



The role of the farmers and forest owners in enhancing biodiversity

Marco Onida, European Commission DG ENV
MTK Seminar on Biodiversity 24/03/2020

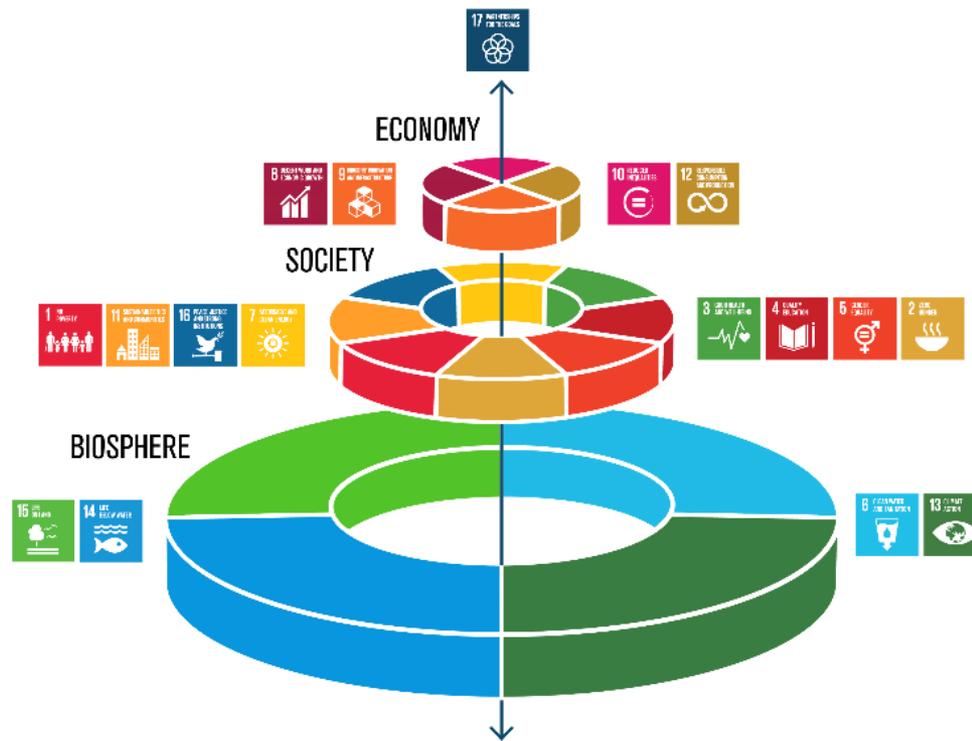




Topics

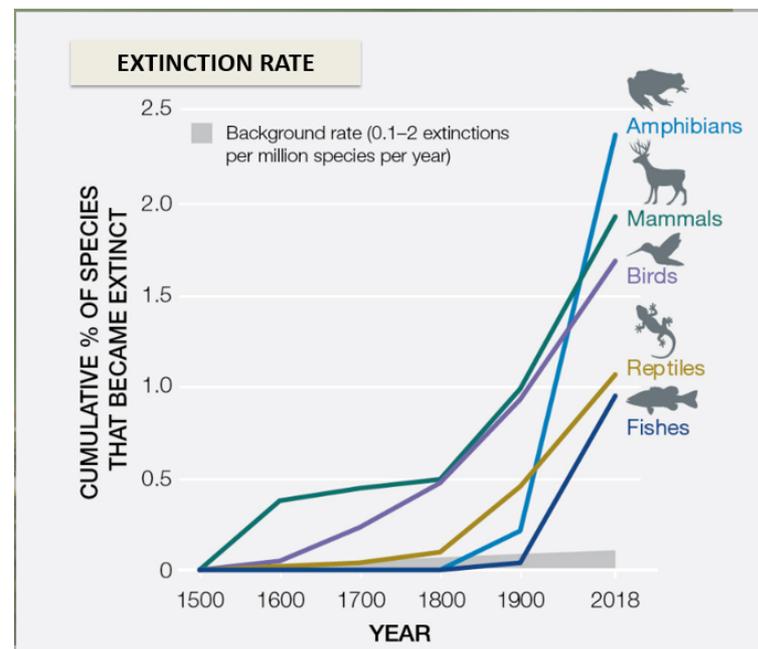
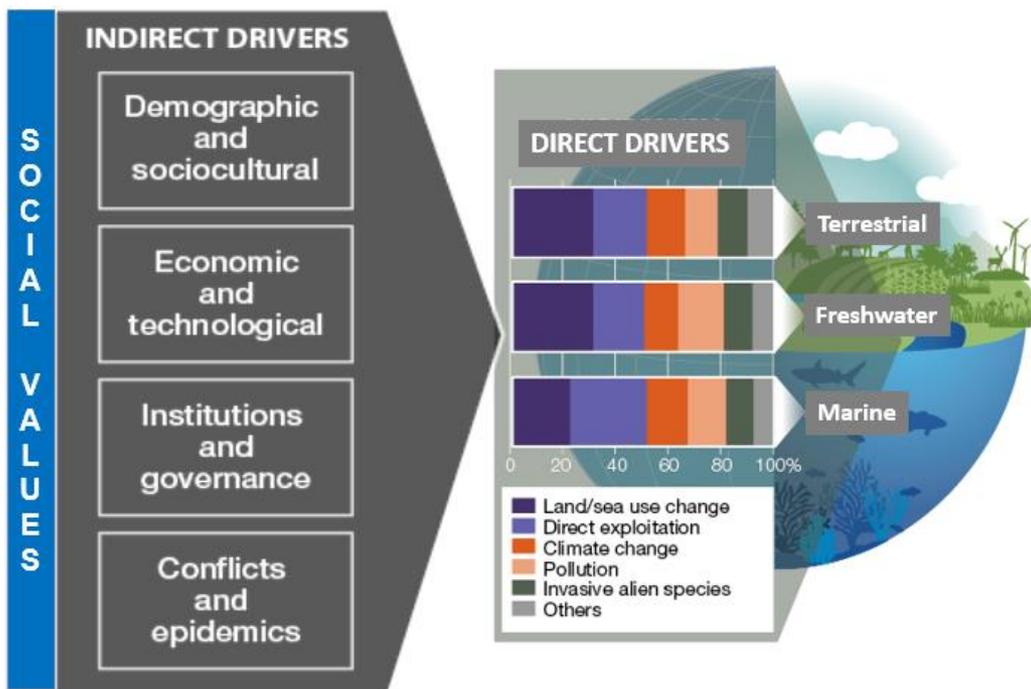
- Biodiversity as a global issue – General considerations
- Focus on Agriculture and Forestry in the EU
- The EU response

Biodiversity underpins sustainable development



Graphics by Jerker Lokrantz/Azote

The global biodiversity crisis

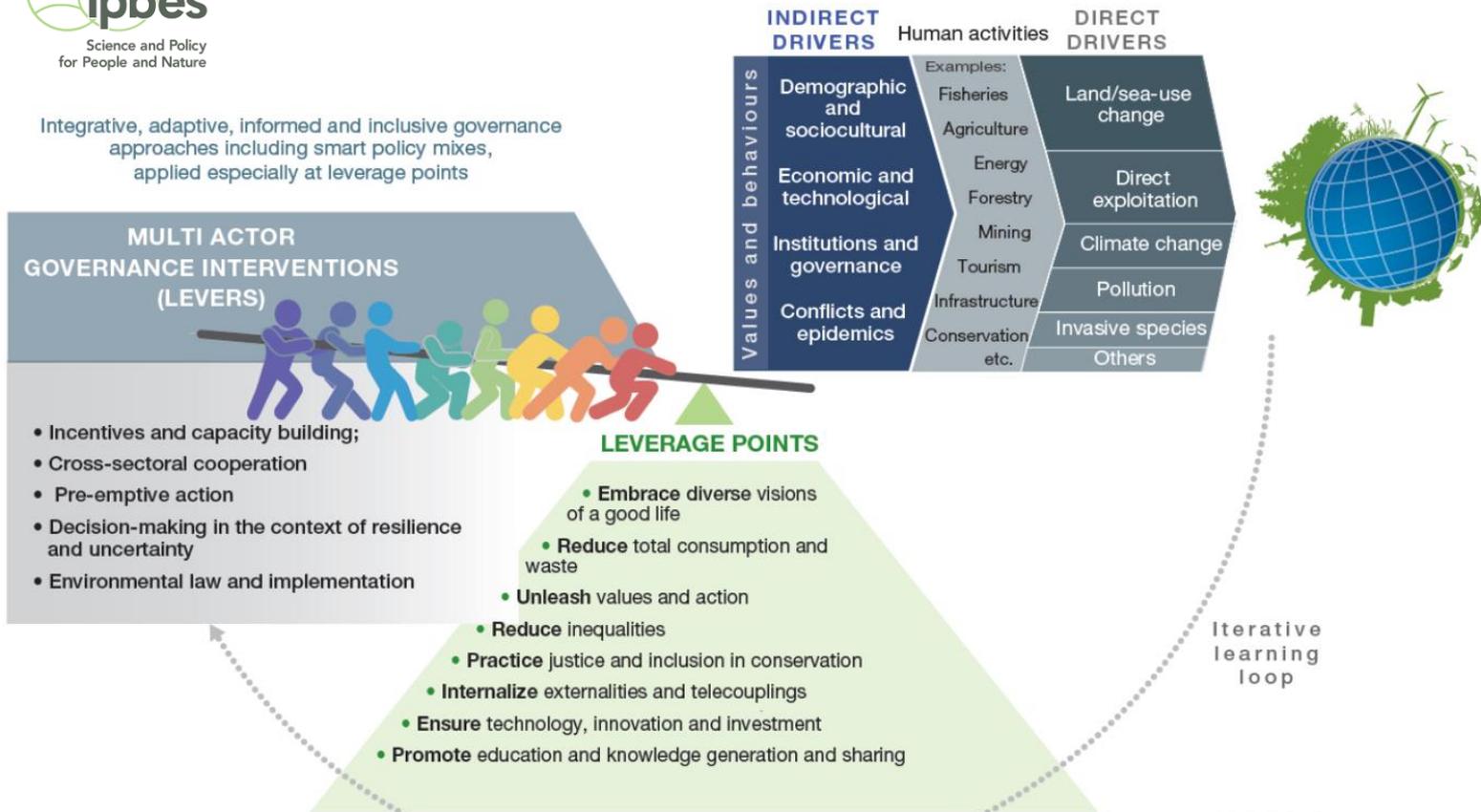


Source: IPBES Global assessment 2019

Transformative change needed

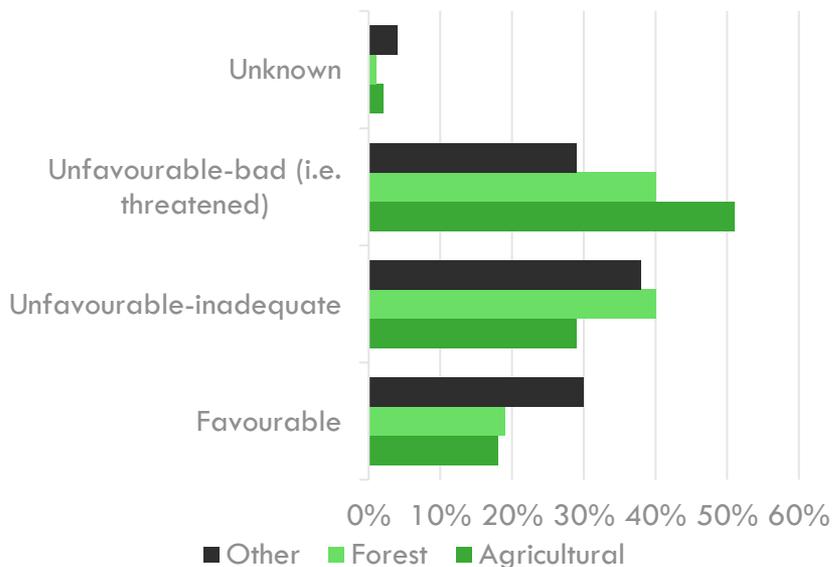


Integrative, adaptive, informed and inclusive governance approaches including smart policy mixes, applied especially at leverage points

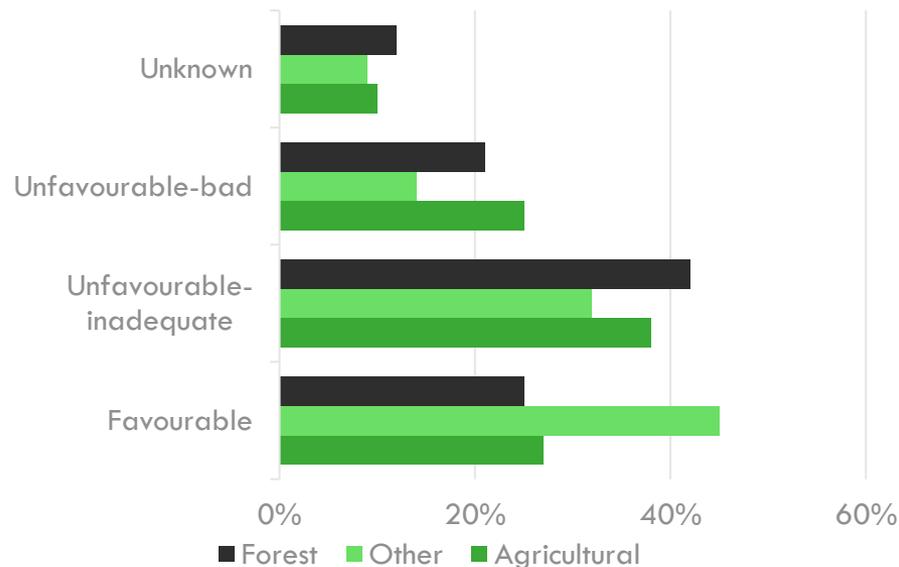


Biodiversity status in agricultural and forest habitats and species

Conservation status by ecosystem 2013-2018



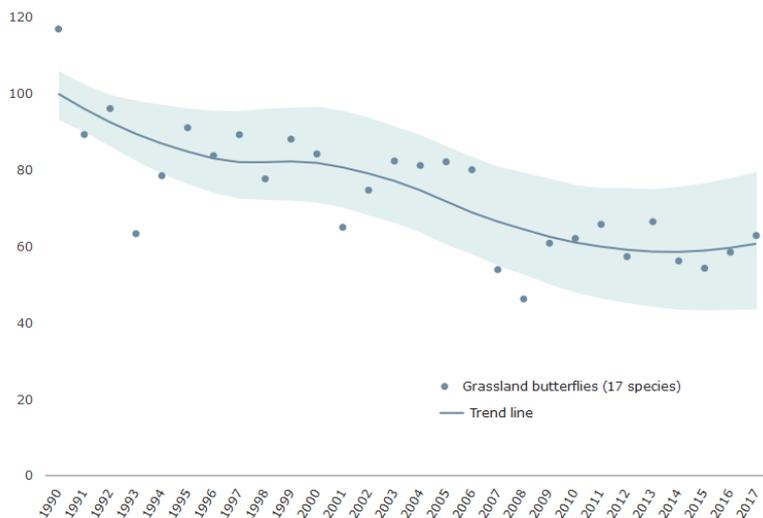
Conservation status of BHD species by ecosystem 2013-2018



Source: EEA (2019) preliminary data based on MS 2013-2018 Nature Directives reporting

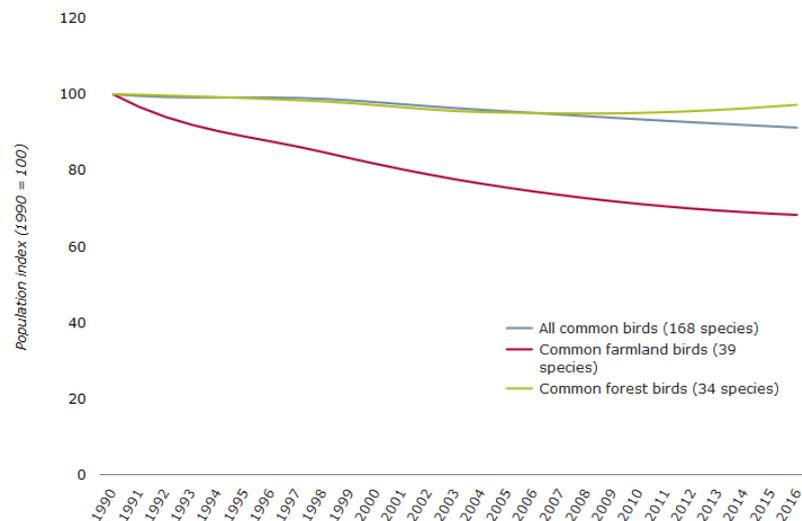
Abundance and distribution of relevant species

Grassland butterflies - population index, 1990-2017



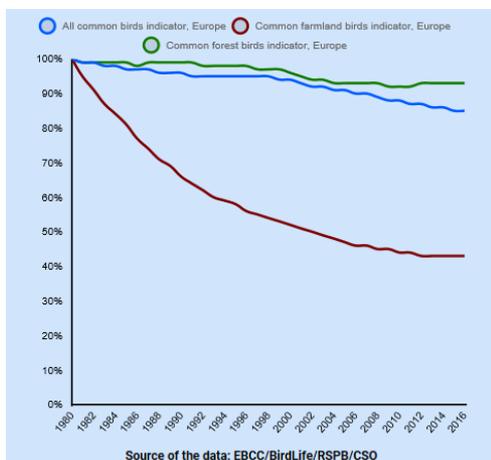
Source: EEA, Butterfly Conservation Europe, European Butterfly Monitoring Scheme partnership, Assessing Butterflies in Europe (ABLE) project
 Notes: Compiled by EEA refers to BE, EE, FI, FR, DE, IE, LT, LU, NL, PT, RO, SL, ES, SE, UK

Common birds - population index, 1990-2016

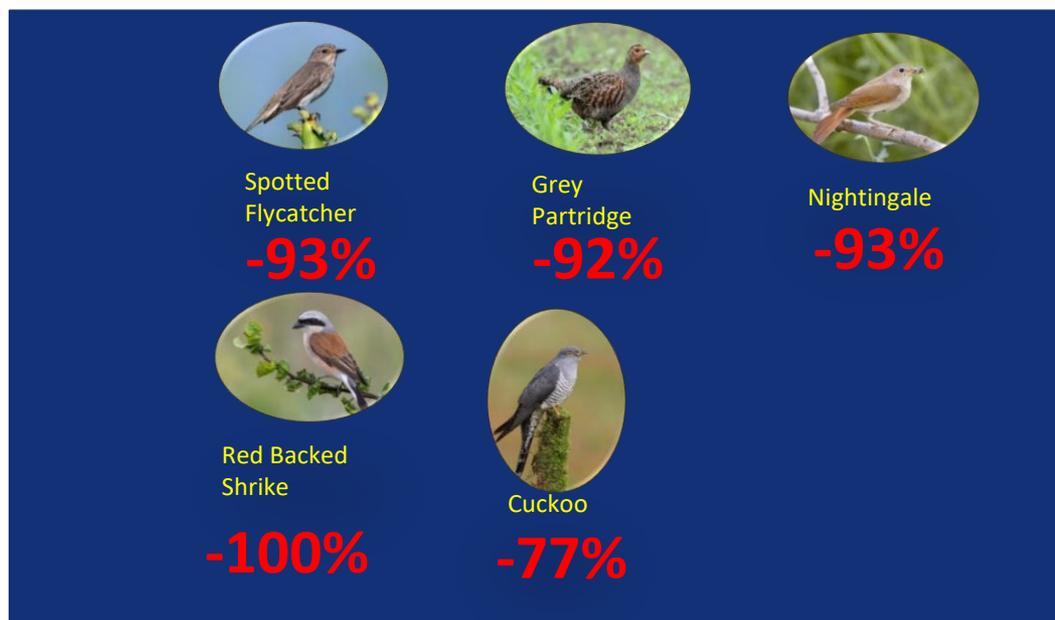


Source: European Bird Census Council, RSBP, BirdLife International, Czech Society for Ornithology
 Notes: Compiled by EEA refers to EU-28 (except HR, MT) + Norway and Switzerland

Diversity of farmland birds is declining



Farmland bird index: -60% since 1980



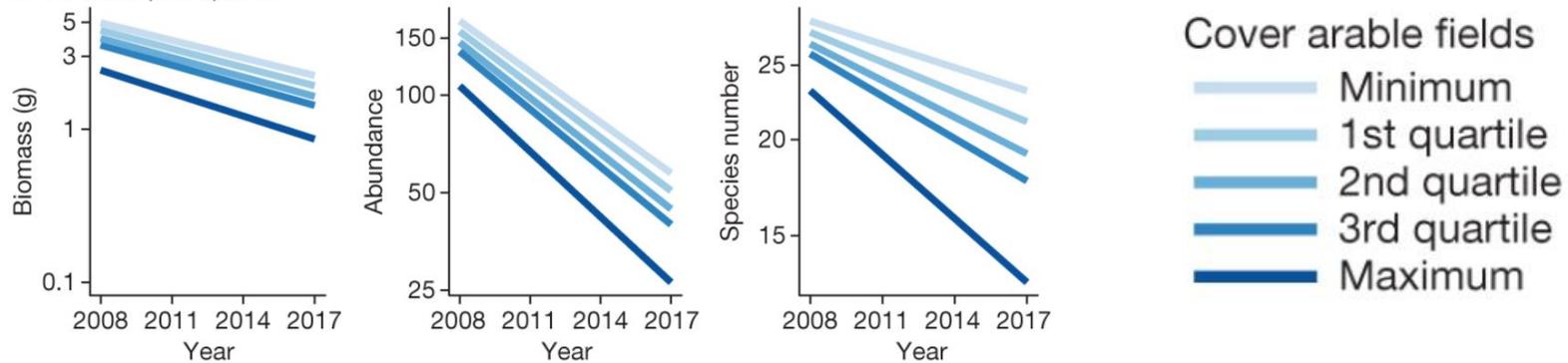
Insect hunting
birds
UK trends



European
Commission

Insect biodiversity declines more in areas with more arable crops

a All arthropod species



Seibold et al. Nature 574, 671–674 (2019)

Data from more than 1 million individual arthropods (about 2,700 species), from standardized inventories taken between 2008 and 2017 at 150 grassland and 140 forest sites in 3 regions of Germany. Overall gamma diversity in grasslands and forests decreased over time, indicating loss of species across sites and regions. In annually sampled grasslands, biomass, abundance and number of species declined by 67%, 78% and 34%, respectively.

Causes of the decline

- 1. Habitat loss**
 - Landscape features
 - Extensive use
 - Greater parcels
- 2. Pesticides**
 - Monocultures, limited uptake of crop rotation
 - Simplified landscapes
- 3. High fertiliser loads**
- 4. Other factors: land conversion, climate change**



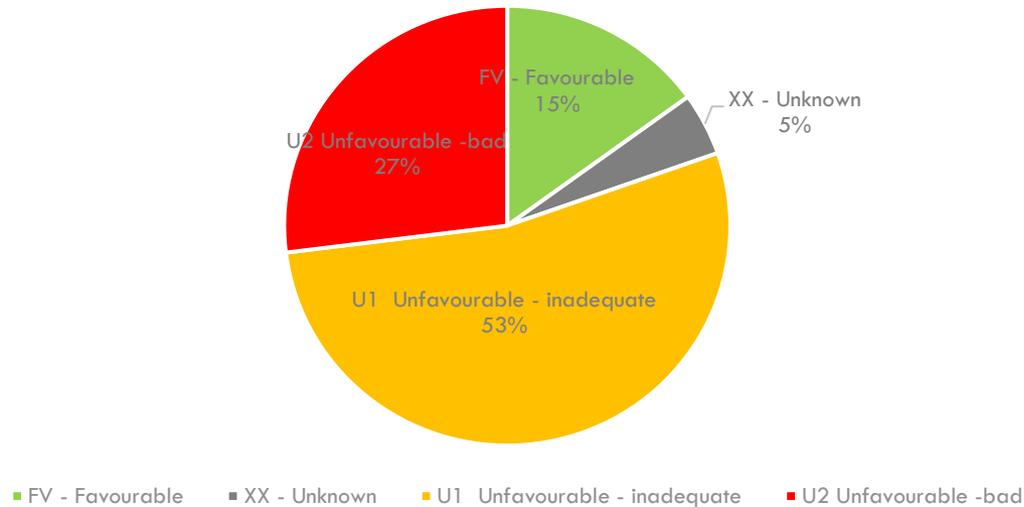
Crucial role of forests for Biodiversity

- Forest account for 42% of EU land
 - Forest account for 50% of Natura 2000
 - 81 forest ecosystems are listed in Nature legislation, out of 321 in total
- ⇒ Forests are the largest reservoir of biodiversity compared to other terrestrial ecosystems

The state of nature conservation in Europe's forests

Ecosystem health diagnosis based on status and trend

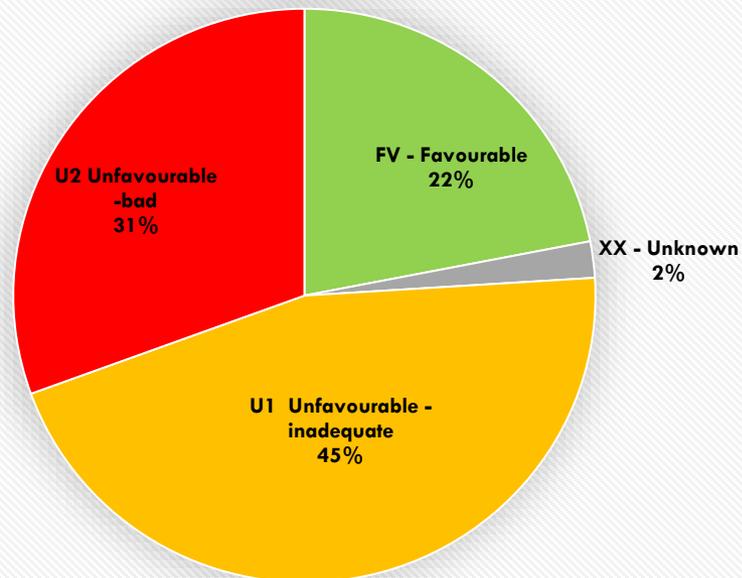
EU forest habitats Conservation status 2006-2012



The state of nature conservation in Europe's forests

Ecosystem health diagnosis based on status and trend

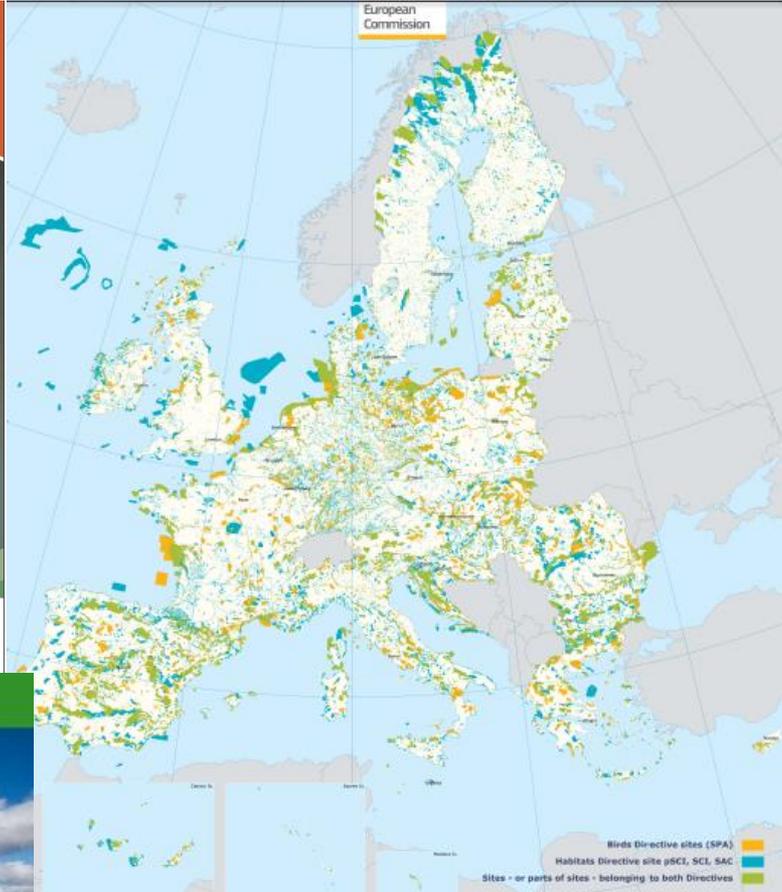
EU forest habitats Conservation status 2013-2018



■ FV - Favourable ■ XX - Unknown ■ U1 Unfavourable - inadequate ■ U2 Unfavourable - bad

The EU response: we don't start from scratch

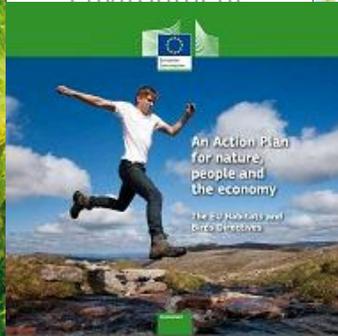
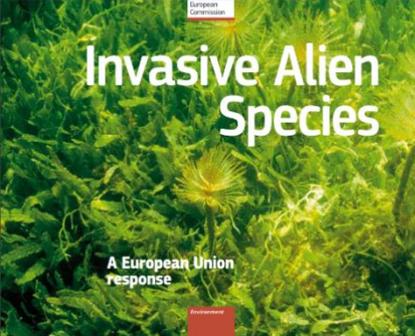
The EU Biodiversity Strategy to 2020




The EU Pollinators Initiative



- What are pollinators and why do we need them?
- Why are pollinators declining?
- What is the EU doing to stop the decline?





Many EU policies are relevant



EU FUNDING FOR RESEARCH AND INNOVATION 2021-2027



European development policy

European Commission proposes a new modern EU budget

The Commission is putting forward new simplified EU financial rules for the period 2021-2027 and is proposing to increase the external action budget to better address global challenges.

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1 2 3 4 5

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2020 EU Biodiversity Strategy progress and the CAP

mid term review 2015

- Agricultural and forestry ecosystems are still declining at a rapid rate*
- Agricultural intensification, land abandonment, and intensively managed forests continue to be key threats to biodiversity
- Review concluded that opportunities under CAP need to be taken up by MS at sufficient scale to address these challenges

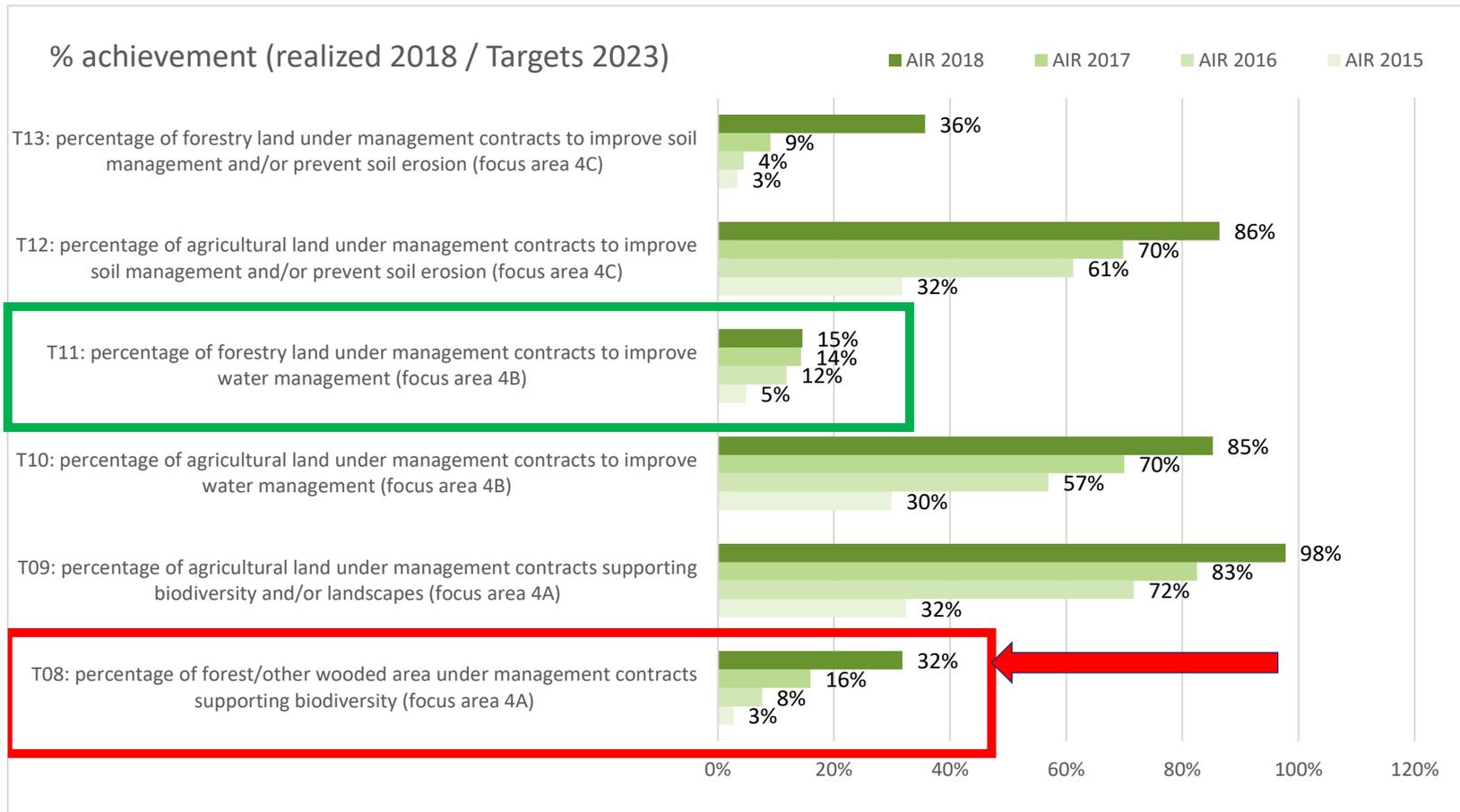
EU Biodiversity Strategy 2020 - Mid-term Review 2015				
Target 3a (Agriculture)			Target 3b (Forests)	
Overall Assessment: No significant overall progress (much stronger efforts are needed to meet the target by its deadline)				
Action 8: Enhance CAP direct payments	Action 9: Better target rural development	Action 10: Genetic diversity	Action 11: Encourage forest conservation	Action 12: Biodiversity measures in forest plans
				

Source: European Commission, 2015

*Based on MS 2007-2012 Nature Directives reporting

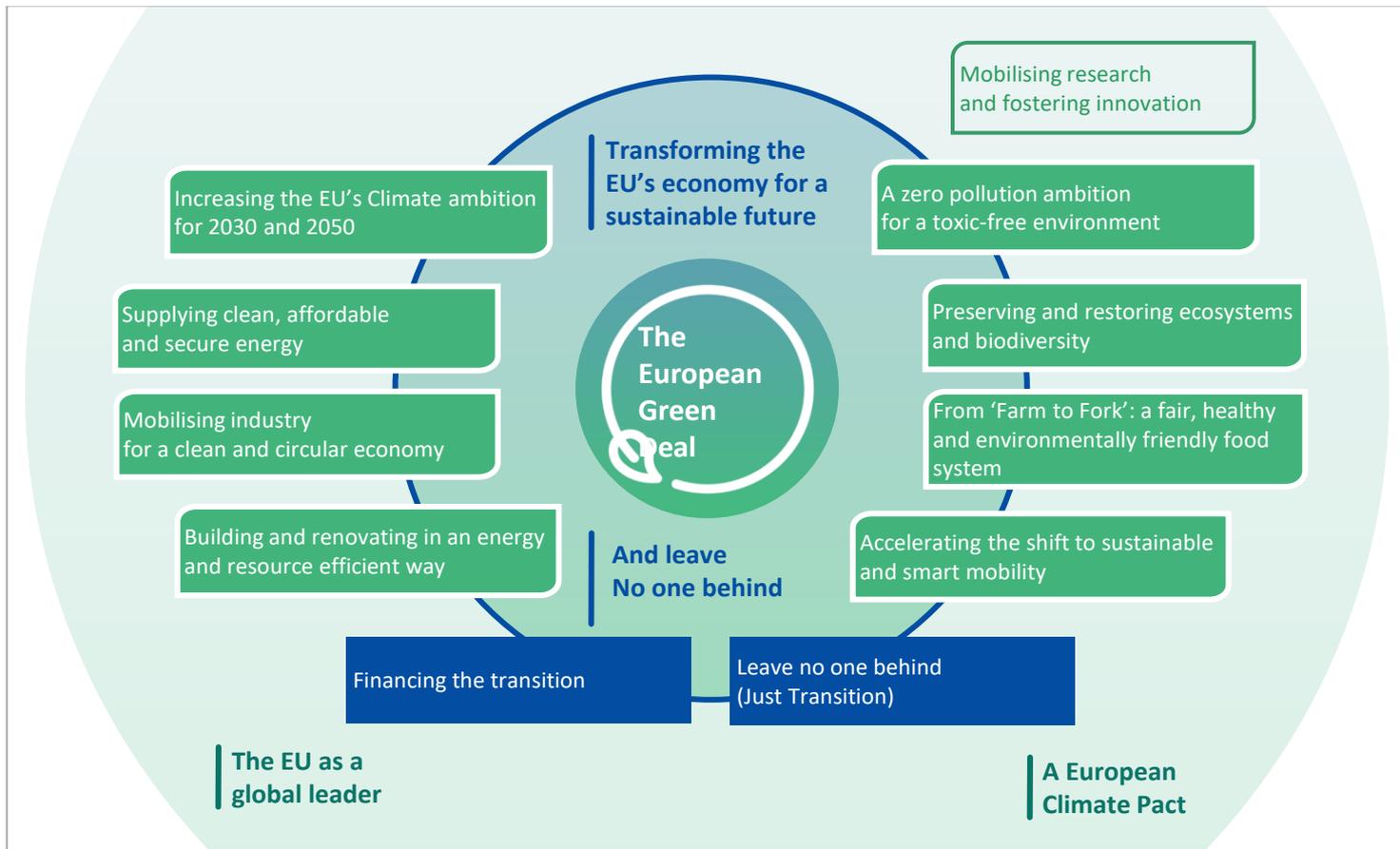
Assessment of the achievement of the “self imposed” targets of MS on the percentage of area under environmental measures in the Rural Development Programs

Priority 4 - Restoring/Preserving/Enhancing ecosystem - Target Indicators



IMPROVEMENTS BUT NOT ENOUGH!

The European Green Deal



The European Green Deal

- Farm to Fork Strategy in spring 2020
- Measures, including legislative, to significantly reduce the use of chemical pesticides, fertilizers and antibiotics
- Examination of the draft national strategic plans, to meet the ambitions of the European Green Deal and the Farm to Fork Strategy in 2020/2021

From 'Farm to Fork': a fair, healthy and environmentally friendly food system

The EU as a
global leader

A European
Climate Pact

The European Green Deal

- **EU Biodiversity Strategy** for 2030 in April 2020
- Follow up with concrete measures in 2021 to **address the main drivers of biodiversity loss**
- A new **EU Forest Strategy** in 2020
- Measures to support **deforestation-free value chains** from 2020

Preserving and restoring ecosystems and biodiversity

The EU as a
global leader

A European
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Leading by example, the EU 2030 biodiversity strategy

- Achieve **healthy ecosystems** and **favourable conservation status** by 2050
- Milestones and SMART targets for 2030
- marine and terrestrial **protected areas**
- address **drivers** (overexploitation, land-use change, climate change, pollution, IAS)
- sustainable management of land and sea ecosystems (**agriculture, forestry, fisheries,...**)
- roll out **nature-based solutions** aimed at the conservation and **restoration** of healthy and carbon-rich ecosystems
- reduce Europe's **global footprint** (sustainable consumption, commodities, trade)
- funding and sustainable **financing**
- integration of natural capital into **private and public decision-making**
- cooperation with **business, youth**, etc...,
- research, monitoring and **knowledge**



Areas for EU Action to 2030 – Agriculture (examples)

Reduce drivers of **biodiversity loss on agricultural land** through:

- A. Significant increase of agricultural area managed according to agro-ecological principles, including crop rotation
- B. agriculture area under organic farming
- C. reduction in the use and risk of pesticides
- D. Zero pollution from nutrients

Ensure **non-deterioration of soil condition** by:

- A. Gradually eliminating severe and extreme soil erosion on agricultural land
- B. Gradually increasing soil organic carbon
- C. Reduction of agricultural land conversion and loss

Provide **space for nature** through:

- A. Increase agricultural areas under landscape features, non-productive and non-rotational set-aside



Areas for EU Action to 2030 – Forest

“Protect”

“Restore”

“Afforest”

“Monitor”



Forest management

- ❖ There is a growing demand for “closer-to-nature” forestry principles
- ❖ Sustainable Forest Management is a concept widely used, including in EU policy, however it is not precisely defined in EU policy.
- ❖ Forest protection is part of EU competences (Environment) as confirmed by the European Court of Justice

Former monoculture – Today mixed species, multiple age forest in DK



Example Luxembourg

Forestry in Luxembourg: C2N Sylviculture

Close to Nature Sylviculture established by law since 1999

Principles:

- Maintain of old wood over the whole forest stand
- Single tree or group harvest, no clearcut
- Developing uneven-aged forests according to the soil
- Soil protection

LE GOUVERNEMENT DU GRAND-DUCHÉ DE LUXEMBOURG
Ministère de l'Environnement, du Climat et du Développement durable





THANK YOU FOR YOUR ATTENTION!

