

EXPERIENCES WITH AND THE CHALLENGES OF WILDLIFE HEALTH MANAGEMENT IN NATIONAL PARKS OF TANZANIA

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Introduction

- ◆ Country size 945,200 sq km
- ◆ Over 28% is Protected Area network
- ◆ Increasing human population and their activities around protected areas has resulted in increased interaction and conflicts between human - wildlife - livestock
- ◆ Conflicts include disease transmission
- ◆ Development of a Tanzania National Parks Veterinary Unit
- ◆ Low ability to meet the needs

Expanding human population

- Rate is 2.8% and thought to be higher (3.5%) around protected areas
- Competition for land – settlement, agriculture, cattle grazing, charcoal burning
- Wildlife habitat degradation
- Pollution of water resources
- Blockage of migratory areas and dispersal areas
- Problem animals – animal attacks, crop raids

Loss of species

- Due to:
 - loss of habitat
 - over exploitation
 - diseases
- Black rhinos, wild dogs
- Local extinction – gerenuk, Thomson's & Grant's gazelle, eland
- Metapopulation management

Transmissible Diseases

- *Sexually transmitted disease in baboons in Lake Manyara and Gombe National Parks*
- *Ear disease in giraffes in Mikumi National Park and Selous Game Reserve*
- *Giraffe skin disease in Ruaha National Park*
- *Sitatunga and bushbuck deaths in Rubondo Islands National Park*
- *Salmonellosis in elephants in Tarangire National Park*

Chimpanzee health problems in Gombe National Park

Chimpanzee deaths due to diseases (Pusey)

Period	Number of outbreaks	Number of deaths	Health problems
1960 - 70	3	12	1 Polio, 2 Pneumonia-related
1971 - 80	4	3	Pneumonia related
1981 - 90	1	10 or 11	Pneumonia related
1991 - 2002	4	16	1 Scabies, 4 Pneumonia related

TD cont...

- *Rabies and Canine distemper in and around Serengeti National Park*
- *Rinderpest*
- *Foot-and-mouth disease*
- *Sleeping sickness in and around northern national parks*

Wildlife Veterinary Units

- **Tanzania National Parks**
4 vets, 2 technicians
Located in zones (at least 4 parks each), 1 for coordination
Goals: disease investigation and management support in NPs
- **Tanzania Wildlife Research Institute**
2 vets, 1 technician
Disease investigation and research support in GRs.

Facilities

- small field labs with low capacity
- scant equipment
- staff lack adequate training and skills
- low funding
- most of specimens have to be sent to other institutions often outside the country
- Inefficient, late results and late management decisions

Proposed approaches

- Strengthening of Zonal Veterinary Units
- At least a Vet and two technicians in each zone
- Equipment for each zonal unit: transport (a 4-wheel drive vehicle), basic lab facilities such as microscopes, incubators, autoclave, freezers, reagents, sampling materials, pipettes etc. to enable carrying out even the basic tests.

Proposed approach cont...

- Since most of the emerging diseases affect large ecosystems or across countries, there is a need to strengthen local capacity to detect and identify disease threats, coupled with efficient reporting mechanism and resources to manage and mitigate their effects
- Regional and international collaboration is necessary and if possible prompt
- Central facilities for referral cases

Conclusion

- In view of the magnitude of the country, and the abundance and diversity of species, there is a wide range of issues and problems, making wildlife health management in Tanzania an enormous task.
- Due to its geographical position and ecosystem complexes Tanzania has an important epidemiological role to diseases.
- Disease transmissions have complex interactions to wildlife management, public health, livestock development and rural livelihoods.

Conclusion cont..

- Present resources and infrastructure are insufficient to address the challenges effectively hence increasing the risk to the neighbouring countries.
- Concerted efforts –material, moral, political - are therefore urgently needed.
- The wildlife we cherish today is our foremost natural heritage and its survival is of grave concern to all people assembled at the World Parks Congress.
- Decisions and effective policies need to be developed to address the situation for the benefit of the region and the world at large.

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THANK YOU

