Pan-European reporting on land degradation and restoration

Forest Landscape Restoration and the Bonn Challenge in Eastern and South-East Europe

16 - 17 December 2019

Belgrade, Serbia

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Who we are

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FOREST EUROPE

- FOREST EUROPE (the brand name of the Ministerial Conference on the Protection of Forests in Europe) is the pan-European high-level political process promoting **sustainable forest management** through the dialogue and cooperation on forest policies in Europe
- FOREST EUROPE, founded in 1990, develops common strategies for its **46 signatory countries + EU**
- Before each Ministerial Conference, FOREST EUROPE publishes the report **State of Europe's Forests**, which is based on the set of **Criteria & Indicators for SFM**

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Updated pan-European indicators for sustainable forest management

Forest policy and governance
1. National Forest Programmes or equivalent
2. Institutional frameworks
3. Legal/regulatory framework: National and International commitments
4. Financial and economic instruments
5. Information and communication

6 CRITERIA

34 QUANTITATIVE INDICATORS – 3 of which are NEW

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11 DESCRIPTIVE INDICATORS

1. Forest Resources & Carbon
C.1 Policies, institutions & instruments
1.1 Forest area
1.2 Growing stock
1.3 Age structure &/or diameter distribution
1.4 Forest carbon

2. Forest Health
C.2 Policies, institutions & instruments
2.1 Deposition & concentration of air pollutants
2.2 Soil condition
2.3 Defoliation
2.4 Forest damage
2.5 Forest land degradation

3. Productive Functions
C.3 Policies, institutions & instruments
3.1 Increment and fellings
3.2 Roundwood
3.3 Non-wood goods
3.4 Services

4. Biological Diversity
C.4 Policies, institutions & instruments
4.1 Diversity of tree species
4.2 Regeneration
4.3 Naturalness
4.4 Introduced tree species
4.5 Deadwood
4.6 Genetic resources
4.7 Forest fragmentation
4.8 Threatened forest species
4.9 Protected forests
4.10 Common forest bird species

5. Protective Functions
C.5 Policies, institutions and instruments
5.1 Protective forests – soil, water and other ecosystem functions - infrastructure and managed natural resources

6. Socio-economic Functions
C.6 Policies, institutions & instruments
6.1 Forest holdings
6.2 Contribution of forest sector to GDP
6.3 Net revenue
6.4 Investment in forests and forestry
6.5 Forest sector workforce
6.6 Occupational safety and health
6.7 Wood consumption
6.8 Trade in wood
6.9 Wood energy
6.10 Recreation in forests

About the indicator 2.5

Short name: **Forest land indicator**

Full-text name: **Trends in forest land degradation**

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Original idea of AG UPI, Madrid 2015

Partially modified UNCCD definition of desertification had been suggested:

*"reduction or loss of the biological or economic **productivity** and **complexity** of forest and other wooded lands resulting from land use or from a process or combination of processes, including processes arising from human activities and habitation patterns such as*:

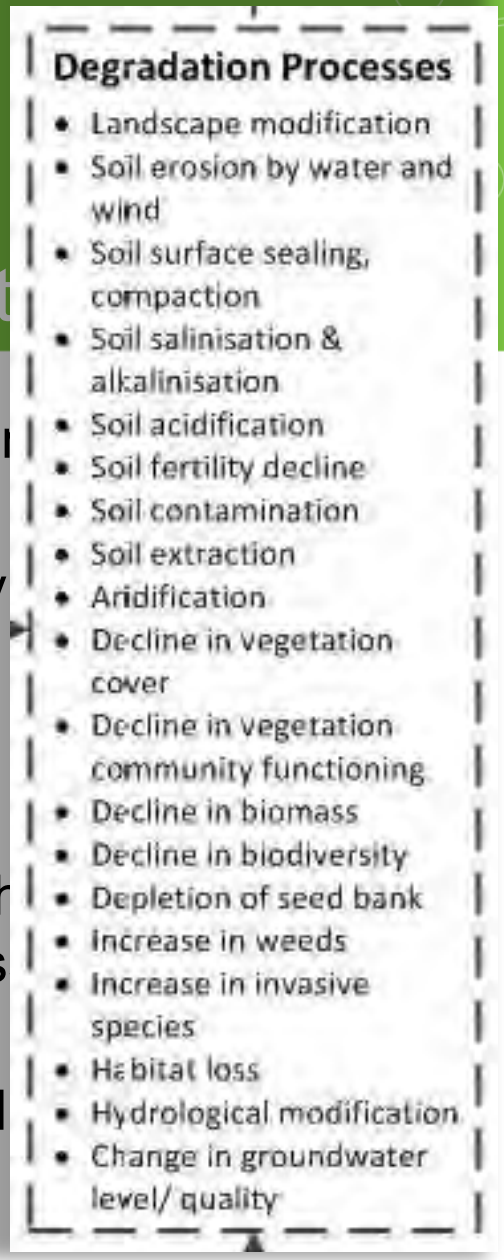
- *soil erosion*
- *deterioration of the physical, chemical and biological or economic properties of soil*
- *long term loss of natural vegetation"*

- The definition was found unclear and impractical for C&I reporting purposes

Land degradation: a process or a patt

- Land degradation is a complex process consisti
  processes
- These processes, if intensive enough, gradually
  degraded pieces of land

- Measurement of processes would require thresh
  partial process to be set up, while pattern asses
  a **definition of degraded land**
- Most of the pan-European indicators are based
  measurement of patterns
- Therefore, we have chosen a pattern approach



FOREST EUROPE **definition** of degraded forest land (based on the ITTO definition)

- Forest land **severely damaged**, e.g. by the desertification, fires, grazing, air pollution, erosion, unsustainable management, etc., that lost tree cover and with soil damaged **to such a degree that severely hampers or delays the re-establishment of stocking**.

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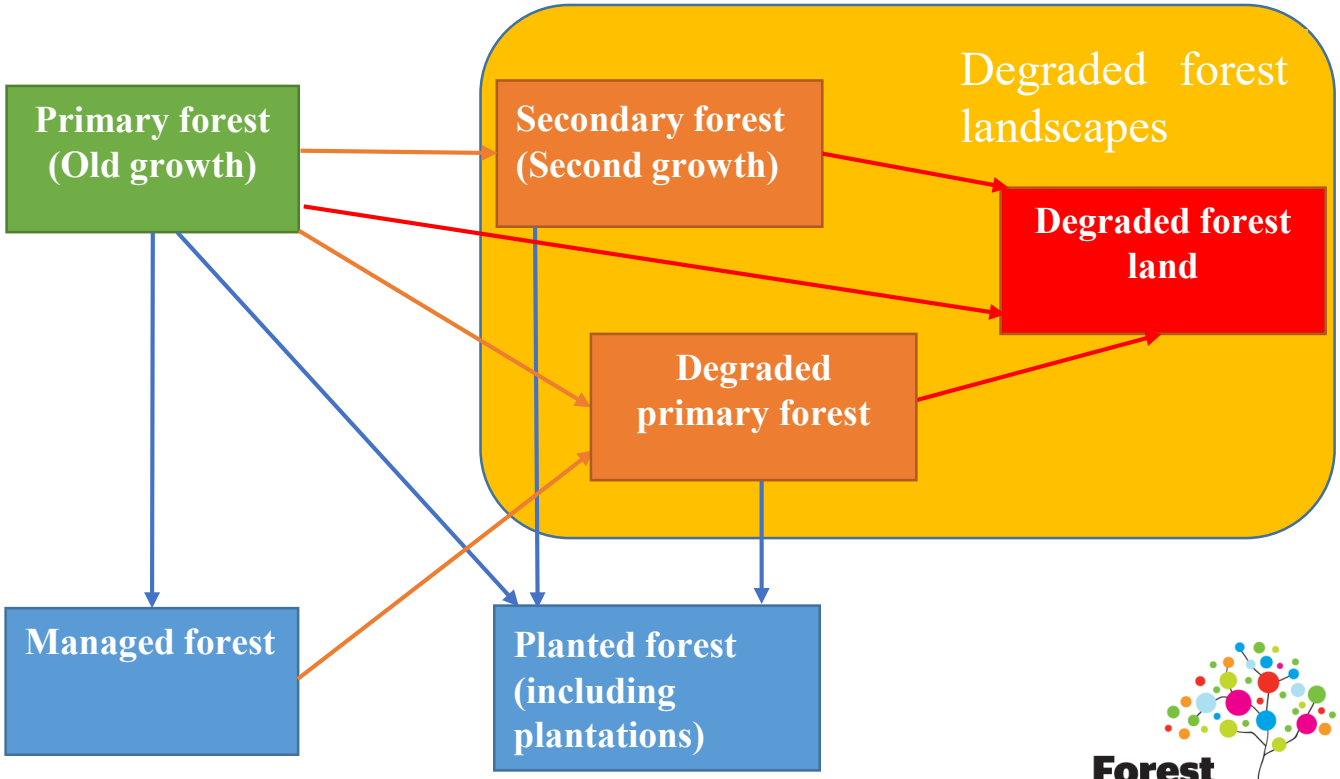
ITTO forest categories (from ITTO 2016): conveniently distinguish between intentional and unintentional changes



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Pan-European reporting and its results

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Pan-European quantitative questionnaire for the State of Europe‘s Forests 2020 report

- We asked our signatories according our definition to report on

Total area of degraded land[1]	Area primarily degraded by								Former degraded land restored[2]
	Grazing	Repeated fires	Air pollution	Desertification	Other 1	Other 2	Other 3	Unknown	
1000 ha									

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Pan-European quantitative questionnaire for the State of Europe‘s Forests 2020 report

- In comments to this data, we asked our signatory countries for
  - Minimum size of degraded land reported (in ha)
  - Other criteria and minimum thresholds used to determine an area as “degraded”
  - Criteria used to determine primary type of degradation
- and asked the following questions:
  - Are degraded areas originating from land uses other than forestry included in the figures you reported?
  - In your country, are recently degraded forest areas legally considered as non-forest land?
  - In your country, are degraded non-forest areas re-categorised to forest land with the aim to reforest them?
  - Does your country have a national methodology for land degradation assessment?

Results of the reporting (data availability)

- Only 4 of 46 signatory countries reported some areas of degraded land, none of them reported all the required figures
  - Croatia and Switzerland reported the areas degraded or damaged by repeated fires (not the total area of degraded land)
  - Poland and Romania reported restored areas of formerly degraded land.
- 15 countries provided at least some qualitative information or comments related to the issue

- Some countries explicitly reported that land degradation was unimportant within their territories

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Why land degradation is not an issue for FOREST EUROPE signatories?

- For many reasons:
  - By definition, SFM should prevent land (soil) degradation resulting from forest management. **While the trends in other SFM indicators are within their "allowed ranges", the degradation of forest land should not be progressing**
  - The most degraded land is usually non-forest land
  - Foresters are usually not responsible for land degradation (forest degradation is another issue)
  - Land degradation concepts (WAD, LDN) are usually equally complex to the entire concept of SFM, therefore land degradation cannot serve as a single SFM indicator (1 of 34)

What next?

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How to continue?

- Poor results of the first reporting do not have to mean the failure
  - some indicators (e.g. deadwood), after modest beginnings, became an integral part of the concept of SFM
- The monitoring and reporting of the area of degraded forest land could be feasible,
  - either within national forest inventories
  - or via tailored surveys (RS methods combined with terrestrial investigation)
- On the other hand, a reporting burden still remains an issue

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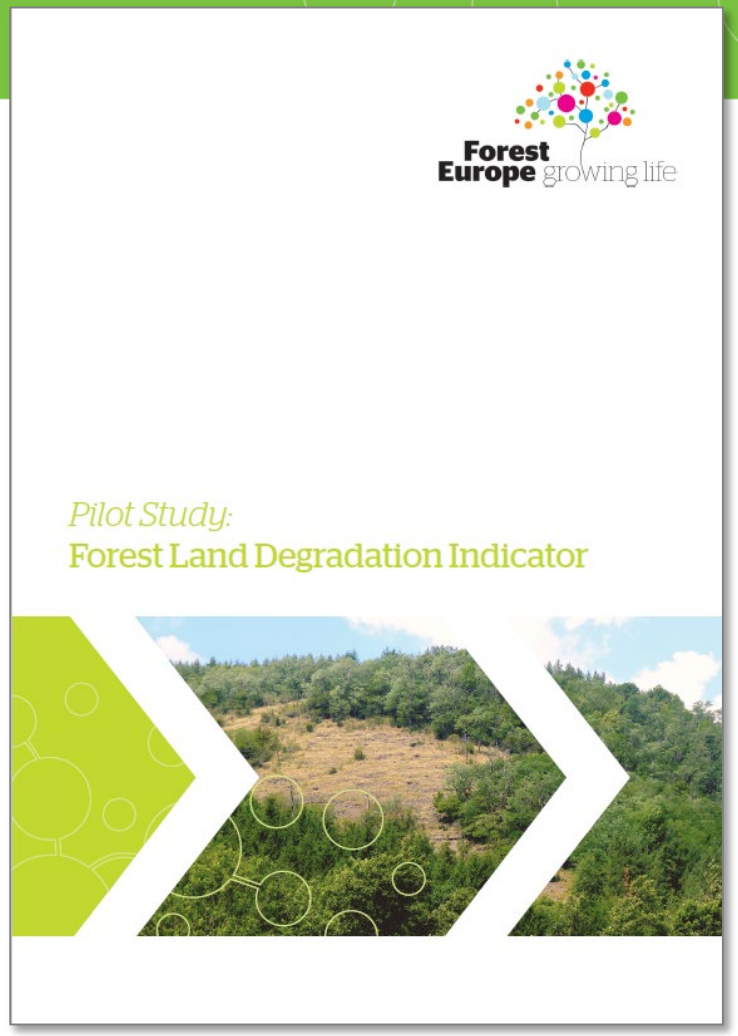
The pilot study

- More detailed information on the issue are included in the pilot study
- that will be available at www.foresteurope.org/publications/



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