

Biodiversity Conservation to Mitigate the risks of emerging infectious diseases



This project has received funding under the European Union's Horizon Europe research and innovation programme under grant agreement No 101059483

Project Profile

- **Duration:** 1 August 2022 31 July 2026
- **Overall budget:** 4949614.55
- **EU contribution:** 4949614.55
- **Topics:** HORIZON-CL6-2021-BIODIV-01-11
- **Keywords:** Biodiversity, environmental health, nature conservation, participatory approach, disease emergence



Our partners

















University of Antwerp Evolutionary Ecology Group

HIOH HELMHOLTZ Institute for One Health











Current challenges



COVID-19 pandemic and the other repeated outbreaks

We are vulnerable to emerging infectious diseases (EIDs).



Tropical areas = hotspots of risky zoonotic pathogens

Areas with rich biodiversity have high risks for developing infections diseases.



Human activities in these hotspots are more intense

There are higher chances for pathogen transmissions between humans and wildlife.



How can we solve these global problems? At BCOMING project we aim to



Reduce the risk of infectious disease emergence in three biodiversity hotspots

Data collection and analysis

Develop a standardized data collection and analysis framework.

7 agent-based models

Develop seven agentbased models to support the creation of biodiversity conservation strategies and zoonotic disease surveillance systems.

Participatory learning process (CHaRL)

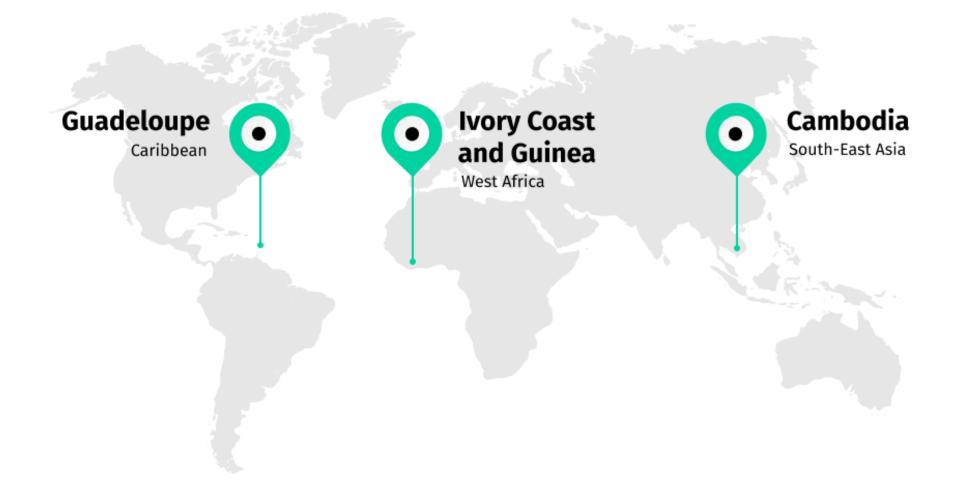
Ensure stakeholder engagement, raise awareness and collaboration with the allrelevant parties and communities.

Our mission

BCOMING, our Horizon Europe project, will concentrate its efforts to biodiversity hotspots which are declining due to human activities in order to understand, prevent and react to future pandemics.

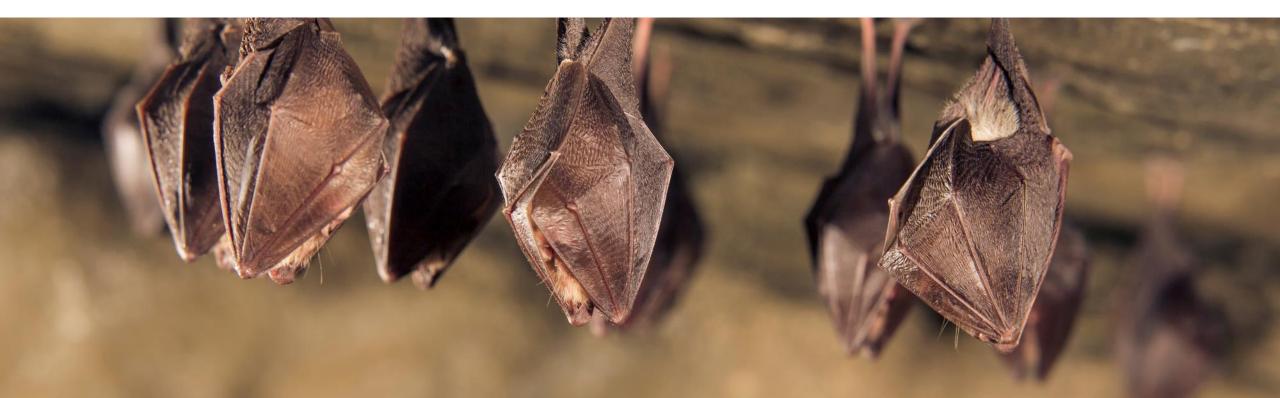


Our biodiversity hotspots



Our Sampling strategy

We will develop a coherent and consistent biological sampling strategy which will help us understand the factors that affect the wider spread of pathogens and discover how biodiversity influences the risk of zoonotic emergence.



Our tools

To empower stakeholders & local communities

> Mechanistic models

Will contribute to better risk mapping and forecasting of future emergences of zoonotic diseases

Pathogen detection tools & a rapid on-side detection tool Will allow a rapid identification of potential zoonotic pathogens; useful for local communities and healthcare workers

Agent-based models (ABMs) Will test diverse scenarios and improve understanding on effective One Health solutions and sustainable farming and forestry





Our integrated surveillance systems

- Will enhance collaborative surveillance strategies for avoiding zoonotic disease emergence and,
- Will be replicable to any biodiversity hotspot.





Our policies & strategies

BIODIVERSITY CONSERVATION STRATEGY

The strategy will integrate best practices and guidelines to reduce risk of disease emergence and transmission.

POLICY RECOMMENDATIONS

Specific policy recommendations and policy joint actions will improve biodiversity and support global biodiversity goals.

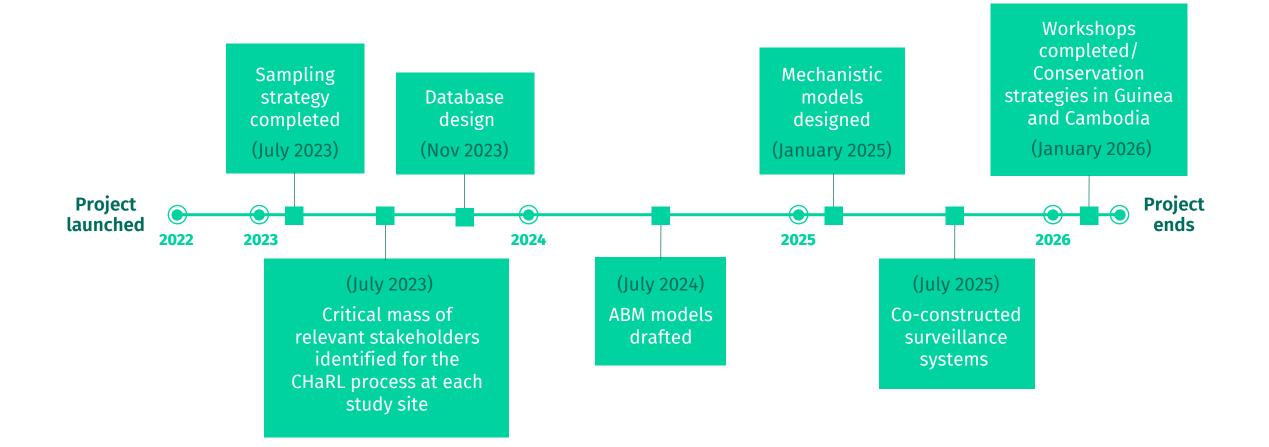


Our workshops

We will organize three participatory workshops in Guinea and Cambodia for stakeholders and local communities to help them preserve and protect biodiversity and get prepared for pandemics.



Project's Timeline





Follow us!

Twitter: <u>@BcomingEU</u> Facebook: <u>@BcomingEU</u> LinkedIn: <u>@BCOMING</u>



Thank you

PROJECT COORDINATOR: Julien Cappelle CIRAD Julien.cappelle@cirad.fr

PROJECT CO-CORDINATOR:

Gabriella Lovasz

Europa Media gabriella.lovasz@europamedia.org

