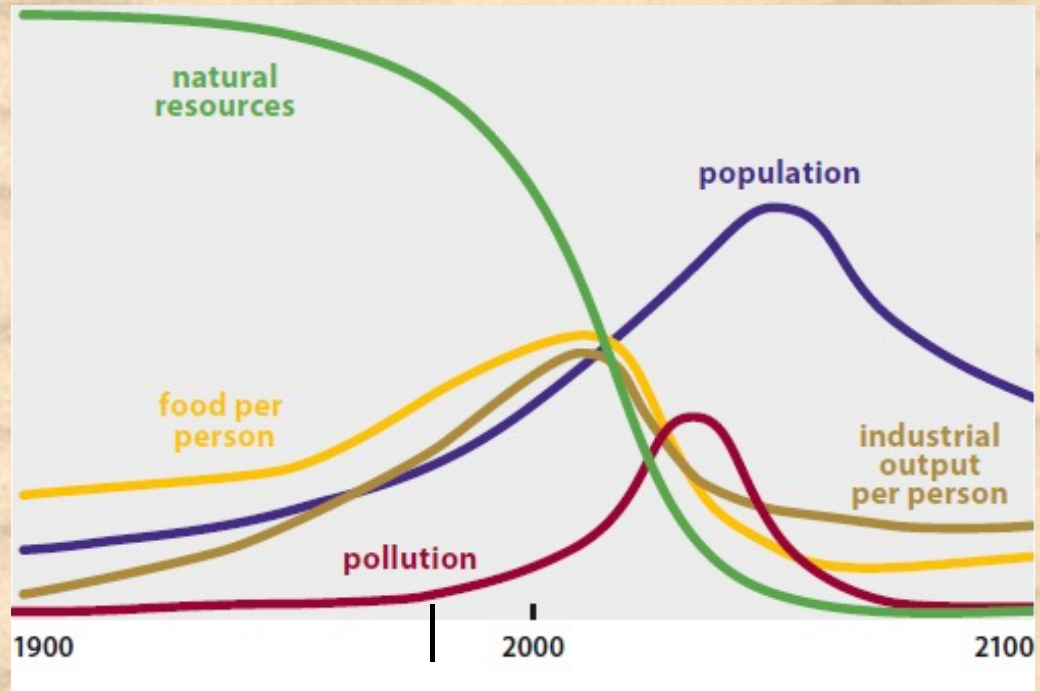
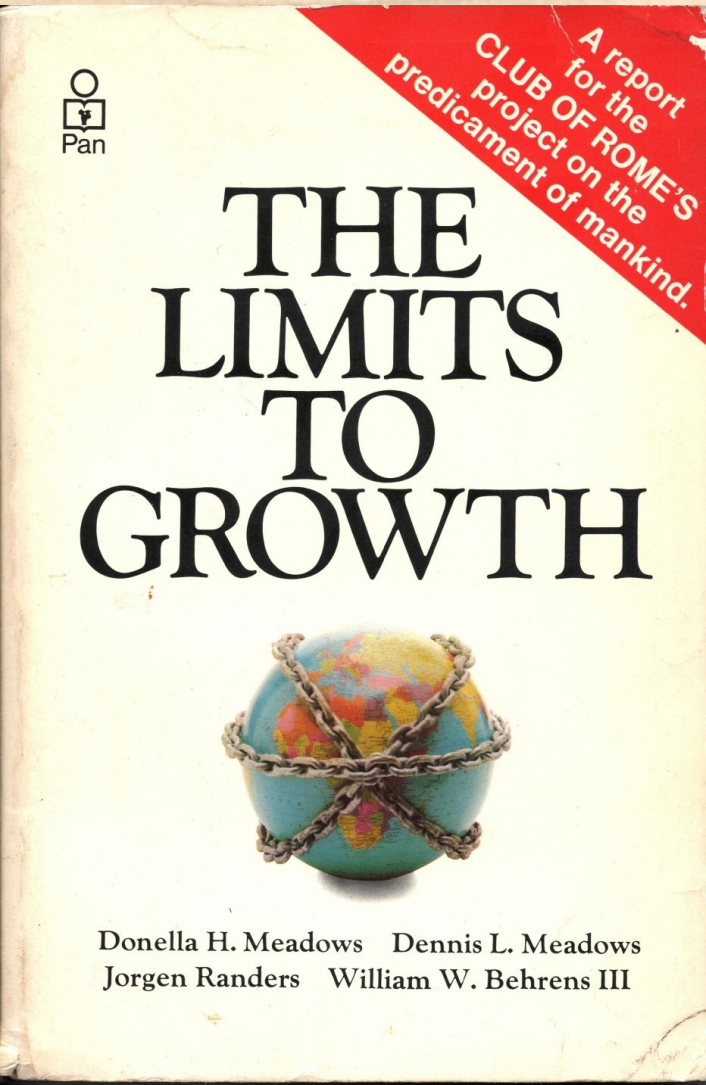


# “Träd som växer upp till himlen – finns de?”

- Presentation av Anders Wijkman, vid KSLA:s seminarium “Sustain our Soils” 27 september, 2022

# Recalling The Limits to Growth



1972

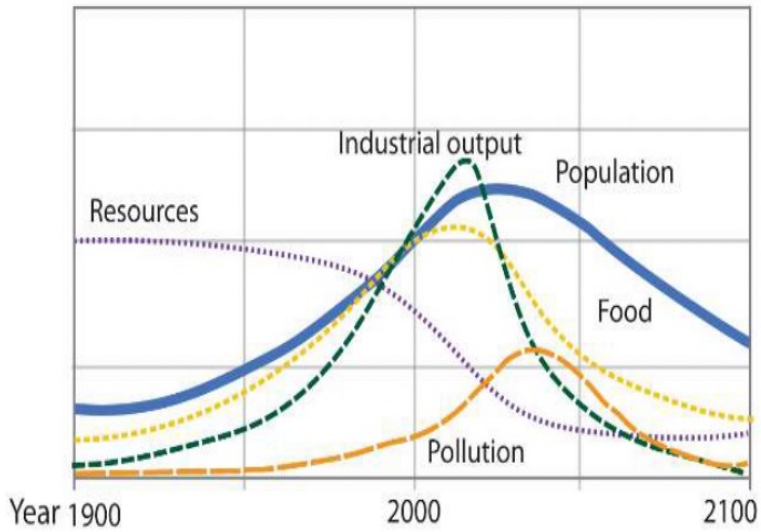
The book predicted collapse.  
The value issue was avoiding collapse.

## WATERSHED

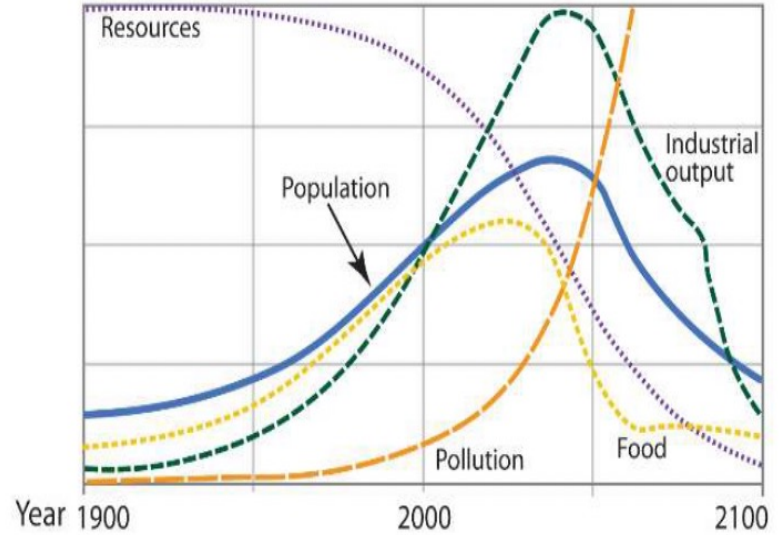
*Limits to Growth was a Wake-Up Call -*

*but the World did not listen....*

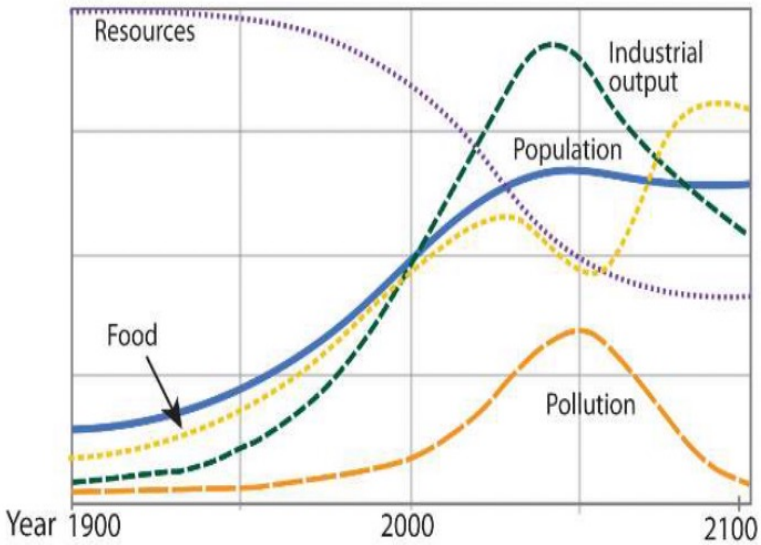
**BAU**



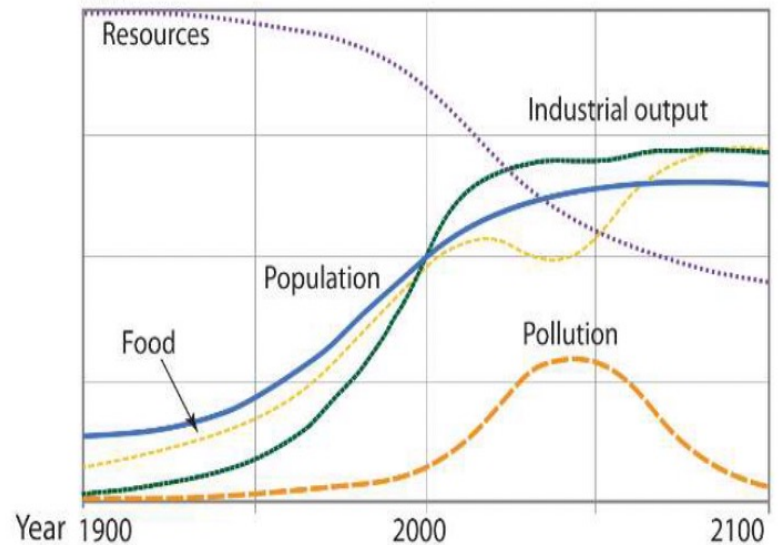
**BAU2**

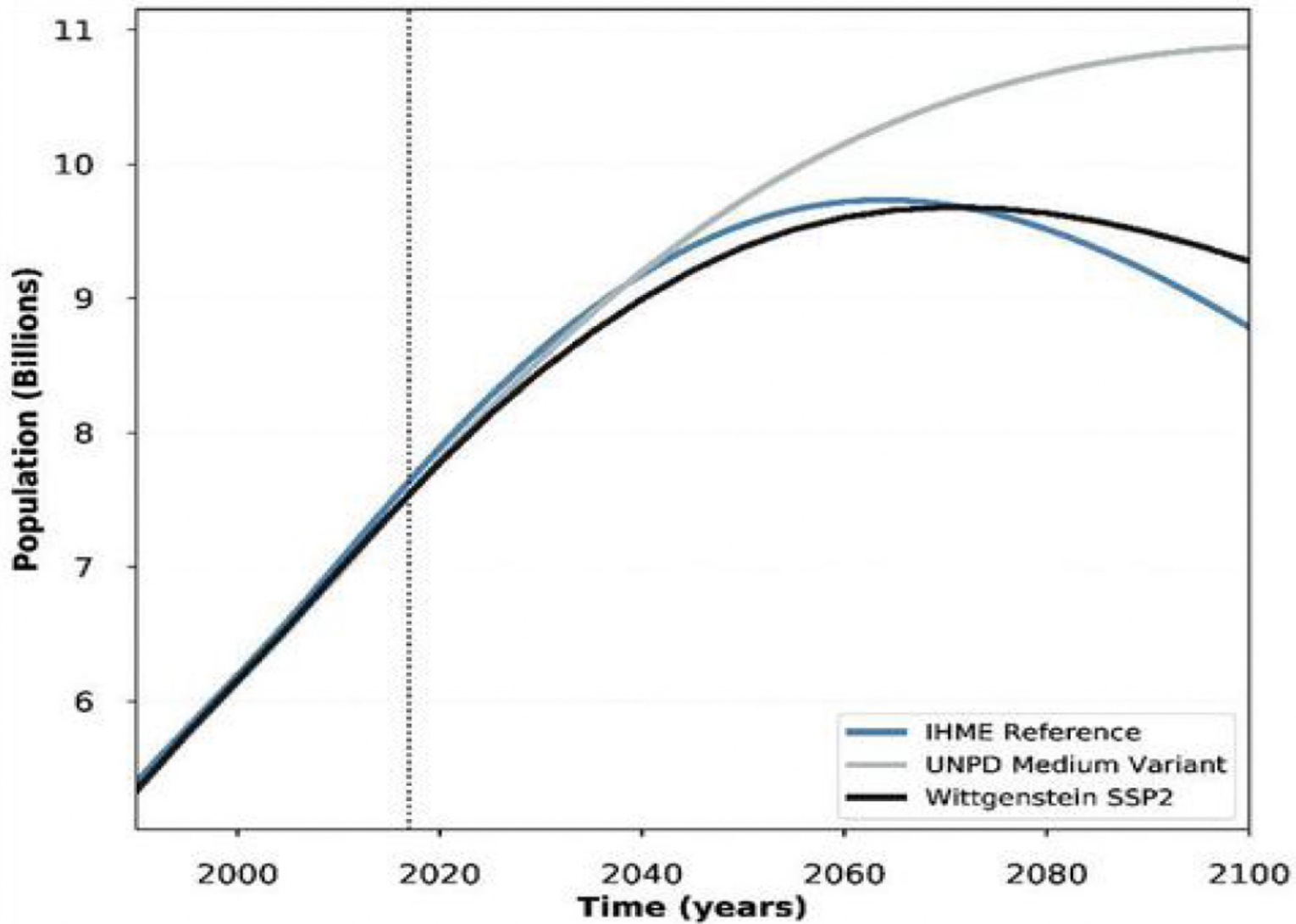


**CT**



**SW**



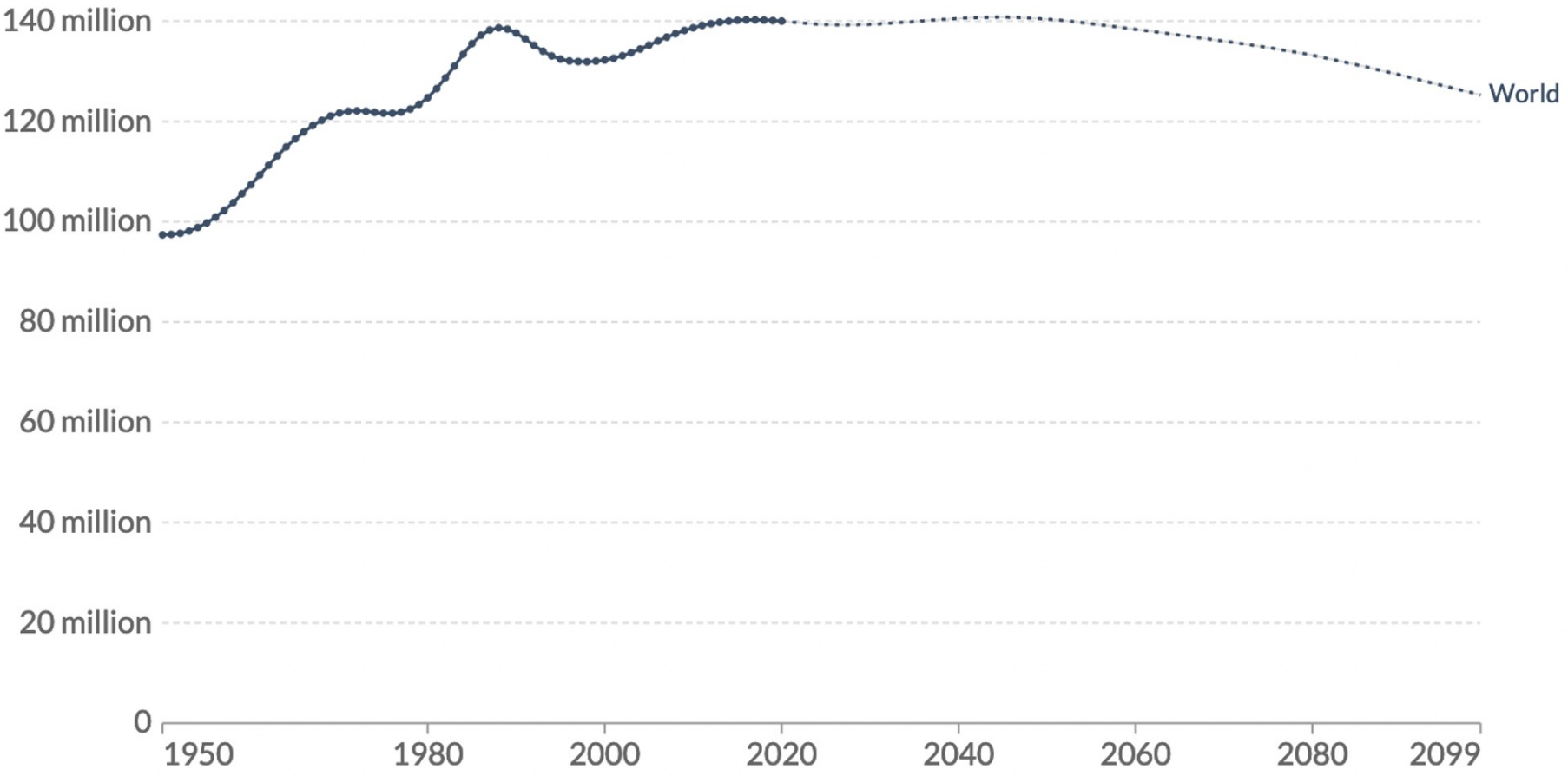


**Figure 1** – Main existing demographic projects, here comparing the UN (UNPD Medium Variant), Wittgenstein Centre (Wittgenstein SSP2) and Lancet (IHME Reference) demographic forecasts. Source: Vollset et al 2020

# Number of births per year, World

The dotted line shows the medium variant of the UN population projections.

↔ Change country



Source: United Nations - Population Division (2019 Revision)

OurWorldInData.org/world-population-growth • CC BY



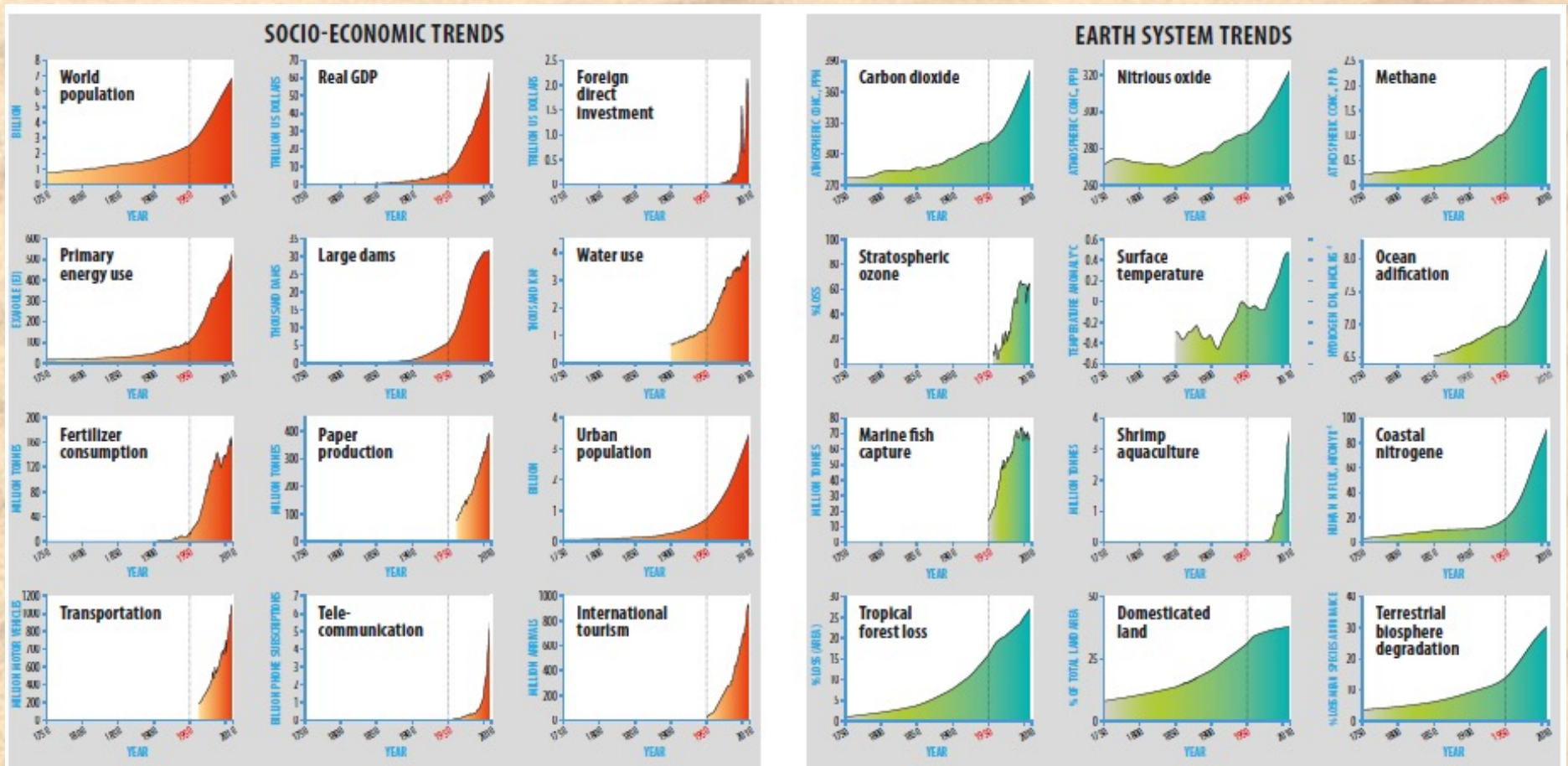
09266  
100266  
12-09-26

Place where you are  
Place where you are  
Place where you are

6 6  
6  
6

# The Anthropocene: steep upwards curves since 1950

of **human consumption** and of **human induced pollution**.

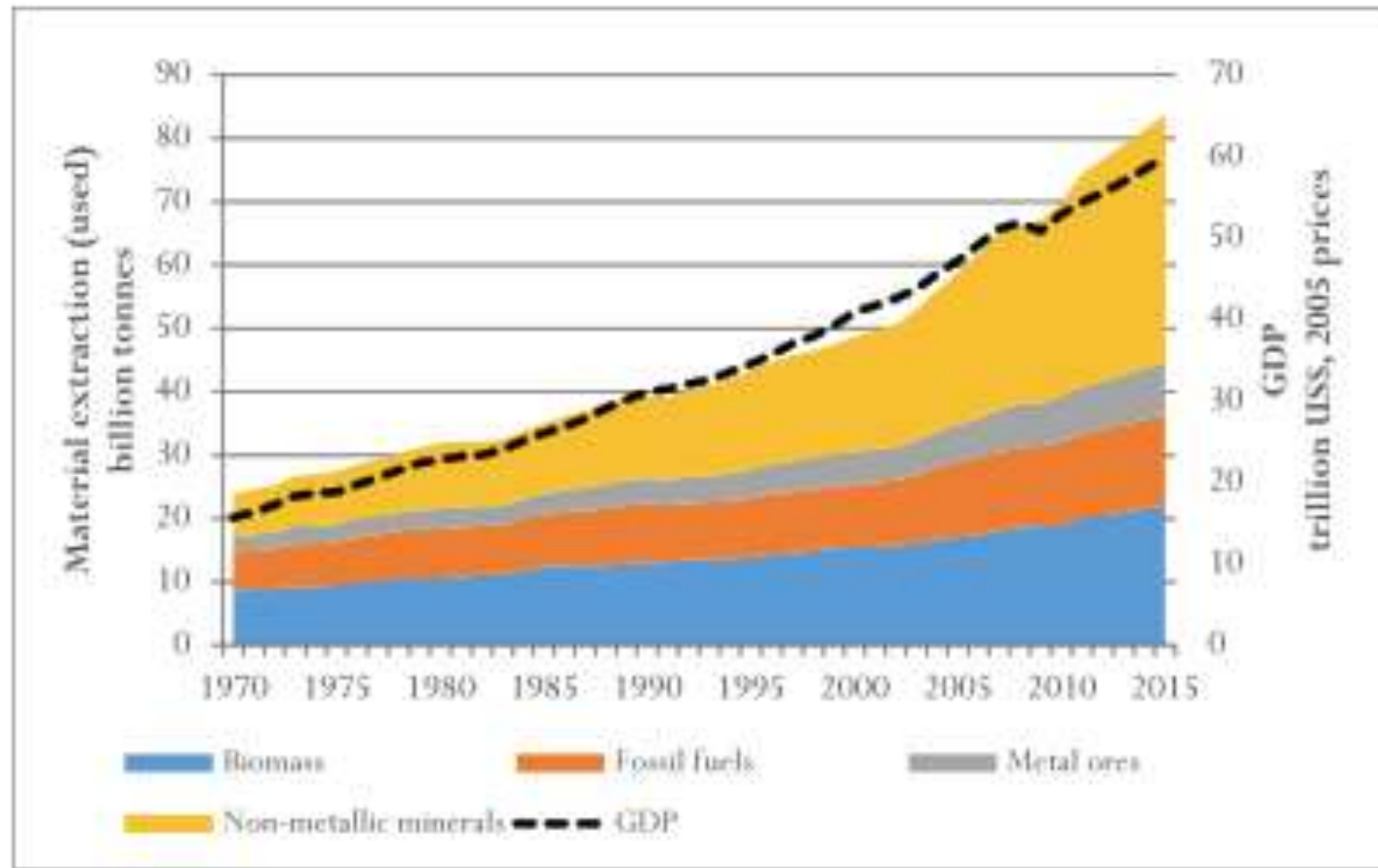


adapted from Steffen, Crutzen et al 2007

Bruntlandrapporten 1987 – den första stora rapporten på temat Sustainable Development - hade ett viktigt budskap:

„Decoupling economic growth from the use of natural resources“

Figure 3: Global material extraction in billion tons, and global GDP in trillion US dollars 2005 prices, 1970-2015.



Source: Material extraction data from UNEP (2016a), GDP data from UNSD (2015).

## The Challenges...

A large pile of plastic waste, including bottles, containers, and debris, under a dramatic sunset sky. The scene is filled with various types of plastic trash, such as water bottles, food containers, and other unidentifiable pieces of plastic, all piled up in a vast area. The sky is a mix of orange, yellow, and grey, suggesting a sunset or sunrise. The overall tone is somber and highlights the environmental impact of plastic waste.

**On average, Europe uses materials **only once.****

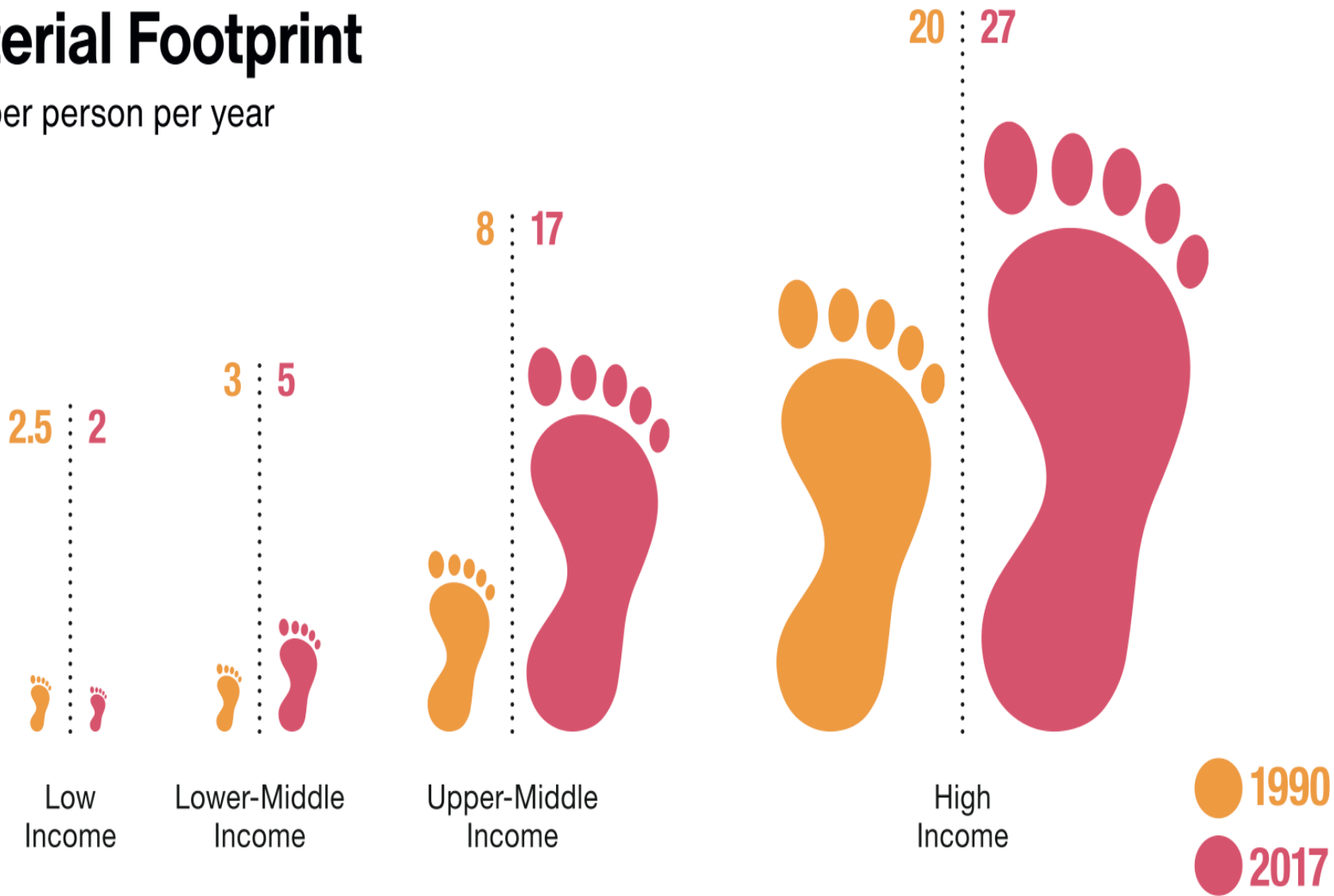
# *International Resource Panel*

## GRO 2019

- 50% of global carbon emissions and 90% of biodiversity loss are related to the extraction and processing of materials, fossil fuels and food
- The production of cement, steel, aluminum and plastics make up almost 20% of global carbon emissions

# Material Footprint

Tons per person per year



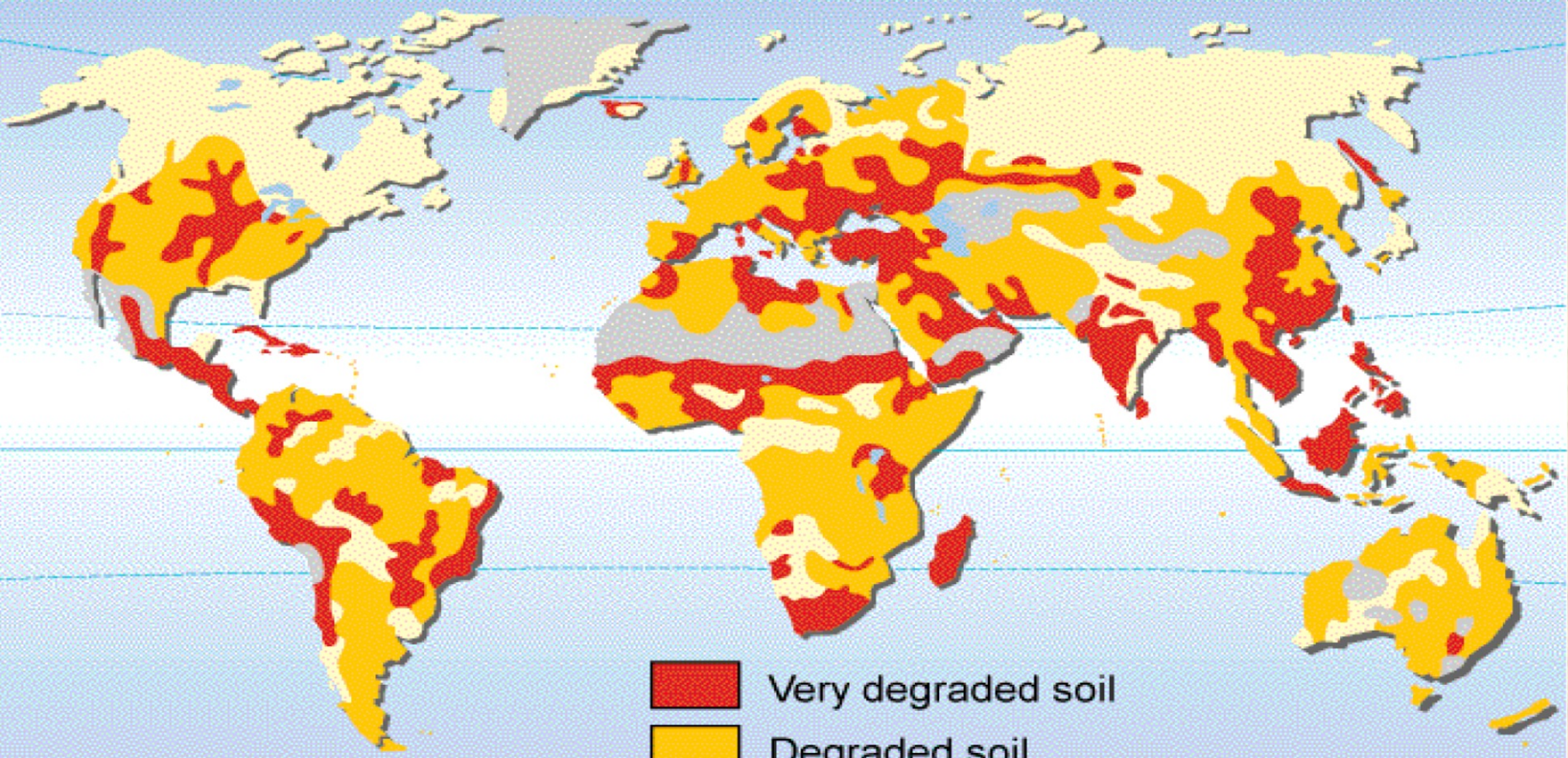






International  
Resource  
Panel

# THE TASTE OF 21<sup>ST</sup> CENTURY URBANISATION

- *More than 50% of urban fabric expected to exist by 2050 still needs to be constructed*
- *In the three years period (2011-2013), China has used more cement than the USA during the entire 20th century*

# Soil degradation



-  Very degraded soil
-  Degraded soil
-  Stable soil
-  Without vegetation

In the ocean, around  
**90%** of fish stocks are  
either **overexploited** or  
**fully exploited**.



# Four intertwined global crises

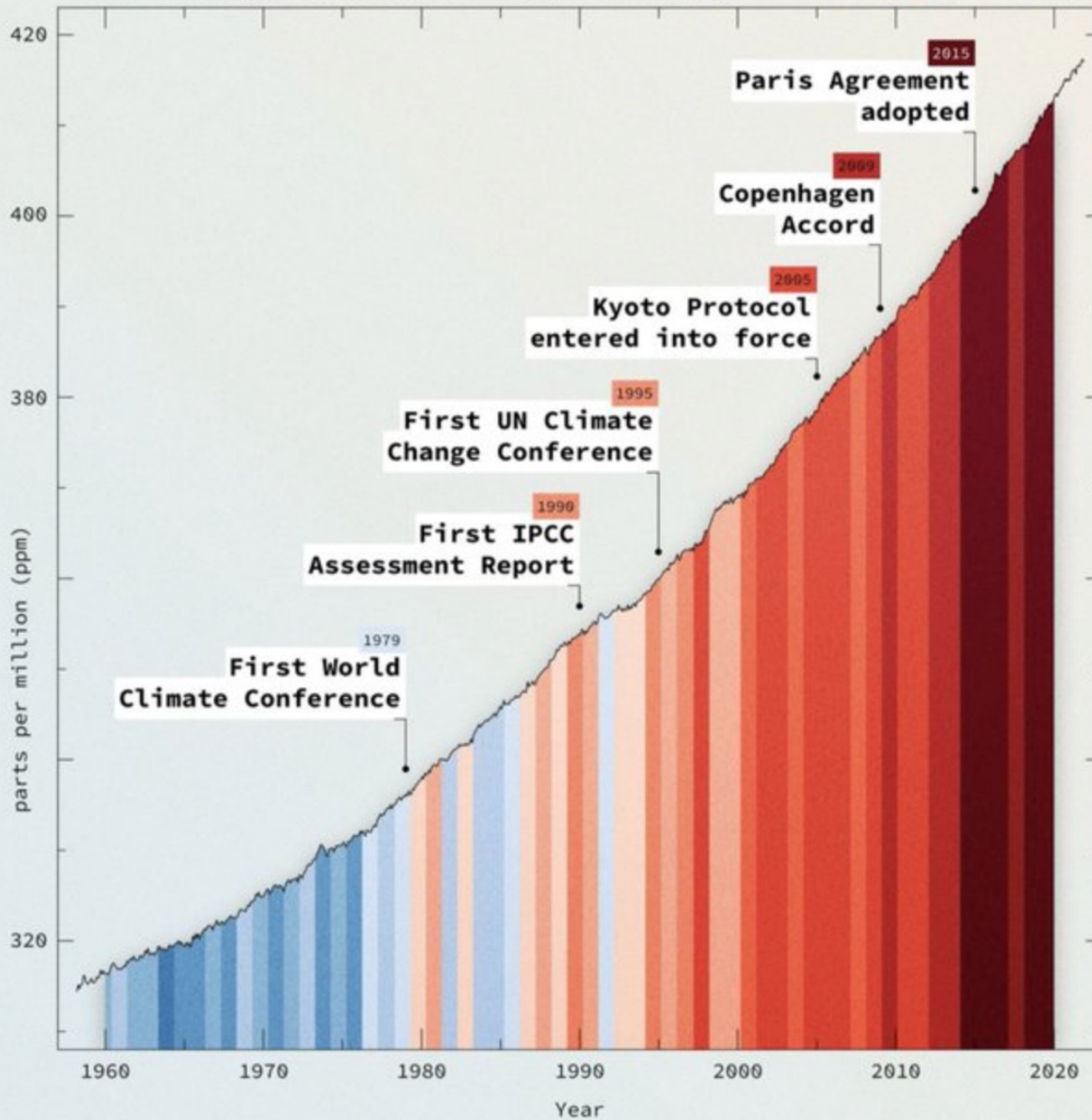


*I would add a few more:*

- A deepening social crisis or social crises
- A crisis for democracy and politics
- A technology challenge

# Trends in Atmospheric CO<sub>2</sub> vs Global Temperature Change

#climateINACTIONstripes

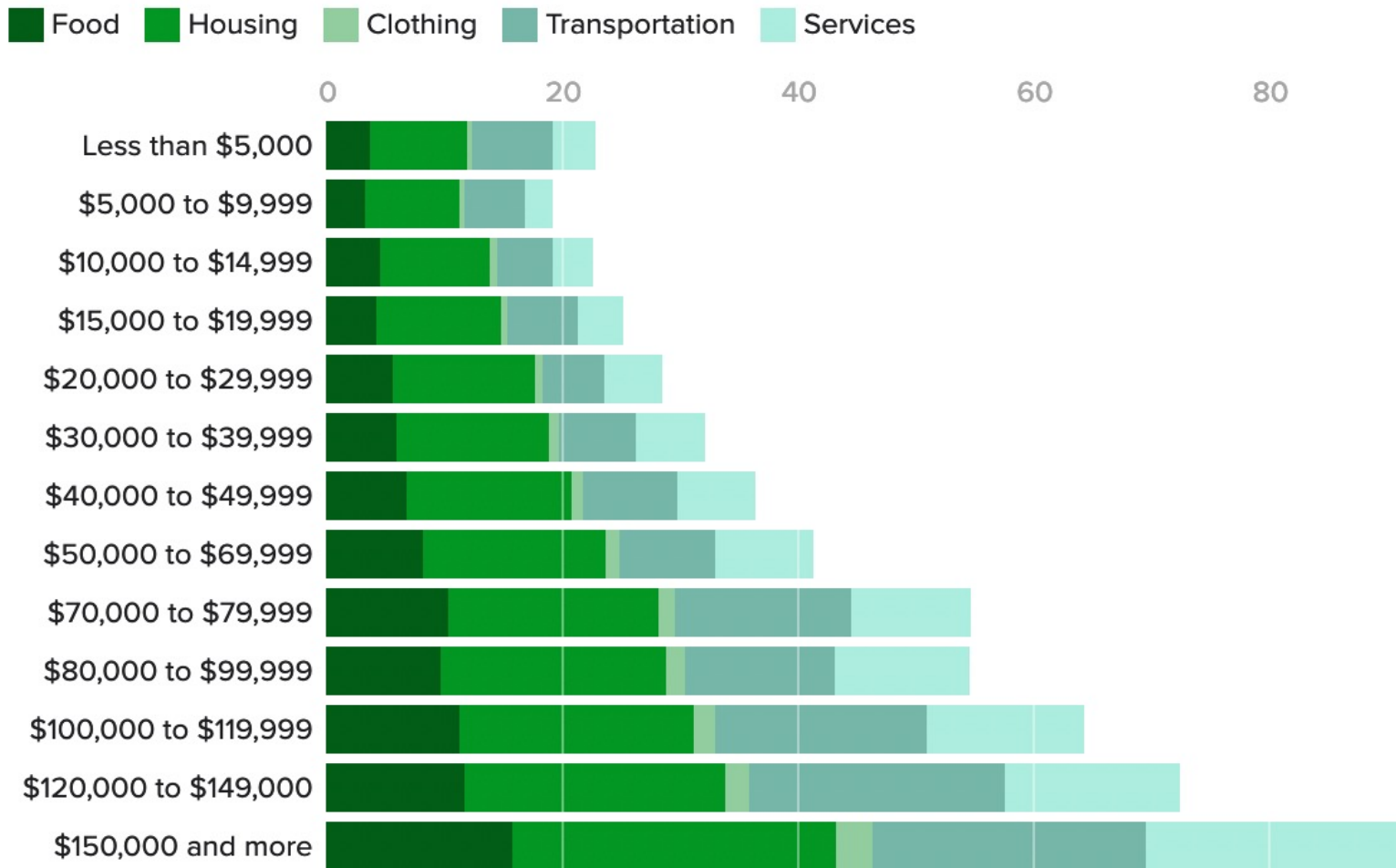


Composite Graph of: Atmospheric CO<sub>2</sub> at Mauna Loa Observatory, December 2021 – Scripps Institution of Oceanography & NOAA Global Monitoring Laboratory | #ShowYourStripes – Graphics & Lead Scientist: Ed Hawkins, National Centre for Atmospheric Science, University of Reading; Data: UK Met Office | Design by: sustentio [PG] | Licence: CC-BY  
t7@muellerTazio @wiebismarie @marrustajasebhatt @sustentioEU

VANDERS  
VANDERS  
VANDERS  
WIJKM

# More money, more carbon

U.S. household emissions, by household income. (Expressed in terms of tons of carbon dioxide per year.)



Source: Environment International

24<sup>th</sup> Jul  
2019

Amazon deforestation is accelerating towards an unrecoverable tipping point, Brazilian scientists say

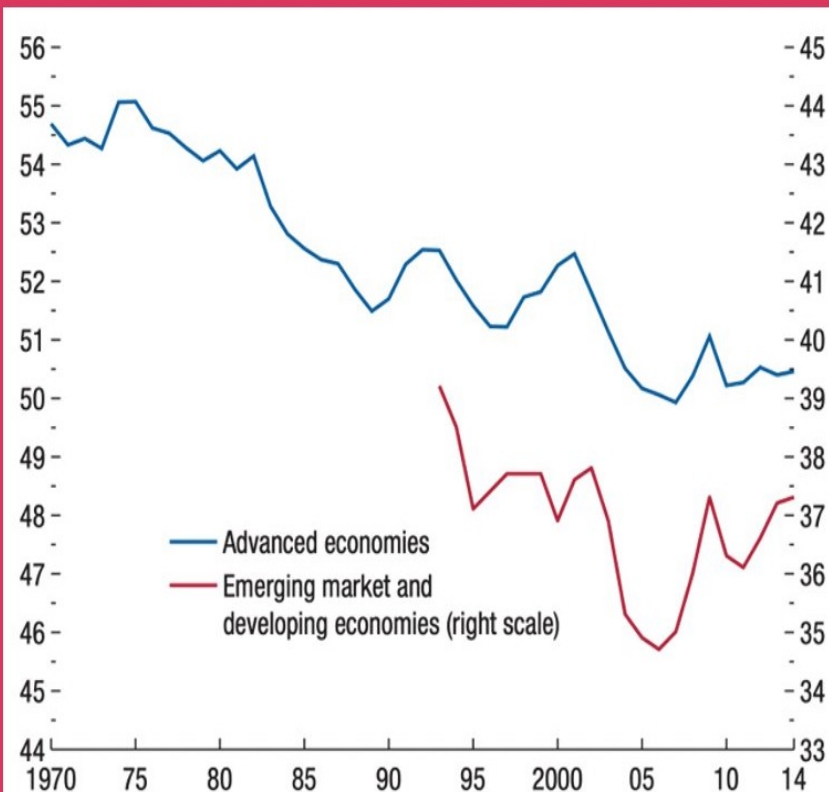


Government data show a surge to three football pitches a minute in the 7 months since hard-right populist president Bolsonaro came to power.

The poorest 50% of people take less than 15% in total earnings, while the richest 10% take well over 40%. In many regions, it is closer to 60%.

The major challenge is that within-country distribution has recently been moving the wrong way.

# WORKER SHARE OF INCOME FALLING (1/2)



Sources: CEIC database; Karabarbounis and Neiman (2014); national authorities; Organisation for Economic Co-operation and Development; and IMF staff calculations.



INEQUALITY IS INCREASING

Labor's share of national incomes declines when wages grow more slowly than labor productivity (output per hour). The result is that a growing fraction of productivity gains has been going to capital.

And since capital tends to be concentrated in the top of the income distribution and hence an increase in the share of income accruing to capital tends to raise wealth inequality.

Sources: IMF, Dao et al. (2017) "Drivers of Declining Labor Share of Income." [Blogs. Imf. Org/2017/04/12/Drivers-of-Declining-Labor-Share-of-Income](https://blogs.imf.org/2017/04/12/Drivers-of-Declining-Labor-Share-of-Income) & Manyika et al (2019) [McKinsey.com](https://www.mckinsey.com)

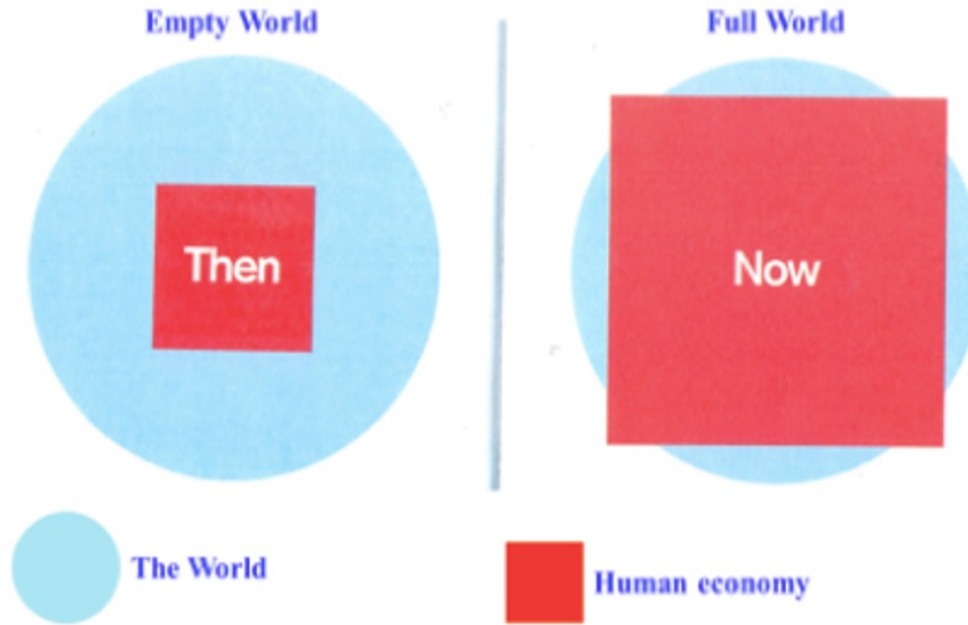
*The economic system is failing to adequately value what matters*

Economic systems failure #1:  
destabilising societies

Economic systems failure #2:  
destabilising the planet

Economic systems failure #3: failure to  
value the future

# Empty World and Full World



Source: Club of Rome: Simplified after Herman Daly

*Labour and Infrastructure limiting factors of human wellbeing*

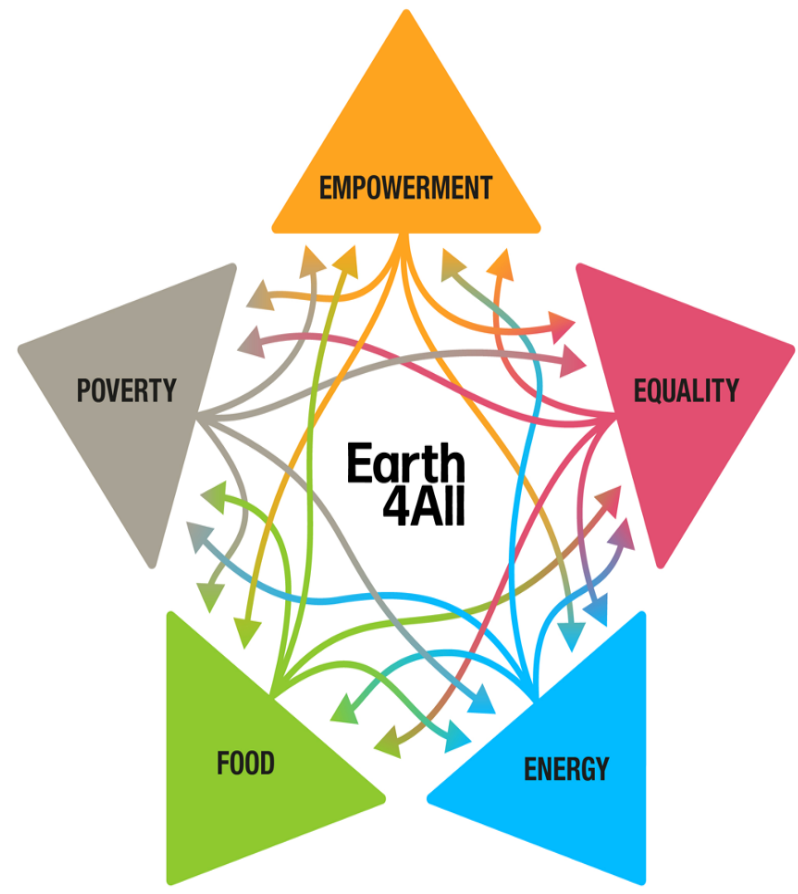


*Natural resources and Environmental sinks limiting factors of human wellbeing*

## *Vi behöver en bättre balans – mellan*

- Ekonomi och natur
- Kort och lång sikt
- Politik och marknad
- Allmänna nyttigheter och privat konsumtion
- Topplöner och gemene man
- Shareholder value vs stakeholder value
- Exponentiella teknologier och balans

# KEY RECOMMENDATION GLOBALLY



The world needs five extraordinary turnarounds to reverse the trend in declining wellbeing and to remain within planetary boundaries.

Visit [www.earth4all.life](http://www.earth4all.life) to learn more.



# For the Love of Earth

*“The major problems of the world are the result of the difference between how nature works and the way people think.”*

Greg Bateson