative to governmentally enforced nature conservation

“Nothing about us, without us!”



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