
WILDLIFE TRADE, LIVESTOCK TRADE AND THE IMPACT ON ONE HEALTH

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Outline

- Wildlife Estate of Ghana
- Wildlife Trade
- Wildlife Trade and Public Health
- Volumes of Wildlife Trade in Ghana
- Risk in Bush meat Trade
- Objective
- Wildlife Trade and Public Health
- Livestock Imports into Ghana
- ZD events associated with Wildlife Trade
- What is the problem?
- Addressing Zoonoses and Wildlife and Livestock trade
- One Health approach in Wildlife and Livestock trade
- Conclusion
- The Way forward

Wildlife Estate of Ghana

- Ghana's wildlife estate is 1,347,600 ha (5.6%) of country landed area.
- 21 wildlife protected areas (PAs).
- These include 2 zoological gardens (captive wild animal populations)



Wildlife and Livestock of Ghana

Wildlife

- 220 species of mammals,
- 725 species of birds (including 176 regular seasonal migrants),
- 74 species of bats,
- 37 species of rodents,

Livestock

- almost 46% of population is into agriculture.
- Out of which 74% are in livestock and crop farming,
- Cattle- 1.8 million, goats-7.1 million, sheep-4.9 million, pigs-760,000, poultry 80.3 million.³⁰
- Horses and Donkeys make up (approximately 14,800).

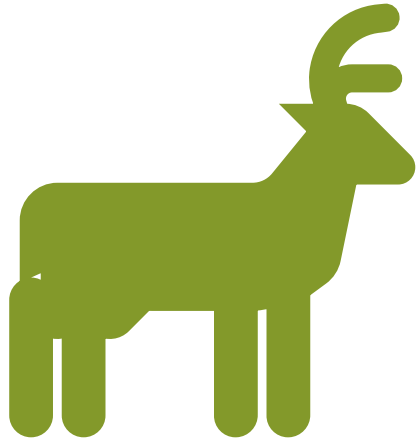
Wildlife Trade

- Can be legal or illegal. Domestic or International
- Can range from small-scale to formal commercial-sized.
- Demand for: traditional medicines, pets, **Food (bush meat)** and decorations, (contribute to **illegal trade**).
- e.g. demand for products such as rhino horns and pangolin meat and scales.



Wildlife Trade cont..

- According to the World Economic Forum (WEF) illegal wildlife trade or wildlife trafficking, is estimated to generate approximately \$7 billion - \$23 billion annually



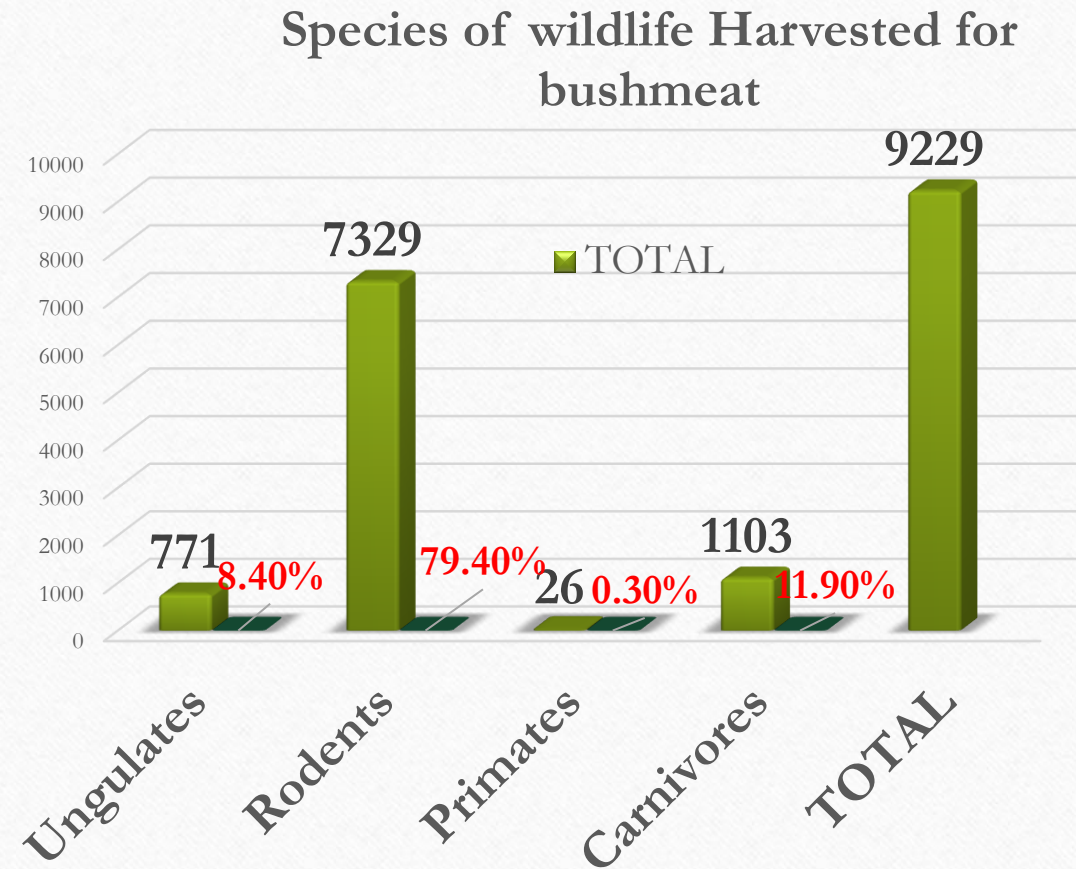
Volumes of Wildlife Trade in Ghana

Ghana exported 150,343 and imported 133,472 different wild animals comprising Reptiles, Insects, rodents, primates. and other mammals



Wild animals Harvested for Bushmeat

- Over 30 different wild animal sp. are harvested and sold in our study area (Kumasi Atwumunum)

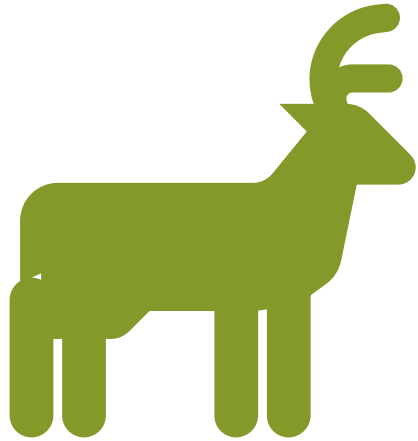


Risk in Bush meat Trade

- Hunting, butchering , handling and dressing of wild animals- high risk
- **More people butcher than hunt animals (83 % and 42 %, respectively, and butchering with sharp tools, which may lead\.**
- during butchering **38 %** of bushmeat traders cut themselves regularly
- **More Women** engage in butchering and cooking therefore are at risk than men.

Objective

- To analyze the importance of the One Health Approach and Wildlife and Livestock trade in promoting animal welfare and preventing disease spillover to humans.
- **Specifically:**
 1. To highlight the role of multidisciplinary and multi-sectoral stakeholders.
 2. To review risk associated with frequent interaction with wild animals.
 3. Recommend the approach to promote animal welfare practices to prevent disease spillover from animals to humans.



Wildlife Trade and Public Health

The global trade in wildlife provides disease transmission mechanisms that not only cause human disease outbreaks but also threaten:

- livestock,
- international trade,
- rural livelihoods,
- native wildlife populations, and
- the health of ecosystems.

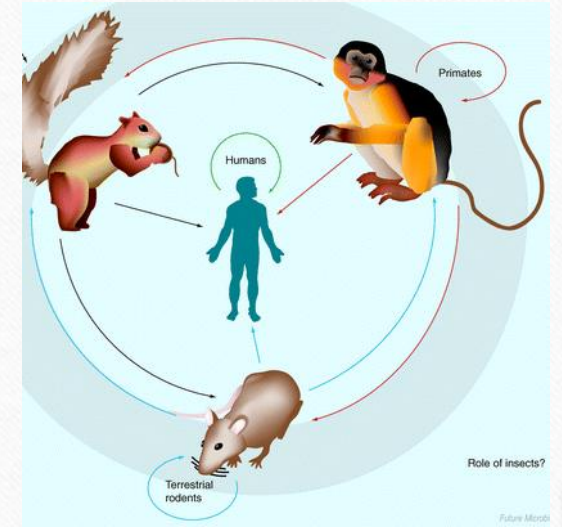
Wildlife Trade and Public Health cont..

- Other wild animals in the trade are temporarily exposed,
- domestic animals and wild scavengers in villages and market areas consume the remnants and wastes from the traded wildlife



Wildlife Trade and Public Health cont..

- Monkeypox was introduced to a native rodent species and subsequently to humans in the United States by importing wild African rodents from Ghana for the US pet trade.



Livestock Imports into Ghana

DESCRIPTION OF POULTRY PRODUCT	YEAR OF IMPORT			
	2018	2019	2020	TOTAL
LAYERS	6,252,538	15,381,066	10,560,898	32,194,502
BROILERS	511,960	745,244	405,652	1,662,856
TURKEY	50,170	19,381	18,390	87,941
GUINEA FOWL	10,320	65,820	23,912	100,052
BREEDING STOCK	101,871	46,598	270,682	419,151
HATCHING EGGS	183,260	400,120	719,340	1,302,720
TOTAL	7,110,119	16,658,229	11,998,874	35,767,222

Imported poultry products thru KIA



Imported DOCs at KIA



Dead DOCs at KIA

Source: Dr. K. Abuh GAR Vet Officer

Livestock Imports

- Livestock such as cattle, sheep and goats are imported from Ghana's neighbouring countries.
- Due to poor loading conditions, some arrive weak and stressed and even dead



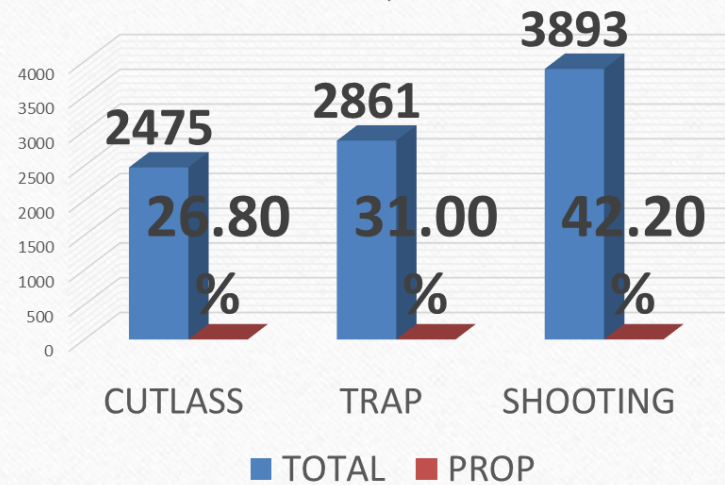
ZD events associated with Wildlife Trade

- **2019**—SARS-CoV-2: The virus is identified in bats and other species (mink and **pangolins**). An intermediate host species that might have transmitted the virus to humans.
- 2012- MERS-CoV: In Saudi Arabia associated to dromedary camels.
- 2002-2003—SARS-CoV: Scientists identified the virus in horseshoe bats, civets, and other animals sold in wildlife markets in China. Civets are thought to have transmitted the virus to humans
- **2014-2016** and **2018-2020**—Ebola Virus in humans can be traced to the handling and consumption of infected wildlife carcasses, eg bats and apes. Bushmeat trade is linked to Ebola.
- **2004-2014**—Simian Foamy Virus and Herpesvirus: Illegal bushmeat entering the United States showed evidence of zoonotic retroviruses that could transfer to humans



- COVID-19
- Livestock Trade

Methods of Harvesting Bush meat in Kumasi, Ghana



Addressing Zoonoses and Wildlife and Livestock trade

- Internationally, the World Organization for Animal Health (OIE) analyzes and disseminates information related to animal disease control.
- OIE operates the Global Early Warning System (GLEWS+), which aims to share data and improve risk assessments related to zoonoses
- Locally, the use of the One Health Concept is very critical and the promotion of inter-sectoral collaboration

One Health approach in Wildlife and Livestock trade

- **One Health?**
- Recent events has taught as that the health of animals, the environment and humans is interconnected.
- Multidisciplinary, inter-sectoral and transboundary efforts needed to prevent, mitigate and halt zoonoses events.
- Zoonoses have high potentials of becoming pandemics as we see today with COVID-19.

The One Health Approach in Ghana

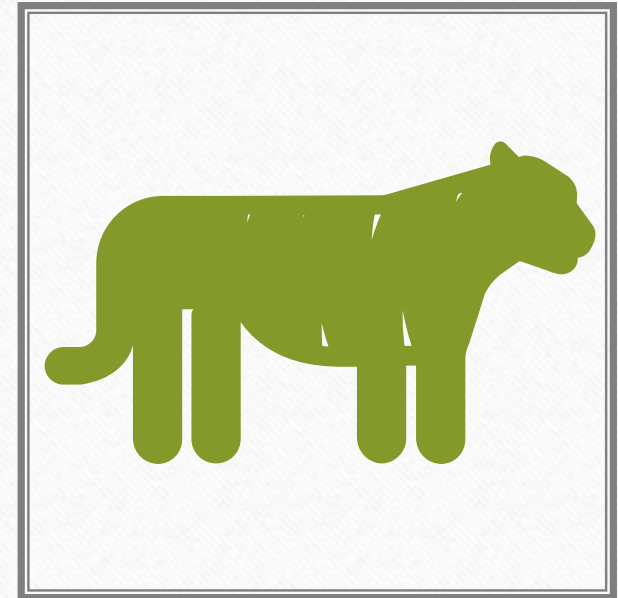
- In Ghana, the One Health concept adopts an all-inclusive approach in responding to public health events at the human, animal and the environment interface.
- The OH approach in Ghana works well at the national level coordinated by the National Disaster Management Organisation (NADMO).
- It does not really work at local levels where challenges really begin

Ghana's OH achievement so far

- One Health Zoonotic Disease Prioritization for multi-sectoral engagement in Ghana was successfully used to prioritize ZDs of concern in Ghana.
- Final Draft of a OH policy
- There is now Standing OH TWG
- Depending on the Public Health event, relevant sectors are roped in for prevention and mitigation. eg COVID-19. Health and Veterinary Services Labs.
- Work in place for a preparedness plan for some Haemorrhagic Diseases such as Ebola and Marburg

Conclusion

- Legal but poorly regulated trade in wildlife can increase human exposure to zoonotic diseases, lead to habitat destruction, biodiversity loss, introduction of harmful alien species, animal cruelty
- There are high chances of disease outbreak due to poor handling, transporting of animals in the trade of wildlife and livestock.



WAYFOWARD cont..

Government (Airport)

- Establish an **Animal Reception Centre** for arrivals, transit and departures.

Responsible for:

- **Receiving animals from the aircraft to Reception Centre**
- **Inspect shipments are packed and loaded according to International Air Transport Association (IATA) requirements**
- **Inspect paper works are according to CITES, OIE, WHO and local veterinary requirements**
- **Provide temporary holding area for animals on transit.**

WAYFOWARD cont..

- Importers should preferably use airlines that arrive in the night (cooler temperatures).
- Speedy approval of the OH bill will further promote Inter-sectoral and multidisciplinary collaboration: - animal welfare and prevention of disease spillover and spread enhanced.



WAYFORWARD cont...

Wildlife Traders and Exporters

- Implement Biosecurity measures in **Wildlife Quarantines** and **wet markets**
- report wildlife disease incidences to the appropriate authorities.

Bushmeat-

- Meat inspection at the Bushmeat market
- More sensitization of Hunters and Bush meat traders.

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