Policy Issues Related to Zoonotic Disease Emergence from Wild Animal Farming and Trade in Viet Nam

SUMMARY FINDINGS
INTRODUCTION

Wildlife farming and trade are practiced in Viet Nam. These industries are recognized as a possible source of disease emergence risk, based on the conditions for wild animal harvest, rearing, transport, and processing. To determine the state of knowledge of this topic to support policy decisions and inform risk reduction strategies, a literature review and in-depth interviews were conducted in Viet Nam in 2022. The summary of findings presented here intend to provide a basis for further dialogue, both to validate and refine findings and identify practical solutions to address priority gaps.

METHODS

Legal documents and publications and reports were searched and reviewed in Vietnamese and English. In-depth interviews were conducted among the leaders and specialists from animal health and forestry management sectors working on wildlife farming and zoonotic disease issues at the national, provincial, and district levels in Viet Nam.

POLICY AND PRACTICE GAPS

Regulated species

At present, there are two types of listings of government-regulated species: 1) those under CITES Appendix I and II, 2) those categorized as endangered precious and rare wild fauna species for farming and protection in Viet Nam. There are no lists of wild species in the trade specifically regulated in the country on the basis of zoonotic disease risk.

Capacity and mandates

There are fragmented mandates and limited capacity in terms of human resources, information, and knowledge to support animal disease management under the authority of the forestry department, existing regulations also prioritize zoonotic diseases of relevance to domestic animals. Meanwhile, the animal health sector lacks information about wildlife farms, including access to the wildlife farm database managed by forestry sector.

Knowledge and awareness

Knowledge, technical skills, and corresponding guidance for biosecurity and veterinary care in wildlife farming is generally insufficient. These result in disincentives and practical concerns about dangers from handling wild animals (e.g., bites, scratches) and liability for any problems perceived to be caused to animals by authorities since wildlife farms are valued properties of households. This is also related to the limited awareness, particularly among farmers and forestry sector, about existing pathogens that may or may not lead to apparent illnesses but need to be considered in risk assessment. These awareness factors impede implementation of disease prevention, monitoring, and control measures.
Government stakeholders clearly recognized the existing gaps and expressed strong interest in improved management of zoonotic disease risk in the wildlife trade and farming. Correspondingly, Viet Nam is encouraged to pursue a systematic approach to monitoring and managing disease risk in the wildlife trade in line with the forthcoming *WOAH Guidelines for Reducing Spillover Risk in Wildlife Trade*. Actions that will contribute to this include:

- Establish a continuous information flow mechanism between forestry and animal health departments.
- Conduct risk assessments based on specific taxonomic groups and value chain contexts, to allow for more precise understanding of the levels of risk (including information gaps) and prioritization of management measures.
- Design a plan for systematic monitoring and surveillance for pathogens, diseases, and wildlife species in wildlife farming and trade (with corresponding investment and sustained financing as needed), to address knowledge gaps, enable early detection of threats, and monitor effectiveness of interventions.
- Develop a list of species (or broader taxonomic groups) regulated on the basis of disease risk. For example, in the U.S. the Centers for Disease Control and Prevention regulates importation and trade of bats, primates, and some rodent species on the basis of risk to public health, apart from other agencies’ species listings on conservation or invasive species considerations.

Contributions to livelihoods and species conservation are often cited as a rationale for wildlife farming. Indeed, economic incomes were discussed as the primary incentive/driver for wildlife farming in this study, while conservation was seldom mentioned. There is a clear need to better examine and assess the possible trade-offs and benefits of the industry in Viet Nam with a multi-sectoral approach, including to what (if any) extent which economic conditions are improved by this industry compared to other livelihood opportunities, any positive or negative impact of wildlife farming on conservation outcomes in Viet Nam, and any unassessed burden of disease and economic cost to households (for medical care, lost productivity, deaths) linked to wildlife farming or other wildlife trade activities.

**Economic and conservation value**

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**Scope**

The wildlife farming and trade chain in Viet Nam involves many different practices and contexts, each of which may have different implications for disease risks. For example: Sourcing of free-ranging animals from the wild; wildlife breeding; the site placement of farms; the mixing of animals from same or different populations and/or species; slaughter on or off-site; biosecurity status; hygiene measures; and different occupational risk practices (e.g., use of personal protective equipment). While complex, the variation in practices also offers opportunity for targeted interventions and regulations along the value chain.

**PRIORITY ACTIONS**

Viet Nam is not unique in many of the above challenges; however, the scale and scope of wildlife farming and trade in Viet Nam warrant specific and increased attention to disease risks.
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The full report is openly available upon request (please contact: li@ecohealthalliance.org and klawson@oucru.org).