Drivers of human-wildlife interactions: A case study of wildlife value chains in Vietnam

Pham Duc Phuc, Nguyen Ngoc Ha, Ngo Hoang Tuan Hai and Thinh Nguyen

Introduction

The COVID-19 global pandemic, which may have originated in wildlife, has led to the death of millions of people and caused adverse impacts to livelihoods, society, and economies across the world. In Vietnam, wildlife is commonly traded for various purposes by a diverse range of actors who could be vectors for the spread of zoonotic diseases from wildlife. A wide range of interventions has been employed by the government to change practices related to the commercial trade and consumption of wildlife in Vietnam with a focus on tightening the laws and regulations, enhancing enforcement, and imposing penalties, etc. However, the effectiveness of these interventions is still unproven, especially because of limited knowledge of the drivers of the participation and decision-making of those engaged in the wildlife value chain in the country.

Under the ‘Dynamics of wildlife trade and wildlife policy implementation in Vietnam’ project, which is funded by the CGIAR-COVID-19 Hub, a study was done, in 2021, to understand the drivers of actors’ involvement in the wildlife value chains in Vietnam. Its specific objectives were to:

i. spatially ground where wildlife trade is occurring

ii. identify actors who are involved in hunting/raising and trading wildlife;

iii. understand economic, cultural, etc. drivers of these actors; and

iv. propose leverage points for change.

Findings from the study were expected to support the government and practitioners to design necessary actions for the prevention of future zoonotic diseases related to wildlife.
Materials and methods

The study focused on legal wildlife value chains with wildlife species traded from captive wildlife facilities. Dong Thap Province was selected given its scale of captive breeding facilities and trading operation, diversity of traded wildlife species, and existing strong partnership with local government and local partners to facilitate the study (Figure 1).

Data was collected in November 2021 through three activities, including an online survey with 24 local experts at management levels, key informant interviews (KII) with 28 value chain actors, and a consultation workshop with 28 stakeholders to aggregate and validate key findings from the online survey and KII.

Key findings

Wildlife captive facilities are operated in almost all districts of Dong Thap Province but are mainly concentrated in Tam Nong (28.1%), Cao Lanh (15.1%), Hong Ngu City (10.1%), Thap Muoi (8.6%), and Thanh Binh (7.2%) (Figure 1). These districts have some advantages for this activity including abundant food sources, long tradition of wildlife farming, and proximity to markets.

Wildlife species in Dong Thap Province are very diverse with more than 192,394 animals, of which the main ones include crocodiles (174,000 individuals), snakes (14,000), tortoises (1,652) and civets (348). Most wildlife farms raise only one or two wildlife species. The animals are traded locally (inside the province) or to neighboring provinces including Dak Lak, Dong Nai, Ho Chi Minh city, Ca Mau, Tay Ninh, Hau Giang, Vinh Long and Long An.

There are three key value chains referring to three groups of wildlife species in Dong Thap including export species such as crocodiles and pythons (Figure 2), high-value species such as porcupines and civets (Figure 3), and popular species such as snakes and wild pigs (Figure 4). The first value chain is short and simple and transactions among the actors are mainly based on contracts. The second and third value chains involve more actors and are mainly operated at a small-scale where transactions are made verbally on spot.
The engagement of value chain actors in wildlife farming and trading activities are induced by various internal and external factors. Regarding the internal factors, generally all actors participate in the wildlife value chains for a source of income, especially those who cannot find alternative livelihoods (up to 100% of total household income). Some actors in the value chain have inherited businesses from earlier generations or are technically supported by relatives or friends who have rich experiences in this field. The availability of physical resources such as infrastructure and feed also induce farmers to raise wild animals in addition to domestic ones.

The external factors include the province’s long tradition of wildlife farming and trading, which means that residents tend to engage more in this business given the availability of local supply and trading networks. Their motivations are further supported by high market demand and favourable regulations.

**Recommendations**

Illegal operation of wildlife farms, weak awareness of relevant regulations among value chain actors, and lack of resource are key challenges faced by the local authorities in management of wildlife-related activities. Thus, introduction of livelihood alternatives for value chain actors, promotion of communication strategies for raising public awareness, and improvement of cross-sectoral cooperation and greater involvement of mass organizations (e.g., Women’s Union, Youth Union, etc.) and private sector actors (e.g., non-governmental organizations, and private companies) are recommended for more effective wildlife management in Dong Thap.
Drivers of human-wildlife interactions: A case study of wildlife value chains in Vietnam

Authors
Pham Duc Phuc, Nguyen Ngoc Ha, Ngo Hoang Tuan Hai work for the Institute for Environment Health and Sustainable Development (IEHSD) and Center for Public Health and Ecosystem Research (CENHER) - Hanoi University of Public Health (HUPH). Thinh Nguyen works for the International Livestock Research Institute (ILRI), Vietnam.

Photo credit
IEHSD

Contact
Thinh Nguyen, ILRI, T.T.Nguyen@cgiar.org

Acknowledgement
We would like to thank the CGIAR-COVID-19 Hub, sub-department of Animal Health of Dong Thap, sub-department of Forestry of Dong Thap for supporting this study.

The International Livestock Research Institute (ILRI) is a non-profit institution helping people in low- and middle-income countries to improve their lives, livelihoods and lands through the animals that remain the backbone of small-scale agriculture and enterprise across the developing world. ILRI belongs to CGIAR, a global research-for-development partnership working for a food-secure future. ILRI’s funders, through the CGIAR Trust Fund, and its many partners make ILRI’s work possible and its mission a reality. Australian animal scientist and Nobel Laureate Peter Doherty serves as ILRI’s patron. You are free to use and share this material under the Creative Commons Attribution 4.0 International Licence.

ilri.org