



Experience of European countries in reporting on forest soil, forest, water

Roman Michalak
UNECE-FAO Forestry and Timber Section

13th Montreal Process Technical Advisory Committee Meeting
'Soil and Water – telling the story for forests'
4 July 2012




Scope

- Health and Vitality
- Marketed services
- Protected and Protective Forests
- Policies, Institutions and Instruments



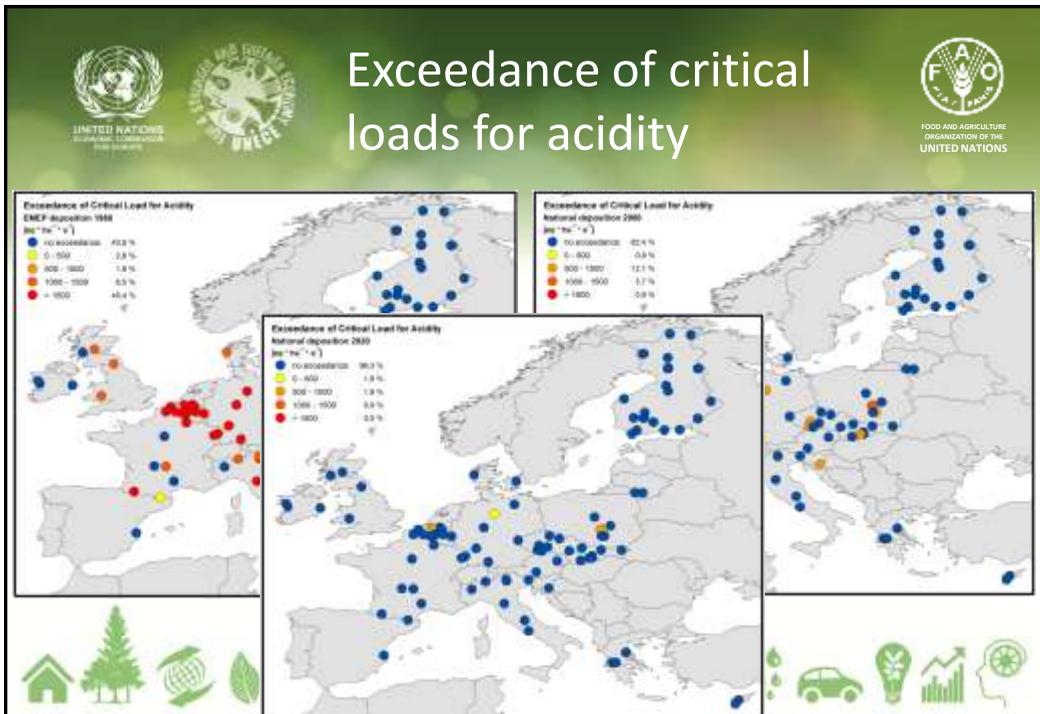


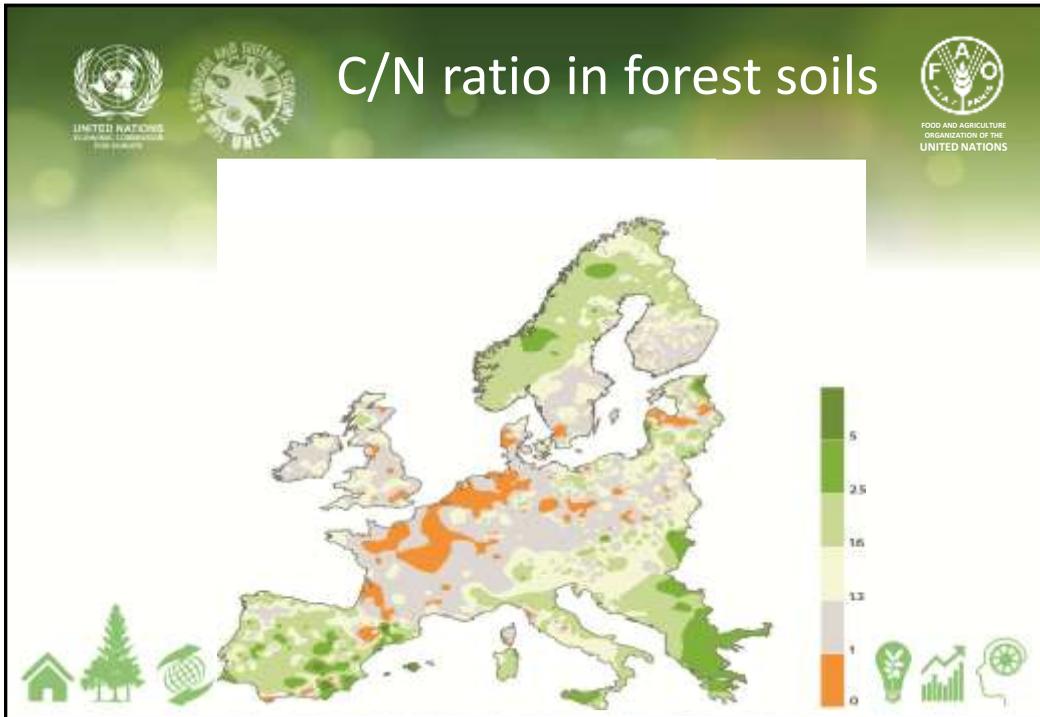
Criterion 2: Maintenance of Forest Ecosystem Health and Vitality

2.1 Deposition of air pollutants
Deposition of air pollutants on forest and other wooded land, classified by N, S and base cations

2.2 Soil condition
Chemical soil properties (pH, CEC, C/N, organic C, base saturation) on forest and other wooded land related to soil acidity and eutrophication, classified by main soil types

2.4 Forest damage
Forest and other wooded land with damage, classified by primary damaging agent (abiotic, biotic and human induced) and by forest type



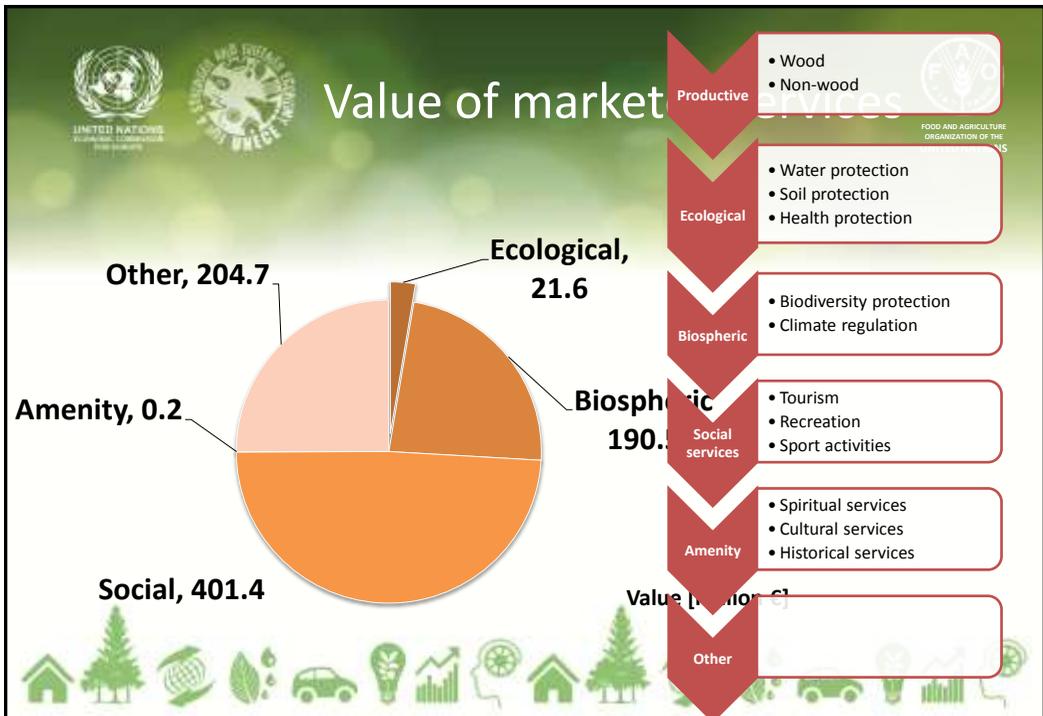


Value of marketed services

Value of wood - 21.2 billion Euro (33)

Value of non-wood goods – 15% of wood (33)

Value of services – 7% of wood (16)





Criterion 6: Maintenance of other socio-economic functions and conditions

6.4 Expenditures for services

Total (government) expenditures for long-term sustainable services from forests

Value of reported expenditures
– 3.2 billion Euro






Protected and Protective forests

Criterion 4: Maintenance, Conservation and Appropriate Enhancement of Biological Diversity in Forest Ecosystems

4.9 Protected forests

Criterion 5: Maintenance and Appropriate Enhancement of Protective Functions in Forest Management (notably soil and water)

5.1 Protective forests – soil, water and other ecosystem functions

5.2 Protective forests – infrastructure and managed natural resources





MCPFE Assessment Guidelines for
Protected and Protective Forest and
OWL in Europe

- 1: Management Objective "Biodiversity Conservation"
 - 1.1: "No Active Intervention"
 - 1.2: "Minimum Intervention"
 - 1.3: "Conservation Through Active Management"
- 2: Management Objective "Protection of Landscapes and Specific Natural Elements"
- 3: Management Objective "Protective Functions"




General Principles

- Existence of legal basis
- Long term commitment (minimum 20 years)
- Explicit designation for the protection of biodiversity, landscapes and specific natural elements or protective functions of forest and other wooded land





Class 3 : Main Management Objective 'Protective Functions'

- The management is clearly directed to protect soil and its properties or water quality and quantity or other forest ecosystem functions, or to protect infrastructure and managed natural resources against natural hazards
- Forests and other wooded lands are explicitly designated to fulfil protective functions in management plans or other legally authorised equivalents
- Any operation negatively affecting soil or water or the ability to protect other ecosystem functions, or the ability to protect infrastructure and managed natural resources against natural hazards is prevented




Indicators

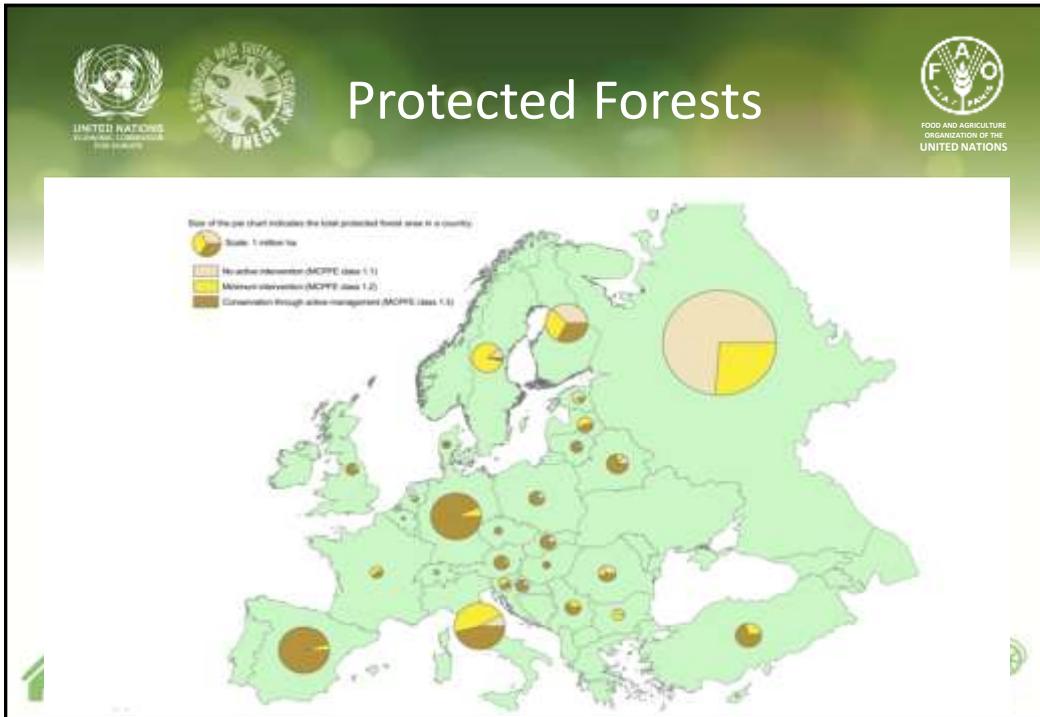
5.1 Protective forests – soil, water and other ecosystem functions

Area of forest and other wooded land designated to prevent soil erosion, to preserve water resources, or to maintain other forest ecosystem functions

5.2 Protective forests – infrastructure and managed natural resources

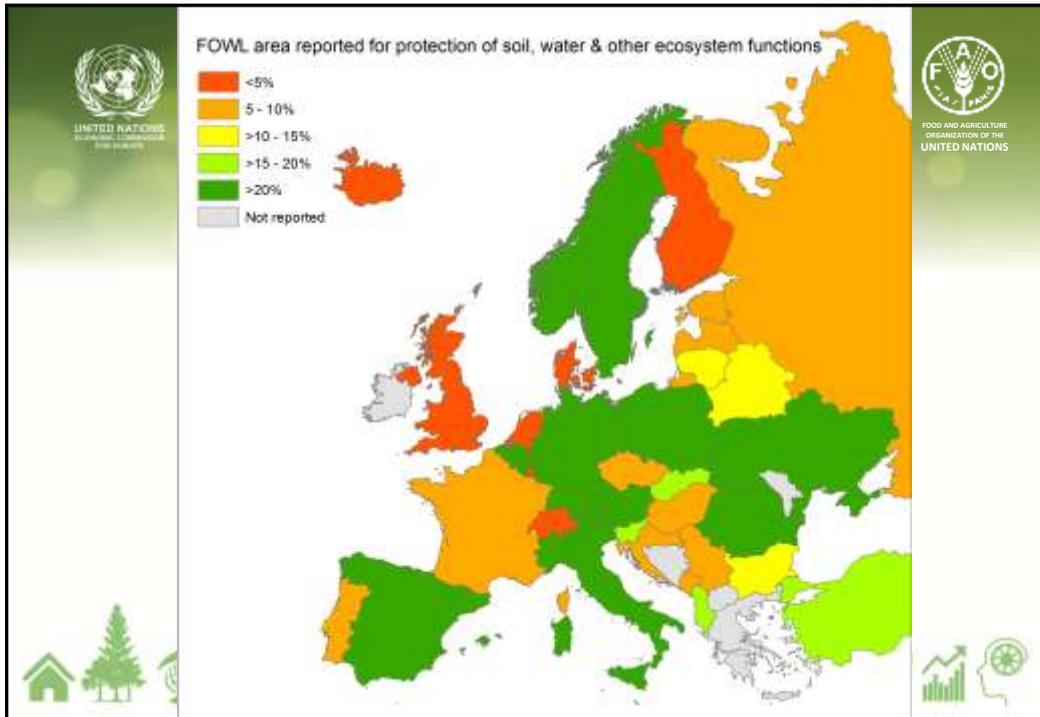
Area of forest and other wooded land designated to protect infrastructure and managed natural resources against natural hazards





Protected and Protective Forests

Management objective	Europe excluding the Russian Federation		Russian Federation	
	million ha	%	million ha	%
Protected forests - Total Biodiversity and Landscape	38.4	18	16.8	2
Protective forest - soil and water	47.4	19.2	75.0	8.5
Protective forests - infrastructure and managed natural resources	4.0	1.9	71.3	8.1
		~39.1		~18.6



Protective forests (soil and water) - change

	2000	2010	Annual change
	Million hectares		
Russian Federation	70.4	75.0	0.5
Europe without Russian Federation	44.6	47.4	0.3

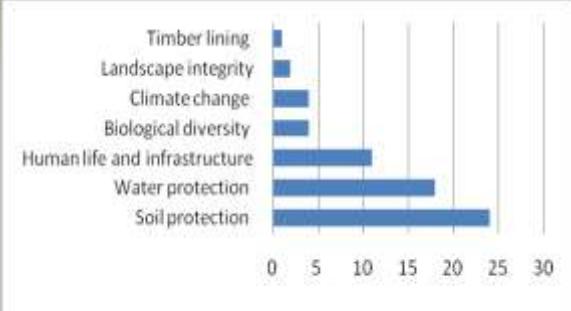


Qualitative indicators B7. Protective services – key findings

- *Protective forest services were mainly regulated by the forest law. National Forest Programmes as well as EU legislation and support programmes were gaining more relevance.*
- *In most countries, the State forest administrations played a crucial role in implementing and coordinating forest legislation about forest protective services.*
- *Strict regulatory instruments were applied in most countries to secure forest protective services.*




Qualitative indicators B7. Protective services



Issue	Number of countries
Timber lining	1
Landscape integrity	2
Climate change	4
Biological diversity	5
Human life and infrastructure	11
Water protection	18
Soil protection	24

Issues considered in main policy objectives related to forest protective services for the period 2007-2010 (number of countries)





Example - Poland



Project on small water bodies, like fire dams, in forests, intending to store and retain 31 million m³ of water in 3 300 small hydrological appliances.



Thank you for attention

roman.michalak@unece.org

