Resilience through Impact Assessment and Leadership
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The pathway of epidemics

1. Deforestation

2. Species collecting and trafficking

3. Animal markets
   crowding and closeness between species

4. Risk of zoonosis
   transmission from animal to animal, from animal to human and from human to human

Zoonoses such as COVID-19 are diseases that are transmitted from animals to humans

75% of newly emerging infectious diseases are zoonoses

60% of infectious diseases in humans are spread from animals

Zoonotic diseases are responsible for an estimated 2.5 billion cases of illness and 2.7 million deaths worldwide, each year
The past 2 years have erased the gains of the 5 years prior.

Figure 2: The global Human Development Index value has declined two years in a row, erasing the gains of the preceding five years.

Figure 1: A new uncertainty complex is emerging

Everyday uncertainty that people have always faced

The pursuit of sweeping societal transformations

New kinds of uncertainty now layer and interact forming a new uncertainty complex

Dangerous planetary change of the Anthropocene

Widespread, intensifying polarization

Protecting planetary boundaries

6 out of 9 have been breached

(Stockholm Resilience Centre, 2022)
Global temperature raising, warmer ocean, shrinkage of ice sheets, retreating of glacier, rises of sea level, heatwaves, storms, and drought

Loss of wildlife population, monocrop

Cutting down rainforest, decrease in agricultural land due to conversion into develop land and open land

Microplastics have been found in people’s bloodstream, pregnant women’s placenta, and in babies’ faeces.

By 2050, half a billion will be subjected to water-stress. At present, nearly 1 million die each year from water, sanitation, and hygiene-related diseases.

Inhaling highly polluted air causes roughly 800,000 people to die prematurely each year.

The pH level of the ocean might drop from 8.1 to 7.7, the fastest drop in 50 million years
“the health of human civilization and the state of the natural systems on which it depends”
*Lancet-Rockefeller Commission, 2015*

“the international and interdisciplinary field focused on characterizing and addressing the human health impacts of global environmental change”
*Planetary Health Alliance, 2019*
01 Integrated approach to impact assessments

02 Applying interconnectedness of planetary health
Floods
Population displacement
Malaria and other infectious diseases
Water-borne diarrheal diseases
Germany’s transformation of peatlands

INTACT PEATLANDS

Only 2% of German peatlands are still pristine.

1. Mires are an important habitat for protected plant and animal species.
2. Peat is preserved and newly formed.
3. Carbon is stored because a permanently high water level preserves dead plant in the soil.
4. Soils of natural peatlands consist of centuries-old layers of peat with carbon stored in them.

www.greifswaldmoor.de
In Landmark Ruling, Air Pollution Recorded as a Cause of Death for British Girl

Legal and environmental experts hailed a coroner's ruling that, for the first time in Britain, directly linked a specific person's death to air pollution.

Ella Adoo-Kissi-Debrah in a photo shown by her mother, Rosamund. Hollie Adams/Agence France-Presse — Getty Images
We should not underestimate ourselves, because if lots of individuals go together then we can accomplish almost anything.

GRETA THUNBERG
Swedish environmental activist