

Wildlife trade and Covid-19

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If SARS has not taught a lesson for China to tackle its rampant wildlife trade problem, Covid-19 probably will.

More than one million people have now lost their lives to Covid-19, and record-high economic loss has sent world economy into recession.

Few would have predicted an invisible virus, jumped species from a wildlife carrier to human, has been able to devastate the world to this grand scale.

Based on research by Beijing Shanshui Conservation Center, in 2017, the total value of China's legal wildlife industry was estimated at around 560 billion RMB (about 80 million Euros). Even such a figure would be dwarfed by trillions of dollars loss up to date globally due to the pandemic.

The wildlife trade in China is daunting. What made it worse is growing illegal wildlife trade which casting a grave picture for endangered species. Initially the poaching of its own wildlife within China's boundary, but gradually, adjacent Southeast Asia fell victim of China's appetite. Domino like, South Asia and Africa subsequently fell as supply bases of endangered species and its products, such as tiger skin, rhino horn and ivory.

In middle of 1990s, an investigation by Beijing Zoological Institute found an average of around eight tons of turtle and tortoise species were being smuggled to China from Vietnam-Guangxi border towns every day. In recent years, Pangolin became a popular target due to the demand for its scales and meat.

Wet markets exist in China and many southeast Asia countries as a convenient food market. The choice of using wet markets by consumers has several reasons. Most of commodities sold in wet markets are relative cheap. Customers also regard the meat and fishery products sold in wet markets are fresh, thus being regarded as a healthier option. While comparing to large supermarket, which often owned and operated by big brands, wet market is a place while food supply chain has been shortened.

Various animals, sometimes wildlife, are kept in proximity, which makes such

marketplace a prolific source of emerging zoonotic diseases. Close encounter with human creates a perfect storm for an animals-specific virus to mutate and jump to human. Pangolins, which was brought to spotlight as potential transmitters of COVID-19, has been heavily poached and smuggled to China.

Of documented infectious diseases, approximately 60% derive from animals, and 70% of animal-origin diseases come from wildlife.

Wildlife is also believed to have higher risk than farmed animals in terms of viral emergence. Illegal smuggled and sold wildlife is impossible to be determined its providence and health conditions. Most of wild caught animals are inevitably either sick or stressed.

However, as SARS pandemic in 2003 showed, even legal wildlife trade, such as civet cats, has amplified zoonotic diseases and their transmission to humans, leading to the first pandemic of the 21st century.

Later outbreaks of avian influenza strains H5N1 and H7N9 have not only been linked to associated sanitation issues, but also biodiversity loss through deforestation and livestock production.

Human population density in the urban areas contributes to the spread of zoonotic diseases. In 2003, Hong Kong played an important role in spreading the SARS to international community due to its extensive flight connections. Nowadays, Chinese cities such as Wuhan, Chengdu, Guangzhou have become as cosmopolitan as Hong Kong 17 years ago.

Rapid development of high-speed railway network and exploding air travels in China further propelled the spread of emerging COVID-19 across the country. The connectivity China experienced with other countries under the Belt and Road Initiative enabled the virus spread further beyond its border.

While China aspires to be world's leading economy, the current health crisis clearly demonstrates a necessity for China to install effective measures to prevent emergence of new infectious diseases and their spread alongside its economic routes.

China saw many previous diseases connected with wet market that sold livestock. Being a central space for close contact between humans, livestock, and wild

animals in China, wet markets are expected to remain a source of disease emergence and transmission. Since wet markets will unlikely disappear, the measure should eye at public health and safety measures.

China has just passed a new law governing biosafety issues. Its Wildlife Protection Law also needs to be strictly enforced to protect biological diversity. Current heavy-handed mitigation should transition to effective measures ensuring elimination of illegal wildlife trade. China needs to address unsanitary environment of wet markets, inhumane conditions animals are kept both in market and at farms, and improve health and safety guidelines for workers and consumers. Chinese government needs to realize biodiversity conservation and ecological security are a central piece of is national security.