

## 6<sup>th</sup> Multi-stakeholder Forum on Science, Technology and Innovation for the Sustainable Development Goals 4-5 May 2021, UN HQ New York (virtual)

<https://sdgs.un.org/tfm/STIForum2021>

My statement is delivered on behalf of CIRAD, INRAE and IRD (PREZODE preparatory Committee).

For more than half a century, despite considerable advances in health sciences, the number of outbreaks of infectious diseases in humans, including zoonotic diseases, has increased exponentially in addition to being more globalized. Similarly, emerging infectious diseases (*i.e.* newly identified or previously unknown infections, which cause public health problems) or re-emerging diseases have become more frequent. With 75% of emerging human infectious diseases derived from animal hosts, these emergencies are indicators of our relationship with animals and the environment: the risk of emergence is increased by more frequent interactions between humans and animals, the erosion of biodiversity and the alteration of ecosystems (deforestation, intensive agriculture, ...). At the same time, the over-use of antimicrobials against infectious diseases has triggered the rise of anti-microbial resistance, which decreases our capacity to combat infectious diseases.

Thus, zoonoses represent a substantial threat to global health, and they have caused economic damages exceeding hundreds of billions of US dollars in the past 20 years. According to the World Bank, six major outbreaks of highly fatal zoonoses between 1997 and 2009 (Nipah virus, West Nile Fever, SARS-CoV-1, HPAI, BSE and Rift Valley Fever) cost the global economy at least 80 billions of US dollars. It is estimated that the COVID-19 pandemic alone has already cost more than 11,7 trillion dollars.

The response strategies to emergence, which seek to mitigate the spread of diseases and their impact in human populations are clearly important but arrive too late. To lower the burden of zoonoses and emerging zoonoses, and to **prevent future pandemics**, we need to understand the drivers of emergence and intervene before they occur. Zoonotic emergencies result from a complex set of relationships. Furthermore, re-orienting current human actions to limit their detrimental impacts is a very difficult challenge. This situation calls for ambitious scientific and operational programs dedicated to the prevention of zoonotic diseases emergence and spread. There is an urgent need for more international cooperation, action and ambition to **understand the risks of emergence of zoonotic infectious diseases, to develop and implement innovative methods to improve prevention, early detection and resilience in order to ensure rapid response to the risks of emerging infectious diseases of animal origin**. In line with the recommendations of the report on biodiversity and pandemics published by IPBES (2020) and UN agenda on biodiversity (e.g., COP15), these initiatives will support science-based policies aiming at risk mitigation of zoonotic diseases emergence, and policies contributing to the more overall **Sustainable Development Goals (SDGs) and Agenda 2030**.

One of these initiatives is the PREZODE initiative (**Preventing Zoonotic Diseases Emergence**), which was launched on the occasion of the One Planet Summit on January 11th 2021 by the French President with the support of the president of the European Commission and of the FAO and in articulation with the Tripartite+. PREZODE will strengthen existing cooperation between the different world regions most affected by these risks. The initiative aims to propose a framework for coordinating research projects, monitoring networks and operational projects in order to strengthen this continuum and thus maximize their impact. It also aims to serve as a platform for sharing knowledge acquired through past, current and future projects and capitalizing on experiments in different regions of the world. The

gathered resources will thus be available to decision-makers to enable the implementation of public policies to reduce the risk of emergence of zoonotic infectious diseases.

PREZODE will contribute to the coordination a large portfolio of regional, national and international projects and programs concerning the emergence of zoonotic infectious diseases and implement innovative methods to **improve prevention and mitigate emergence risks**. These activities will be performed in close collaboration with the One-Health High Level Expert Panel announced on 12 November 2020 at the Paris Peace Forum. And all relevant other projects and programs already existing on the field or under preparation will also be invited to join this initiative.

**Together we must now apply what the Covid-19 crisis has taught us. Prevention is absolutely necessary: we must invest in knowledge, science, and education in order to design more pandemic resistant and resilient socio-ecosystems for the future.**

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