

Overview of Key Livestock and Wildlife Health
Challenges, Activities and Gaps in KAZA
Landscape

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Outline of Presentation

- Introduction
- Livestock and Wildlife Health Challenges
- Activities and Gaps
- Conclusion

Introduction



Zambia is a Land linked country
8 neighbours
Population is estimated at 16 million
50% of the population live in town and the other 50% in the rural area
Zambia's economy is dependent on minerals mainly copper

Introduction-cont.

- **Livestock Population and distribution**
 - Livestock is 35% of Ag GDP
 - Most livestock are found in the southern, Western and Eastern part of Zambia.
 - Livestock rearing in Zambia is centred on cattle which is about 4-5 million

Cattle	4,984,909
Sheep	149,420
Goats	4,823,910
Pigs	2,146,762
Poultry	174,470,000

Introduction-cont.

- Wildlife Distribution
 - The two main National Parks out of 20 are Kafue National Park and Luangwa National park (North and South)
 - Kafue National park is the second largest in world and covers 22,400 sqkm.
 - North and South Luangwa National parks cover 13,686 sqKm in the eastern part of the country

National Parks of Zambia



Livestock and Wildlife Health Challenges

- Occurrence of animal diseases
- Disease control

Notable Reported Animal Diseases

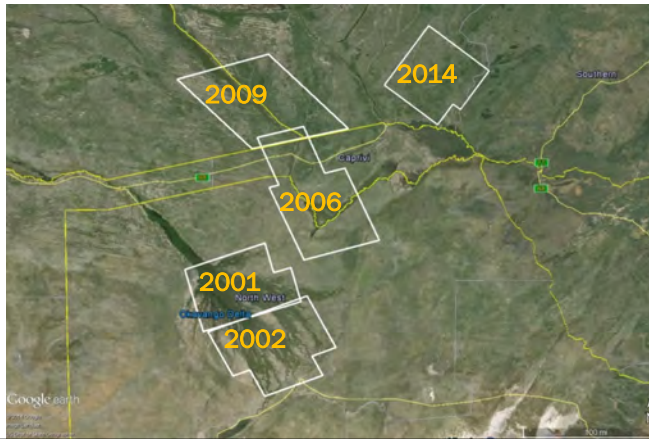
DISEASE	SPECIES AFFECTED	AFFECTED AREAS
Foot & mouth disease	Cloven-hoofed animals	Kafue flats
Anthrax	Mammals	Western Zambia, lower Zambezi, Eastern Luagwa National Park
Contagious Bovine Pleura Pneumonia	Ruminants	Western Zambia bordering Angola
Heartwater	Ruminants	Through out the country
Trypanosomosis	Mammals	Associated with Tsetse flies covers 2/3 of the country
Rabies	Mammals	Through out the country
Bovine Brucellosis	Cattle; other mammals	Production; zoonosis
Bovine Tuberculosis	Cattle; other mammals	Mortality; production; zoonosis
Theileriosis (Corridor)	Cattle	Occurs through out the country except western and northern parts of the county
African swine fever	Pigs	Endemic in eastern part of the country
New Castle Disease	Birds	Through out the country

DISEASE CONTROL

- **Trypanosomosis**

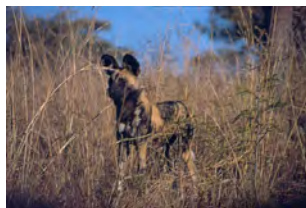
- Effects on cattle range from mortality to chronic debility
- Zoonosis
- No vaccine
- Wildlife reservoirs

- Tsetse eradication operations under the Kwando-Zambezi regional Project as at 2009, 2014



Rabies

- Domestic dogs/wildlife
- WHO/OIE/FAO Initiative to eliminate dog mediated rabies by 2025
- Through multisectoral approach (medics/vets/local authority)
- Vaccination targeting 70% of the dog population
- One health strategy has been developed



Anthrax

- Periodic outbreaks in wildlife and livestock with high mortality in the recent past hippos were more affected.
- Outbreaks usually occurs from November through December in Western and Eastern provinces
- Major threat to Tourism and endangered species like lions

African swine fever

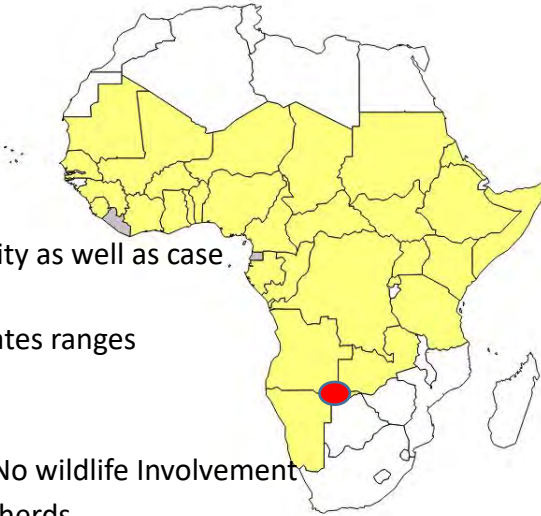
- Wild pigs /warthogs – reservoir host
- Can cause high mortality in domestic pigs
- No vaccine is available
- Usually, the grave socio-economic effects of ASF are inflicted on rural poorer pig farmers and households who lack basic biosecurity facilities and may not effectively implement prevention and control measures.
- Ban - Movement, sale of pigs and products,
- Test and slaughter
- Trade restriction – no market access for endemic regions



CBPP

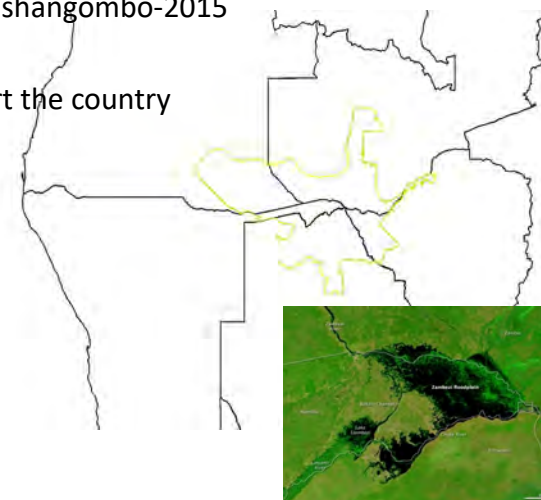
- CBPP Affected KAZA countries: Angola, Namibia and Zambia

- Morbidity and mortality as well as case fatality rates variable
 - Reported fatality rates ranges between 17-20%
- Vaccination
- Movement control – No wildlife Involvement
- Slaughter of positive herds

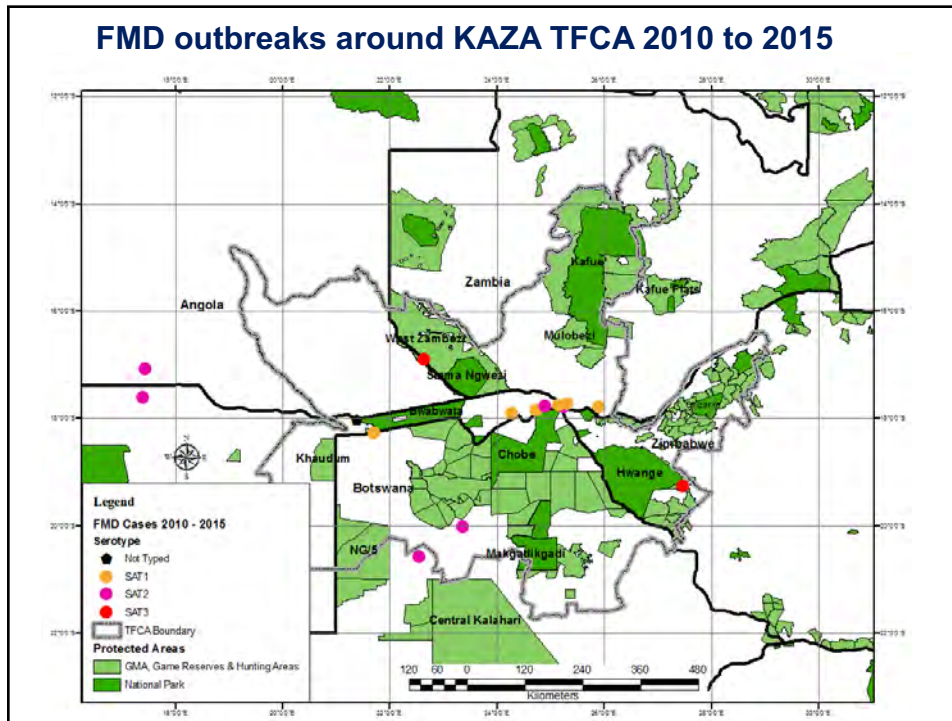


FMD

- Apart from other parts of the country, Zambia has had a fair share of FMD outbreaks in KAZA area
 - SAT3 –Sioma /shangombo-2015
- OTHER AREAS
 - Type 0 –Northern Part the country
 - SAT 1 AND 2-Kafue



FMD outbreaks around KAZA TFCA 2010 to 2015



FMD

- Vaccinations
 - High risk areas bi-annual vaccinations against SAT 1,2
 - In western part of the country SAT3
 - Northern Part of the country Type0
- Movement restrictions

Other challenges Facing Animal Disease Control Within KAZA

- KAZA is a human/livestock/wildlife interface that present many challenges from:
 - Increasing human population and its ensuing demand on the land resource – encroachment, over use of resources and rapid land transformation
 - Climate change – droughts, floods
 - Unresolved issues arising from creation of NPs
 - Wildlife migratory routes disturbed by new settlements
 - Flood plains suitable for survival of both wild and domestic animals
- Failure to reconcile the interests and expectations of stakeholders with divergent views e.g., erection of fences along boundaries
- Wildlife Conservation at the expense of human life and livestock – source of conflicts.
- Different approaches in the management and control of animal diseases of economic importance, e.g. FMD, CBPP
- Few supported regional programs on how to manage zoonotic, livestock production and transboundary animal diseases within KAZA.

GAPS

- Regional multisectoral approach to livestock/wildlife disease control (vets/medics/conservationist/others)
- Investment in regional information gathering & interpretation for early warning
- Harmonization of animal disease control policies, legislation and programs for major animal diseases in KAZA
- Investment in risk management along the value chains for both livestock and wildlife for assured market access.
- Investment in models to predict future outbreaks – currently we are reactive and not proactive – Knowledge of human, animal and environmental risk factors.
- Limited capacity in Wildlife health at least for Zambia
- Inadequate coord. betwn livestock and wildlife stakeholders

Conclusion

- KAZA offers opportunities for integrated animal disease control approaches that benefits humans (zoonotic diseases), wildlife and livestock (production and transboundary diseases)
- Livestock and wildlife offer direct benefits to households = poverty reduction and household food security. Poultry and small ruminants play a supplementary role
- Livestock is a NR that must be harnessed. 35% of Ag GDP in Zambia is from Livestock.
- What ever programs that could be done under KAZA should take into consideration Livestock.

