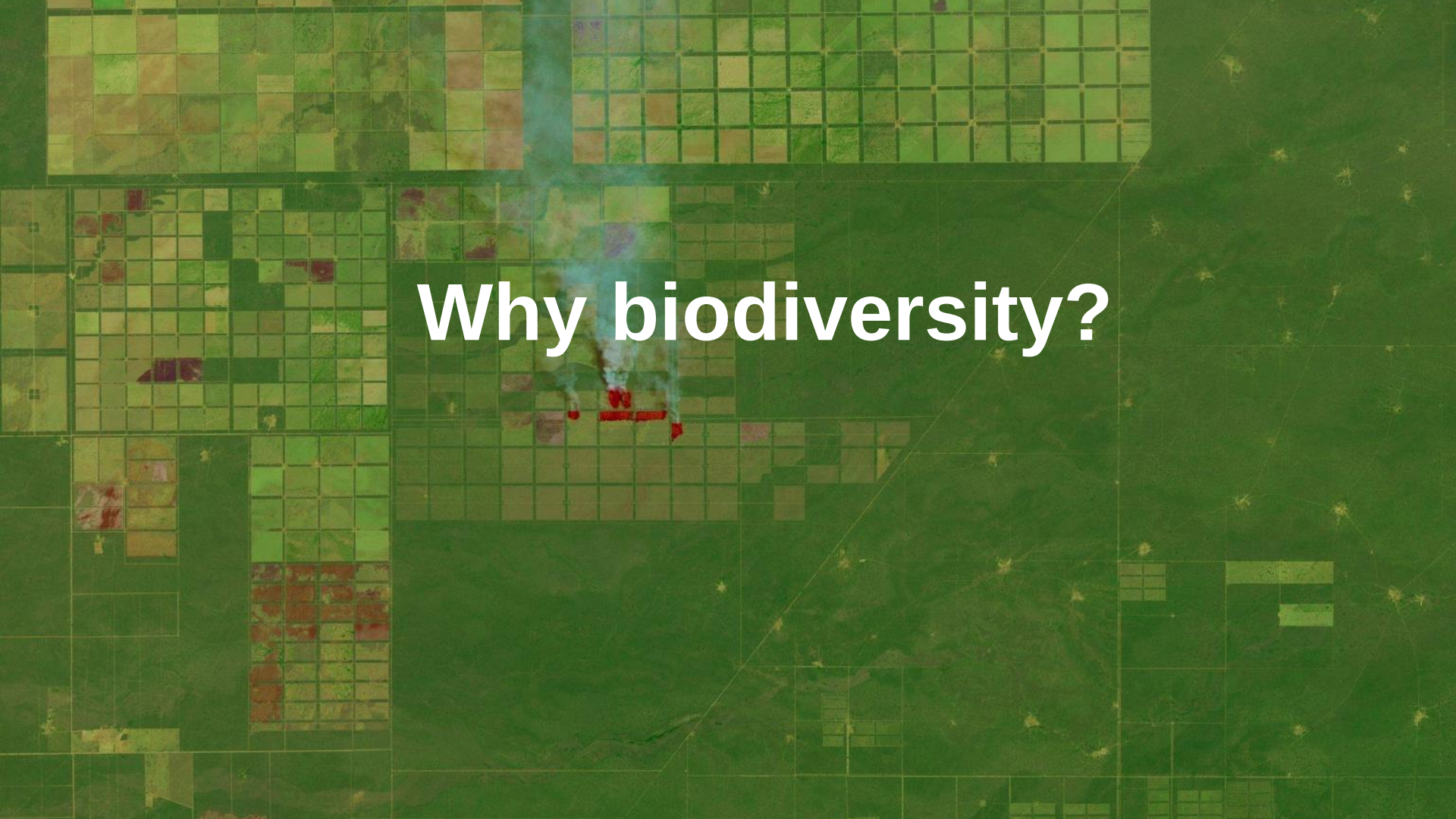

Why biodiversity?

Biodiversity

What is biodiversity?

- **Variety of all living things**, the different plants, animals and microorganisma, the genetic information they contain and the ecosystems they form.

- Collectively describes approx. **10 mio species** and their interaction.

- Natural aesthetics, cultural values and spiritual / religious connections, recreation

- Benefits from the organisms, ecosystems and ecological process are called **ecosystem services.**

Ecosystem services

Provisioning Services

Direct supply of goods, often clear monetary value

Ecosystem services

Regulating services

High value ecosystem services without monetary value

Ecosystem services

Cultural Services

Contributing to wider needs of society, certain WTP

Ecosystem services

Supporting Services

Essentials to functions of living

Ecosystem services

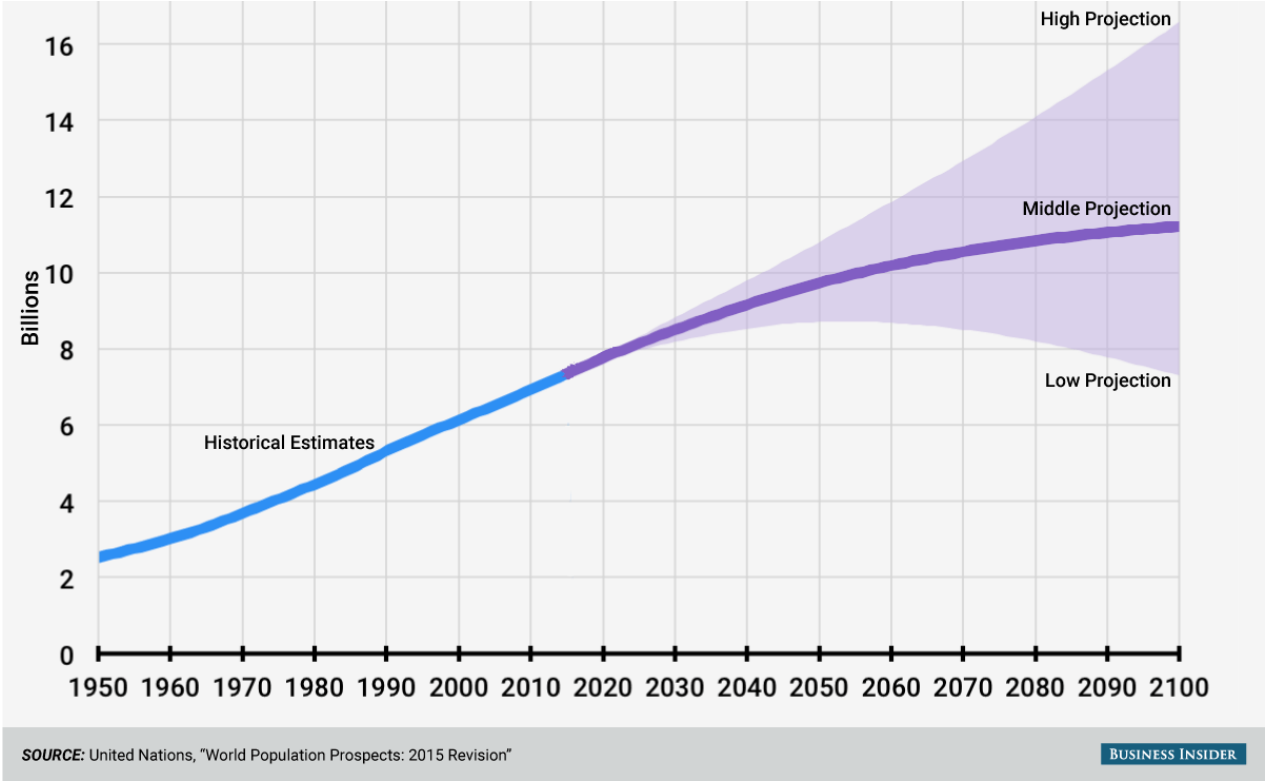
But...

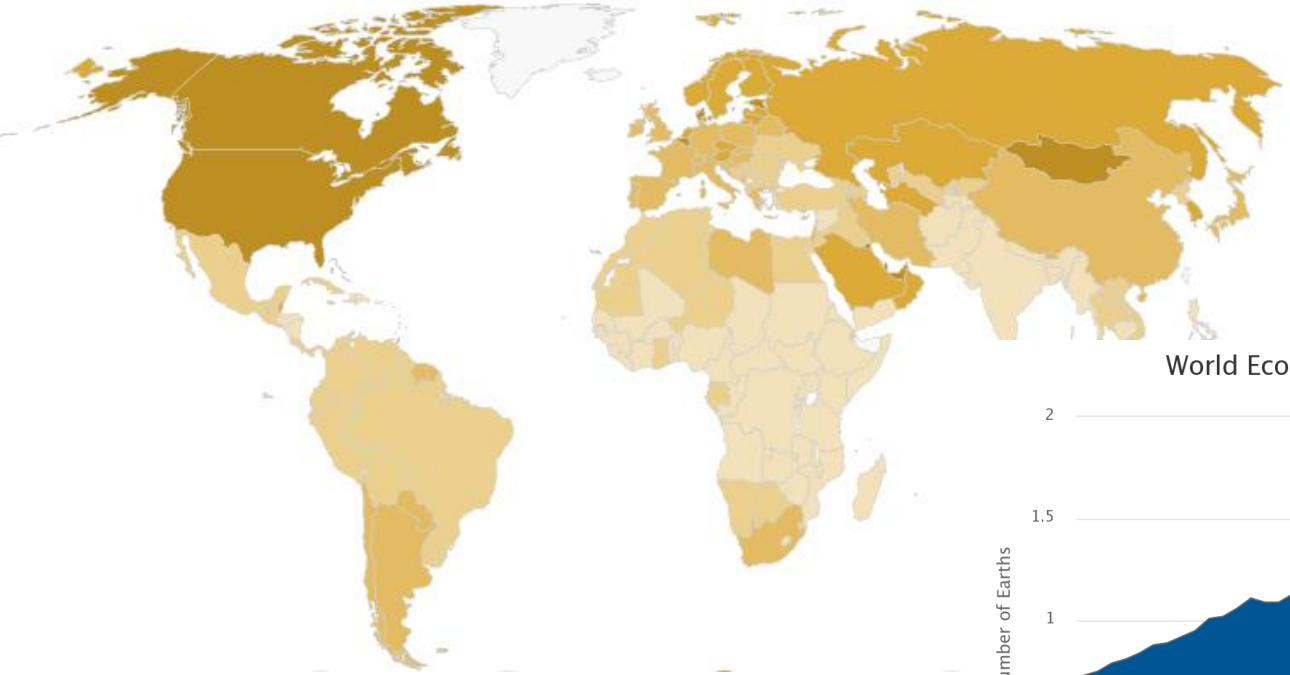
- More than **26‘000 (27%) of assessed species** are threatened with extinction (IUCN 2018)
- More than **30% of global fisheries** have been pushed beyond biological limits (WWF, 2018)
- **Extinctions rates** are estimated to be (at least) **1000 times higher** than the natural rate would be
- **80% of forests** originally covering the earth 8000 years ago have been cleared, fragmented or vanished (EC, 2018)
- Up to **1/3 of world‘s coral reefs** have perished or are threatened (EC, 2018)
- ...

Drivers of biodiversity loss

Pollution	Land use change	Resource Usage	Biotic exchange	Climate change
Pollution of soils, water and atmosphere, i.p. nutrient loading	Alteration, fragmentation, loss of habitat	Over-exploitation of resources	Introduction of exotic species and genetically modified organisms	Global warming / changes in temperatures

Root causes


High Projection
Middle Projection
Low Projection
Historical Estimates
Billions
16
14
12
10
8
6
4
2
0
1950 1960 1970 1980 1990 2000 2010 2020 2030 2040 2050 2060 2070 2080 2090 2100
SOURCE: United Nations, "World Population Prospects: 2015 Revision"
BUSINESS INSIDER



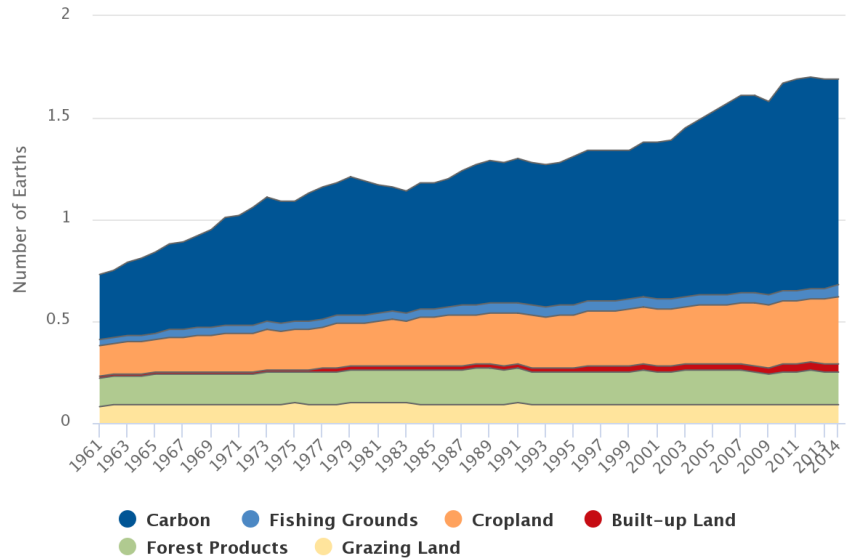
ECOLOGICAL FOOTPRINT PER PERSON

The Ecological Footprint per person is a nation's total Ecological Footprint divided by the total population of the nation. To live within the means of our planet's resources, the world's Ecological Footprint would have to equal the available biocapacity per person on our planet, which is currently 1.7 global hectares. So if a nation's Ecological Footprint per person is 6.8 global hectares, its citizens are demanding four times the resources and wastes that our planet can regenerate and absorb in the atmosphere.

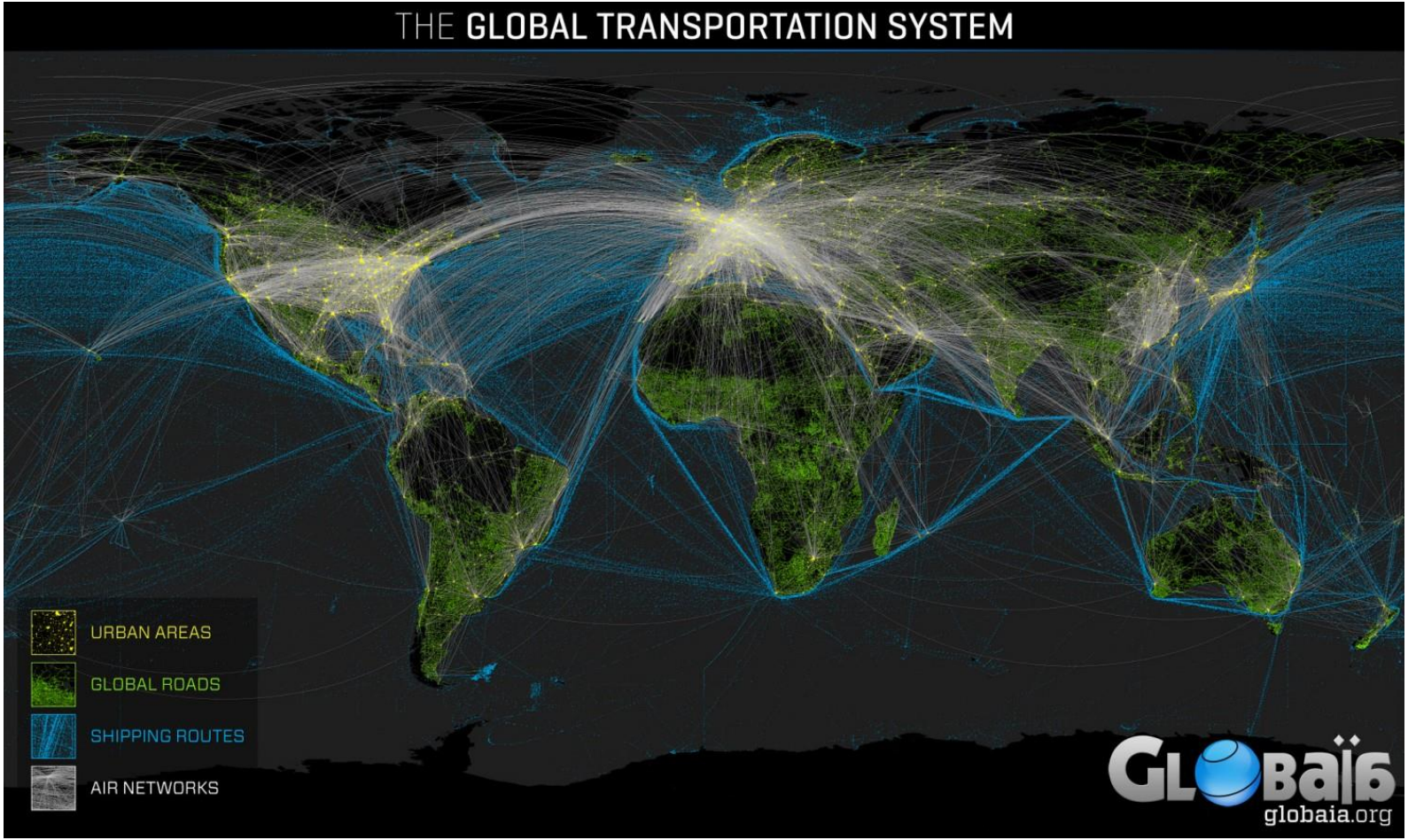
ECOLOGICAL FOOTPRINT PER PERSON OF COUNTRY'S POPULATION (in global hectares)

> 6.7 | 5.1 - 6.7 | 3.4 - 5.1 | 1.7 - 3.4 | < 1.7

World Ecological Footprint by Land Type



Global Footprint Network, 2018 National Footprint Accounts


THE GLOBAL TRANSPORTATION SYSTEM
URBAN AREAS
GLOBAL ROADS
SHIPPING ROUTES
AIR NETWORKS
GLOBAIA
globaia.org

Additionality

Reinforcement

Impact of biodiversity loss

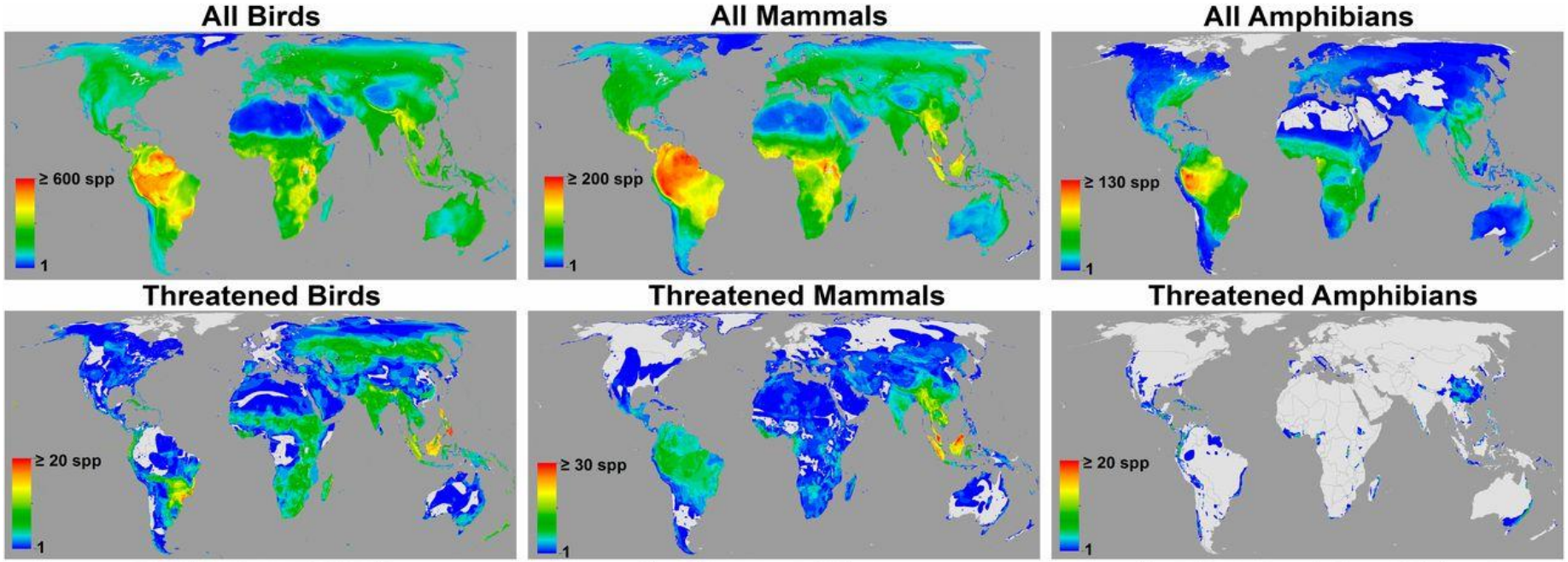
- Species extinction
- Local extirpation
- Loss of interactions / novel interactions
- Loss of functions / ecosystem services

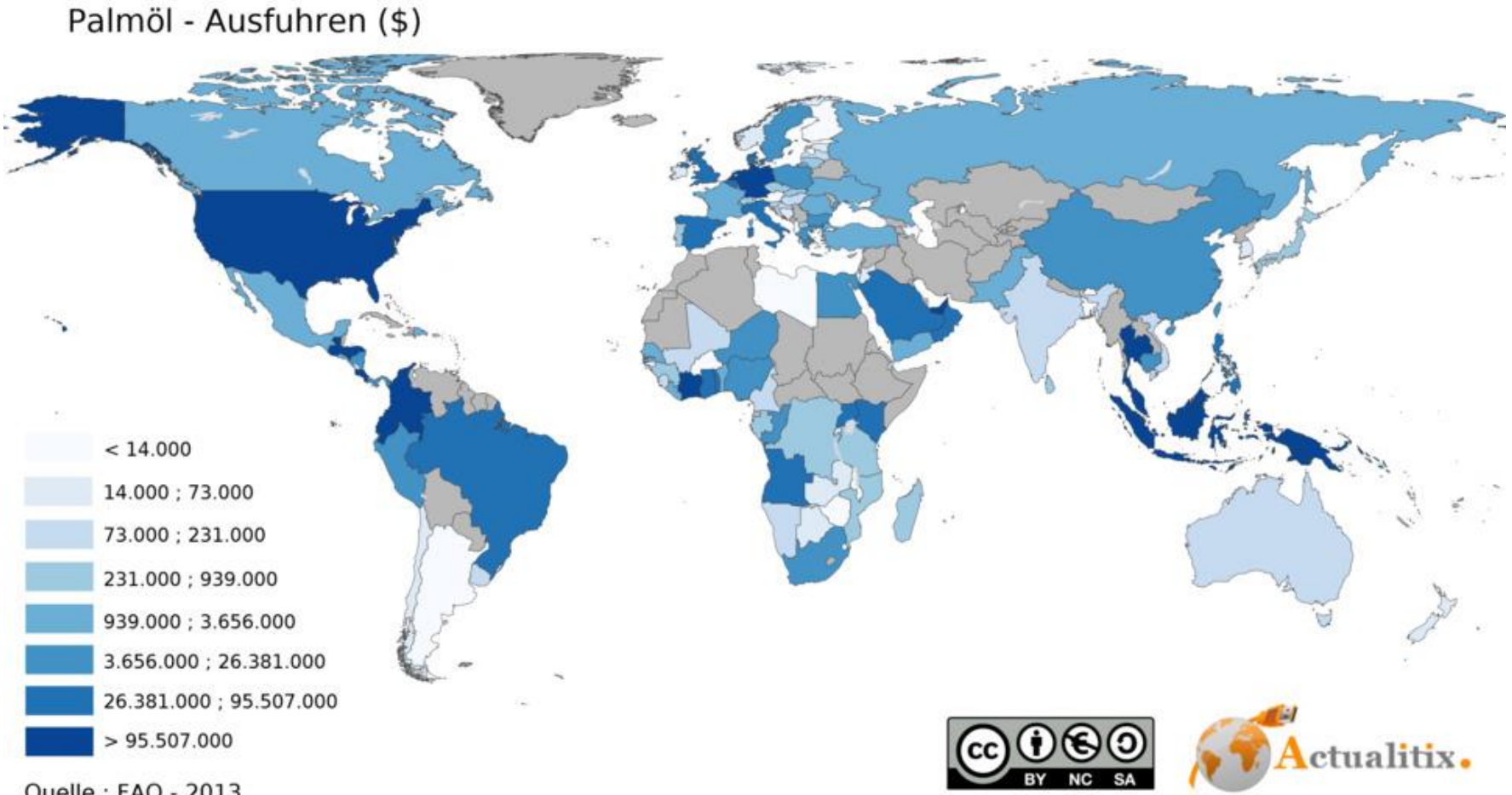
➔ Impact not only economically, but also socially, cultural...

Reasons for inaction / ignorance

- Biodiversity / natural capital not accounted for in economic system
- Missing attribution of responsibility
- Short-termism in political system
- Concept of human separation from and supremacy over nature

Responsibility




Palmöl - Ausfuhren ($)
< 14.000
14.000 ; 73.000
73.000 ; 231.000
231.000 ; 939.000
939.000 ; 3.656.000
3.656.000 ; 26.381.000
26.381.000 ; 95.507.000
> 95.507.000
Quelle : FAO - 2013
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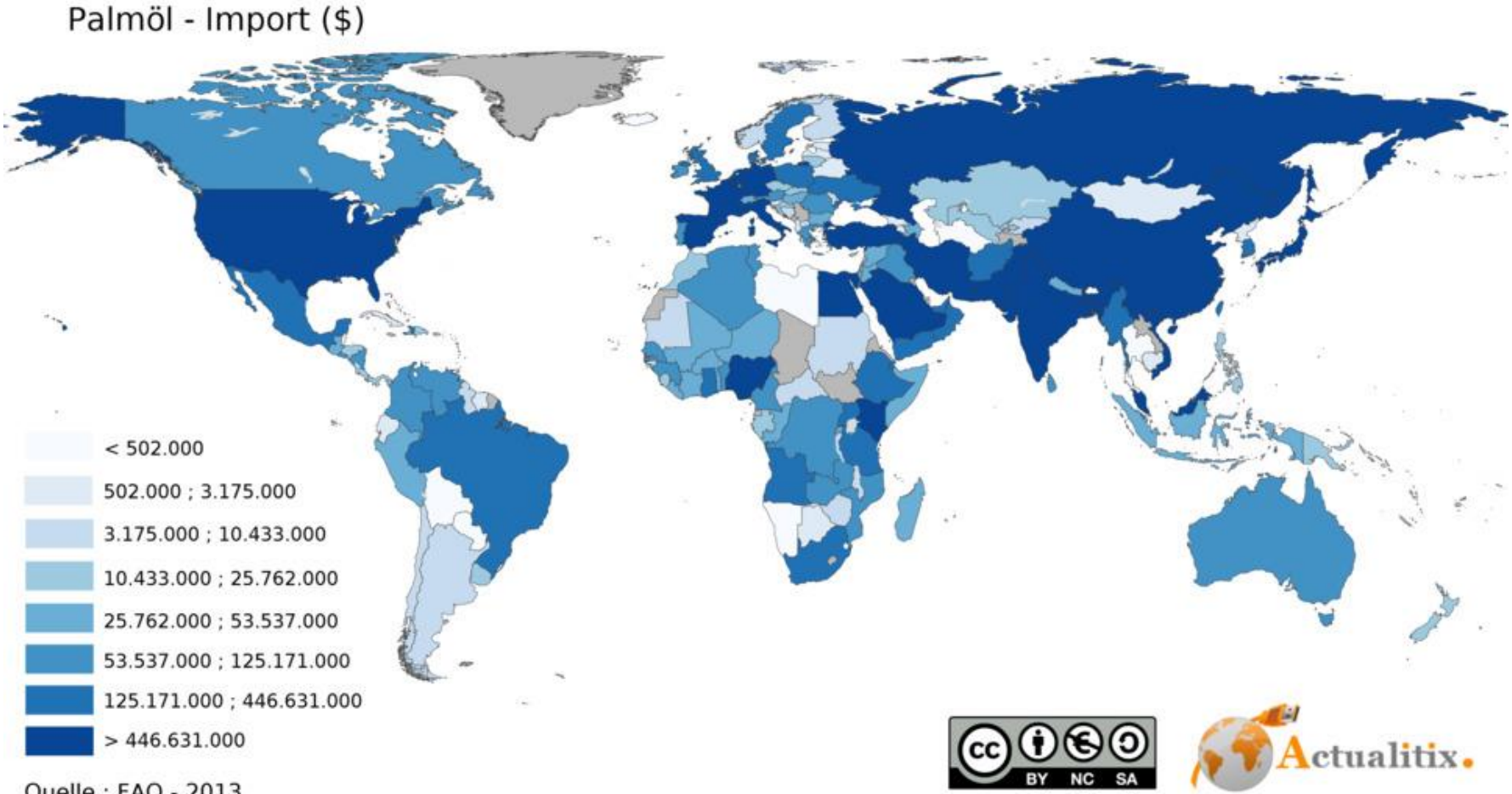
Palmöl - Import ($)
< 502.000
502.000 ; 3.175.000
3.175.000 ; 10.433.000
10.433.000 ; 25.762.000
25.762.000 ; 53.537.000
53.537.000 ; 125.171.000
125.171.000 ; 446.631.000
> 446.631.000
Quelle : FAO - 2013
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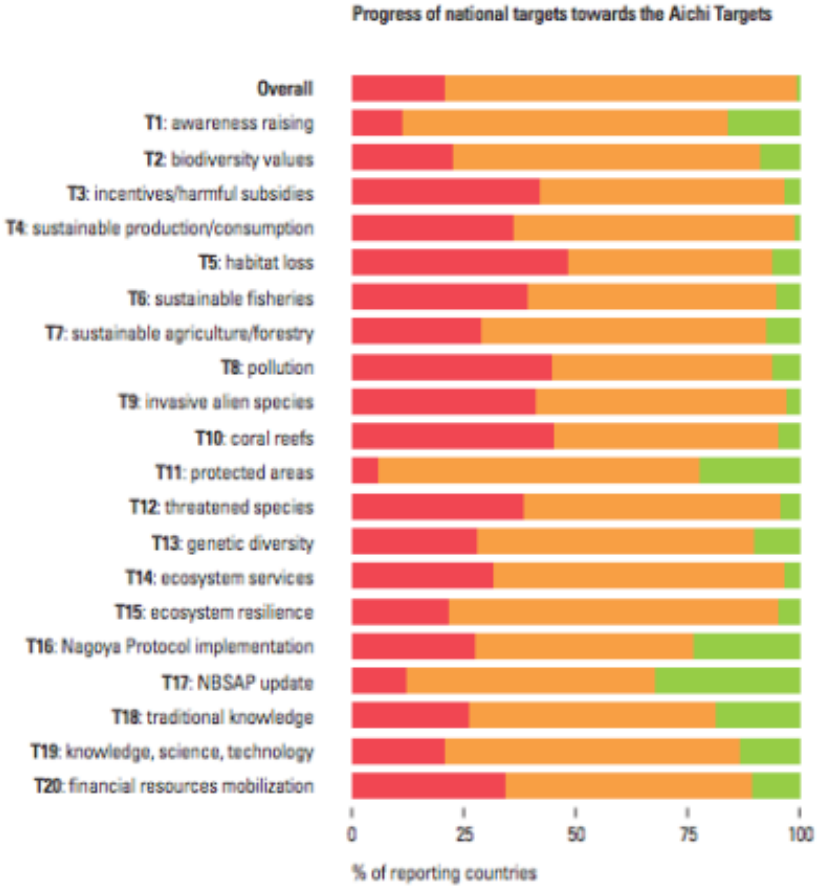
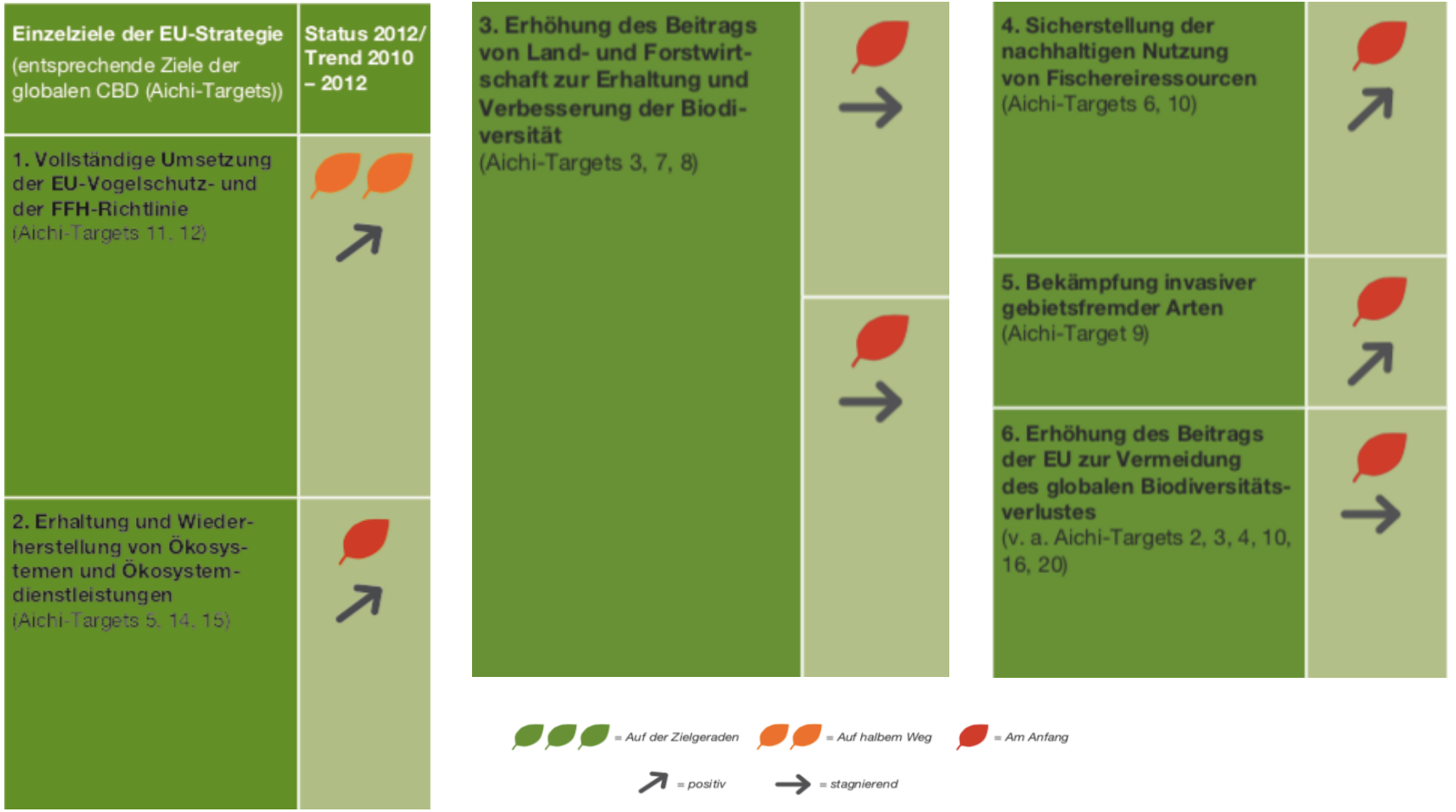
Priorisation?

Global Governance




Einzelziele der EU-Strategie
(entsprechende Ziele der globalen CBD (Aichi-Targets))
Status 2012/ Trend 2010 – 2012
1. Vollständige Umsetzung der EU-Vogelschutz- und der FFH-Richtlinie
(Aichi-Targets 11, 12)
2. Erhaltung und Wiederherstellung von Ökosystemen und Ökosystemdienstleistungen
(Aichi-Targets 5, 14, 15)
3. Erhöhung des Beitrags von Land- und Forstwirtschaft zur Erhaltung und Verbesserung der Biodiversität
(Aichi-Targets 3, 7, 8)
4. Sicherstellung der nachhaltigen Nutzung von Fischereiressourcen
(Aichi-Targets 6, 10)
5. Bekämpfung invasiver gebietsfremder Arten
(Aichi-Target 9)
6. Erhöhung des Beitrags der EU zur Vermeidung des globalen Biodiversitätsverlustes
(v. a. Aichi-Targets 2, 3, 4, 10, 16, 20)
= Auf der Zielgeraden
= Auf halbem Weg
= Am Anfang
= positiv
= stagnierend

Global governance

How to **improve global governance** in order to be more effective at protecting biodiversity?

Trade

How to ensure that concerns for biodiversity conservation is **built in trade policies and agreements**?

Development

How to ensure biodiversity protection in **development**?

Global governance

Ricarda Steinbrecher
Econexus

Trade

Hubertus Schmidtke
FSC

Development

Vivian Valencia
Wageningen University