

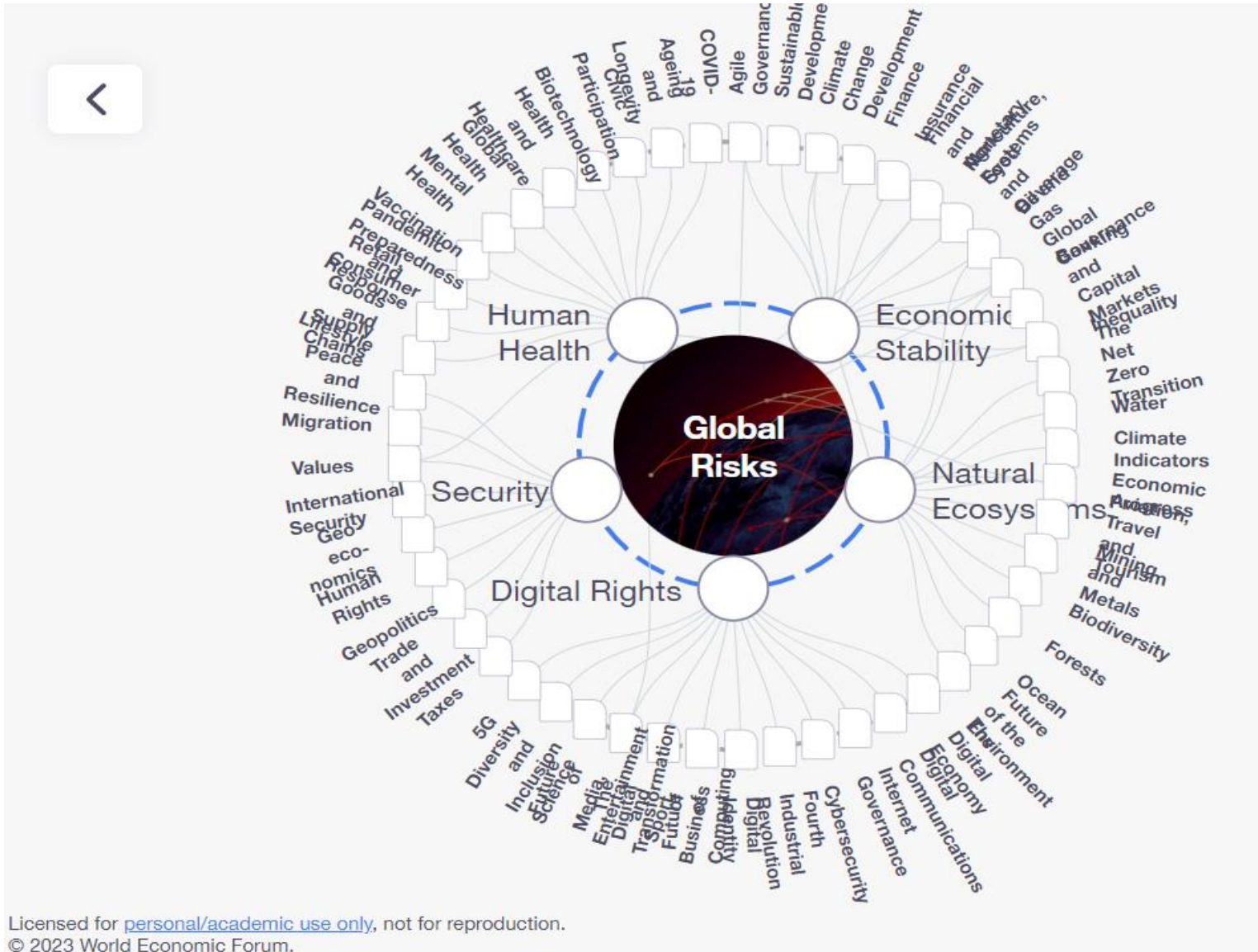
Changing Threats Landscape

Challenges and Opportunities

Dr Chadia Wannous
One Health Global Coordinator
World Health Organisation for Animal Health (WOAH)

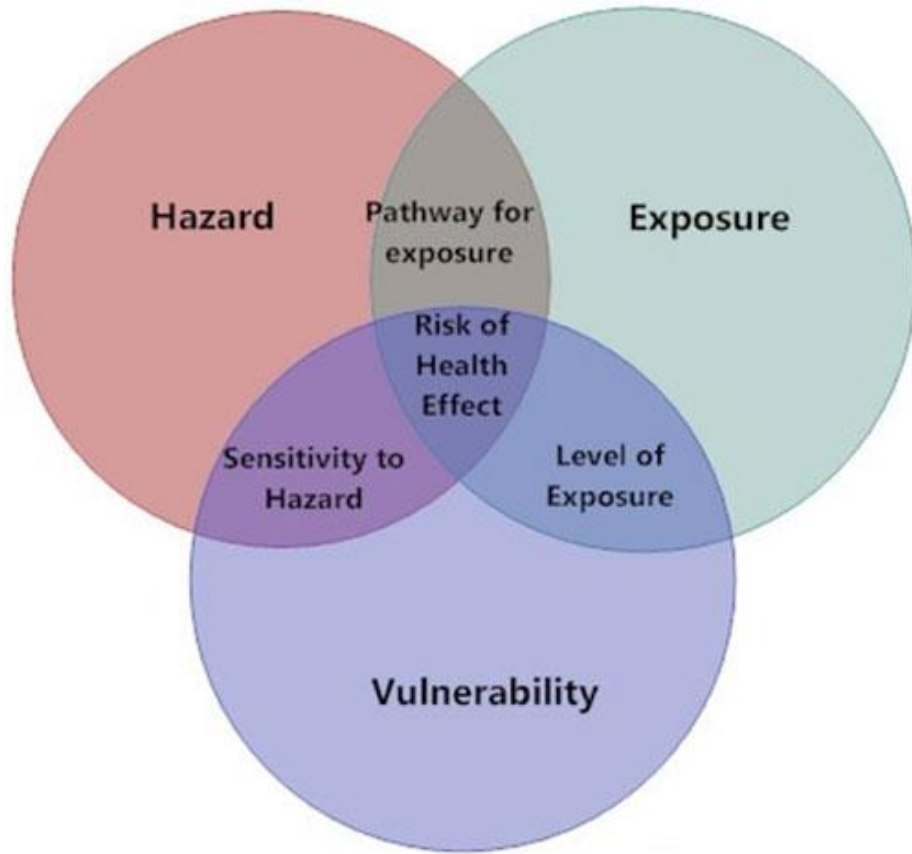
WOAH- EM conf, 3 April 2023

Changing landscape of global risks



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Understanding Risk



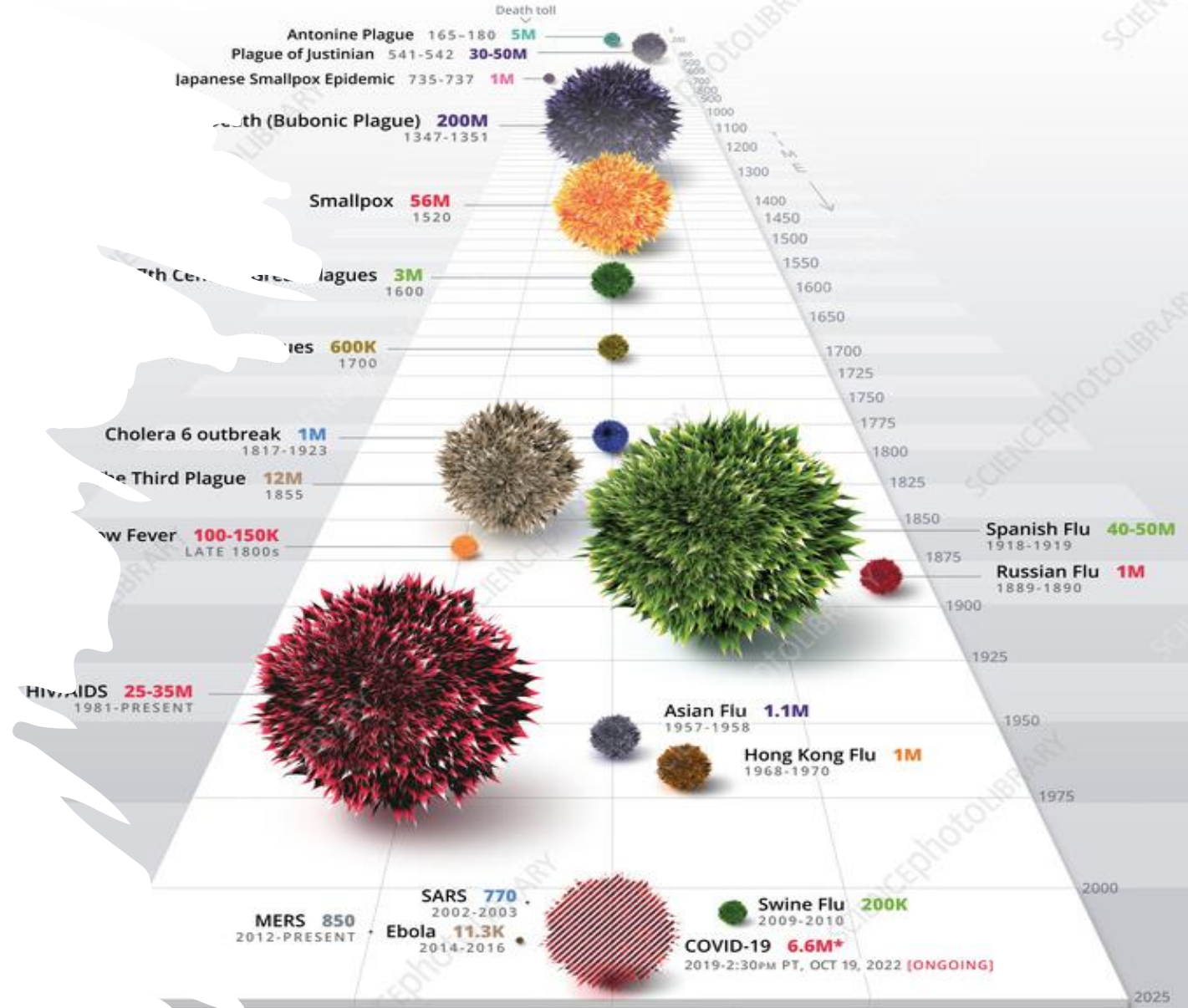
Coping Capacity

Five Steps of Risk Management Process



Prevention

Increasing risk of pandemics



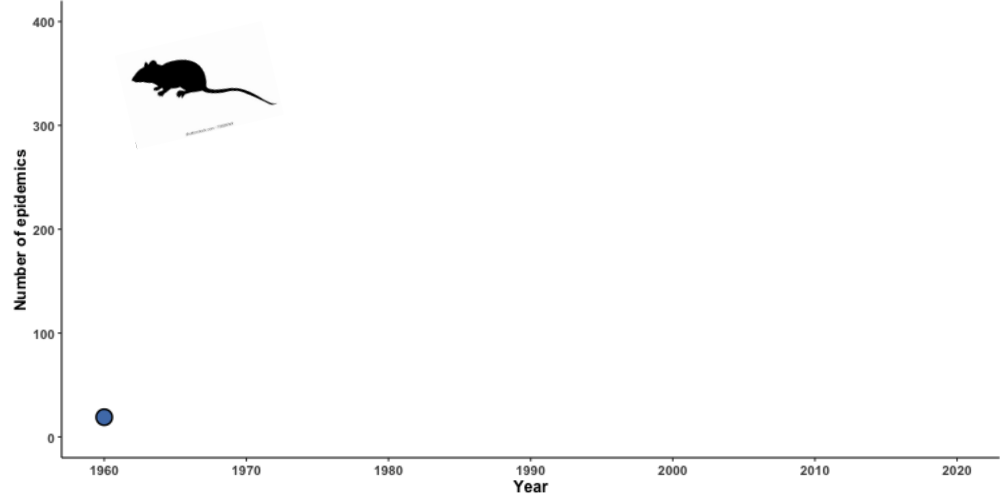
An increasing number of outbreaks



Humans

Outbreaks of zoonotic diseases

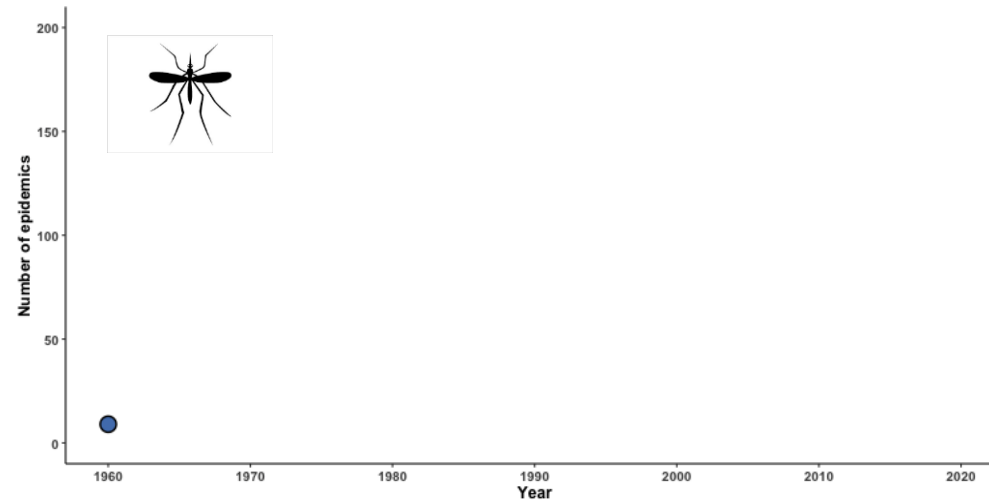
1960-2019



Data source: GIDEON

Outbreaks of vector-borne diseases

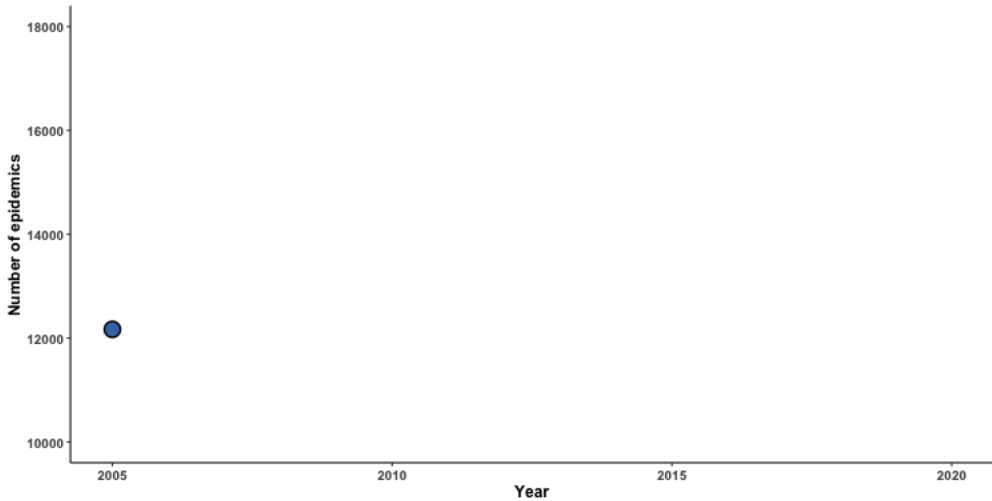
1960-2019



Data source: GIDEON

Outbreaks of livestock - poultry diseases

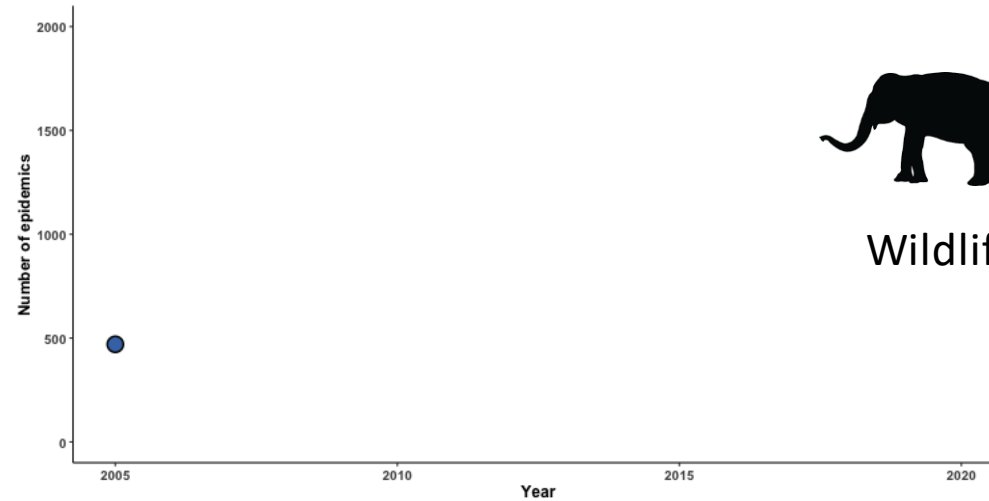
2005-2019



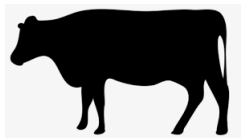
Data source: OIE-WAHIS

Outbreaks of wildlife diseases

2005-2019



Data source: OIE-WAHIS



Livestock

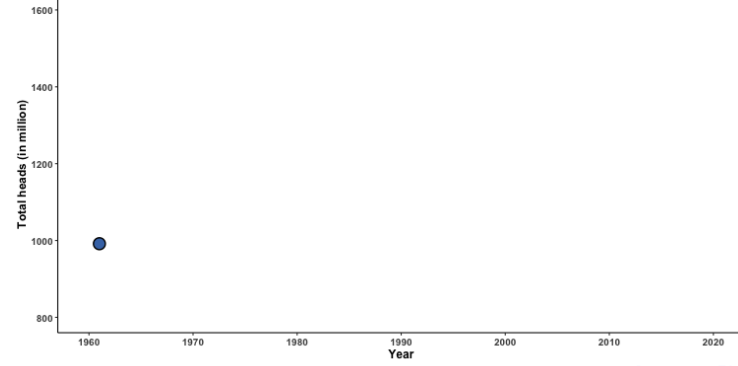


Wildlife

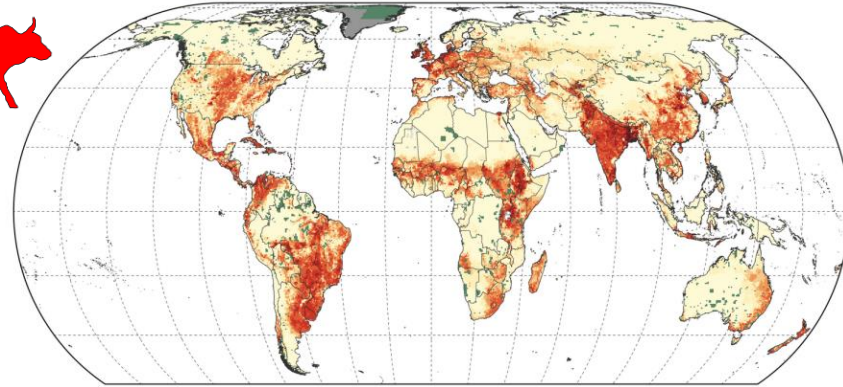
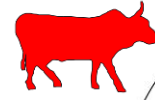


Total heads of cattle (in million)

1960-2020

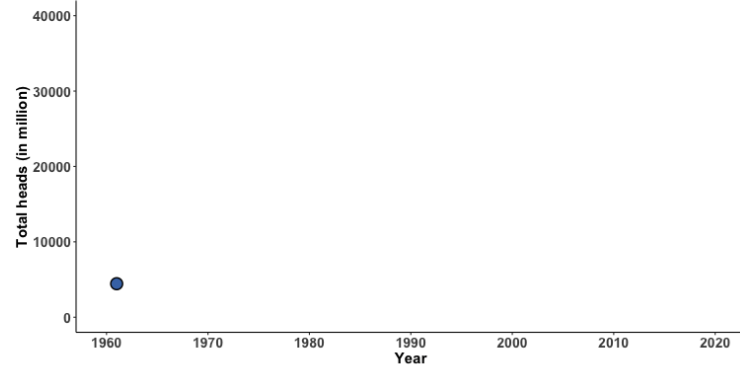


Data source: FAO

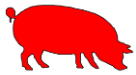
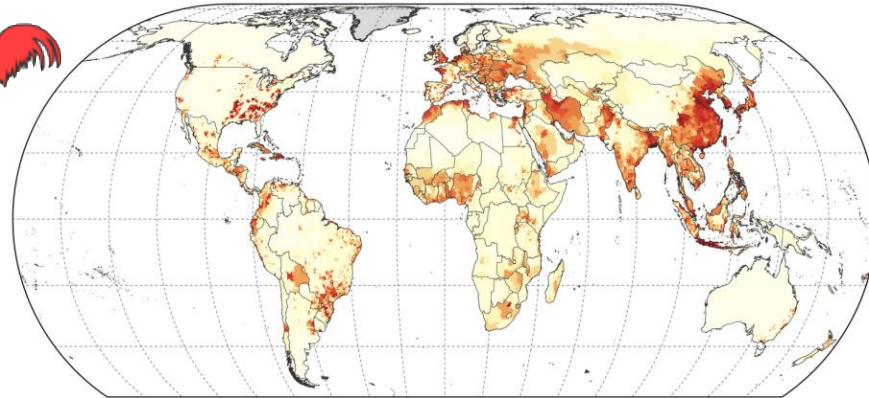


Total heads of chickens (in million)

1960-2020

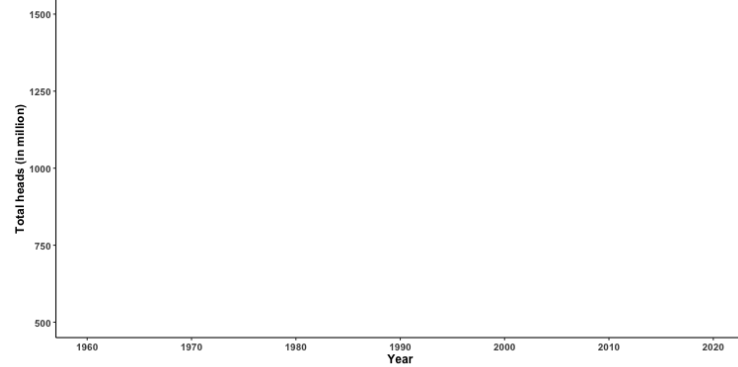


Data source: FAO

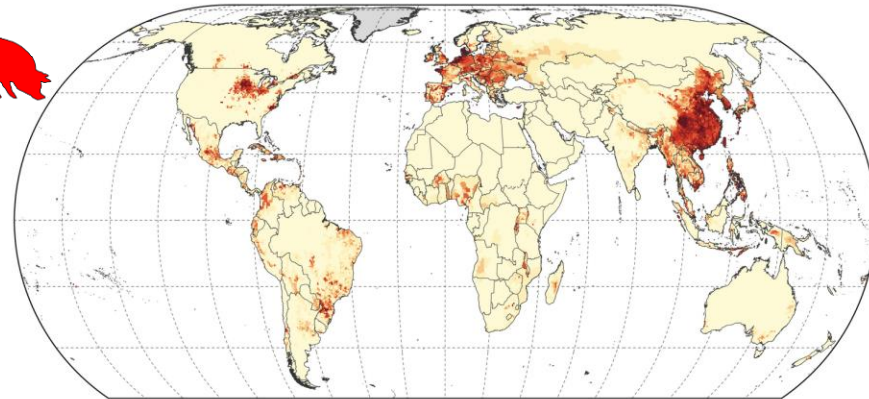
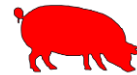


Total heads of pigs (in million)

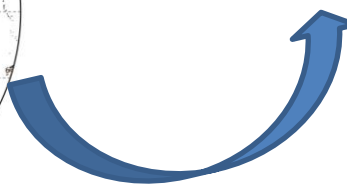
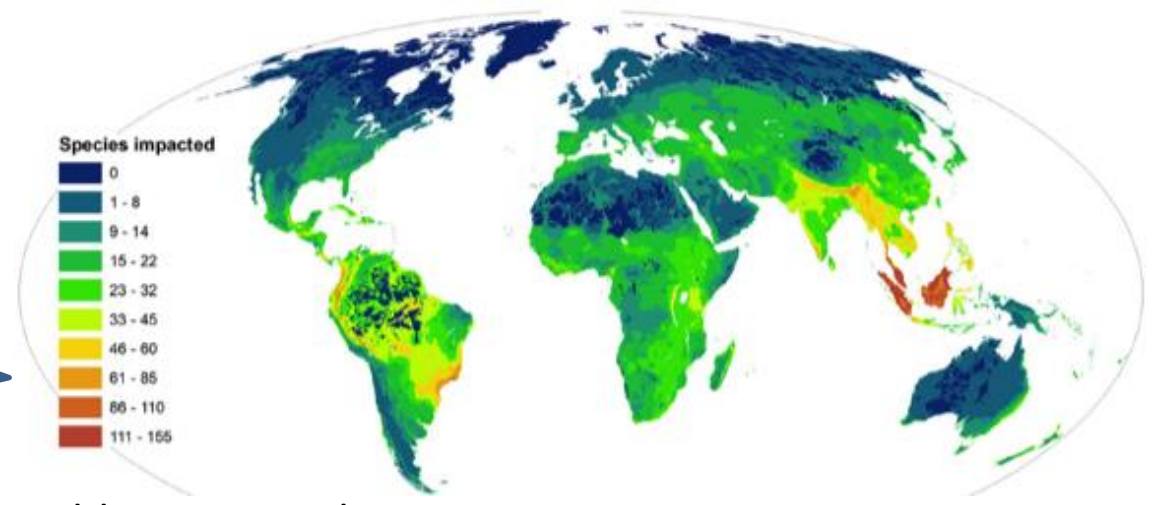
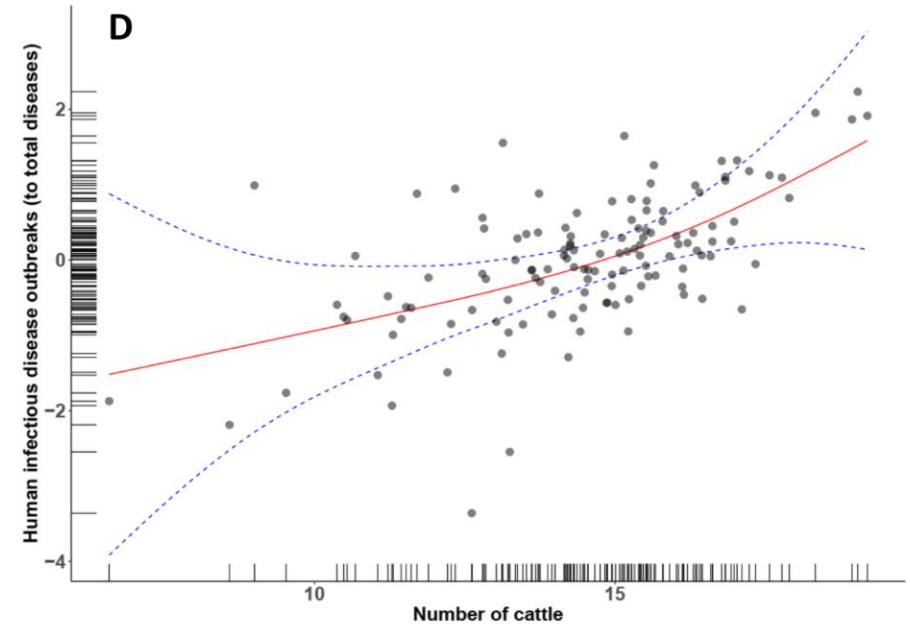
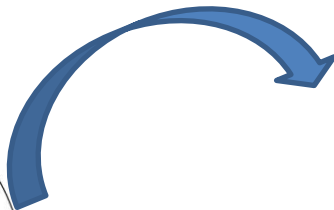
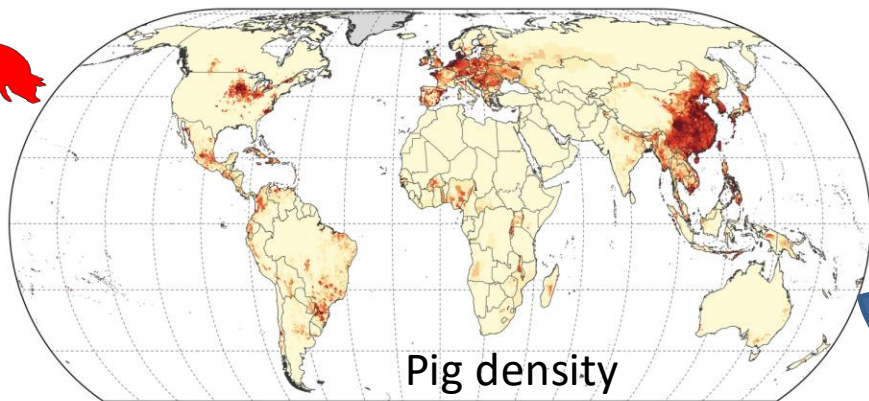
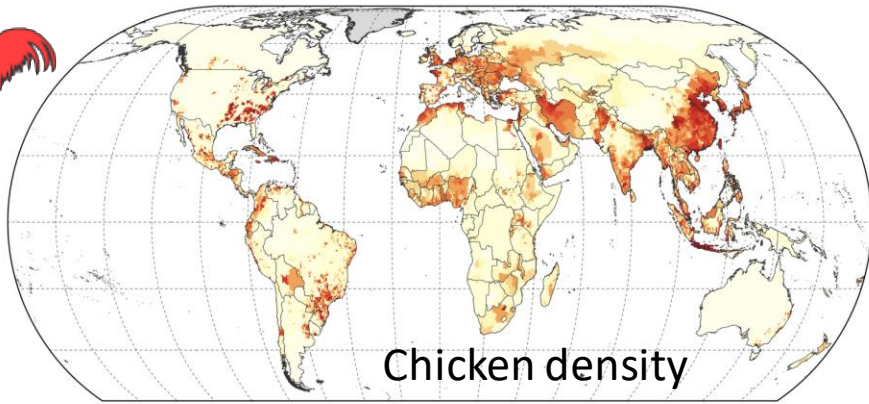
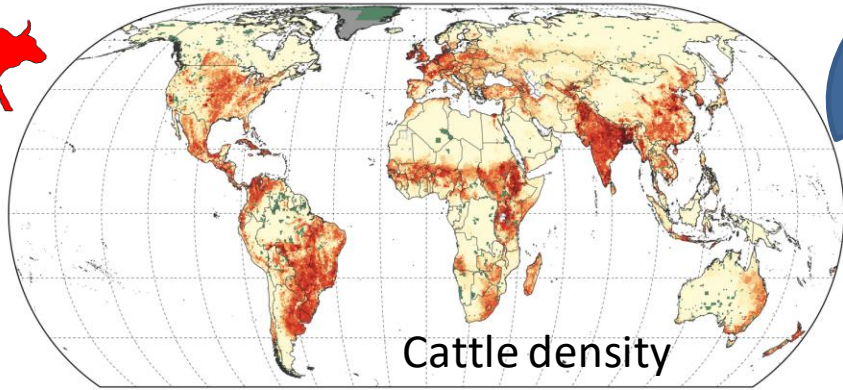
1960-2020



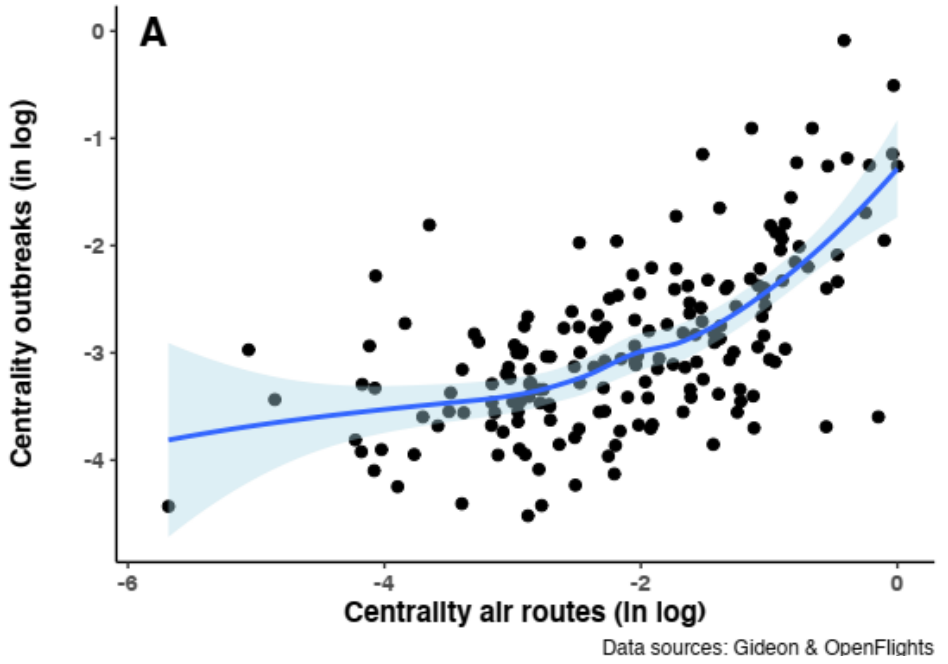
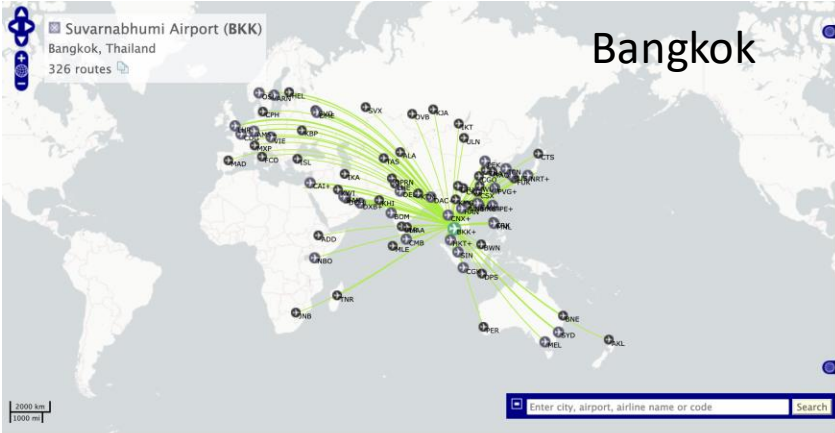
Data source: FAO



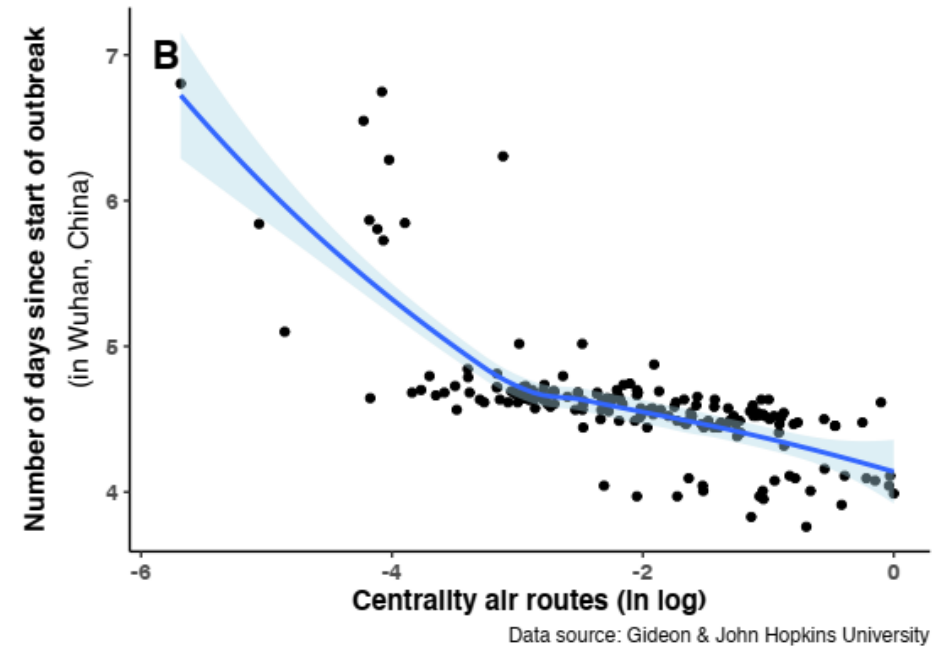
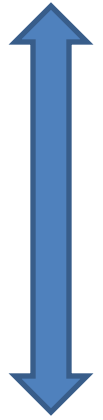
Oubreaks of zoonoses



Wild species at threat



Centrality in outbreaks vs centrality in air routes



First cases of Covid-19 vs centrality in air routes

Disasters in 2022

- In 2022, the Emergency Event Database EM-DAT recorded 387 natural hazards and disasters worldwide, resulting in the loss of 30,704 lives and affecting 185 million individuals. Economic losses totaled around US\$223.8 billion. Heat waves caused over 16,000 excess deaths in Europe, while droughts affected 88.9 million people in Africa. Hurricane Ian single-handedly caused damage costing US\$100 billion in the Americas. The human and economic impact of disasters was relatively higher in Africa, e.g., with 16.4% of the share of deaths compared to 3.8% in the previous two decades. It was relatively lower in Asia despite Asia experiencing some of the most destructive disasters in 2022.

Number of disasters by continent and top 10 countries⁸ in 2022

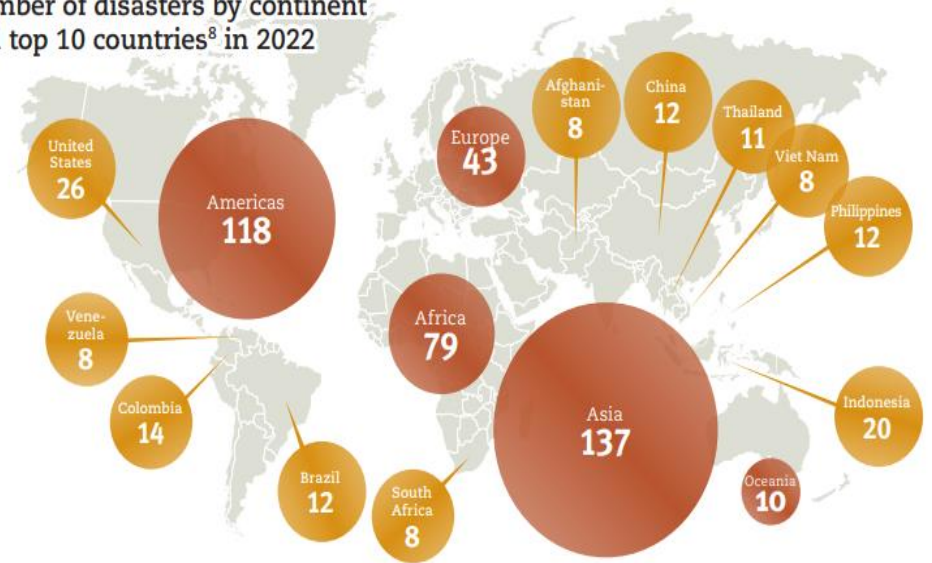
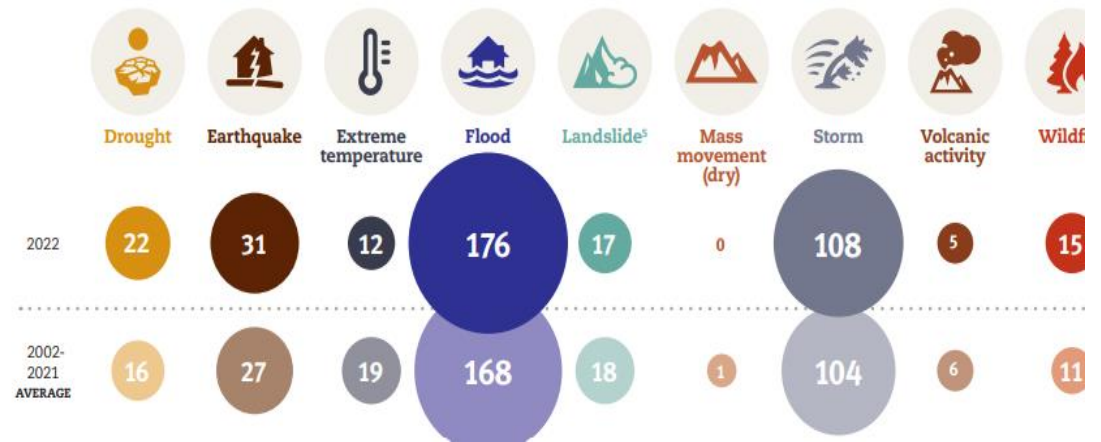


Figure 2

Occurrence by disaster type: 2022 compared to the 2002-2021 annual average

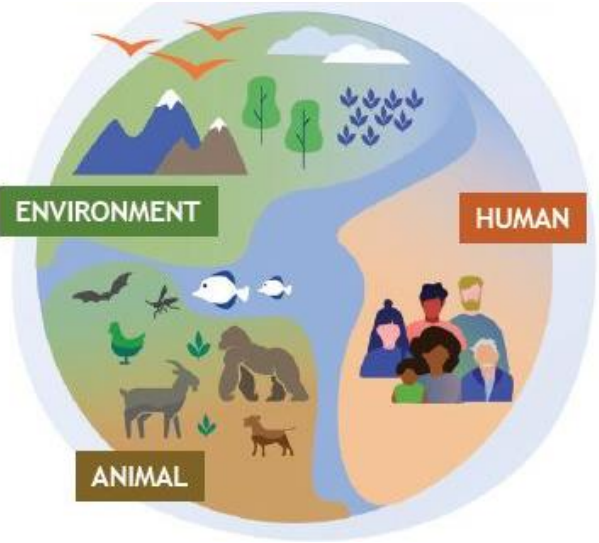
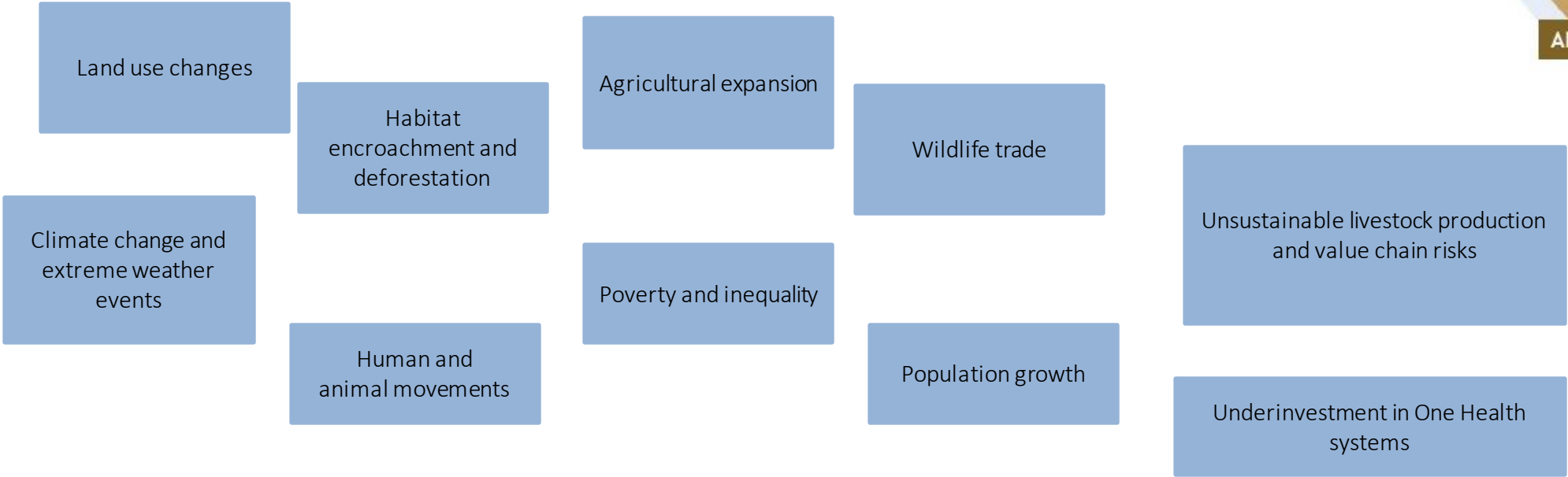
370 2002 to 2021 < 387 in 2022



Drivers of risks

Health risks including pandemic potential

Human – animal – plant – environment interface



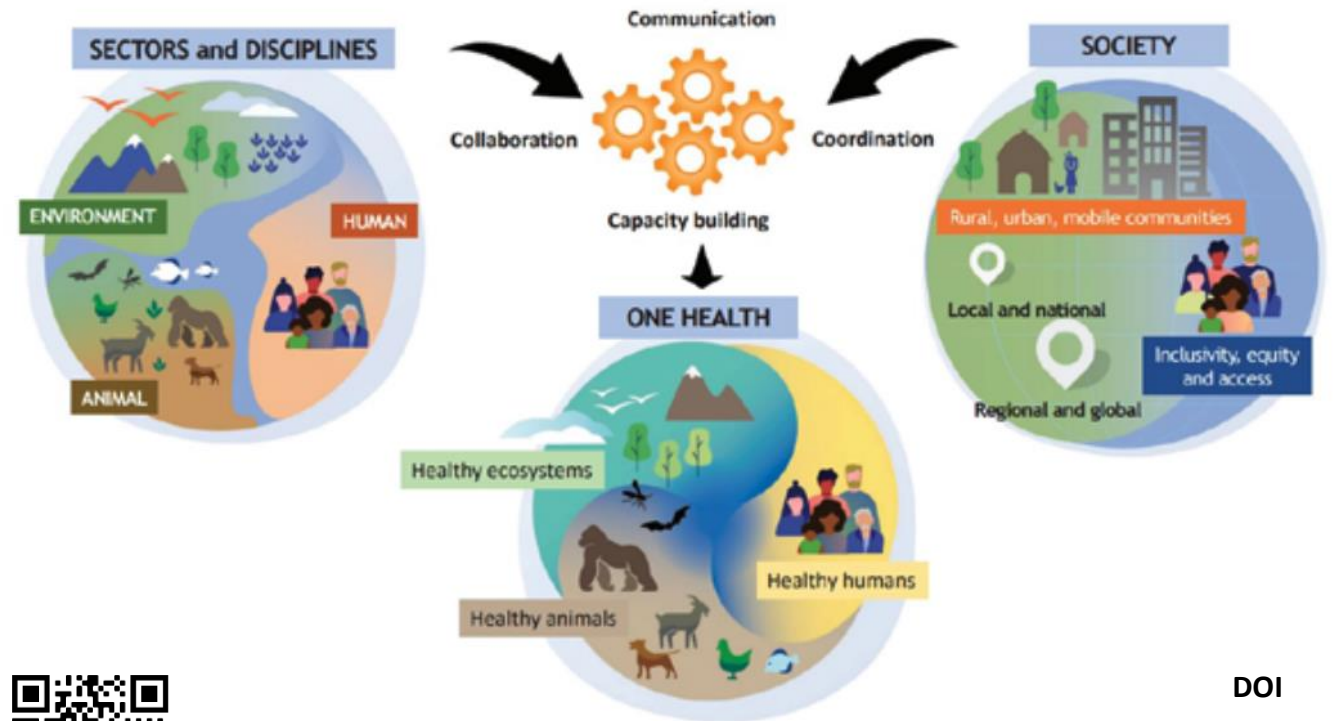
One Health

One Health Definition developed by the OHHLEP

“One Health is an integrated, unifying approach that aims to sustainably balance and optimize the health of people, animals and ecosystems.”

It recognizes the health of humans, domestic and wild animals, plants, and the wider environment (including ecosystems) are closely linked and interdependent.

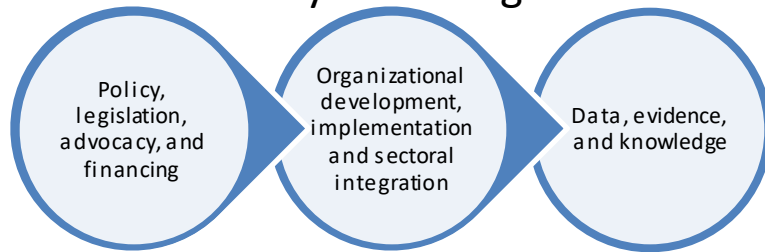
The approach mobilizes multiple sectors, disciplines and communities at varying levels of society to work together to foster well-being and tackle threats to health and ecosystems, while addressing the collective need for clean water, energy and air, safe and nutritious food, taking action on climate change, and contributing to sustainable development”.



ONE HEALTH QUADRIpartite JOINT PLAN OF ACTION (2022-2026)

WORKING TOGETHER FOR THE HEALTH OF HUMANS, ANIMALS, PLANTS AND THE ENVIRONMENT

Pathways of change

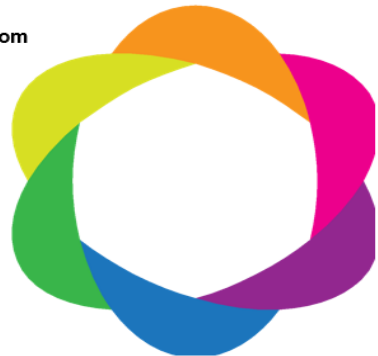


The OH JPA-Six Action Tracks

Action Track 1: Enhancing One Health capacities to strengthen health systems

Action Track 2: Reducing the risks from emerging and re-emerging zoonotic epidemics and pandemics

Action Track 3: Controlling and eliminating endemic zoonotic, neglected tropical and vector-borne diseases



Action Track 4: Strengthening the assessment, management and communication of food safety risks

Action Track 5: Curbing the silent pandemic of Antimicrobial Resistance (AMR)

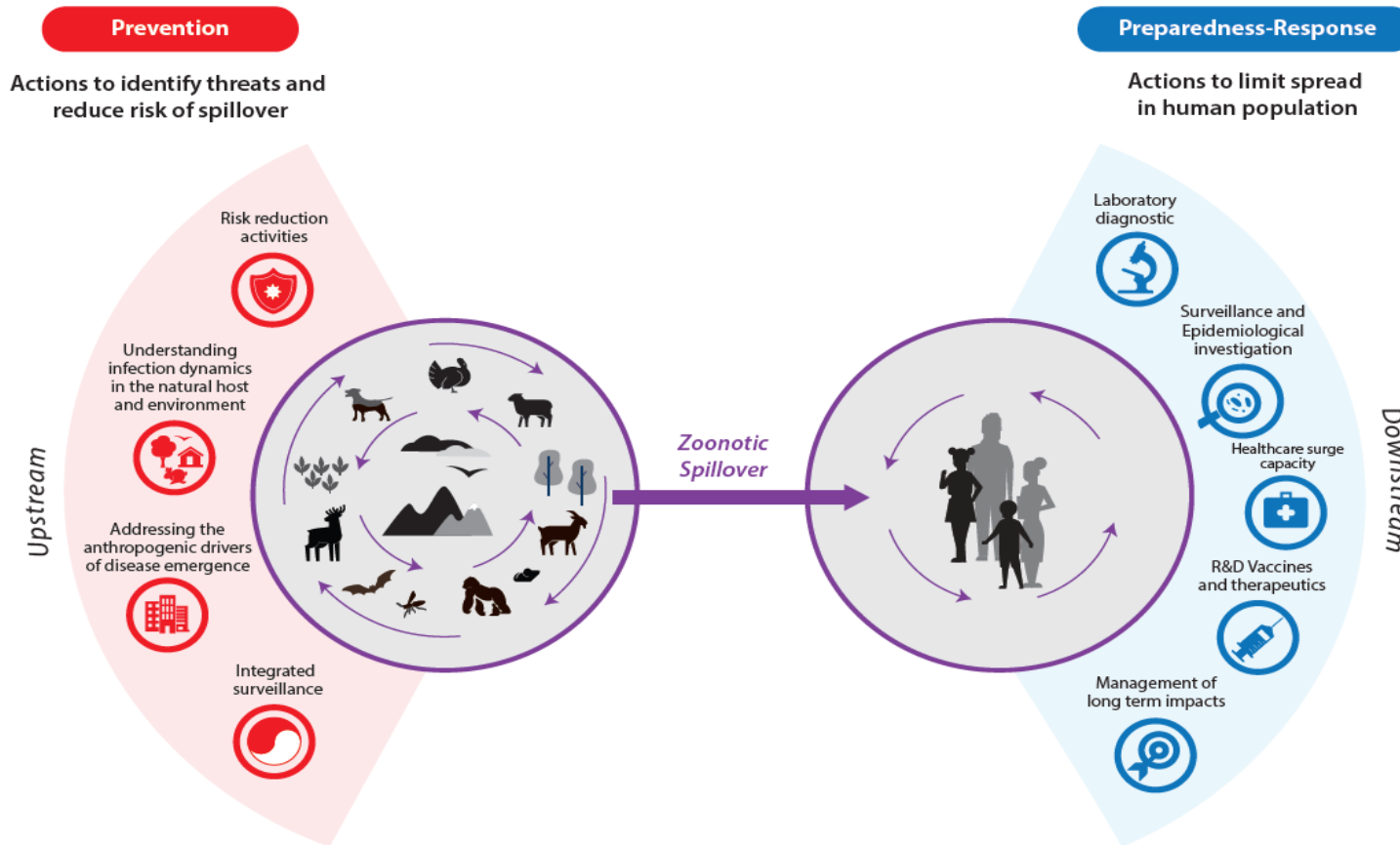
Action Track 6: Integrating the Environment into One Health



Launched 17 October 2022

FAO, UNEP, WHO, and WOA. 2022. One Health Joint Plan of Action (2022-2026). Working together for the health of humans, animals, plants and the environment. Rome. <https://doi.org/10.4060/cc2289en>

Prevention of Spillover



PREVENTION OF ZONOTIC SPILLOVER TO HUMANS

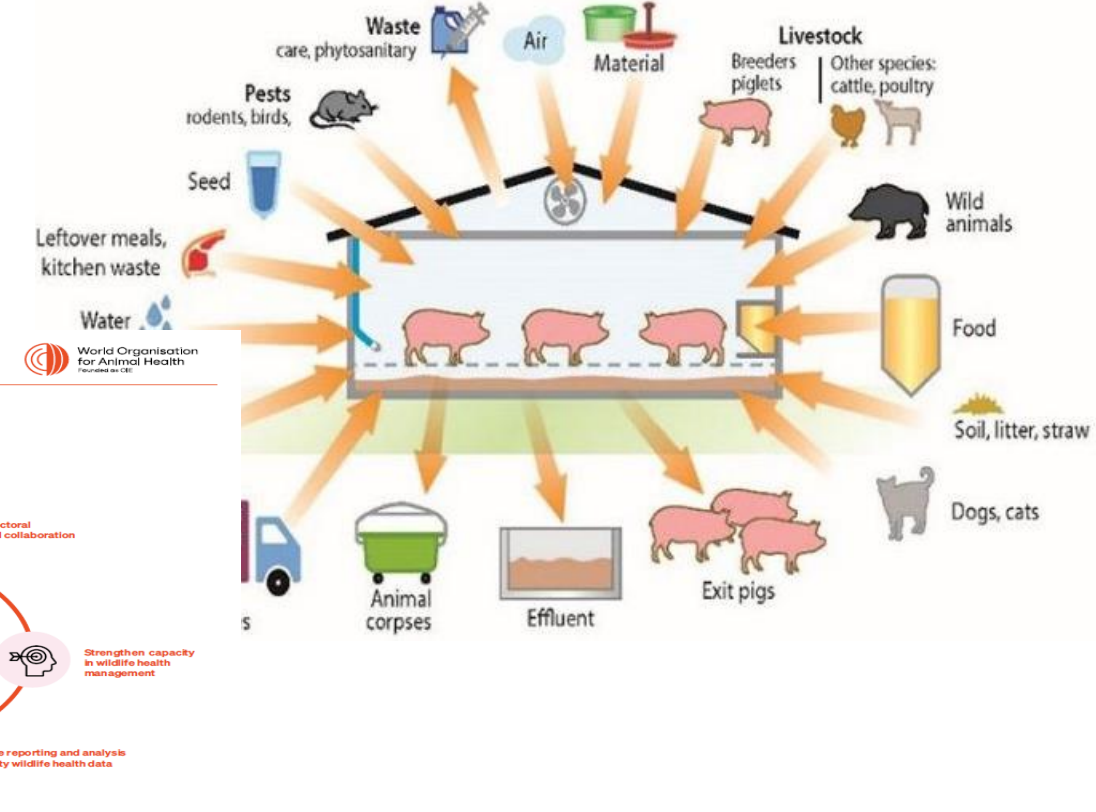
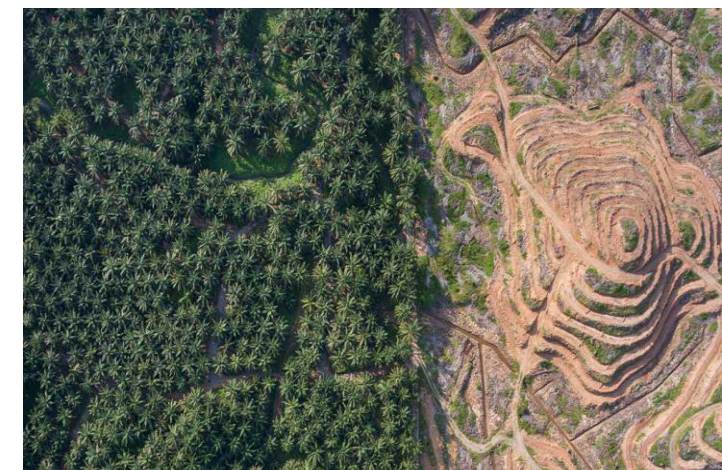
Prevention of pathogen spillover from animals to humans; shifting the infectious disease control paradigm from reactive to proactive (Primary prevention). Prevention includes addressing the drivers of disease emergence, namely ecological, meteorological and anthropogenic factors and activities that increase spillover risk, in order to reduce the risk of human infection. It is informed by, amongst other actions, biosurveillance in natural hosts, people and the environment, understanding pathogen infection dynamics and implementing intervention activities.

Preventive Actions

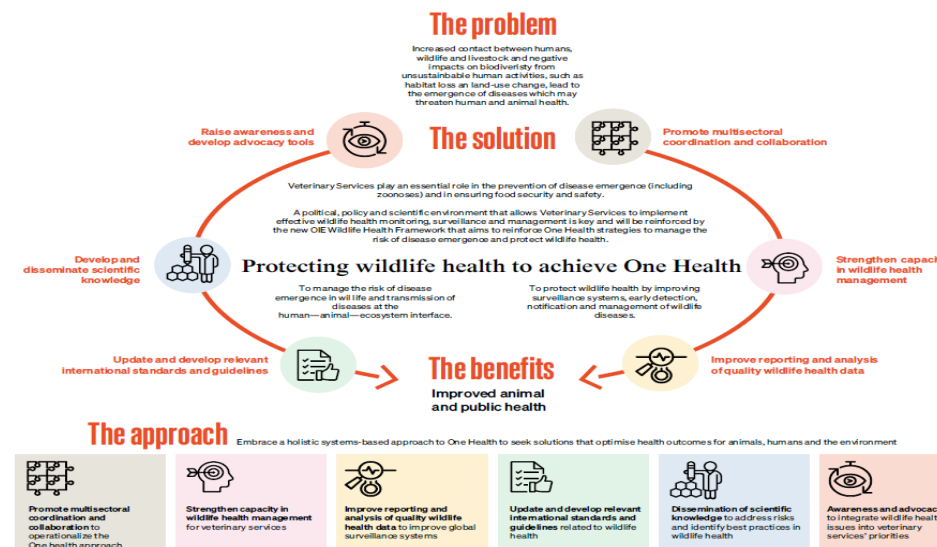
Preventive Actions should target 'activities' and 'places' that increase the risk of zoonotic spillover from animals to humans.

It requires a One Health (OH) approach that bring together human, animal, and environment sectors to work together on actions that include:

- 1) Expand viral discovery and integrated OH surveillance and data sharing.
- 2) Monitor wildlife hunting, consumption and trade as well as large, high- density animal farming for viral infections.
- 3) Improve biosecurity at animal farms,
- 4) Strengthen multi-stakeholders coordination mechanisms/OH Platforms, at national, regional and international levels.,
- 5) Prevent drivers of risk including deforestation and other land-use changes associated with agricultural expansion, & biodiversity loss, degradation of ecosystems, and climate change



WOAH Wildlife health programme



Relevant international legal instruments

Overall goal	Reduce risk of infectious disease (re)emergence and spread in humans and animals			
Context	Environmental governance		Public health governance	
Approach	Deep prevention		Containment	
Stage of intervention	Upstream	Midstream	Downstream	
Focus	Preventing drivers	Preventing events	Detecting, reporting and containing events	
Regulatory target	Drivers of (re)emergence and spread	(Re)emergence (spillover, mutation, outbreak)	Human disease outbreak	Human disease spread
Instruments	International agreements, e.g. on wildlife trade (CITES), climate change (UNFCCC/PA), biological diversity (CBD, Biosafety Protocol), land-use change (CBD, UNCCD), international traffic, population movements, etc	Regulatory 'blind spot' The new pandemic treaty		IHR (2005 or 2024), including self-assessment and Joint External Evaluation (JEE) PWH, WTO General Exceptions, SPS, FTAs

Linkage to Biodiversity and Climate Change Global Frameworks



Disaster Risk Reduction Framework

The Sendai framework recognizes that effective disaster risk reduction (DRR) requires expanding focus on the protection of livelihoods and productive assets. This includes livestock, working animals, tools and seeds.



Kenyan women wait for distribution of water by the government near Kuruti, in Garissa county, on Oct. 27.

BRIAN INGANGA/AP

Global commitment

G20 Ministers of Health reaffirm the urgent need to address global health under a One health approach



Published on 17 September 2021



12. We also welcome the recently announced operational definition of One Health by the work of the One Health High Level Expert Panel, endorsed by WHO, FAO, OIE and UNEP, and its forthcoming gap analysis and recommendations on monitoring and surveillance of emerging zoonotic diseases and priority activities, looking forward to considering the results of the One Health Intelligence Scoping Study as we agreed last year, as G7 Health Ministers, and we support the consideration of the inclusion of the One Health dimension in the new WHO convention, agreement or other international instrument on pandemic prevention, preparedness and response. We encourage other initiatives aiming at strengthening the implementation of the One Health approach such as Zoonotic Disease Integrated Action (ZODIAC) and Preventing Zoonotic Disease Emergence (PREZODE).

Global commitment

1. Multilateral Funds & Multi-Partner Mechanisms
2. Bilateral governmental agreements
3. In kind contributions
4. Non-state actors



What We Do

Financial Intermediary Fund for Pandemic
Prevention, Preparedness and Response -
Engagement and Overview

The Quadripartite Call to Action



1st Quadripartite Executive Annual Meeting

Joint Call to Action

Stressing the need for enhanced collaboration and commitment to translate the One Health approach into policy action in all countries, the Quadripartite leaders urge all countries and key stakeholders to promote and undertake the following priority actions:

1. **Prioritize One Health in the international political agenda, increase understanding and advocate for the adoption and promotion of the enhanced intersectoral health governance.** The One Health approach should notably serve as a guiding principle in global mechanisms including in the new pandemic instrument and the pandemic fund to strengthen pandemic prevention, preparedness and response;
2. **Strengthen national One Health policies, strategies and plans, coded and prioritized in line with the Quadripartite One Health Joint Plan of Action (OH JPA), to foster wider implementation across relevant sectors and at all levels;**
3. **Accelerate the implementation of One Health plans, including supporting of national One Health governance and multisectoral coordination mechanisms, development of situation analyses, stakeholder mapping, priority setting, and metrics for One Health monitoring and evaluation frameworks;**
4. **Build intersectoral One Health workforces that have the skills, capacities and capabilities to prevent, detect, control, and respond to health threats in a timely and effective way, by strengthening joint pre-service and continuing education for human, animal, and environmental health workforce;**
5. **Strengthen and sustain prevention of pandemics and health threats at source, targeting activities and places that increase the risk of zoonotic spillover between animals to humans;**
6. **Encourage and strengthen One Health scientific knowledge and evidence creation and exchange, research and development, technology transfer and sharing and integrating of information and data and facilitate access to new tools and technologies; and**



7. **Increase investment and financing of One Health strategies and plans ensuring scaled up implementation at all levels, including funding for prevention of health threats at source.**

Signed by:

 Dr Qu Dongyu Date: 27 March 2023 For Food and Agriculture Organization	 Ms Ingrid Schwan Date: 27 March 2023 For United Nations Environment Programme
 Dr Tedros Adhanom Ghebreyesus Date: 27 March 2023 For World Health Organization	 Dr Monique Eloit Date: 27 March 2023 For World Organisation for Animal Health





**Tackling shared threats for a safer
world**

#WOAHGlobalConference

3-5 April 2023

Maison de la Chimie, Paris, France

