Workshop 1 - Virtual

20, 24, 25 May 2022

INGSA-Asia Regional Chapter and the U.S. National Academies of Sciences, Engineering, and Medicine (NASEM) co-organized a series of workshops to engage professionals, experts and key scientific and policy representatives involved in the live animal supply chain in the Southeast Asian region. The objective of the first workshop (held virtually on the 20th, 24th, and 25th of May 2022) was to investigate the factors associated with zoonotic spillover risk in the live animal supply chain in the Southeast Asian region, as well as to understand the barriers to risk mitigation.

At the first workshop invited participants who are leaders, stakeholders, and policy makers in various fields such as wildlife conservation, veterinary medicine, virology, microbiology, agriculture, and food safety, provided perspectives on the challenges and strategies used to prevent zoonotic disease spillover in the region. The workshop featured four keynotes on (i) understanding zoonotic spillover and critical animal-human points of contact; (ii) an overview of the live animal value chain in the region; (iii) historic and ongoing international, regional, and national zoonotic disease mitigation efforts; and (iv) contemporary scientific knowledge and scientific innovations relevant to zoonotic spillover. The keynotes were delivered by representatives from various regions, including Professor Linfa Wang, the Executive Director of the Programme for PREPARE, Singapore; Dr. Kelvin Lim, the Director of the National Parks Board, Singapore; Professor Wondwossen Gebreyes, the Executive Director of the Global One Health Initiative at The Ohio State University; Professor Woutrina Smith, a Professor of Infectious Disease Epidemiology at the University of California; Professor George Gao, the Director of the Chinese Center for Disease Control and Prevention in Beijing, China; and Professor Gregory Gray from the University of Texas Medical Branch in Galveston.

Across several interactive breakout session discussions, participants from different international networks, private and government organizations, and research institutes offered their perspectives and experience on countering zoonotic disease as well as exchanged ideas on implementing comprehensive One Health strategies for zoonotic disease surveillance, response, preparedness, and prevention in countries across the region. The breakout discussions highlighted some critical issues associated with mitigating zoonotic spillover in the region:

- There was a broad agreement that effective strategies to control zoonotic spillover along the animal value chain must be multilevel, multisectoral, multidisciplinary and integrated across the region.
- Communication strategies that involve all sectors from research institutions to industry are critical for effective outbreak management.

- The effects of anthropogenic disturbances and land-changes, which are among the major drivers of zoonotic spillover but remain understudied, need to be analysed and integrated in studies on animal movement and trade.
- Some of the participants called for the standardization of regulations and guidelines for research institutions and laboratories to improve cooperation during an outbreak.

The second workshop, which will take place in July 2022, will build on the output of the first workshop and aims to identify actionable, evidence-based methods for reducing the risk of zoonotic spillover and pathogen transmission. Additional workshops in the Fall of 2022 will allow the participants to meet with key local, national, and regional stakeholders and to consider their specific needs to inform policy decisions. The participants will also discuss approaches and innovative ideas to achieve social, commercial, institutional, and governmental buy-in from those stakeholders. The end goal of the project is to generate a collectively produced guidebook and derived material to assist partner organizations to prevent and mitigate zoonotic spillover of High Consequence Pathogens in the region and more broadly to prevent future pandemics.