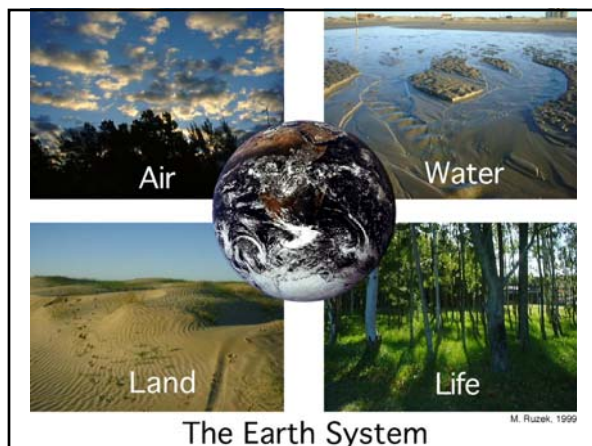


LS 2X03 - Lecture 2 – Global Change and Human Health

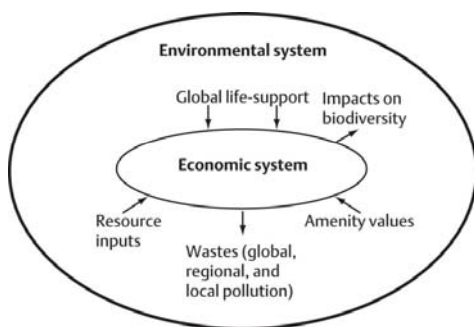
1. Links between Human Health and Environmental Change
2. The Planetary Boundaries Framework
3. Decline of Pollinators
4. Planetary Health

Key Concepts

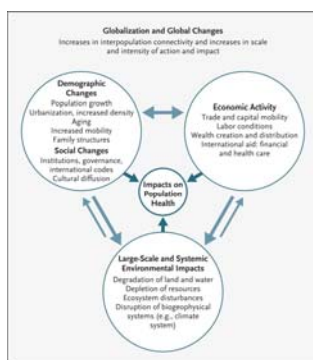
- Links between earth system services and human activity
- Influence on human health of globalization
- Examples of environmental change during the Anthropocene
- The planetary boundaries framework
- Planetary health



1. Links to Human Activity

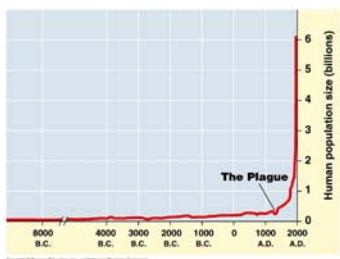


Influence on Human Health of Changes Related to Globalization

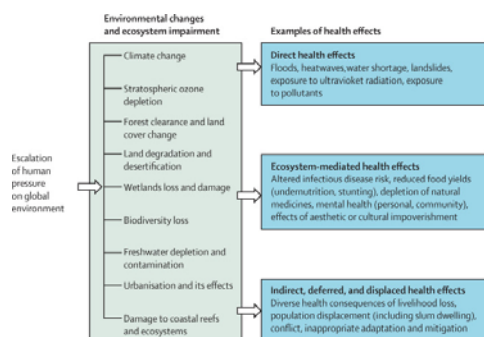


Population Growth

- Humanity has traded off many of the Earth's supportive and regulating processes to:

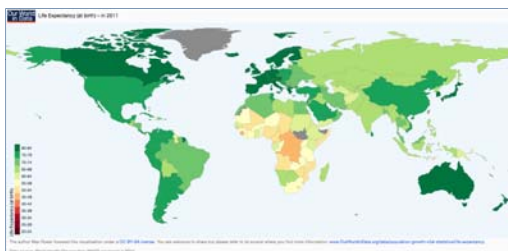


Health and Ecosystems

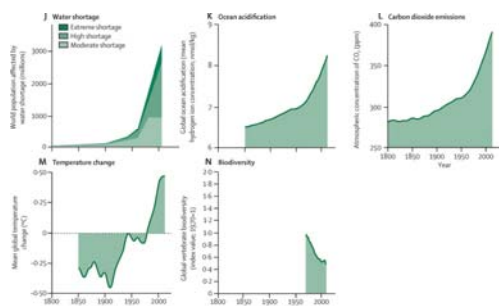


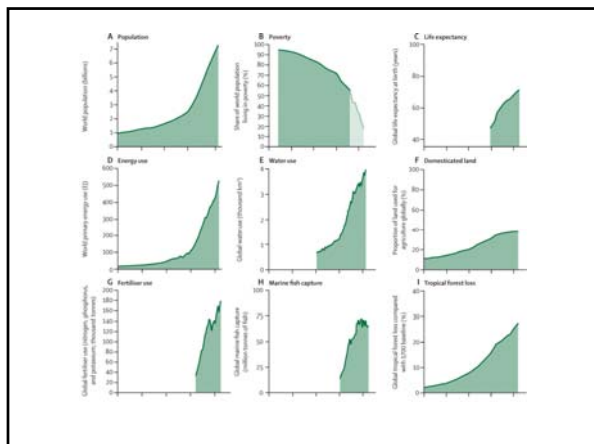
Human Health is better today than at any time in history

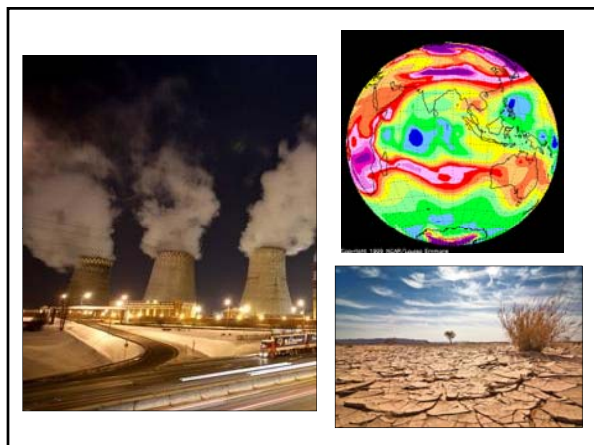
- Life expectancy has soared from 47 years in 1950–1955, to:



Environmental Change in the Anthropocene

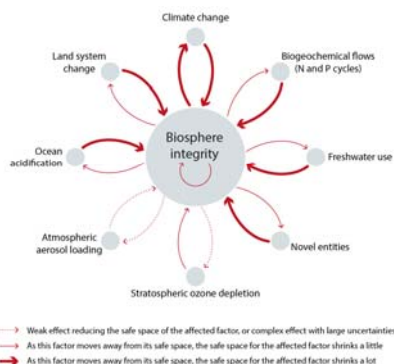


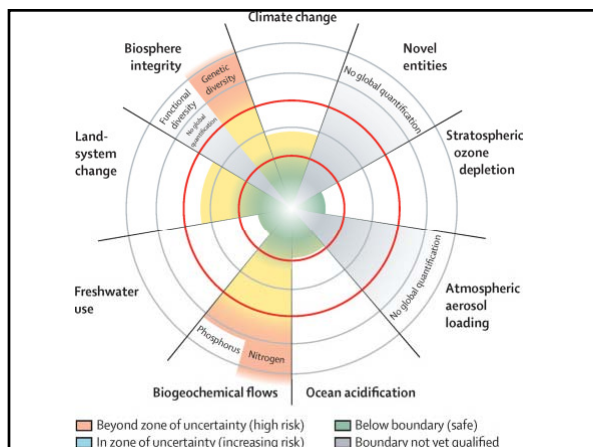






2. The Planetary Boundaries Framework



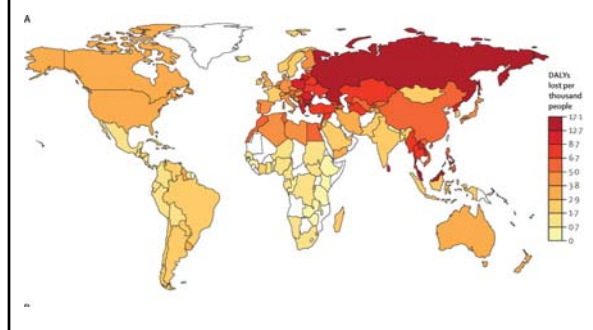


3. Anthropogenic Decline of Pollinators

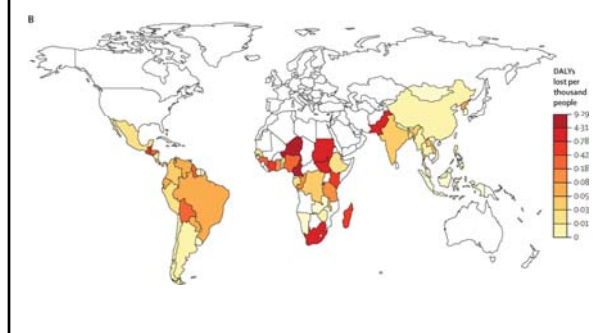
- What has happened to the pollinators?

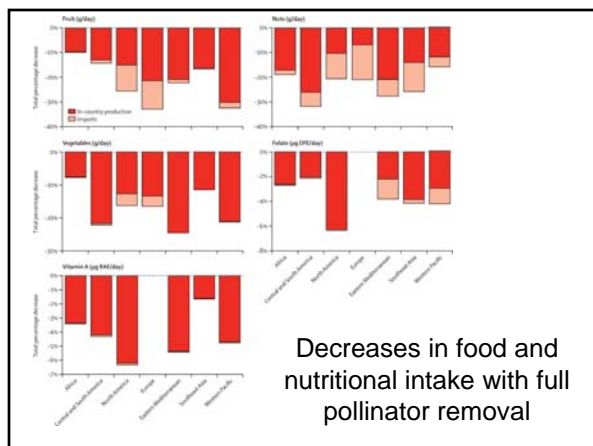


Cardiovascular Disease, Cancer, and Diabetes



Malnutrition and Communicable Disease





Solutions!

- U.S . Government has proposed to help pollinators through:

1.

2.

- The European Union has instead focused on:

1. restricting use of pollinator-harming neonicotinoid pesticides
2. promoting national apiculture programmes

4. The Concept of Planetary Health

- According to the WHO definition, *“health is a state of complete physical, mental and social wellbeing and not merely the absence of disease or infirmity”*.

- Put simply, planetary health is:

- Necessitates the development, implementation, and assessment of ambitious, integrated policies

Conclusion

- Environmental changes have diverse and major consequences for human health
- Human population growth and development has occurred at the expense of Earth’s supportive and regulating processes
- Human rely on biological and physical processes important to the maintenance of Earth’s functions to grow and ; the “safe operating space”

End of Lecture Question

1. However, despite the environmental changes which have occurred in the past 200 years, human health has mainly improved around the world.

TO DO!

1. For next Lecture: Read Article 2 (Link on A2L)
2. Tutorials start next week
