PREZODE

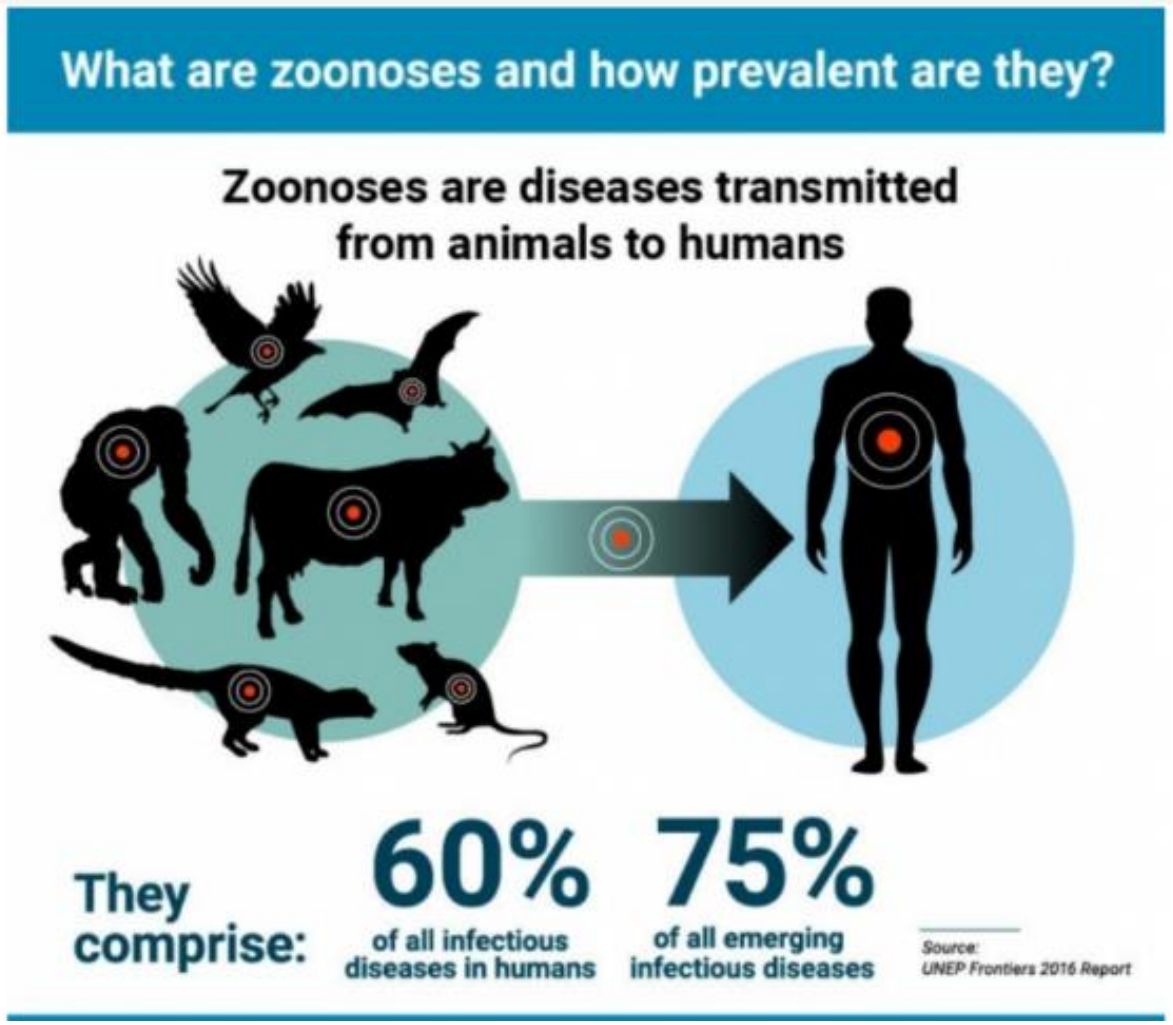
Preventing zoonotic disease emergence

One World One Health Prezode Belgium

8th March 2023

Christine Citti, INRAE

Prezode's Interim Secretariat



https://www.un.org/sustainabledevelopment/fr/biodiversity/

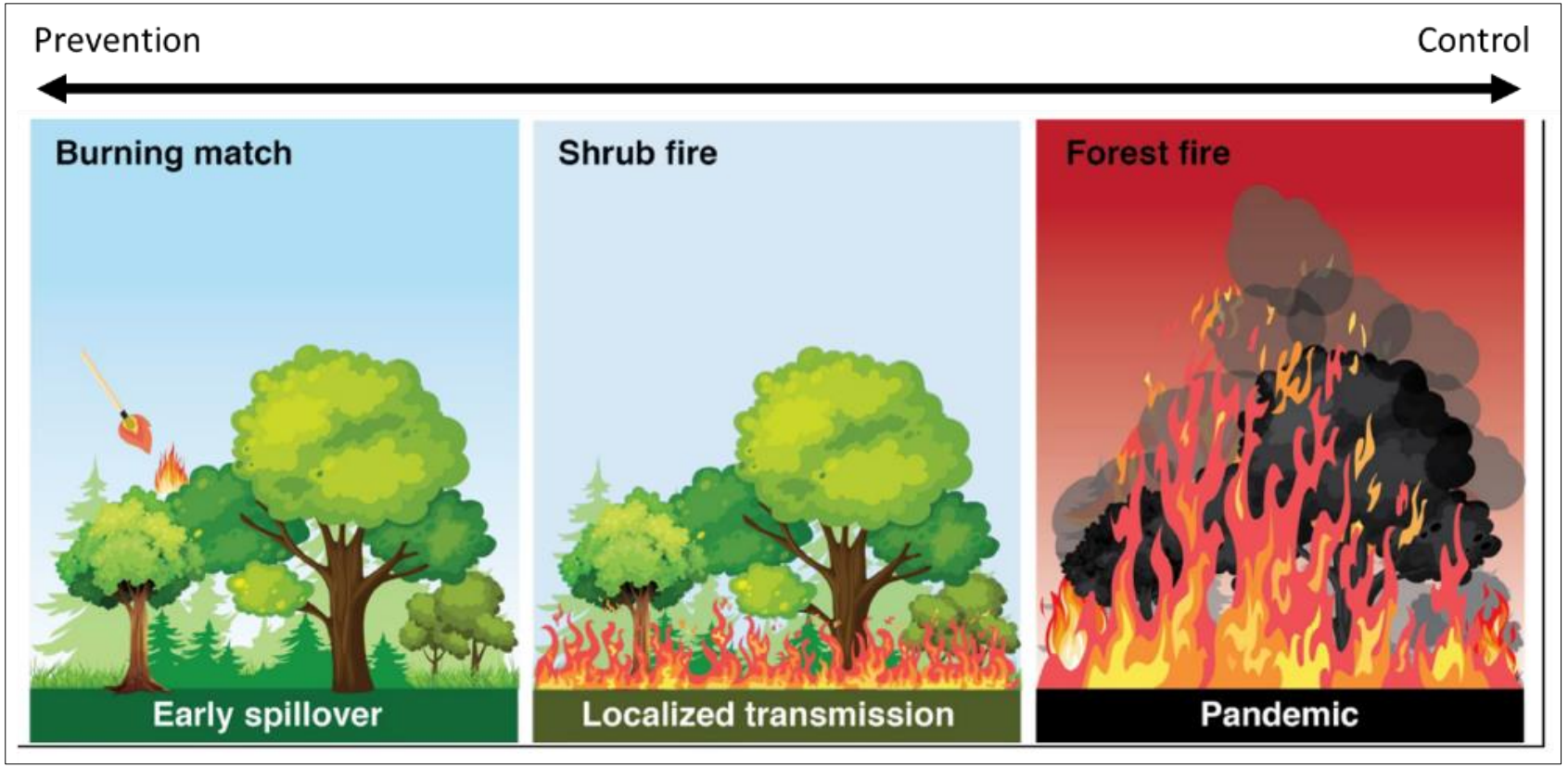
Drivers increasing the risks of emergence

- Livestock intensification
- Illegal trafficking of animal products
- Biodiversity alteration (hosts, vectors)
- Climate change
- Landscape alteration (urbanization, deforestation, etc.)

….

The need for a change in paradigm: PREVENTION and BOTTOM-UP approaches

Covid has demonstrated the need for a real paradigm shift: preventing the emergence of new infectious diseases, and not just seek to anticipate and slow down their spread



OVERALL AMBITION

PREZODE
Preventing zoonotic disease emergence

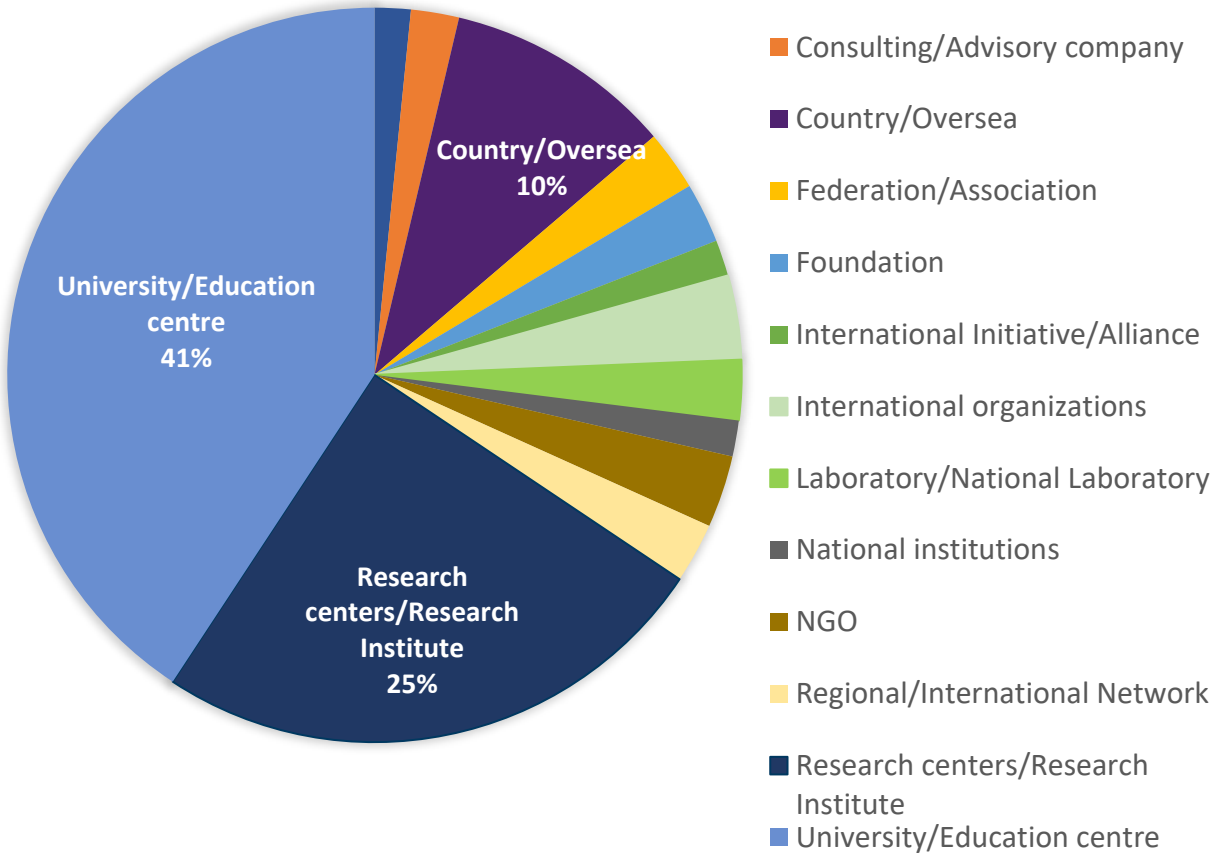
Working with countries and with other initiatives to prevent animal born pandemics, while ensuring food security and livelihoods for the poorest communities,

Missions

- Improve our **understanding of the mechanisms** leading to zoonotic disease emergence in complex socio-ecosystems in order **to identify the main biological, ecological, and socio-economic drivers** influencing the risk of emergence and our capacity to respond
- **Strengthen effective engagement** and integrate knowledge, innovation, capacity building, and operational actions to jointly **reduce the risk and rapidly detect** the emergence of zoonotic diseases (at local and global scale).
- **Deploy** academic research, cross-sectoral collaboration, and operational actors on the frontline of epidemics to **evaluate prevention strategies against emerging risks**.

THE PREZODE COMMUNITY: a community of professionals from different health sectors (animal, human, environment)

- Launching of PREZODE by the President of the French Republic during the One Planet Summit (January 2021), with the support of the international organizations **of the Quadripartite** and the **European Commission.**



March 2023: 200 members

THE PREZODE COMMUNITY: a framework for collaboration

PREZODE
Preventing zoonotic disease emergence

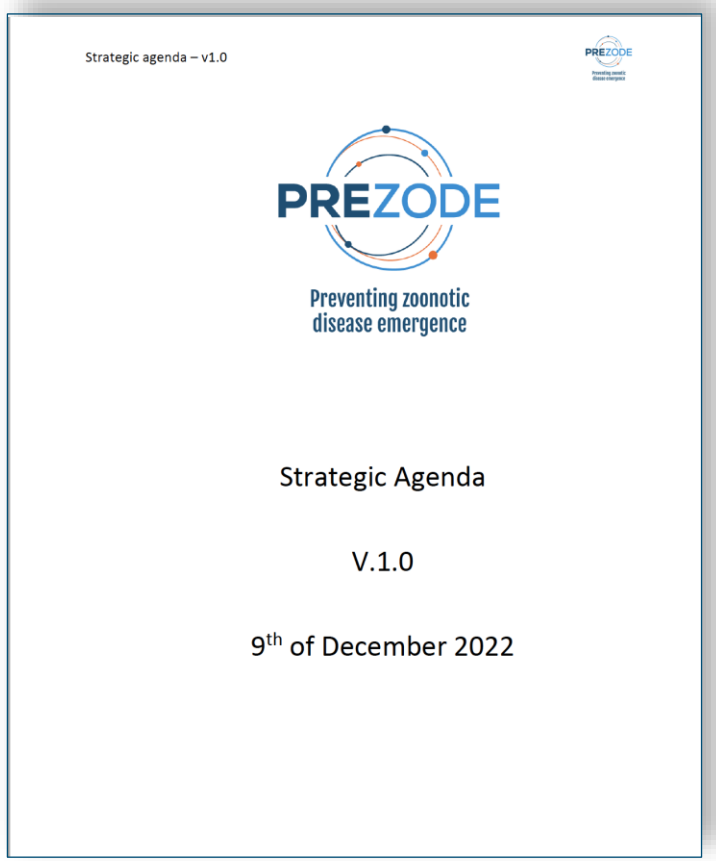
March 2023, 200 members

Of which 20 countries

STRATEGIC AGENDA

Vision, objective and action plan formalized around a single document: the strategic agenda

- Version 1.0 of the PREZODE strategic agenda was adopted by the members of the initiative in January 2023 (78 pages);
- It defines the vision, objectives and action plan of the initiative for the next 10 years.
- A document based on the synthesis of a broad consultation process organized from January 2021 to June 2022;



https://prezode.org/content/download/3922/38001/version/1/file/PREZODE_Strategic_Agenda.pdf

Co-construction and consultation process organized from January 2021 to June 2022

- Share a common vision of the initiative (objectives, expected impacts and obstacles)
- Identify the actors and the needs for changing practices
- Identify the activities to be implemented to promote these changes (research, operational, capacity, and policy needs).

1. Identification of key scientists and stakeholders, literature review

Blibliometric analysis

Mapping analysis

2. Consultation process through co-construction workshops

Regional workshops

International scientific workshops

3. Synthesis of ideas and first draft

PREZODE interim secretariat

PREZODE's member volunteers (Science Working Group)

4. Review and validation

Review: Workshop participants, key scientists and other initiatives

Final validation: Countries and organizations that officially joined the initiative

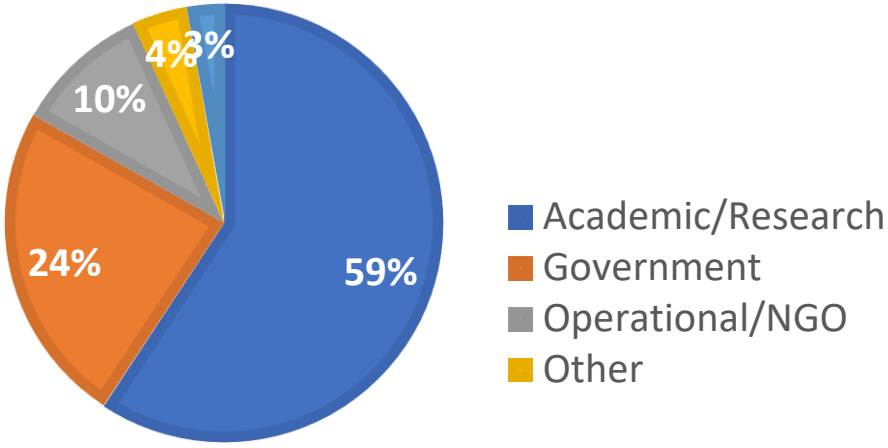
PREZODE Geographical distribution of participants in co-design process

In between 2021 and 2022, a series of workshops across the world to identify research and operational needs

~1600 Research and operational gaps

128 Countries

Made it possible to federate a community of professionals from different sectors



Regional workshops:

West Africa

Central Africa

Austral and Eastern Africa

Latin America, Caribbean

North Africa, Mediterranean, Middle East

Indian Ocean

South East Asia, East Asia, Pacific

Europe

USA, Canada

Replication Data for: PREZODE Strategic Agenda

Version 1.1

Manon Lounnas, Elisa Bohin, Paula Caceres, Nathalie Charbonnel, Christine Citti, Mariette Ducatez, Rudy Gozlan, Claire Guinat, Helena Ladreyt, Marie-Marie Olive, Jean-François Soussana*, Marisa Peyre*, Benjamin Roche*,
2022, "Replication Data for: PREZODE Strategic Agenda", https://doi.org/10.7910/DVN/2EB8AM, Harvard Dataverse, V1

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Description

Results of PREZODE's regional and international co-construction workshops to structure its Strategic Agenda (2022-12-08)

Subject

Medicine, Health and Life Sciences

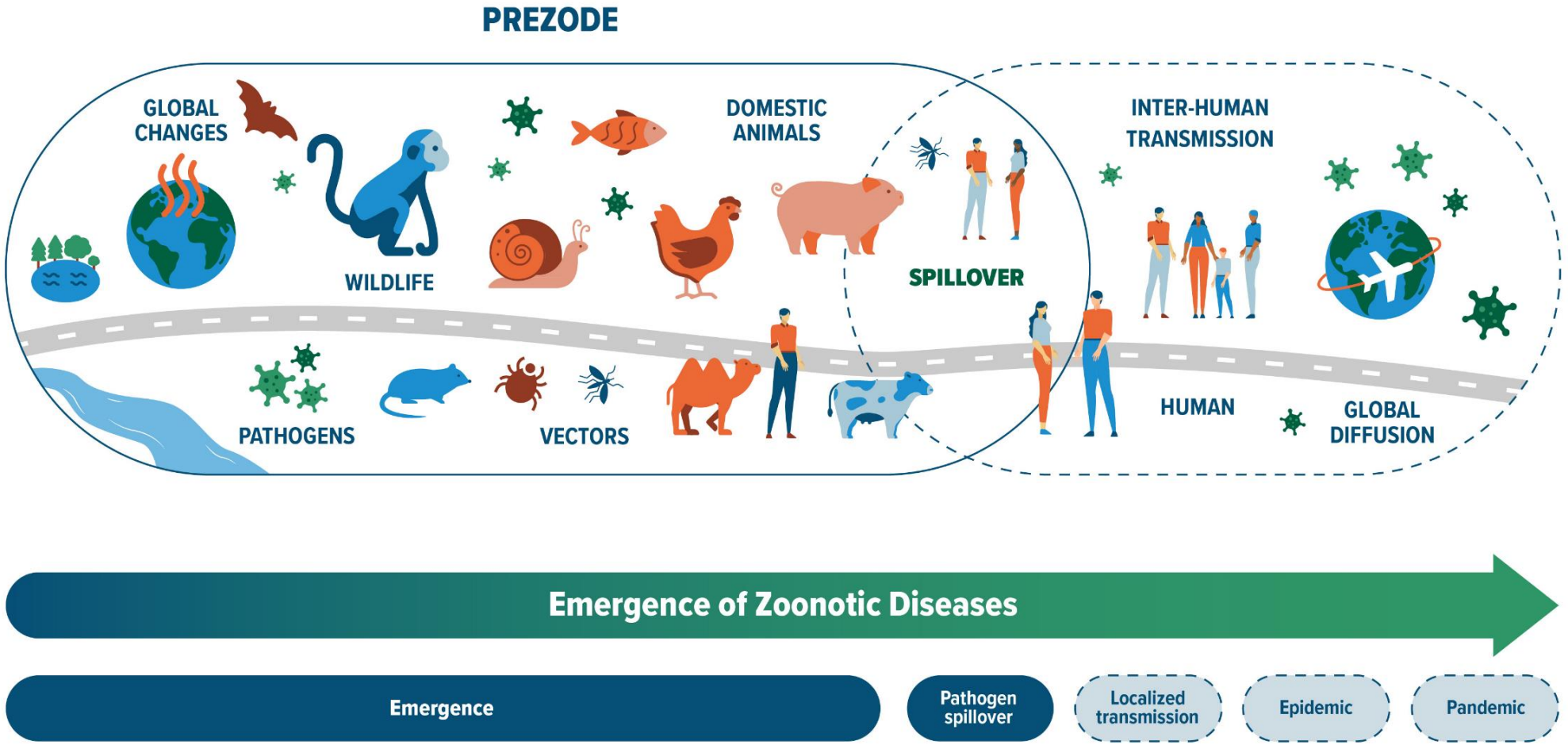
Keyword

Feedback workshop

Feedback

THE SCOPE OF PREZODE

PREZODE
Preventing zoonotic disease emergence



PILLAR 1

Understand zoonotic risks and risk activities

PILLAR 2

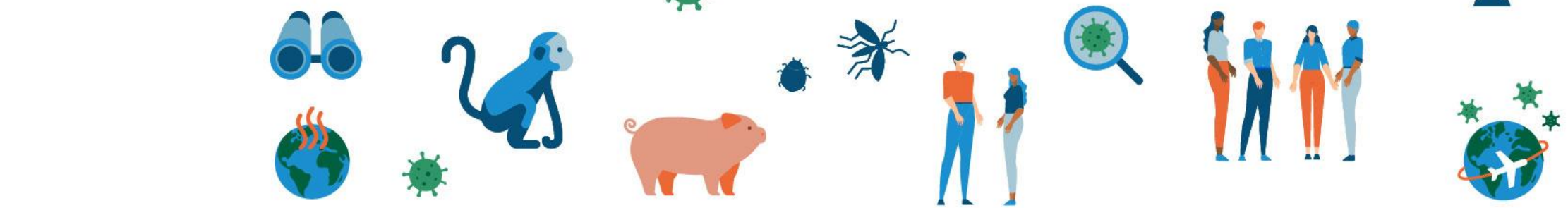
Co-design solutions to reduce zoonotic risks

PILLAR 3

Strengthen early warning system to detect zoonotic risks

PILLAR 4

Prototype a global information system for surveillance and early detection



PILLAR 5 (cross-cutting)

Engage stakeholders and co-design One Health networks and policies

HIGH-LEVEL ACTIONS (20)

PILLAR 1

Understand zoonotic risks and risk activities

1.1. Determine what is a zoonotic emergence risk

1.2. Understand the mechanisms and players in zoonose emergence

1.3. Understand the drivers leading to zoonotic emergence

1.4. Identify strategies to anticipate the risk and decrease spillover likelihood

PILLAR 2

Co-design solutions to reduce zoonotic risks

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PILLAR 2

Co-design solutions to reduce zoonotic risks

2.1. Use of ecosystem conservation to mitigate spillover

2.2. Regulate and trace commercial and non-commercial activities related to wildlife

2.3. Develop innovative systems of livestock management and agriculture

2.4. Design urban space taking zoonotic risk into account

2.5. Articulate between all the risk reduction strategies and engage actors

PILLAR 3

Strengthen early warning system to detect zoonotic risks

PILLAR 4

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PILLAR 3

Strengthen early warning system to detect zoonotic risks

3.1. Assess current surveillance systems and practices

3.2. Develop context specific and user-based surveillance systems

3.3. Develop innovation in surveillance protocols and diagnostic tools

PILLAR 4

Prototype a global information system for surveillance and early detection

HIGH-LEVEL ACTIONS (23)

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PILLAR 4

Prototype a global information system for surveillance and early detection

4.1. Interoperability and sustainability of surveillance systems and global standards

4.2. Define the type of surveillance and objectives and identify relevant indicators and data

4.3. Action plans linked with global surveillance

4.4. Strengthen infrastructures to operationalize global surveillance systems

4.5. Optimization efforts to avoid duplication

HIGH-LEVEL ACTIONS (23)

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PILLAR 5 (cross-cutting)

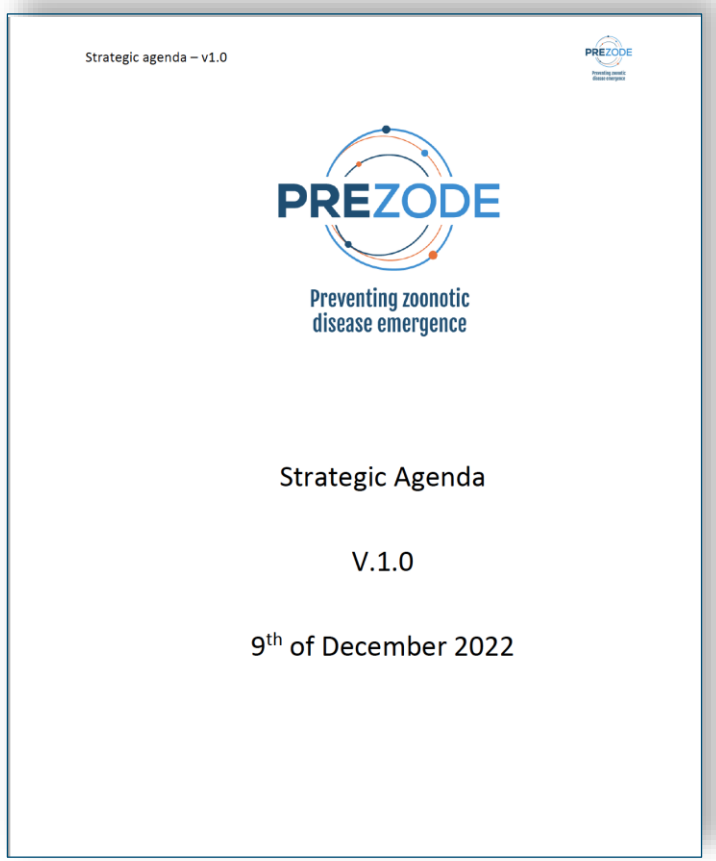
Engage stakeholders and co-design One Health networks and policies

5.1. Community involvement
5.2. Co-develop health networks and policies
5.3. Promote One Health approaches and intersectoral collaboration

STRATEGIC AGENDA

Vision, objective and action plan formalized around a single document: the strategic agenda

- Ethics and policies
- Evaluation of the impacts
  - Strategic agenda developed using the ex-ante Impact Evaluation method based on the Theory of change (Blundo-Canto et al. 2020. Joly et al. 2015)
- Key elements of Prezode
  - Governance
- Synchronization with the One Health Joint Plan of action



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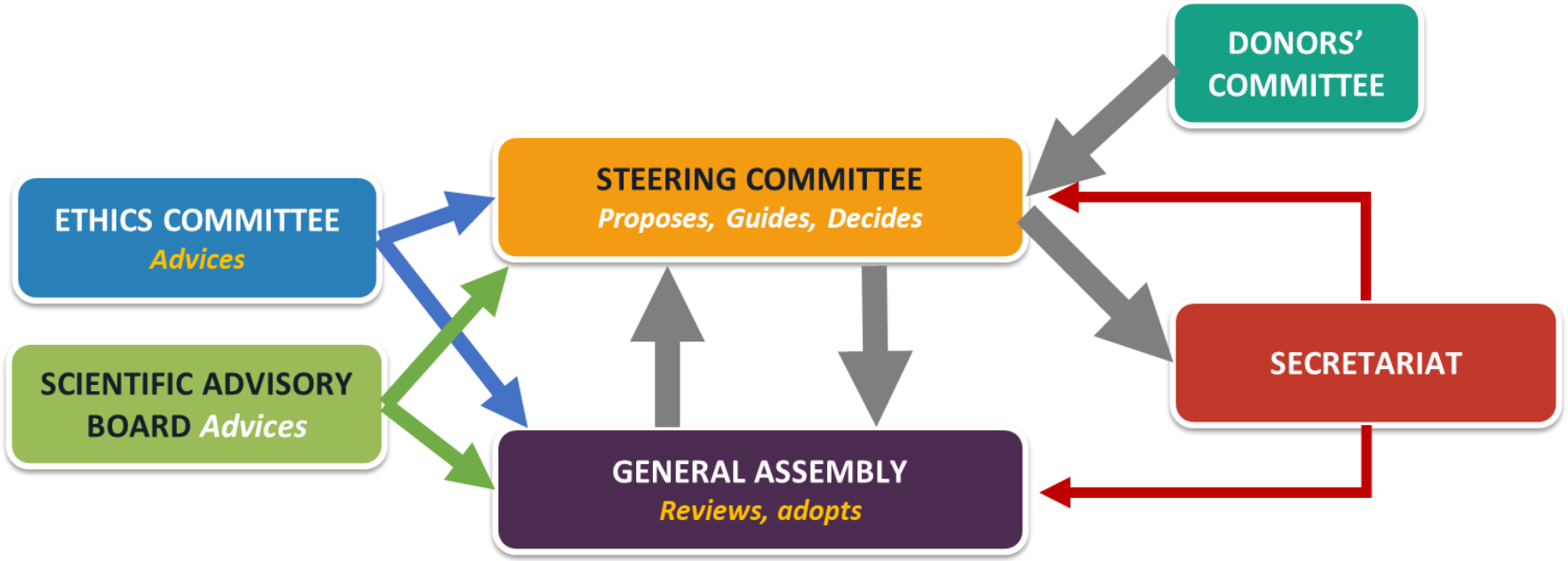
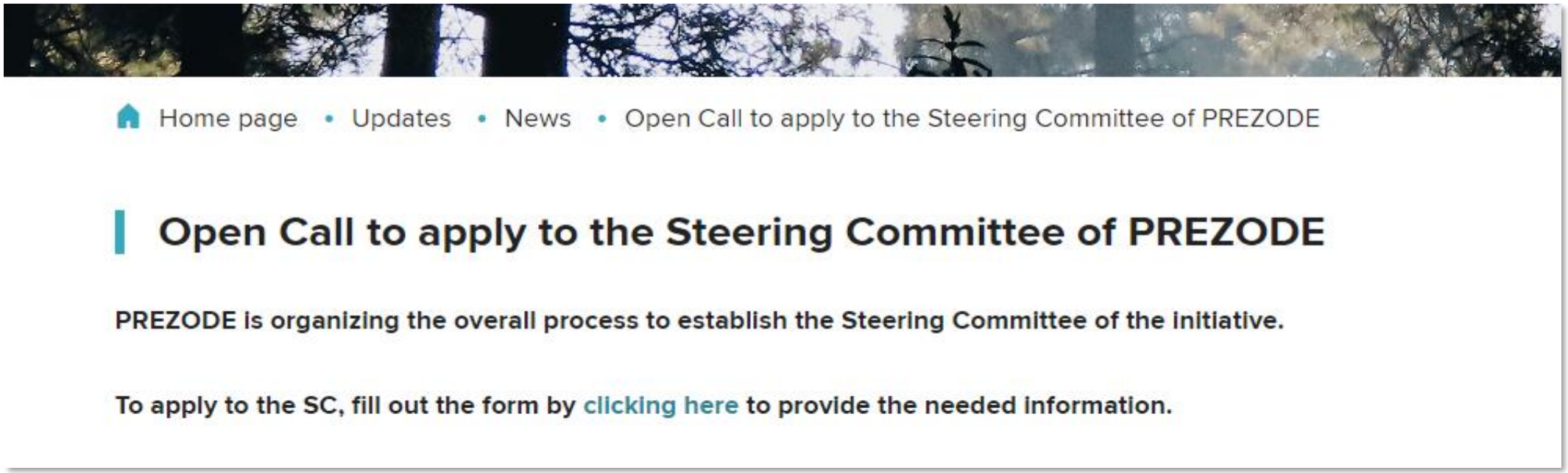
PREZODE GOUVERNANCE

- 1st PREZODE General assembly on October 11, 2022
- More than 220 attendees
- Adoption of the terms of reference for the governance of PREZODE

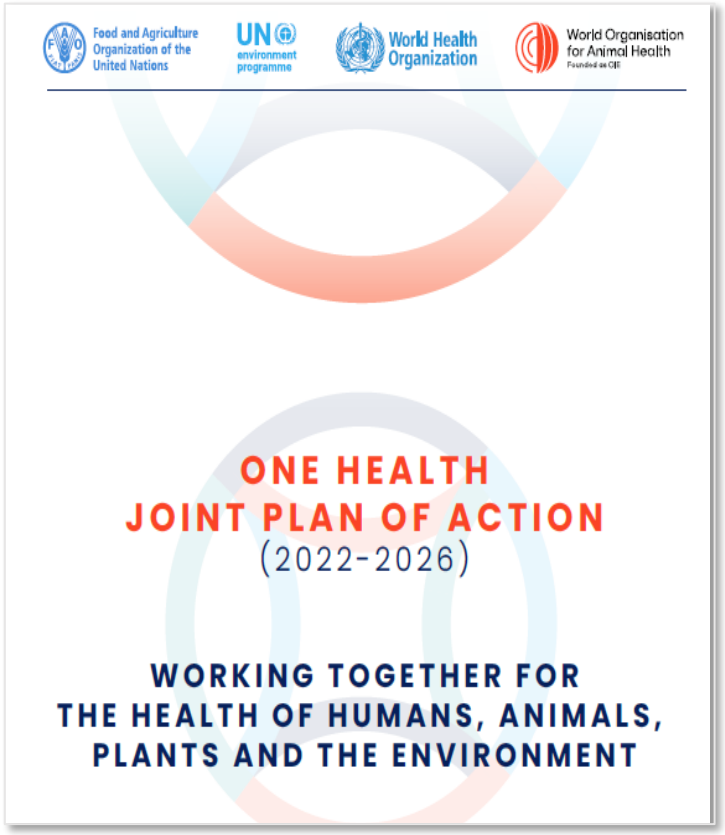
Recruitment process underway for the Secretary General: taking up the position planned for the start of Q2 2023
Launch of a call for applications for the various colleges of the steering committee: in progress





https://prezode.org/Updates/News2/Open-Call-to-apply-to-the-Steering-Committee-of-PREZODE

Synchronization with the One Health Joint Plan of action



We have identified several lines of actions of the OH-JPA (AT-1, -2, -3 and -6) that were also identified by PREZODE workshops.

- Action Track 1: Build One Health capacity to strengthen health systems
- Action Track 2: Reduce the risks associated with emerging and re-emerging zoonotic epidemics and pandemics
- Action Track 3: Control and eliminate tropical endemic zoonoses and neglected vector-borne diseases
- Action track 6: Integrate the environment into the One Health approach

Action tracks 4 and 5, dealing respectively with food safety risks and the relatively unnoticed spread of antimicrobial resistance, are not central to the scope of PREZODE, although synergies of by-products will inevitably emerge over the course of its development.

WHERE ARE WE?
WHAT ARE THE NEXT STEPS

- Framing the initiative
- Co-developing the initiative with all the relevants stakeholders
  - Regional co-design workshops
  - Scientific events

→ Strategic agenda

NEEDED

Establish links and actions to be implemented with the other initiatives and programs

Establish priorities in the series of actions to be implemented

2021

Co-construction of the initiative in link with the other programmes

Engagement by countries, international organizations, research and training actors, and other stakeholders

2022-2023

→ Strategic agenda V1

International governance

First implementation plan

Engagement by countries, international organizations and stakeholders

Inter OH initiative workshops

2024-2025

Second implementation plan

Targeting operational outcomes

A first joint WHO - PREZODE working group to develop emergence risk indicators (03/2023)

Co-chairs : Maria Van Kerkhove (WHO) et Benjamin Roche (PREZODE)

The WHO and PREZODE have announced the creation of **a joint working group** to establish a benchmark of **indicators for quantifying the risk of emergence of zoonotic diseases.**

The risks of emergence depend on multidimensional and multifactorial interactions (biological, socio-economic, climatic, land use, diversity of pathogens, livestock, animal trade, surveillance networks, etc.). It is therefore essential to define a precise and rigorous framework, in order to collect, complete and synthesize the data from the existing scientific literature and translate them into indicators.

Strategic agenda contributors

Workshop participants & Workshop facilitators, Regional focal points

Members of the Interim Secretariat

Manon Lounnas (IRD), Elisa Bohin (INRAE), Nathalie Charbonnel (INRAE), Christine Citti (INRAE), Mariette Ducatez (INRAE), Rudy Gozlan (IRD), Claire Guinat (INRAE), Helena Ladreyt (CIRAD), Marie-Marie Olive (CIRAD), Jean-François Soussana* (INRAE), Marisa Peyre* (CIRAD), Benjamin Roche* (IRD)

Members of the science working group

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Thank you

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