

Planetary Health

EEAC , Oct 14, 2021

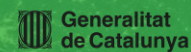
Prof. Josep M. Antó

ISGlobal (Barcelona Institute for Global Health), **IMIM** (Hospital del Mar Research Institute), **UPF** (Pompeu Fabra University)

ISGlobal
Barcelona
Institute for
Global Health



A partnership of:



◆ Research professor, ISGlobal

- ◆ Research Center; University Institute of UB & UPF
- ◆ Board of Trustees: Private/Public ("La Caixa" Foundation, Government of Catalonia, Government of Spain, Barcelona City Council)

◆ Professor of Medicine, UPF

- ◆ Pompeu Fabra University, *Consorci Parc de Salut Mar* (Catalan Government)

◆ Current links with Industry: No direct funding; Indirect links in EU (FP7, H2020, EIT) consortiums

Humanity has never faced a greater challenge



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BAN KI-MOON

UN Secretary-General
(2007–2016)



Climate change
is the greatest threat
to human rights
in the 21st century

—

MARY ROBINSON

UNHCHR (1997–2002)



Biggest threat to
humanity?
Climate change

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ANTÓNIO GUTERRES

UN Secretary-General
(2017 to now)

The Anthropocene Crisis

The climate, the biodiversity and beyond

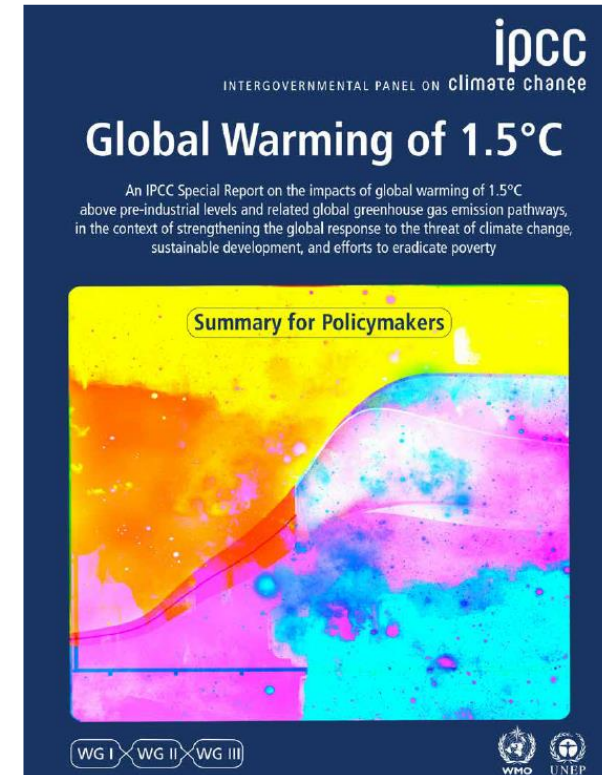
Waters N et al., Science 2016

- ◆ 75% of the species will be extinguished
- ◆ Climate warming for CO₂
- ◆ Microplastic particles are practically ubiquitous
- ◆ Biggest impact on the soil nitrogen cycle in 2,500 million years
- ◆ Permanent layer of airborne particles



IPCC 1.5° report 2018

- ◆ If no change, we will reach a 1.5° increase in 2030-50.
- ◆ The risks will increase $> 1^{\circ} > 1.5^{\circ} > 2^{\circ}$.
- ◆ With the Paris agreements we will not avoid exceeding 1.5°.
- ◆ To keep 1.5°, emissions must decrease 45% by 2030 and be zero by 2050.
- ◆ IPCC 6th Assessment Report:
<https://www.ipcc.ch/assessment-report/ar6/>



**WHY THE CLIMATE
CRISIS AND THE
ANTHROPOCENE ARE
NOT TRANSFORMING
ENOUGH OUR
HEALTH SYSTEMS?**





The Rockefeller Foundation–Lancet Commission on
planetary health

Safeguarding human health in the Anthropocene epoch:
report of The Rockefeller Foundation–Lancet Commission on
planetary health

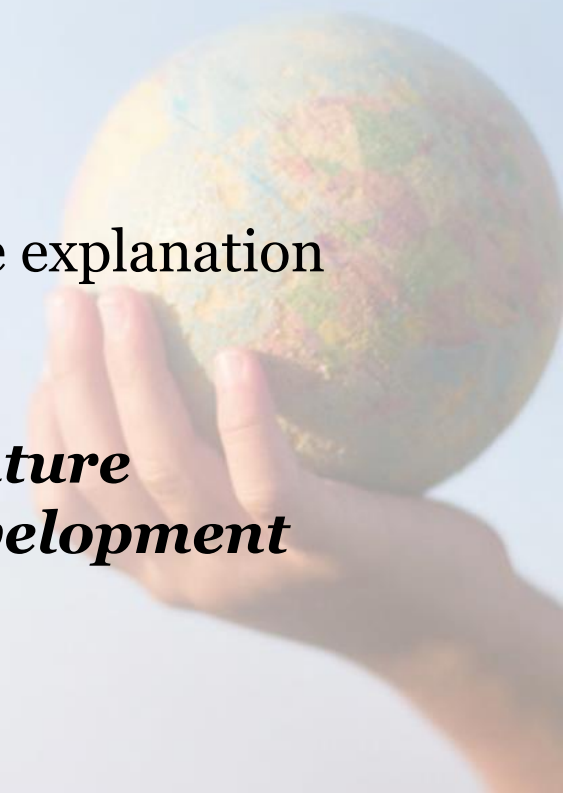
*Sarah Whitmee, Andy Haines, Chris Beyrer, Frederick Boltz, Anthony G Capon, Bráulio Ferreira de Souza Dias, Alex Ezeh, Howard Frumkin,
Peng Gong, Peter Head, Richard Horton, Georgina M Mace, Robert Marten, Samuel S Myers, Sania Nishtar, Steven A Osofsky,
Subhrendu K Pattanayak, Montira J Pongsiri, Cristina Romanelli, Agnes Soucat, Jeanette Vega, Derek Yach*

Planetary Health = Human's Health + Earth's Health

The Concept of Planetary Health

Whitmee S et al., Lancet 2015

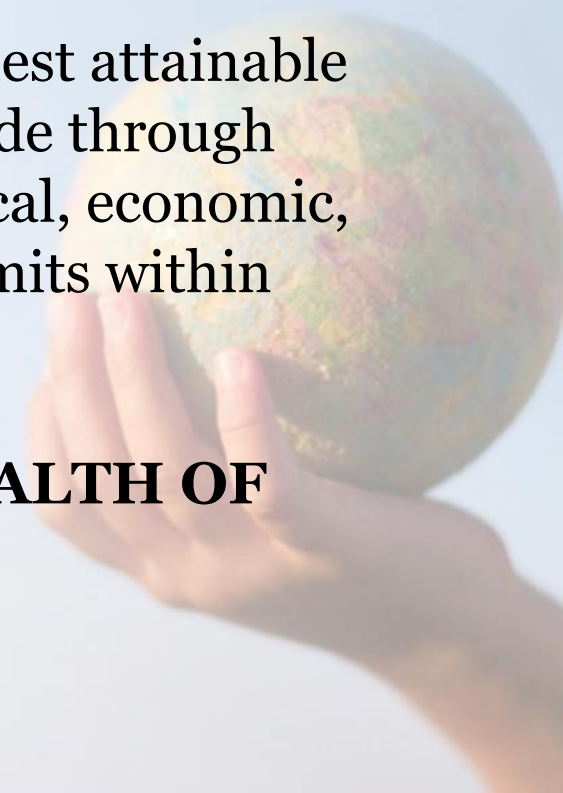
- ◆ Changes of the Earth's natural systems represent a growing threat to human health.
- ◆ And yet, (with huge inequalities) global health has mainly improved as these changes have gathered pace.
- ◆ What is the explanation?
- ◆ As a Commission, we are deeply concerned that the explanation is straightforward and sobering:
 - ◆ ***we have been mortgaging the health of future generations to realize economic and development gains in the present.***

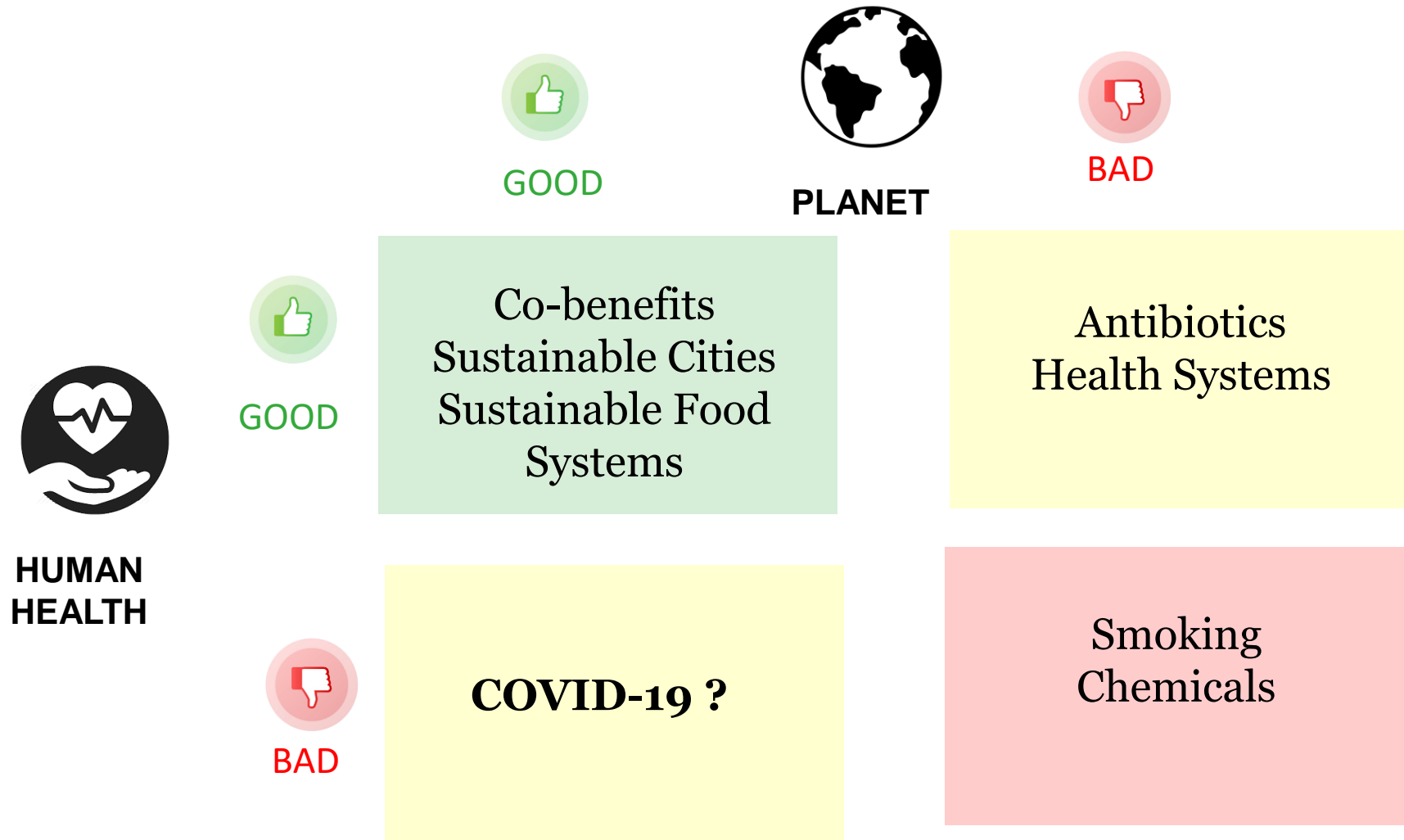


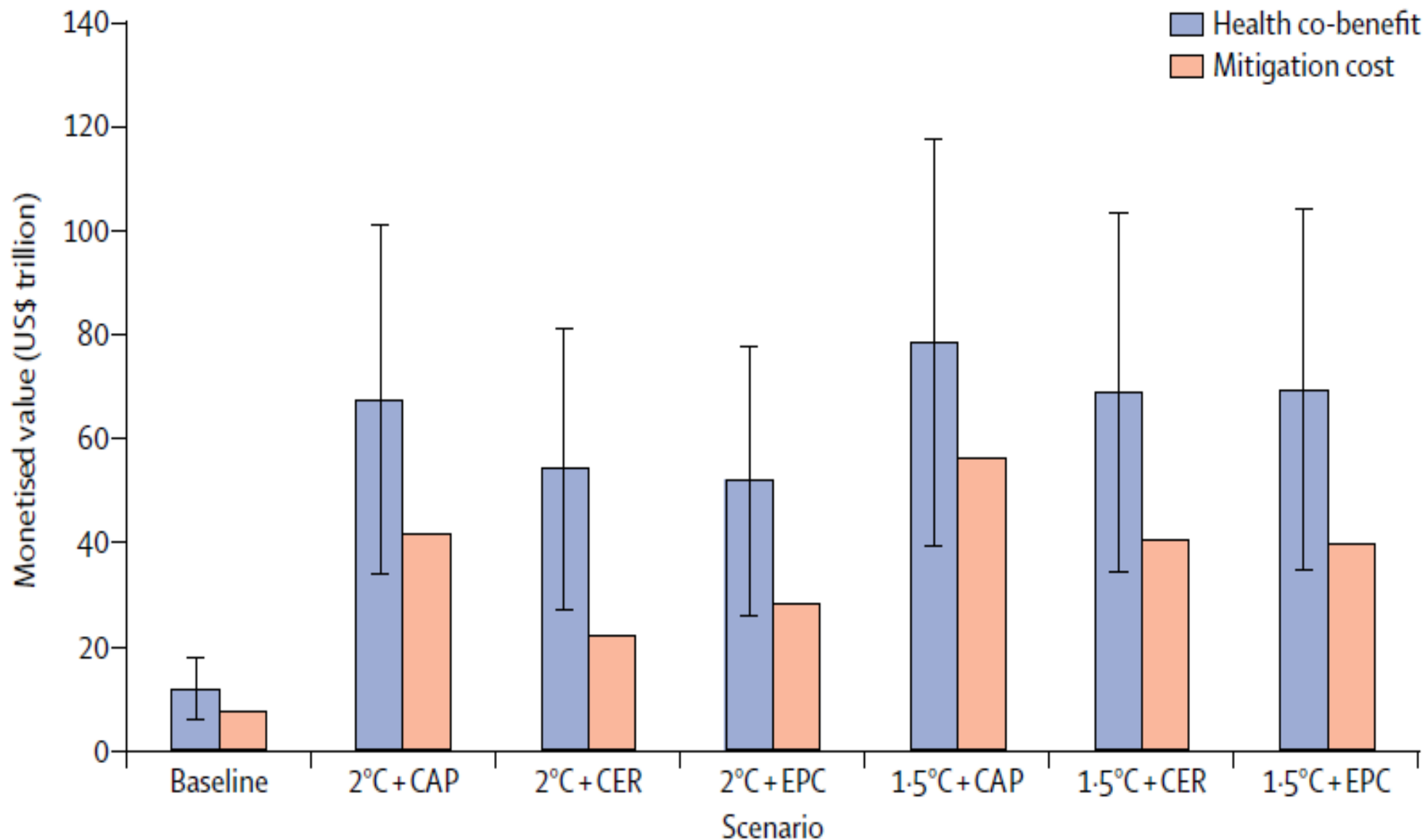
The Concept of Planetary Health

Whitmee S et al., Lancet 2015

- ◆ The current concept of **health** does not take into account whether health gains are achieved at the cost of eroding the Earth's underpinning natural systems
- ◆ **Planetary health** is the achievement of the highest attainable standard of health, wellbeing, and equity worldwide through judicious attention to the human systems —political, economic, and social— that shape Earth's natural systems limits within which humanity can flourish
- ◆ Put simply, **HUMAN HEALTH AND THE HEALTH OF THE PLANET SHOULD GO TOGETHER**







WHO report 2017:

- ◆ Farming on a massive scale
- ◆ Deforestation
- ◆ Land degradation and loss of biodiversity
- ◆ Desertification
- ◆ One of the most environmentally destructive

Zafeiridou M et al. Environ Sci Technol 2018:

- ◆ A typical cigarette has a water footprint of 3.7 L
- ◆ A climate change contribution of 14 g CO₂ equiv.
- ◆ Sector's carbon footprint is comparable to entire countries



- **Practical solutions to:**
 - suppressing the pandemic by means public health interventions;
 - overcoming humanitarian emergencies
 - restructuring public and private finances in the wake of the pandemic;
 - **and rebuilding the world economy in an inclusive, resilient, and sustainable way that is aligned with the Sustainable Development Goals (SDGs) and the Paris Climate Agreement**
- **Additionally, important from a planetary health lens:**
 - The origins of COVID-19 and averting zoonotic pandemics (biodiversity/nature/...)
 - Multilateralism and the UN system

Charting a Course for the Future

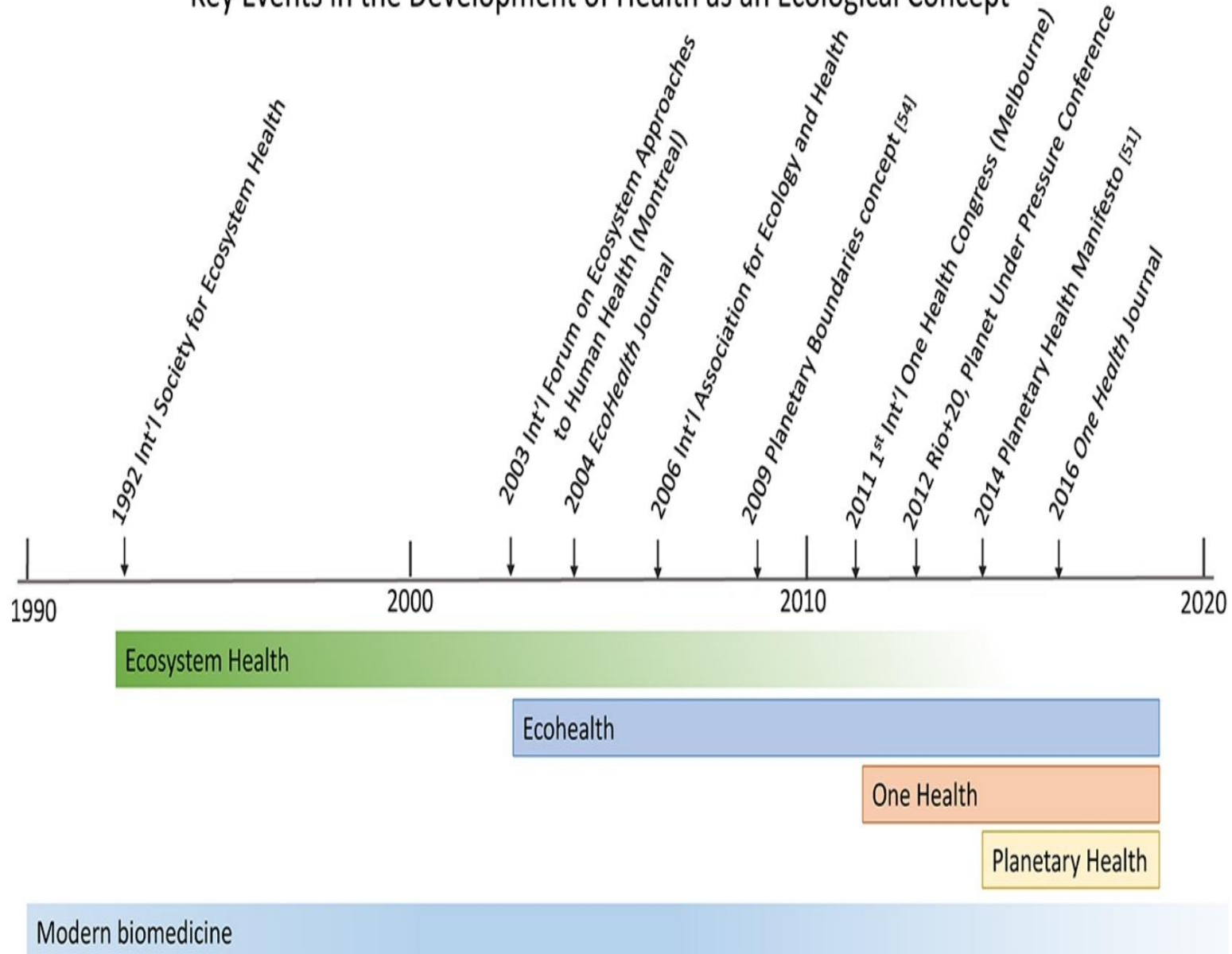
Whitmee S et al., Lancet 2015

- ◆ Food production within environmental limits
- ◆ Sustainable aquaculture and fisheries
- ◆ Healthy low environmental impact diets
- ◆ Integrated land use solutions
- ◆ Co-benefits to health and environment
- ◆ Sound management of chemicals
- ◆ Sustainable cities
- ◆ Improved access to modern family planning
- ◆ Integration of environmental care with health systems





Key Events in the Development of Health as an Ecological Concept



The UN Environment has endorsed the Planetary Health Approach in its GEO6, 2019



Healthy people, a healthy
planet and a healthy
economy can be mutually
supportive

Nobel Prize Laureates and Other Experts Issue Urgent Call for Action After 'Our Planet, Our Future' Summit

Statement | April 29, 2021

Our Planet, Our Future An Urgent Call for Action

Planetary health : The health of nature, our planet, and people is tightly connected. Pandemic risk is one of many global health risks in the Anthropocene. The risks of pandemics are now greater due to destruction of natural habitats, highly networked societies, and misinformation.

- **ISGlobal Planetary Health Activities**
 - EU official meeting. Helsinki declaration on Planetary Health (Lancet PH 2021 & Env Res 2021)
 - Master course on PH (1st edition 2020-21)
- **UPF Planetary Wellbeing Initiative**
 - <https://www.upf.edu/es/web/wellbeing>
 - GHG Footprint and Climate emergency
- **UOC-UPF-ISGlobal**
 - Master on Planetary Health (on line; starting Oct 2021)
 - <https://estudios.uoc.edu/es/masters-universitarios/salud-planetaria/presentacion>

**Complexity &
uncertainty**

Imagination

**Multi &
Interdisciplinarity**

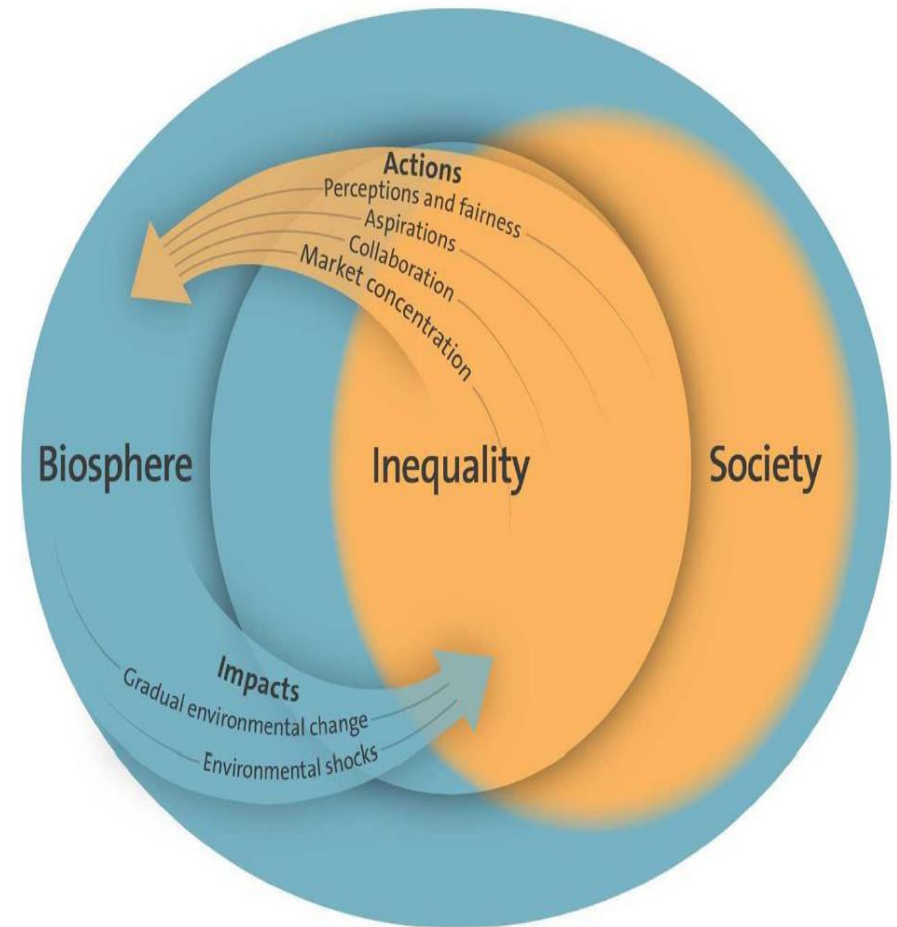
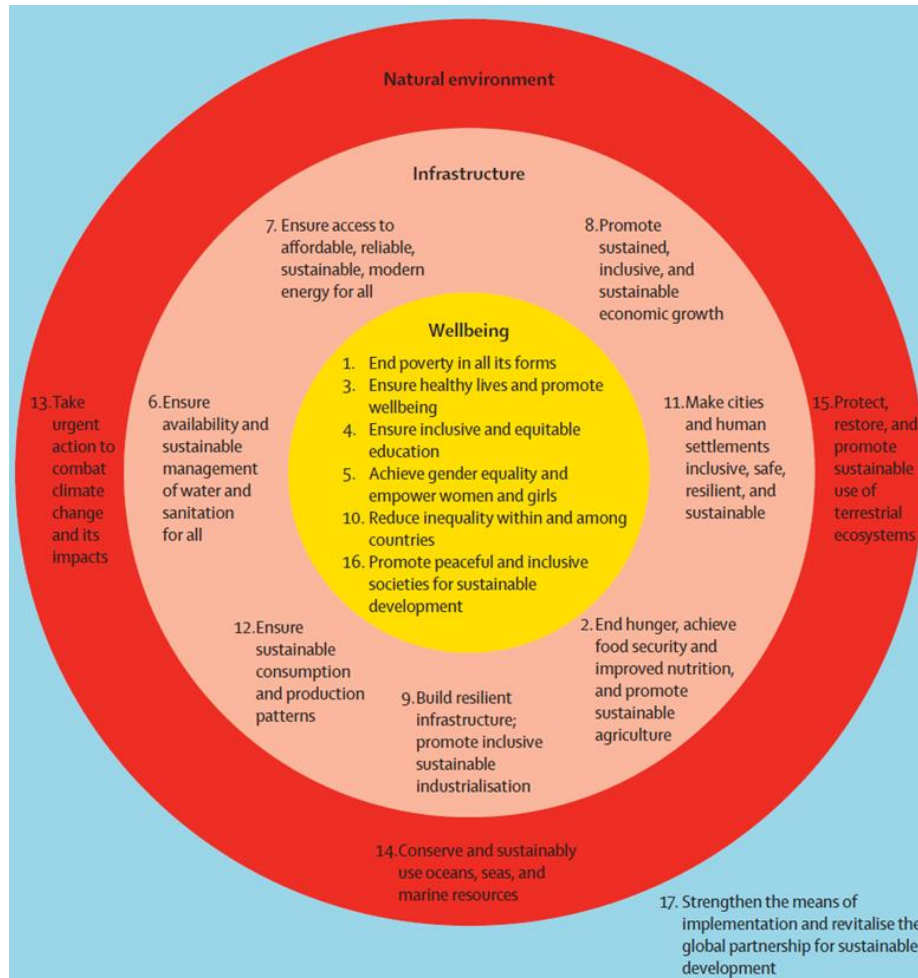
Knowledge

Urgency

Implementation



C. Folke et al. The Royal Swedish Academy of Sciences. Feb'21





Photograph by Isaac Cordal
Courtesy of Splash and Burn / OIC / SOS

THANK YOU!



www.isglobal.org