



The Importance of a Diversified Economy for the People and Wildlife of the Khaudum-Ngamiland WDA

TOWARDS IMPLEMENTATION OF COMMODITY BASED TRADE
in BEEF

Opportunities for Integrating Livestock Agriculture & Wildlife Conservation

CBT Workshop in collaboration with
the Department of Veterinary Services
and Cornell University, AHEAD Program

8-9 November 2017, MAUN

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BOTSWANA PREDATOR CONSERVATION TRUST

BOTSWANA & CATTLE

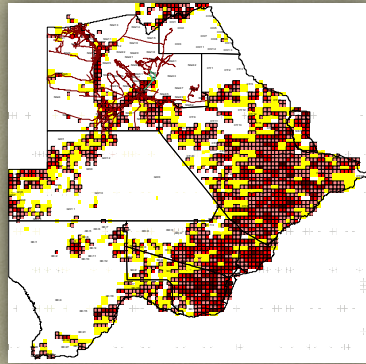
- < 1% of land is arable
- estimated 50% of Botswana own cattle
- estimated 3.3-4 million cattle
- 3% of GDP
- 10% of farmers own 60-70% of the national herd



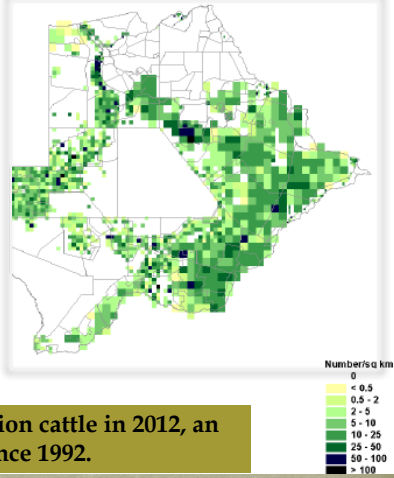
Two systems of cattle farming:

- Traditional (cattle post), communal (tribal) grazing land
- Commercial, free-hold, fenced

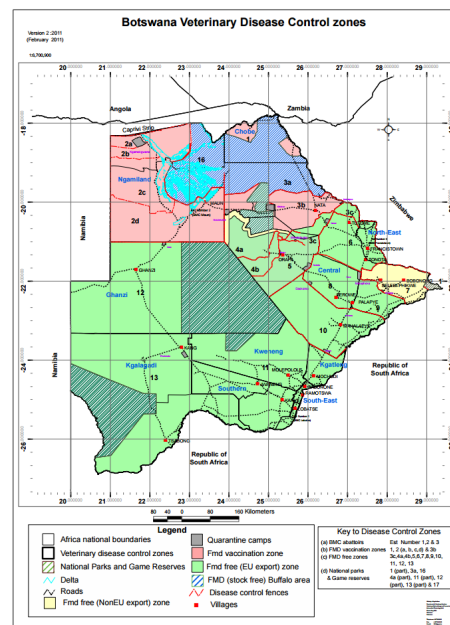
**DISTRIBUTION OF CATTLE
BOTSWANA – 1994**
DWNP AERIAL SURVEY



**DISTRIBUTION OF CATTLE
BOTSWANA – 2012**
DWNP AERIAL SURVEY



Estimated 3.13 million cattle in 2012, an increase of 300% since 1992.



NORTHWEST DISTRICT

Cattle and Beef Production
Management Control
Zones:

Green Zone & Red Zone



BOTSWANA & CATTLE

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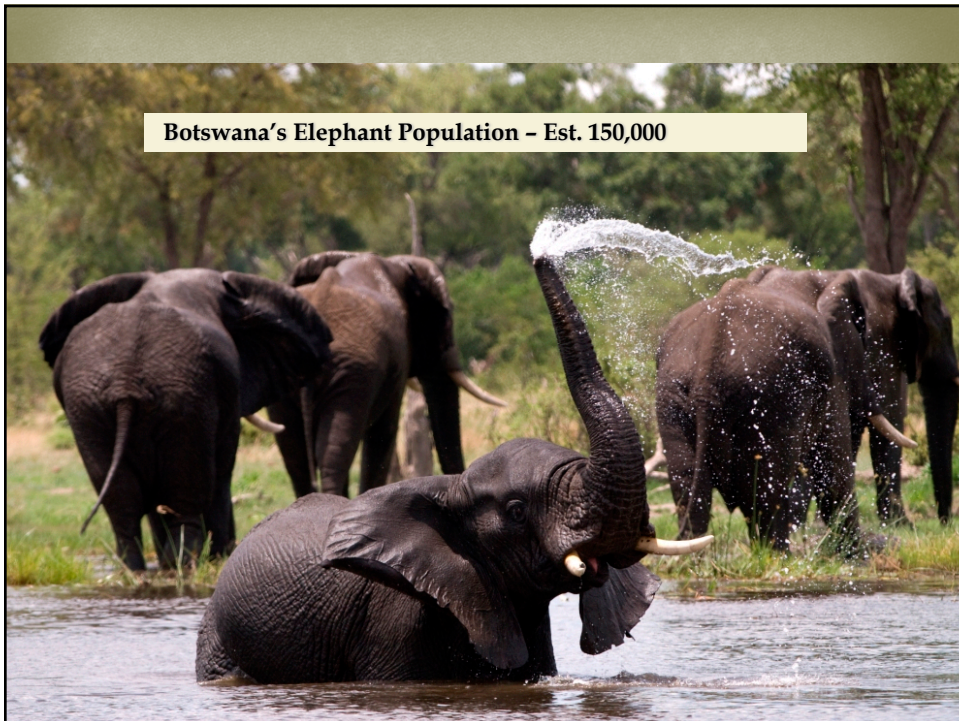
BOTSWANA & CATTLE

Traditional (cattle post), communal grazing land use



Botswana's Fences





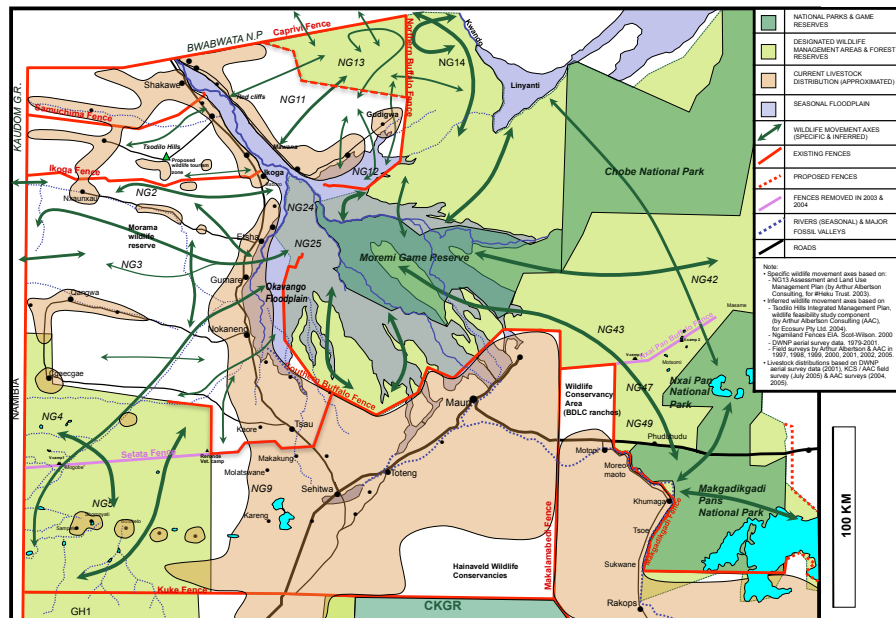
Fences



Managing the Fences



Managing the Fences

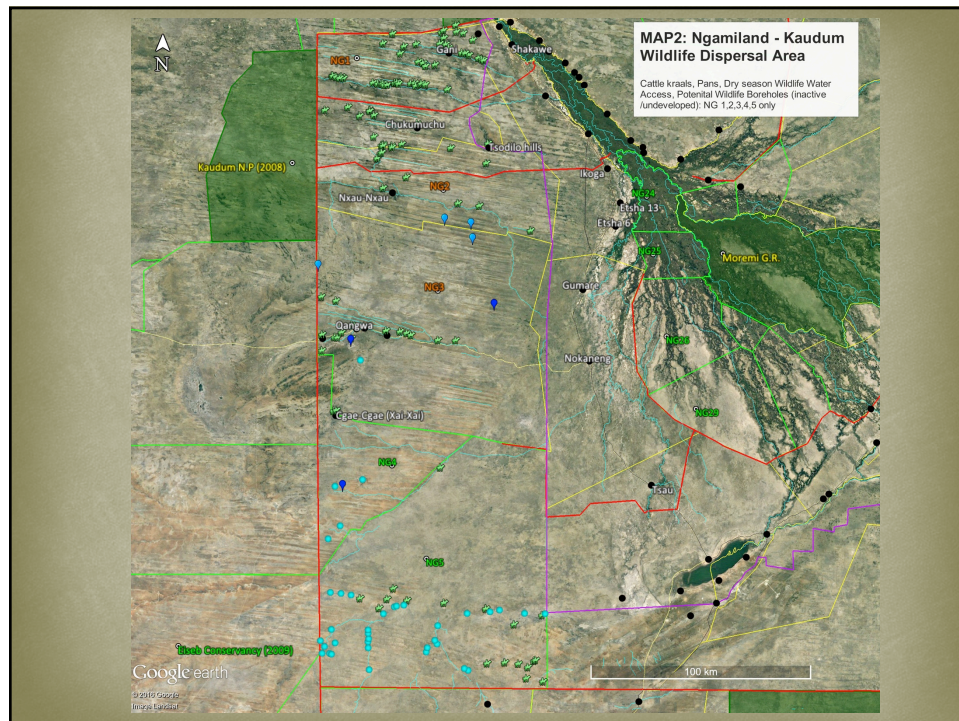


MAP 1: NORTH-WEST BOTSWANA: FENCES & WILDLIFE MOVEMENT PATTERNS

Botswana's Wildlife Tourism

- **GDP: TOTAL CONTRIBUTION**
- The total contribution of Travel **10.9% of GDP in 2016** and was **BWP 17,779,500,000** (USD1,623.8mn), and is forecast to rise by 6.5% in 2017, and to rise by 5.5% pa
- **EMPLOYMENT: DIRECT CONTRIBUTION**
- In 2016 Travel & Tourism directly supported 25,000 jobs (2.6% of total employment). This is expected to rise by 6.8% in 2017.
- **EMPLOYMENT: TOTAL CONTRIBUTION**
- In 2016, the total contribution of Travel & Tourism to employment, including jobs indirectly supported by the industry was 7.1% of total employment (68,500 jobs). This is expected to rise by 3.7% in 2017 to 71,000 jobs and rise by 3.5% pa to 100,000 jobs in 2027 (8.9% of total).

Source: WORLD TRAVEL & TOURISM COUNCIL: ECONOMIC IMPACT 2017 BOTSWANA



Conflict between people, livestock and Wildlife



ILLEGAL HUNTING IN BOTSWANA



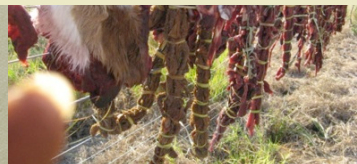
Transport of 'segwapas' (bundles of dried meat) and fresh meat using horses, donkeys and mekorros

ILLEGAL HUNTING IN BOTSWANA



An estimated 620 tons of (illegal) bush meat is exported from the Okavango Delta region of Ngamiland which is unsustainable and compromising the entire wildlife tourism economy for Botswana.

From: Rogan, M.S., Lindsey, P.A., Tambling, C. J., Golabek, K.A., Chase M., & McNutt, J.W. 2017. Illegal bushmeat hunters compete with predators, threatening herbivore populations in a global tourism hotspot. *Biological Conservation* 210: 233-242.



Transport of 'segwapas' (bundles of dried meat) and fresh meat using horses, donkeys and mekorros

Consequences of a long history of unsuccessfully attempting to fence off and separate wildlife from livestock:

- Continuous investment of government funds in an enterprise repeatedly known to fail
- Frequent outbreaks of disease, especially FMD
- District wide (red zone) collapse of the local beef industry, but benefiting:
 - 1) the rest of Botswana beef growers (commercial/ green zone)
 - 2) the wildlife tourism land use plan

Resulting in:

- Disenfranchised communities
- Increased human wildlife conflict
- Increased poverty
- Increased illegal bushmeat hunting
- Declining wildlife resources

"BOTSWANA CAN EXPORT MEAT FROM FMD-INFECTED CATTLE TO SOUTH AFRICA"

Sunday Standard Reporter 03 Jul 2016



"Technologies exist to treat red zone meat so that it can be sold in the green zone and in targeted export markets. However, the value chain for such meats is constrained by the lack of available capacity for such processing. The Ministry of Agriculture..., should promote the establishment of smaller processing facilities for this purpose in the red zone," – *Report from the Private Sector Development Program (PSDP) plan*

Clearly, it is time to change the prevailing practice of attempting geographic separation of wildlife from livestock and to implement a new system that:

- Acknowledges the fact that separation of wildlife from broad landscapes intended to be reserved for livestock is neither practical nor desirable.
- Acknowledges the fact that indigenous wildlife species are more productive in drought affected semi-arid habitats
- Enables integrating wildlife related industries (including legal production of game meat and tourism) with improved traditional livestock farming for the rural communities of Ngamiland
- Develops a local beef industry to enable a reliable market for 'wildlife friendly' beef and provides management incentives for traditional livestock farmers based on a productive economy

CBT BEEF

<p>Strengths</p> <ul style="list-style-type: none"> - Traditional ecological knowledge. - Traditional culture. - Habitat intact and unfragmented. - Free-ranging wildlife populations. - Growing value of wilderness. - Potential tourist circuits (mobile, self-drive). - Policy support for tourism expansion linked to poverty eradication. - High levels interest in wildlife utilization and tourism development. 	<p>Weaknesses</p> <ul style="list-style-type: none"> - Relatively low wildlife densities. - Lack of knowledge of community land use patterns and ecological dynamics. - Poor community participation in plans that affect them. - Lack of sense of ownership of natural resources. - Limited surface water. - Poor ground water. - Poor agricultural potential. - Community Trust difficulties. - Poor local tourism development capacity. - Minimal tourism infrastructure.
<p>Opportunities</p> <ul style="list-style-type: none"> - Potential for integrated approach to livestock. - Habitat management and Human-wildlife conflict mitigation through water points. - Capitalize on wilderness and cultural attributes. - Linkages with emerging Namibia self-drive circuits. - Start local businesses, supported by private sector (Trusts not the only option). - Participatory community based mapping and land-use research and planning. - Land-use plans and WL research strategies with community inputs (use your local ecologists!) - Potential for Low cost – low impact tourism enterprise development. - Cultural sensitivity. Identify viable community support structures from community based planning. - Start small but start! 	<p>Threats:</p> <ul style="list-style-type: none"> - Unemployment. - Dependence on Government. - Barriers to community enterprise and ability to use Natural Resources sustainably. - Loss of livelihood income from hunting ban. - Poaching. - Human disturbance of WL access to Okavango Delta. - Land grabs. - Habitat loss: especially around key pans. - Livestock damage to veld products. - Loss of traditional ecological knowledge. - Predator / elephant conflicts. - Poisoning. - Fences. - Fires. - Degradation of wilderness attributes.