



ONE FOREST SUMMIT
 Gabon, 1-3 Mar 2023

Deforestation & Prevention of Zoonotic Disease Emergence in South-East Asia

Pham Duc PHUC, MD., PhD.

Vietnam One Health University Network (VOHUN)

Center for Public Health and Ecosystem Research (CENPHER)

Institute of Environmental Health and Sustainable Development (IEHSD)

Mobile phone: +84 90 404 9969

Email: pdp@vohun.org; pdp@huph.edu.vn; phucpdp@iehsd.vn



Deforestation in SEA

- Nowhere in the world are forests shrinking faster than in SEA
 - According to the UN FAO, between 1990 and 2010, SEA's forest cover was reduced from 268 million ha to 236 million ha (OR lost 32 million ha)
 - Land clearing for agriculture is the main cause of deforestation (e.g. Palm oil); and forest fires
 - **In Vietnam:** > 27,260 cases of deforestation were reported annually from 2011 to 2015 with 2,640 ha of forest destroyed each year.
- Deforestation destroys the habitats of iconic large mammals such as the orang-utan and tiger, as well as thousands of lesser-known animal and plant species;
- It also contributes to climate change.
- Smoke from fires on forested and cleared land causes economic disruption and thousands of premature deaths.
- Increasing emerging & re-emerging zoonotic diseases.

Deforestation & Zoonotic Diseases in SEA

- SEA have been at the center of global attention regarding Emerging Infectious Diseases (EIDs); **> 60% of global EIDs are zoonoses.**
- Zoonotic diseases are on the rise, as the world continues to see **unprecedented destruction of wild habitats by human activity.**
- Increased contact between wildlife and humans, between wildlife and livestock, or between previously separated wildlife species, **is a potential zoonotic risk situation.**
- Changes in human ecology (human encroachment on wildlife habitat and an increase in wildlife trade) **have spurred the increased emergence of such situations.**
- Several factors that significantly contribute to the potential emergence of zoonotic diseases come together in SEA to **make this region a zoonotic hotspot.**

Reduce Deforestation to Prevent Zoonoses in SEA

- 1. Change of mind-set:** Growing awareness of the need for sustainable development, both as an economic and an environmental imperative, has encouraged a gradual change of mind-set in SEA.
Deforestation is increasingly seen as a serious problem; governments and other stakeholders are now making determined efforts to tackle it.
- SEA countries have signed up to a series of international commitments, including the 1994 UN Framework Convention on Climate Change (UNFCCC).
Given that forests play a major role in climate change, the parties to the convention negotiated REDD+ (Reduced Emissions from Deforestation and Forest Degradation)
- Ensure involvement of ministries responsible for **environment, health and public security** in the development and implementation of regulations.
- Ensure that **finances, criminal penalties and license revocation measures** are strict enough to be effective.
- Strengthening the **land rights of local people** through people-centered forestry can reduce the risks of viral epidemics driven by deforestation.
- Humans and nature are part of one connected system**, and we need to understand how it works.
- The links **between habitat destruction, global biodiversity loss, and human health** must be given greater weight in global health care.
- We need to **break up any silo thinking and tackle these challenges** in a more interdisciplinary way (**ONE HEALTH**)



THANK YOU VERY MUCH!