ASEAN One Health Efforts: Tackling the Intersections of Climate Change and Health

By Danielle Lynn Goh

SYNOPSIS

Climate change and global warming are adversely impacting the environment, and, in turn, human health. Southeast Asia is especially vulnerable. ASEAN policymakers must prioritise regional cooperation to address these challenges. ASEAN’s One Health approach is a good starting point.

COMMENTARY

Climate change has resulted in rising temperatures across the globe. The World Meteorological Organisation found that 2023 was the warmest year on record globally and that temperatures will continue to increase. For Southeast Asia, temperatures have risen to record levels in the last year: Thailand reached 45°C, Laos 42.7°C, Myanmar 44°C, and Singapore 37°C.

Rising global temperatures have impacted infectious diseases, giving rise to new diseases such as COVID-19 and SARS, increasing vector-borne, water-borne and food-borne diseases, and contributing to antimicrobial resistance.

Climate Change and the Rise of Zoonotic Diseases

Of significant concern is the rise in zoonotic diseases, which are infections transmitted between people and vertebrates. Notable examples of such diseases include SARS, COVID-19, Ebola, Avian influenza, and several strains of dengue and malaria. Zoonotic disease transmissions commonly occur with changes in patterns of contact between wild and domestic animals, and direct human and wild animal contact, exacerbated by high rates of ecosystem disruption and biodiversity loss.

In Malaysia, the rise of zoonotic malaria cases last year, fuelled by climate change
and deforestation from agriculture, logging and other human activity, placed the spotlight on the linkages between ecological and human health. This strain of zoonotic malaria, *P. knowlesi*, carried by macaques and transmitted by mosquitoes, has increased across Southeast Asia and become the dominant strain of malaria in Malaysia. Zoonotic malaria has also surfaced in Indonesia and is a serious concern.

**One Health and ASEAN**

ASEAN has made significant progress in terms of managing infectious diseases. Experts have observed that ASEAN adopts a securitisation approach to preventing and containing infectious diseases. For instance, following the SARS epidemic in 2003, numerous outbreaks of Avian influenza, and the recent COVID-19 pandemic, ASEAN has steadily built up its regional policies and mechanisms to respond to infectious diseases.

In 2022, ASEAN health ministers agreed to establish the ASEAN Centre for Public Health Emergencies and Emerging Diseases (ACPHEED) to prepare for the next pandemic and prevent the spread of communicable diseases. ACPHEED’s three pillars are surveillance or detection, response, and risk management, and its working principles would be similar to those of the Centers for Disease Control and Prevention (CDC) in the US.

In terms of dealing with zoonotic diseases, ASEAN established the ASEAN Coordinating Centre for Animal Health and Zoonosis (ACCAHZ) in 2016 and developed the 2021 ASEAN Strategy for Exotic, Emerging, Re-Emerging Diseases and Animal Health Emergencies. The bloc also recognises the importance of a One Health approach in tackling the issue as evident in the 2021 ASEAN Strategy and the 2022 ASEAN Strategy for Preventing Transmission of Zoonotic Diseases from Wildlife Trade.

Ongoing and future developments include the ASEAN One Health Joint Plan of Action which would map out regional and national targets and encourage closer collaboration across sectors on human, animal, plant and environmental health, and food safety.

At the national level, ASEAN member states have also adopted One Health approaches. For example, Singapore has a One Health framework since 2012 that brings together five agencies: the Ministry of Health (MOH), the National Environment Agency (NEA), the National Parks Board (NParks), the Singapore Food Agency (SFA), and the Public Utilities Board (PUB).

Likewise, Indonesia has adopted the One Health strategy and has developed a One Health information-sharing platform called SIZE Nasional to improve disease surveillance, contact tracing, and response. Thailand too has organised One Health training workshops to equip the One Health epidemiological teams at the province and district levels.

At the ASEAN One Health Network and Joint Plan of Action launch on 19 June 2024, there were discussions to integrate the environment into the One Health approach. This is a good initiative as protecting the environment will also contribute to the well-being and health of communities.
Recommendations

ASEAN’s experience with SARS and the COVID-19 pandemic has enabled it to make significant advances in the cooperation needed to tackle infectious diseases, including zoonotic ones. This cooperation should also be extended to public health systems, specifically to systems to tackle heat-related and waterborne diseases in line with the United Nations’ Sustainable Development Goals (SDGs).

Climate change has far-reaching impacts on health and the environment. Southeast Asia is one of the regions most vulnerable to climate change and climate-related disasters.

It is therefore vital that ASEAN prioritises the issue of climate change and makes progress to achieve the United Nations Framework Convention on Climate Change (UNFCCC) and the Paris Agreement goals to reduce greenhouse gas emissions. The wide-ranging impacts of climate change across multiple sectors and the need for cross-sectoral collaboration involving numerous stakeholders, ASEAN bodies, and experts from various fields are expected to be challenging. Nevertheless, ASEAN has taken steps to facilitate this process through its One Health efforts, including the One Health Network, One Health High-Level Expert Panel and One Health Joint Plan of Action (2022-2026).

In February this year, biodiversity and health experts from ASEAN met to exchange views and align efforts for One Health implementation. Such collaboration is essential. For example, the ASEAN health sector needs to continue synergising efforts with the ASEAN Centre for Biodiversity and the ASEAN working groups on environmental cooperation.

Conclusion

As the ASEAN One Health declaration was signed only last year, it would require more time for the organisation to develop, coordinate and execute its plans. A strategic focus on climate change and its impacts on health and the environment is paramount for the region’s security. Policymakers need to prioritise regional cooperation to address these issues.

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