



#### 4. Strengthening One Health Collaboration in the Green Recovery to Prevent the Next Pandemic

The GMS is within a global hotspot for emergence of new, previously unknown infectious diseases in humans or animals. COVID-19 is the most recent example of one of these emerging infectious diseases (EIDs). Most infectious agents with the potential to emerge as new or expanding diseases in humans are ‘zoonotic’, with the ability to infect both humans and animals. These kinds of infectious agents particularly occur in wildlife, although a significant minority arise in domestic animals.

This complex interaction between emerging infectious zoonotic diseases and the processes that bring them into contact with domestic animals and humans is the domain of ‘One Health’. One Health seeks to address more than just emerging infectious diseases. However, in the aftermath of COVID-19 and other potential pandemic diseases such as SARS and highly pathogenic avian influenza, a key focus of One Health is working to understand why infectious diseases emerge at this ‘human-animal-environment’ interface, and how joint efforts across sectors can prevent and respond to these new diseases in efficient and sustainable ways.

The GMS has made progress in tackling several existing zoonotic diseases, such as rabies and highly pathogenic avian influenza, but these efforts have not been comprehensively expanded to EIDs nationally or regionally. In particular, efforts to stop EIDs by targeting surveillance or preventive actions at critical points of emergence are patchy and need strengthening.

The spillover of new infectious diseases from domestic animals or wildlife into humans is particularly likely to occur where there are changes in:

- Landscapes (e.g. deforestation)
- Land uses (e.g. growing crops in former forest areas)
- Systems of animal production (e.g. more intensive farming systems)
- Patterns of animal use (e.g. trade and consumption of wildlife), or
- Human populations (e.g. increased populations and/or density)

One Health involves closer cooperation between sectors—especially human health, livestock, agriculture and the environment—to achieve any added value in terms of better health and well-being for humans and animals, financial savings and improved environmental services, compared to working alone. Conventional One Health approaches often put human health outcomes first, regardless of the impacts or needs of other sectors or potential additional benefits that could be delivered to non-health sectors. In the GMS, the environment sector is often engaged less than other sectors, even though it is the critical origin of many EIDs. Similarly, the focus of the livestock and agriculture sectors on productivity tends to place less emphasis on food safety or value chain management, let alone incorporating plans to prevent EIDs. If a more holistic approach is taken to One Health, there is the potential to deliver benefits across multiple sectors as well as reducing the risk of EIDs more effectively.

There is a real risk that post-COVID-19 recovery efforts and economic development will affect the factors listed above in ways that make new disease emergence even more likely. Even before the pandemic, the sectors active at the human-animal-environment interface brought with them diverse, pre-existing objectives, such as developing human livelihoods and health, increased agricultural and livestock production, and conservation and natural resource management. There is no guarantee that sectoral objectives and priorities in the post-pandemic recovery will be aligned or work to reduce the risk of new diseases emerging in the GMS.

On the other hand, using One Health to support a 'green recovery' in the GMS can provide the opportunity to bring sectors together more effectively to work together to reduce the threat of new disease emergence.