


**Giving  
policymakers a  
view on the road  
ahead,  
driving 100 km/hr**

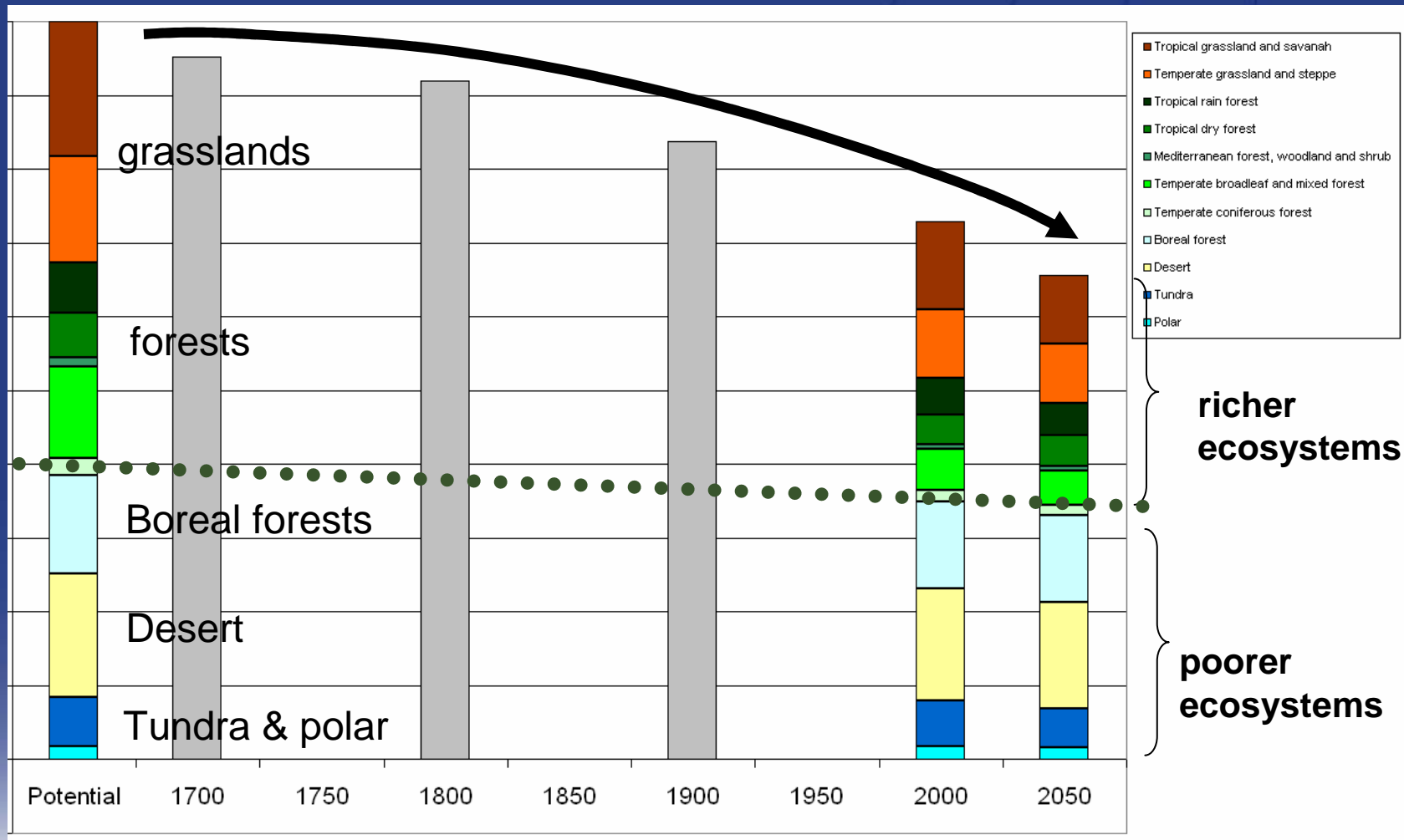
*Ben ten Brink*



**Netherlands Environmental  
Assessment Agency**

# 1. What is happening?

Biodiversity loss accelerates from 1700 to 2050  
with ongoing policies



**Global economy will grow**

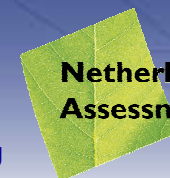
**4 x**

**the current one**

**by 2050**

- 1.5 x global population
- 3 x income per person

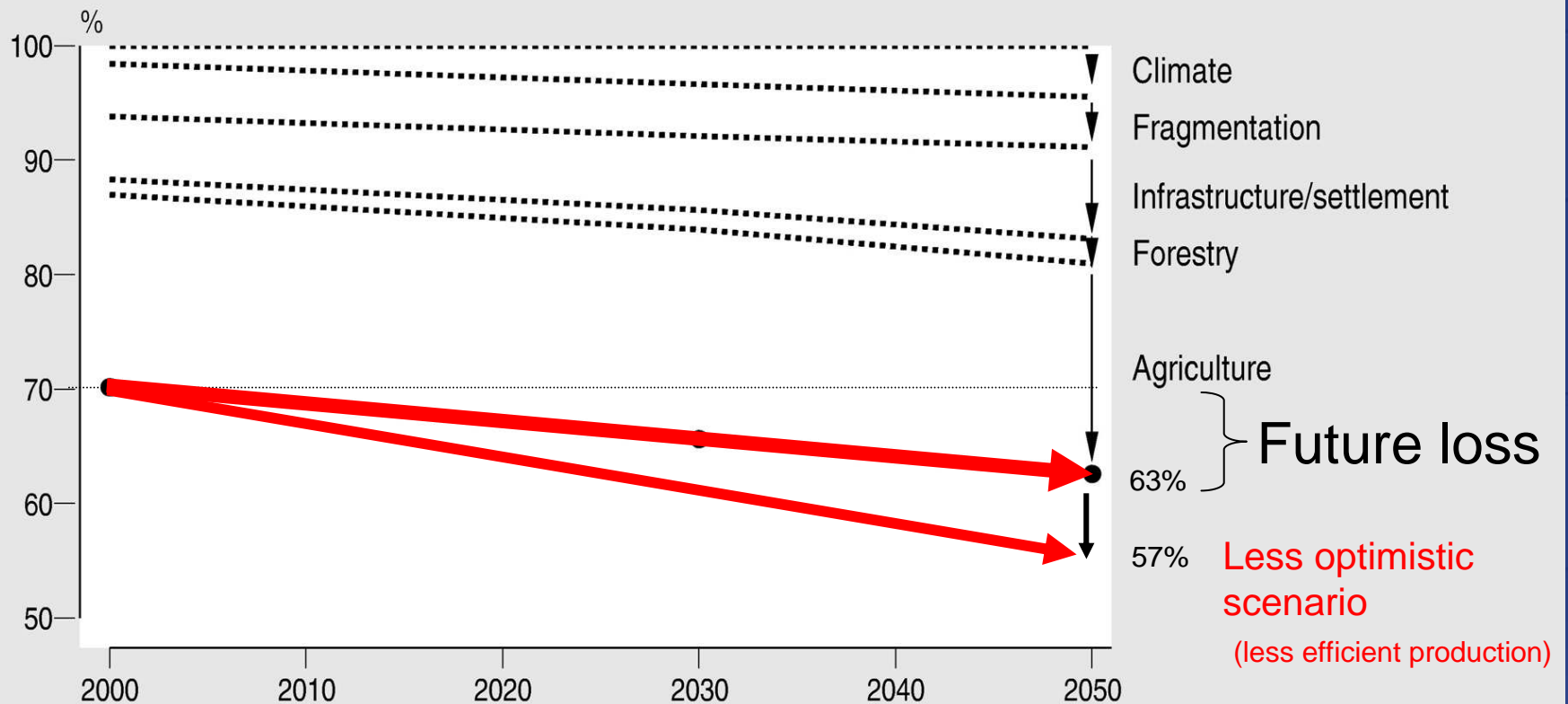
Sources: OECD, IEA, FAO



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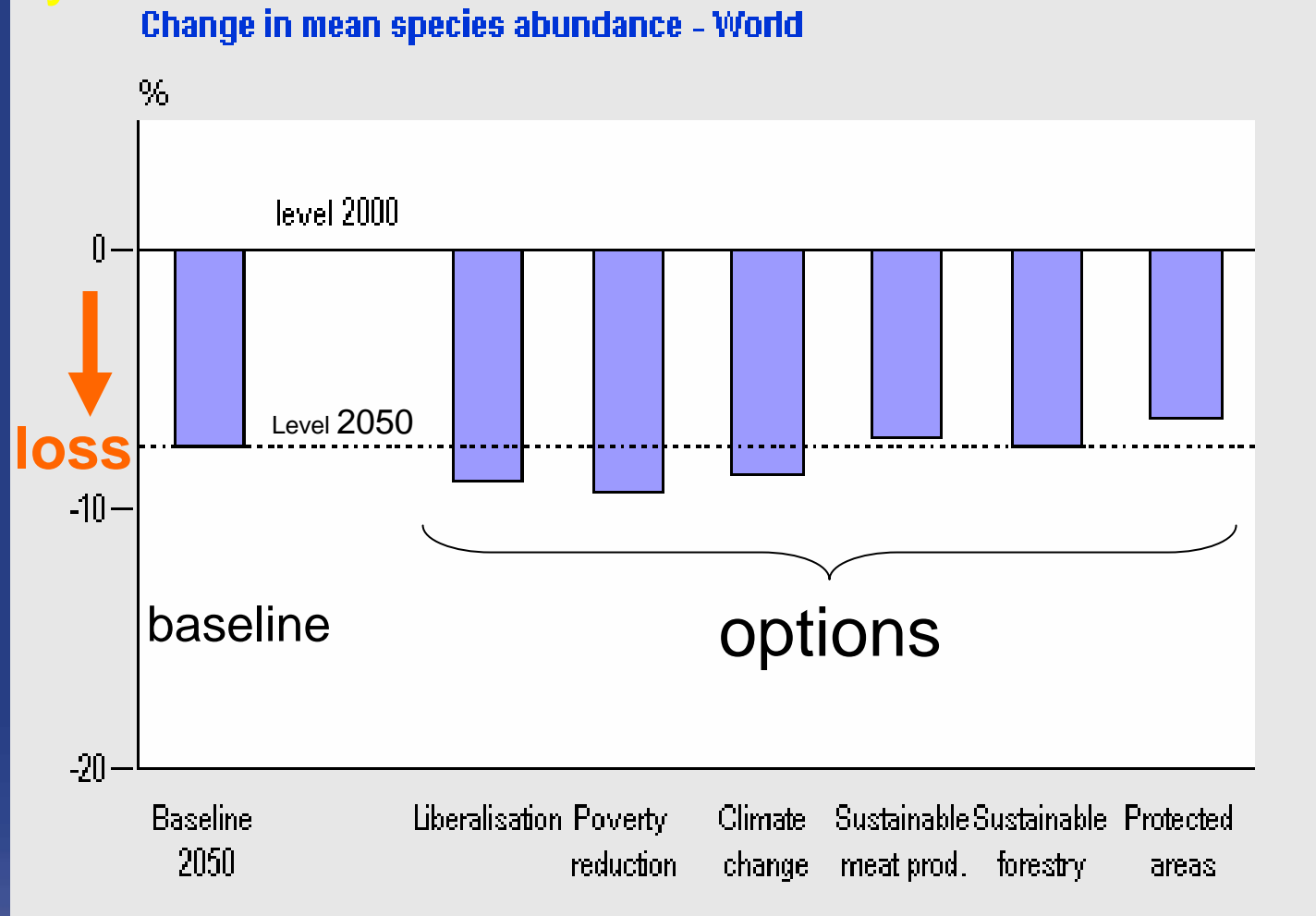
# Global loss straight down: 70% -----> 63% - 57%

Mean abundance original species - World baseline



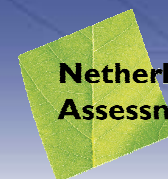
Datum: 20-dec-2005

# Options hardly reduce loss, sometimes even worsen initially



Our socioeconomic systems float on  
healthy ecosystems

Adequate & timely information is key to  
safeguard biodiversity and its G&S



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# We have selected appropriate 2010-indicators, but

## ECOSYSTEM INTEGRITY, GOODS AND SERVICES

- Marine trophic index
- *Connectivity/fragmentation of ecosystems*
- Water quality in aquatic ecosystems
- 
- 

## SUSTAINABLE USE

- *Area of ecosystems under sustainable management*
  - *Forest*
  - *Agriculture*
  - *Fishery*
  - *Aquaculture*
  -
- Ecological footprint
- 

## STATUS AND TRENDS OF COMPONENTS OF BIODIVERSITY

- *Trends in extent of selected biomes, ecosystems, habitats*
- Coverage of protected areas
- *Trends in abundance and distribution of selected species*
- *Change in status of threatened and/or protected species*
- *Trends in genetic diversity of domesticated animals, cultivated plants, fish species of major socioeconomic importance*

## THREATS TO BIODIVERSITY

- *Nitrogen deposition*
- *Numbers and costs of invasive alien species*
- Impact of climate change
- 
- 

Safe landing sc

ental

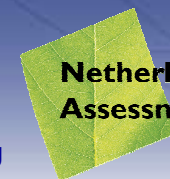
**NO** regular monitoring & information system exist

**NO** underlying budgets

**NO** composite indicator and common baseline of  
'change in abundance of selected species'

**NO** adequate indicators of goods & services

**Yet**





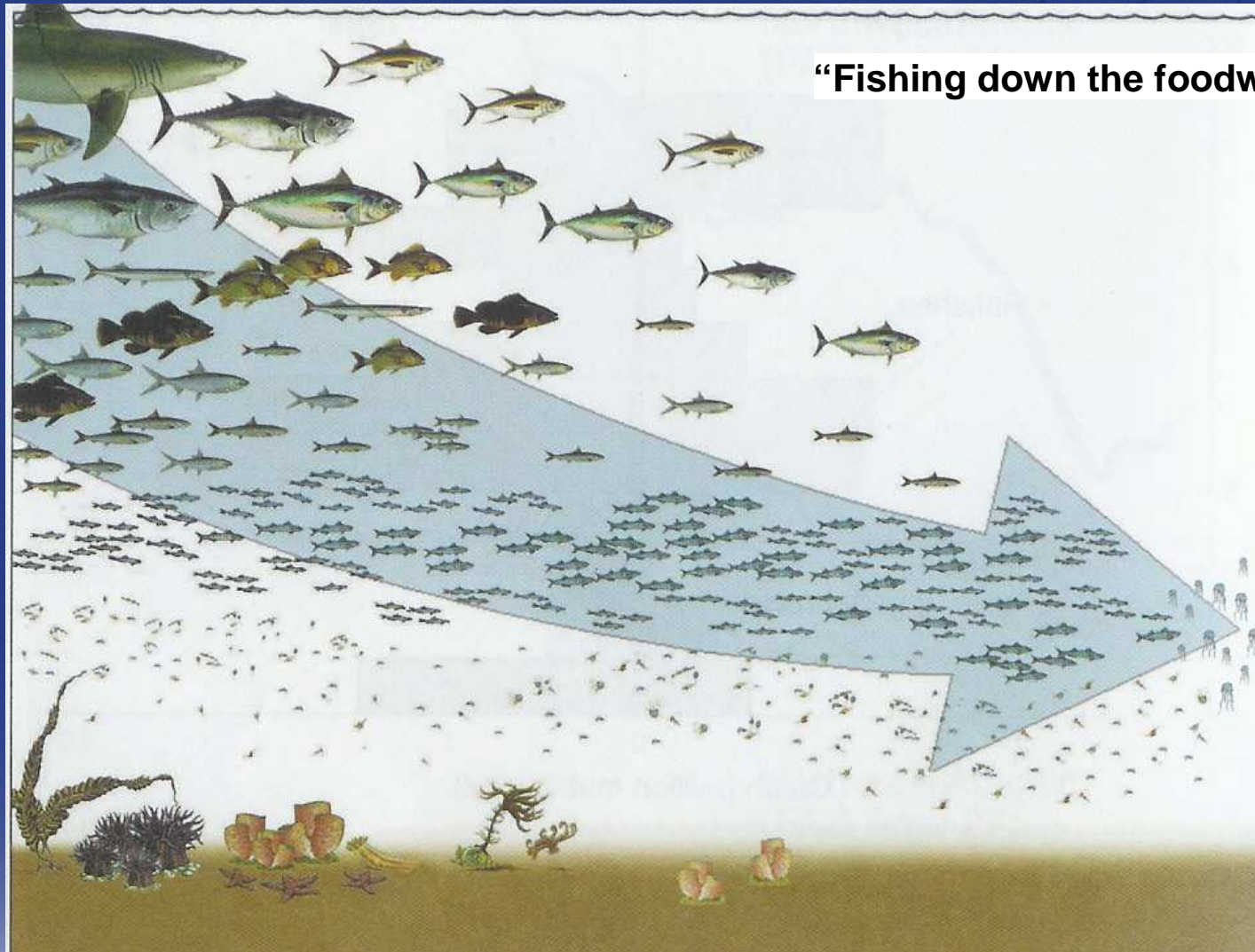
# Current information is

anecdotic,  
caleidoscopic,  
incomplete,  
incoherent,  
not appealing,  
not effective

**not understood**



## 2. Why is it happening? **We homogenise**



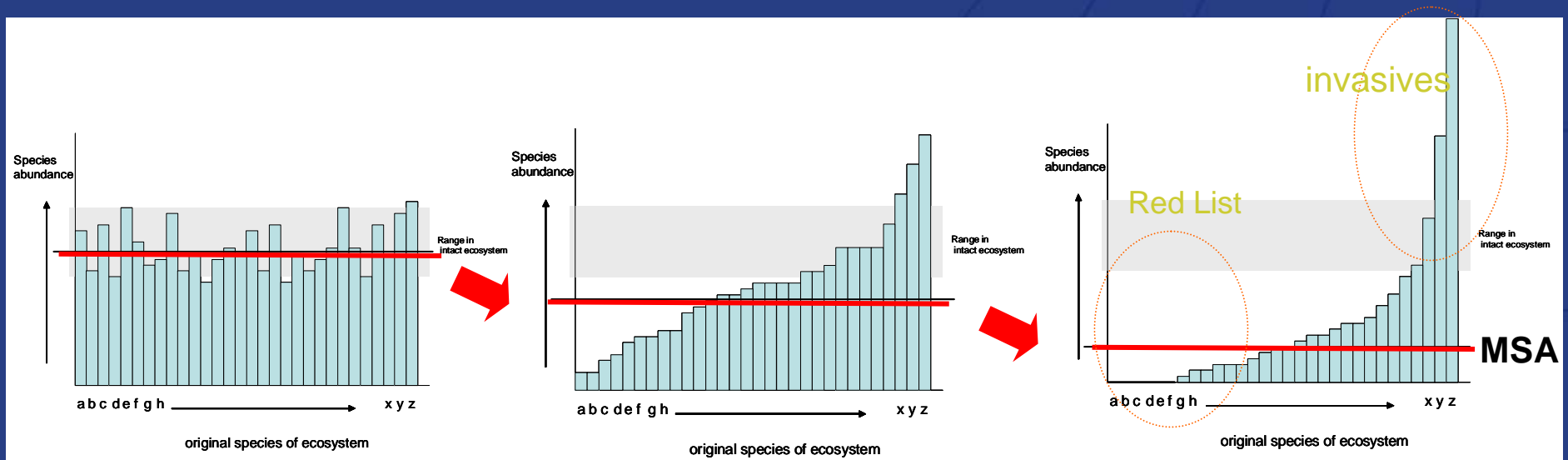
“Fishing down the foodweb (Pauly, 2001)”

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# Can we measure it?

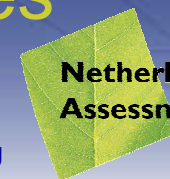
## mean species abundance (MSA)

You need a common baseline



Time

Sure....use a shopping bag of species



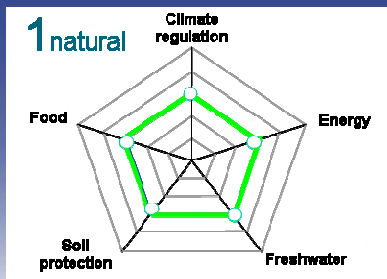
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# We parcelate nature

maximising 1 function

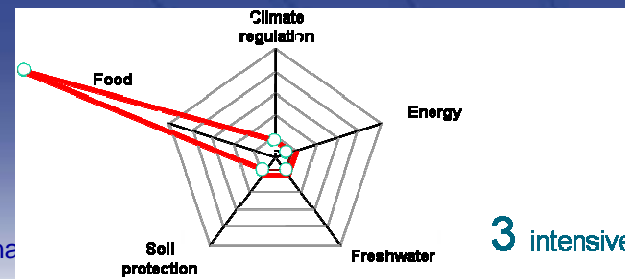


multifunctional



timber plantation	Water basin		National Park	
	Shrimp farm		golf	
crops	cattle	road		city
		Energy crop		

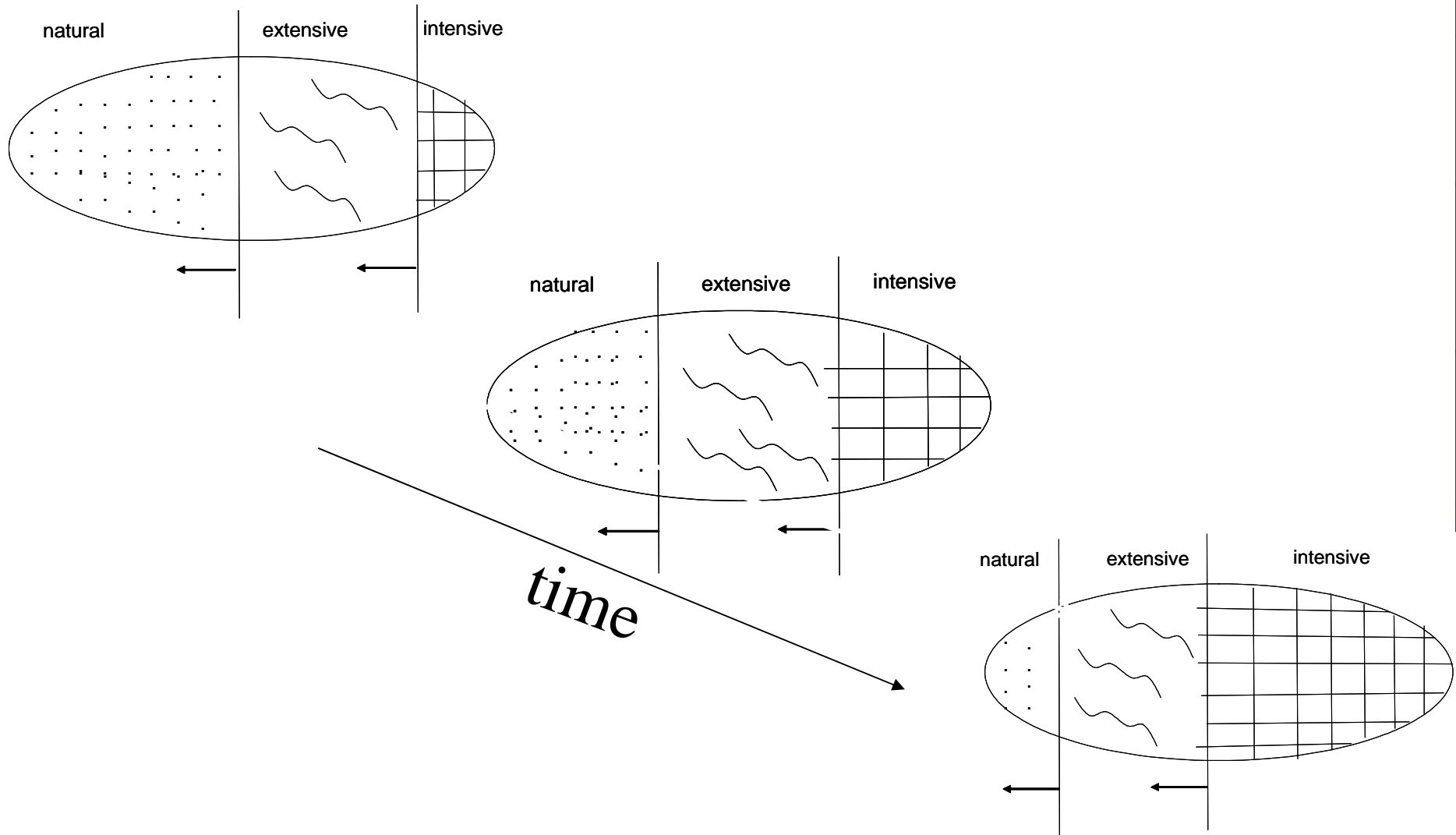
monofunctional



Ben ten Brink, Safe landing scene

mental

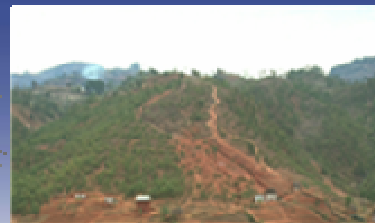
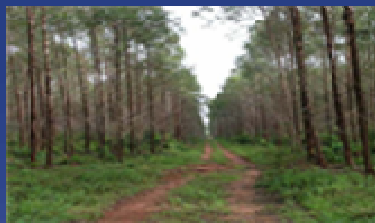
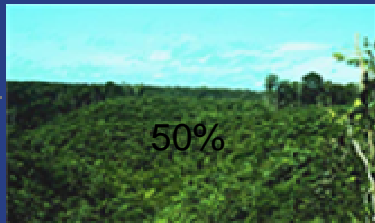
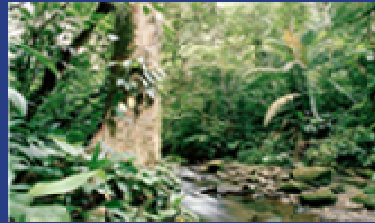
# We parcelate the world, until how far...?



# What we see at the landscape level



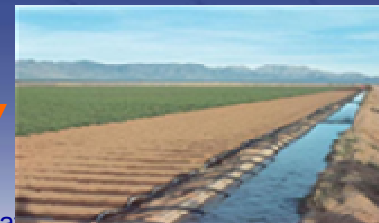
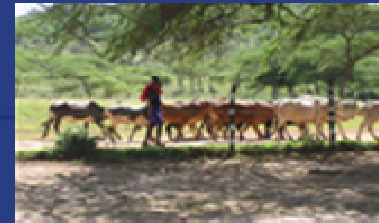
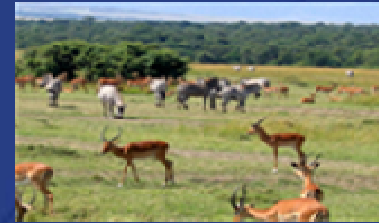
## Forest



100%



## Grassland

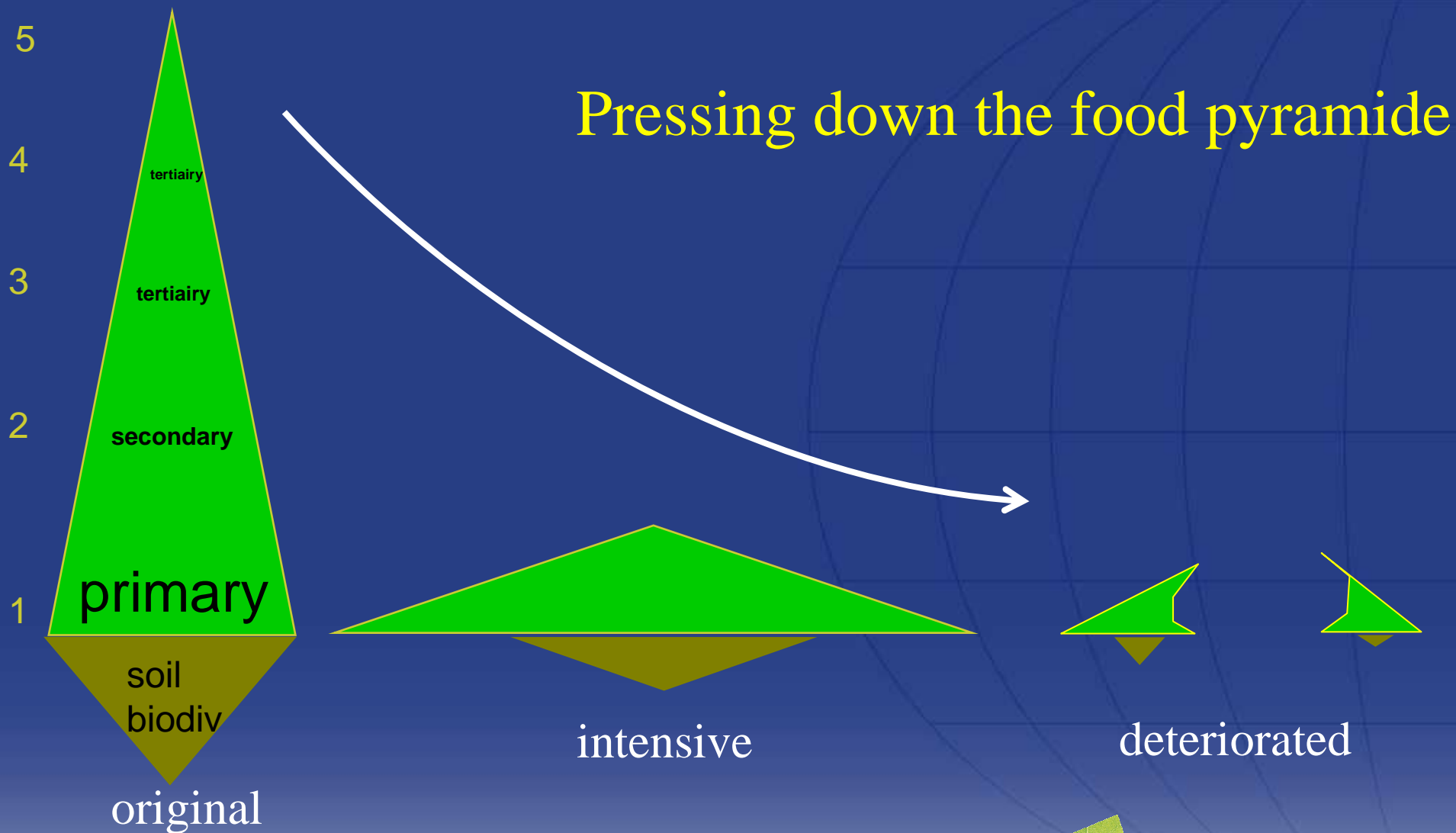


Benton Brink, Care landing scene Croatia meeting

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Trophic level

### 3. Why is it important?

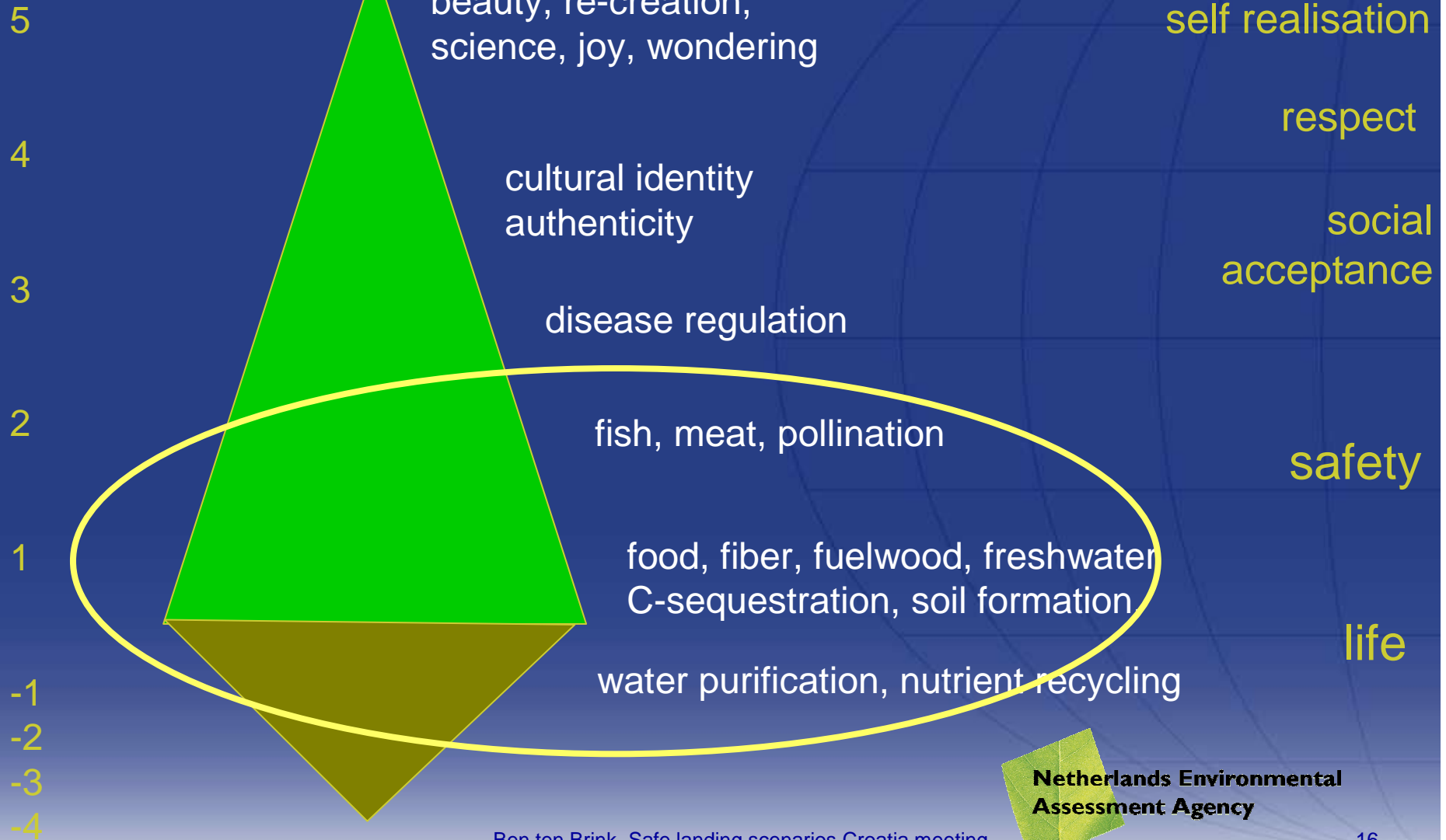


# Most goods & services down-under

## Trophic level

## Functions

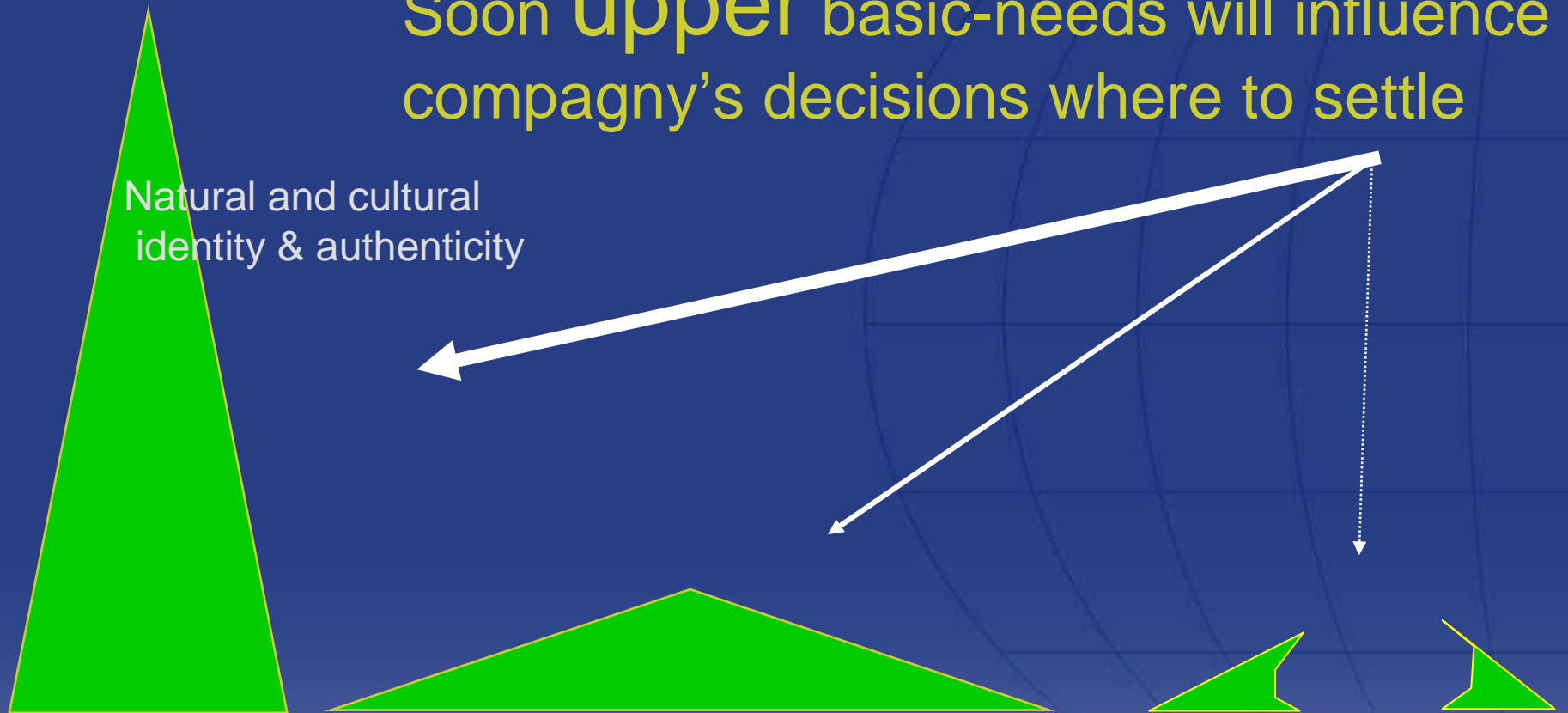
## Basic needs





# The world becomes flat

Soon **upper** basic-needs will influence compagny's decisions where to settle

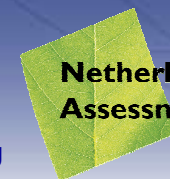


## 4. What can we do about it?

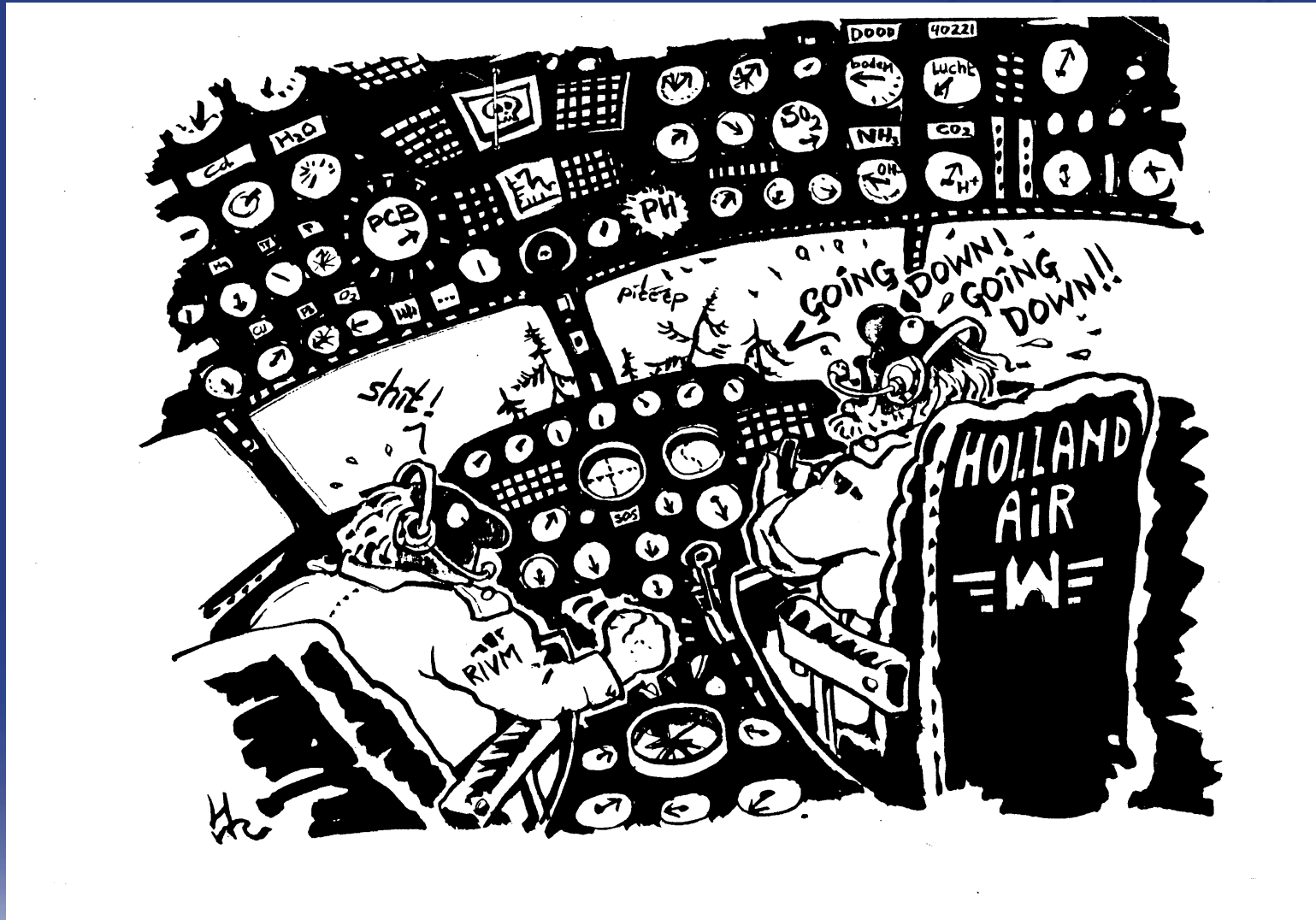
Give policy makers a **clear view** on the road ahead,  
driving 100 km/hr  
and how they can **steer**

# Time for a grown up CBD information feedback system?

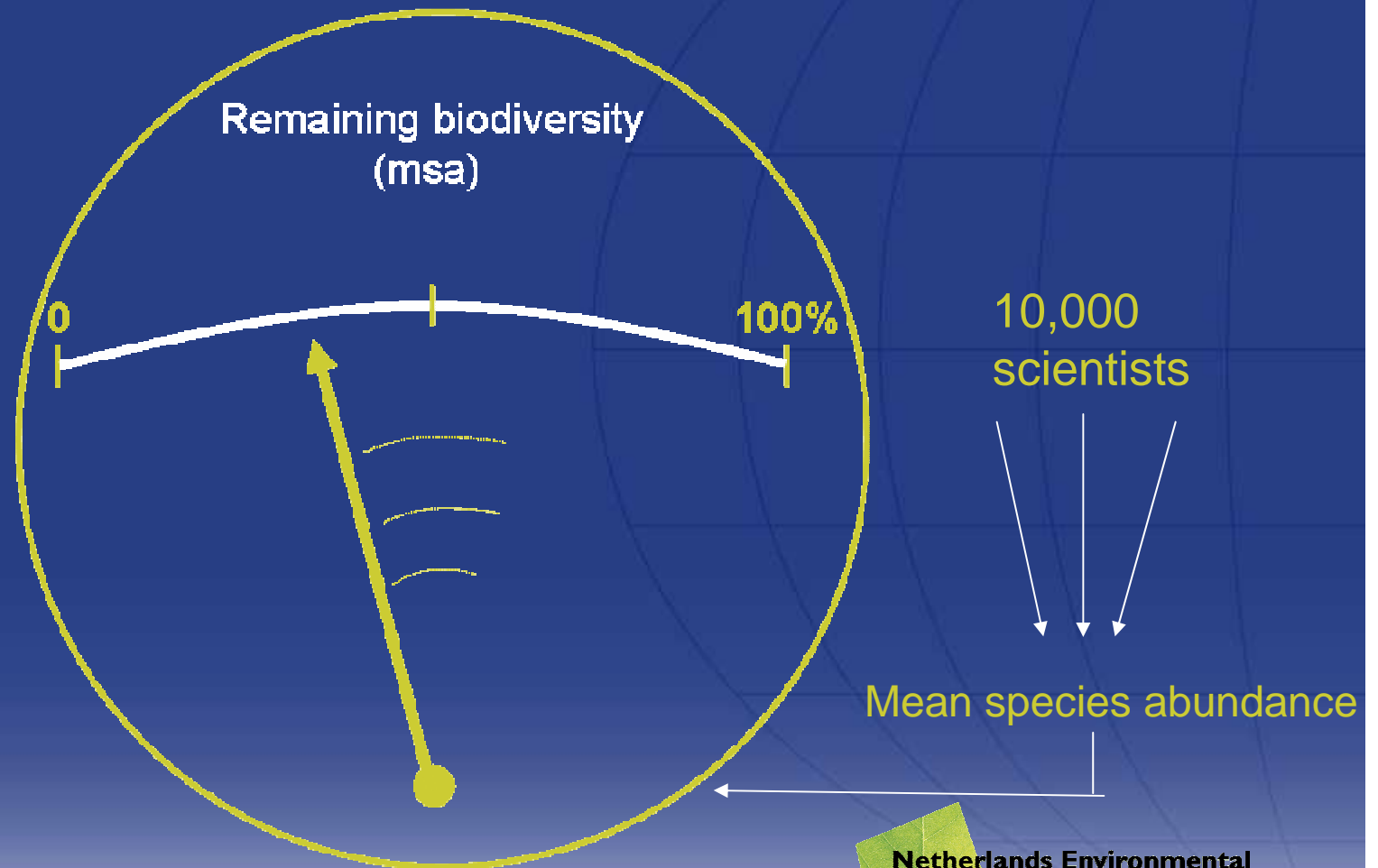
- indicator-based
- standardized
- solution-oriented
- region-specific



# Heading for a biodiversity cockpit?

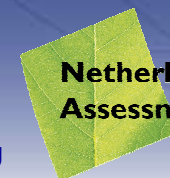


# Heading for an 'Ecological Dow Jones clock' at Des Champs Elysees?

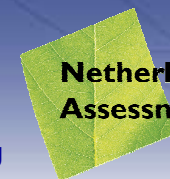


## What can we learn from:

- IPCC reporting & communication process?
- Economic policy feedback cycle?
- Al Gore?



Thank you



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