

A LINE IN THE SAND



THE UNSUSTAINABLE EXPANSION OF
BOTSWANA'S BEEF INDUSTRY AT THE
EXPENSE OF LOCAL COMMUNITIES AND THE
OKAVANGO DELTA



Executive Summary	3
Veterinary Fences: A Deadly History	4
Okavango: Death by Cattle?	4
Proposed Fencing Options 3 and 4	5
Cattle Fences: The European Connection	6
Who Benefits from Fences?	7
Who Loses?	7
Europe's Responsibility to Act	9
Conclusions and Recommendations	10
References	11

Acknowledgements

EIA would like to thank the following individuals for their help in compiling this briefing:

Arthur Albertson, Karen Ross

Many thanks also to Brian Emmerson and all at Emmerson Press.

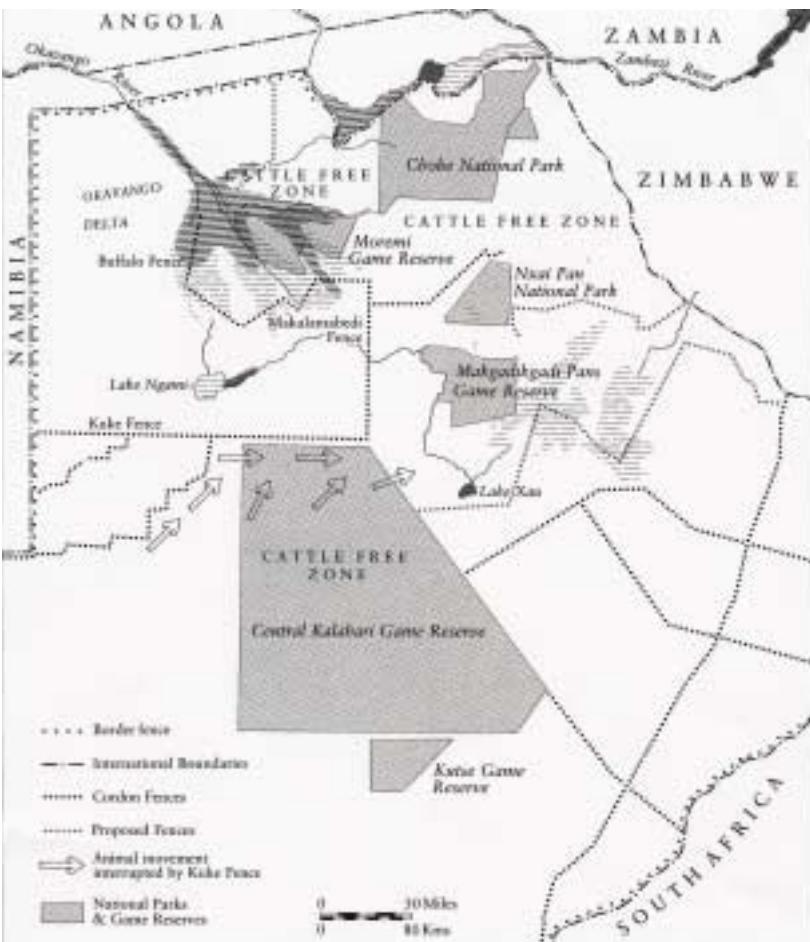
Writing, research and editing by Polly Ghazi, Craig Gibson, Patricia Hadfield, Mary Rice

Picture research and report design by Joaquim Pereira

Okavango's Unique Ecology and People

The Okavango Delta is one of the largest and most important inland wetlands in the world, covering over 15,000 km². Water supplying the Okavango River originates in the highlands of Angola. It passes briefly through the Caprivi Strip in Namibia, entering Ngamiland in the northwestern corner of Botswana. Within the Okavango Delta, five broad ecological zones have been defined - perennial swamps, seasonal swamps, seasonal grasslands, intermittently flooded land, and dry land. The economy of the region is quite diverse and includes floodplain and dryland agriculture, cattle rearing, wage labour and craft and tourist related enterprises.

Botswana National Conservation Strategy Coordinating Agency



Left: Map of Botswana

Executive Summary

The Okavango Delta in Ngamiland, northwest Botswana, is one of the world's greatest ecological treasures. It is the largest wetland site protected under the international Ramsar Convention. Its labyrinth of lagoons, lakes and fertile floodplains and the neighbouring forests and savanna harbour a wealth of charismatic wildlife and are a magnet for tourists.

The Delta is indisputably one of Botswana's greatest natural and economic assets. Yet the Department of Animal Health and Production – against the advice of international experts - is now pressing for the construction of a huge new cattle fence which would leave the Delta encircled to south, north and west by an electrified wire noose. Such an outcome would be an environmental and social disaster, cutting

off wildlife access to food and water supplies within the Delta, driving away tourists and threatening the ancient hunting traditions and fledgling tourism income of local peoples.

The fence is championed by Botswana's powerful cattle industry that wants to create a new, disease-free export zone on the Delta's edge. As Botswana's beef exports are heavily subsidised by European taxpayers under the Cotonou Agreement, Europe plays a direct role in this potential ecological disaster. It is imperative that EU governments and Members of the European Parliament use their influence in support of the Botswana communities, tourism operators, environmentalists and hunters who oppose this new cattle fence which threatens the region's unique ecology and peoples.

Below:
San woman
and child,
Xai Xai village,
Ngamiland,
July 2003



Veterinary Fences: A Deadly History

**"When
the
interests
of wildlife
and cattle
come into
conflict,
the
wildlife
loses."**

Arthur Albertson,
Okavango People's
Wildlife Trust

Below:
Wildebeest have
been a major
casualty of
Botswana's
network of
veterinary
cordon fences

Veterinary Fences: A Deadly History

Botswana has a long and controversial history of erecting vast veterinary cordon fences in the name of disease prevention. Often these have impeded the traditional migration routes of wildlife with devastating results.

The first artificial barriers were erected in the fifties when beef exports became a significant industry. These provided a disease control boundary between Ngamiland and the cattle export zones to the south, but were responsible for enormous wildlife mortalities. In the most infamous incident, an estimated 65,000 wildebeest perished along the Khukhe-Makalamabedi cordon in the early 1980s when they tried to follow ancient routes to water during a severe drought.¹

An international outcry followed, but this did not dissuade Botswana's government from erecting two buffalo fences across the Okavango Delta's southern and northern fringes during the 1980s and early 1990s.

The controversial Northern Buffalo Fence has caused significant casualties amongst wildlife, particularly buffalo. Despite strong opposition from local communities and environmental groups, yet another generation of barriers were erected in north-west Ngamiland in the mid 1990s, following an outbreak of contagious bovine pleuro-pneumonia (CBPP). These include the Setata fence which bisects the Xai Xai

community's land and has been blamed for falling populations of ostrich, wildebeest and eland², which the community depends on for revenue generation.

The negative impact on people and wildlife of six of the region's fences were documented in a 1998 report by ecologist Arthur Albertson of the Okavango People's Wildlife Trust³ which revealed that:

- No environmental impact assessments were conducted before any of the fences were built.
- None of the communities affected were consulted about whether or where fences should be erected and all have since complained about the adverse effects on their movements, use of natural resources and tourism programmes.
- The migratory routes of wildlife have been obstructed, populations fragmented and animals have died from dehydration or entanglement on the fences.

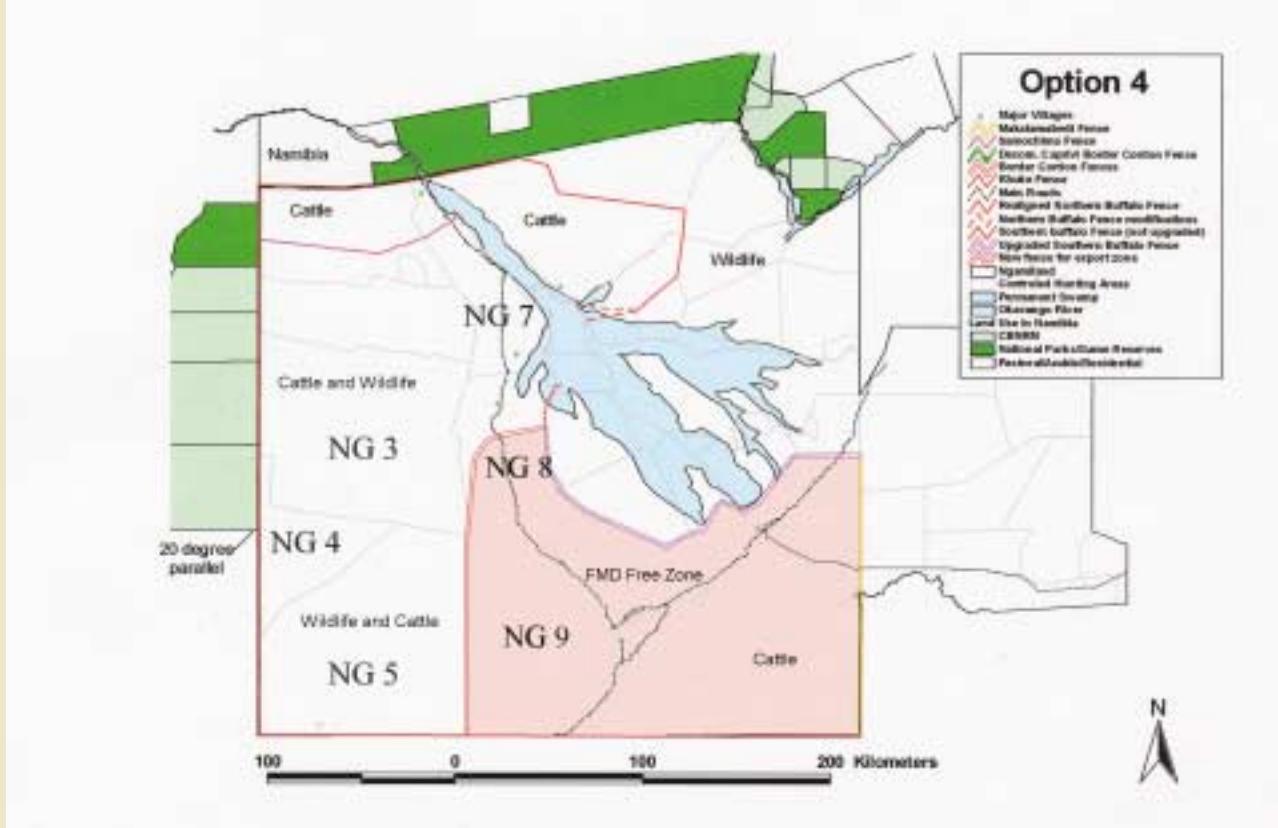
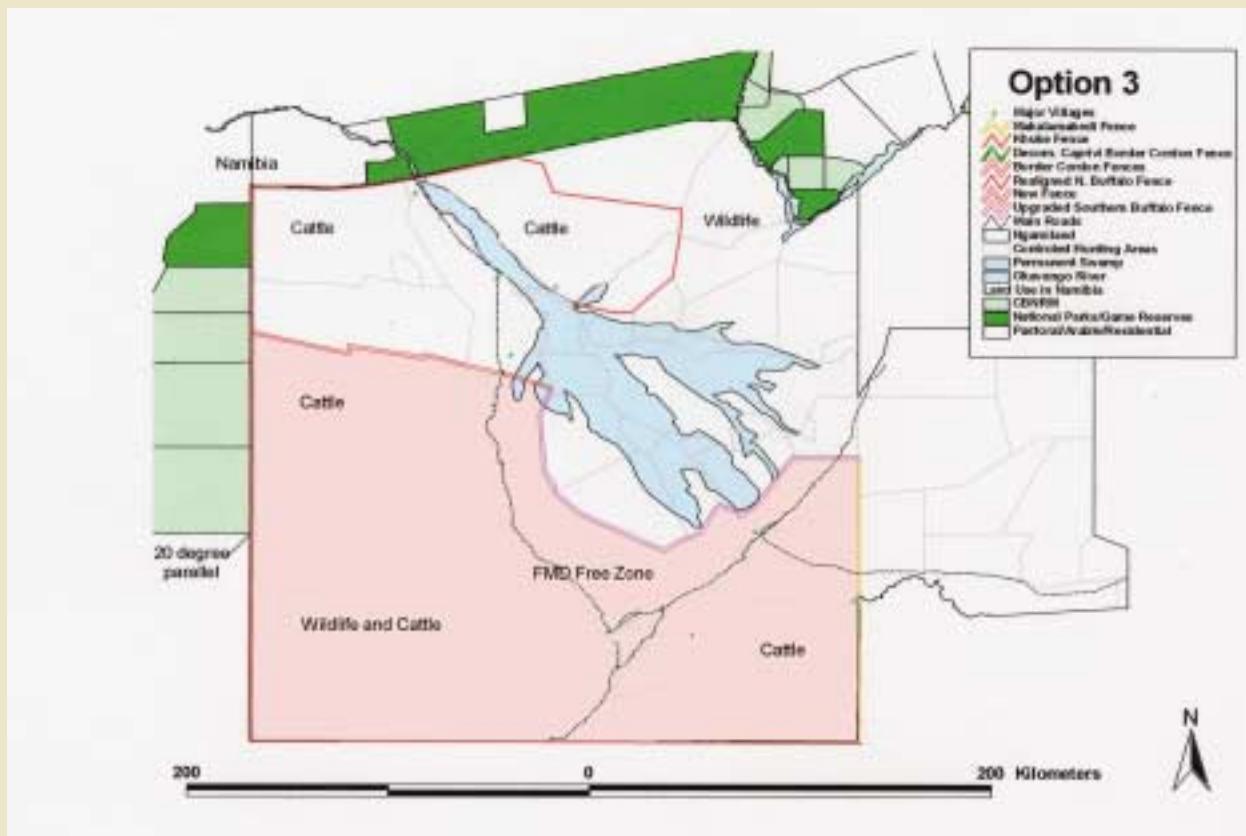
Albertson concluded that, in Botswana: "when the interests of wildlife and cattle come into conflict, the wildlife loses."

Okavango: Death By Cattle?

The Okavango is already bordered by fences to the north and south. Yet, despite the Delta's unique ecology and the negative impact of existing fences in Ngamiland, the powerful cattle industry is pressing for a new beef export zone along the wetland's western border. This would in effect further isolate the delta on three sides and impede wildlife migration routes. In 1999, aware of how controversial such a move would be, the Ministry of Agriculture commissioned independent expert consultants Scott Wilson to carry out an environmental impact assessment of various fencing options – the first of its kind in Botswana.

Part-funded by the UK Department for International Development (DFID), the consultants put forward four potential land use scenarios in their efforts to find a compromise acceptable to all stakeholders. The first two options included no new commercial cattle ranches. Option 3 (favoured by ranchers) provides for a new "foot and mouth free" beef export zone for





Above: Figures representing the Ministry of Agriculture's preferred Option 3 versus the compromise Option 4 favoured by the government commissioned Environmental Impact Assessment. The extent of the Foot and Mouth Disease Free Zone to the west of the Okavango Delta in Option 3 is vast and will limit traditional, seasonal wildlife migration routes. Option 4 favours a limited export zone to the south, but leaves north west Ngamiland free of any restrictive cordons.

Cattle Fences: The European Connection

much of north-western Ngamiland, protected by a vast new cattle fence, to the detriment of rural livelihoods, wildlife and tourism. Option 4 envisages a smaller beef export zone in southern Ngamiland which would impact less on local communities and keep open a western passage for wildlife to the Okavango Delta.

Submitted to Botswana's government in 2000, the Scott Wilson report did not formally recommend one option but left no doubt as to its authors' views. Option 4, they conclude, "would be more ecologically sound, socially equitable and with better net benefits than Option 3". The latter, they warn, would reduce wildlife numbers, risk the "potential disappearance of some species" and cut tourism potential, causing particular hardship to the remote Xai Xai community⁴.

The report has yet to be acted on by Botswana's government. However, the Ministry of Agriculture and its Department of Animal Health and Production have recommended adoption of Option 3 to the Cabinet. In so doing, they have not only ignored the findings of independent experts they themselves commissioned, they have also sidelined a Reference Group of local stakeholders, including representatives of local communities, environmental groups and tourism operators, set up under the consultation process funded by DFID to review Scott Wilson's findings. This Reference Group unanimously agreed to back Option 4 as a compromise solution, which would protect

Below:
Allied Meat
Importers
market and
distribute
Botswana's
beef exports
in the UK



6

wildlife and community-based tourism while allowing for some commercial cattle ranching. The Reference Group includes members of Conservation International (CI), the Kalahari Conservation Society (KCS) and the Hotel and Tourism Association of Botswana (HATAB), all of which believe that Option 3 would be a disaster for wildlife and local people.

Ignoring the Experts

"If Option 3 were to be adopted...wildlife and tourism development in Western Ngamiland would be threatened. The choice of Option 3 is likely to be interpreted by the international community as evidence that the Government of Botswana accords a higher priority to livestock development than to environment conservation and preservation of the Okavango Delta – one of the country's principal assets."

Scott Wilson Summary Report, 2000.

Cattle Fences: The European Connection

Small-scale livestock husbandry is an integral part of Batswana culture⁵ and the average household still boasts 16-20 head of cattle⁶. However, this traditional subsistence activity, involving coexistence with wildlife, was transformed into a major commercial industry from the 1950s. As ranchers accessed first the British colonial market and then the European Community market, cattle numbers and Botswana's beef exports soared.

Under the 1972 Lomé Convention, Botswana and other African, Caribbean and Pacific (ACP) countries began to receive preferential access to European beef and other markets in the form of reduced Customs import duties. This provided the trigger for the erection of a grid of veterinary cordon fences across Botswana to prevent disease spreading from wildlife to cattle herds in export zones. European subsidies continue to this day under Protocol 4 of the Cotonou Agreement, Lomé's successor.

Europe's role in fostering Botswana's cattle industry and, in turn, its controversial veterinary fences is incontrovertible. Between 1970 and 1976, livestock numbers rose fourfold. Today, three million head is thought to be a realistic figure in a country containing only 1.65 million people⁷. As European veterinary health regulations require strict quarantine measures, pressure to build even more fences remains high – despite the cost to wildlife and communities.

In Ngamiland, remoteness from markets and poor soils would make the region a non-starter for commercial cattle production were it not for the EU and national subsidies. An expert report commissioned by Conservation International in 2001 concluded, for example, that while tourism in wildlife-rich areas was "extremely economically efficient", commercial livestock farming was "economically inefficient and should not be promoted in Ngamiland"⁸.

If the preferential access to European markets was removed, beef prices would fall by some 40%, making the industry unviable in remote regions like Ngamiland⁹. Even with the generous subsidies, the huge costs of transporting livestock to abattoirs and on to markets may prove prohibitive to a successful new export zone.

Who Benefits from Fences?

Botswana's cattle barons are among the country's elite and carry weight with the government out of all proportion to their numbers. Only 15 percent of Botswana's livestock farmers own 75 percent of the national herd¹⁰ and it is these large commercial ranchers who gain most from EU beef subsidies and the fences which protect cattle export zones. Their interests are championed by the powerful Ministry of Agriculture and its Department of Animal Health and Production, which have more influence with Cabinet than the less well resourced Departments of Wildlife and National Parks and Tourism. Members of Botswana's Cabinet also retain large herds of cattle, suggesting a potential conflict of interest in the final decision on which Ngamiland fence option to adopt.

However, even major cattle farmers only stand to gain unsustainable, short-term benefits from expanded export zones as the preferential access to European beef markets will be phased out in the next few years. The price – a potential wildlife desert – is surely too high for the country's wider population to pay.

Who Loses?

Apart from commercial cattle ranchers, all other major stakeholders oppose the fencing option favoured by the Ministry of Agriculture. These include affected local communities, two government ministries - Department of Wildlife and National Parks and the Ministry of Tourism – Botswana's Hotel and Tourism Association and local environmental groups and hunting organisations.



© Craig Gibson

Left:
Giraffe also get
entangled in
cordon fences,
Northern
Botswana

Fence Facts

The proposed export-certified barriers are double electrified fences, 1.4m high with five strands of wire, including one steel cable, and two electric wires set on the outside of each fence. The parallel fence lines are separated by a firebreak. While controlling the movement of livestock, the fences present an impenetrable barrier for most local wildlife species.

Local Communities

About 40,000 people live in the area affected by the proposed new fences and cattle zone, most in remote villages. Families traditionally make a living from farming and owning a few cattle and engaging in hunter/gatherer activities¹¹. Community-based tourism is also an increasingly important part of the economic matrix.

According to local people, community elders have been shut out of the decision-making process on fencing options, not receiving notice of meetings organised by the Department of Agriculture. The Scott Wilson report warns that Option 3 would be the worst outcome for these traditional communities as commercial cattle ranching would drive away wildlife, “giving opportunities to richer and larger cattle-owners...to the detriment of the poorer local people”¹².

The Xai Xai community, a small scrubland village of less than a thousand people stands to lose most. Its Herero pastoralists and San (Bushmen) residents have since 1997, with the aid of US and Dutch funding, formed a community trust that has raised income through tourism and trophy hunting activities. The Xai Xai Community Trust sells its quota of animals to hunting outfitters and can raise €5,230(US\$6,000) for a single elephant. Tourists also come to view traditional San dances and buy handicrafts. In 2002 the trust earned

Below:
Tourist shop,
Maun, Botswana,
July 2003



© Craig Gibson/Environmental Investigation Agency

€77,006(US\$88,500)¹³. Yet if, as Option 3 dictates, much of Xai Xai's concession area is given over to a major new cattle export zone, the community stands to lose both tourism revenue and its traditional access to wildlife for food.

Nxuka Xishee, a development facilitator with the Xai Xai Community Trust, fears such a prospect. “We use the money to train children and develop our gardens, the office, airstrip and community hall,” she explains. “The Trust has also bought a vehicle and developed a campsite. If cattle are brought here, the grass will be finished...Many cattle will also disturb the movement of wildlife. Wildlife we cannot live without, as we sell animals to hunters to earn money”¹⁴.

Tourism Industry

The Okavango Delta and Ngamiland's scenic and wildlife-rich game reserves are the heartland of Botswana's tourism industry. The Botswana government's official website describes the Okavango Delta as “one of the finest tourism destinations on the African continent.” Gaborone has also been heavily promoting commercial and community-based tourism in recent years. Yet the western cattle fence now under consideration by the Cabinet would drive out wildlife and, according to the Scott Wilson report, “significantly lower” the area's tourism potential¹⁵.

Not surprisingly, the Hotel and Tourism Association of Botswana strongly oppose Option 3. They argue that with tourism limited at present to expensive safaris and small-scale community programs, sensitive development of visitor facilities could provide a major income boost to the region and country.

In 1999, the latest year for which figures are available, revenue from Botswana's protected national parks and game reserves amounted to €1.6 million(US\$1.84 million) of which the biggest money spinner was Ngamiland's Moremi Game Reserve¹⁶. In less protected wildlife management areas, social benefits from community-based tourism (including jobs created) totalled €4,532(US\$5,204) per tourist bed/year¹⁷.

In Ngamiland alone, tourism accounts for 13,500 jobs – 60 percent of the region's workforce. And potential for expansion is enormous, with visitor figures predicted to rise by 10 percent a year from 1997 to 2020¹⁸. Moreover, while the commercial cattle industry is highly subsidised, tourism largely pays for itself, with money spent by the wildlife department on the upkeep of reserves mostly recouped through park fees and land use rentals¹⁹.

Hunting Industry

Bordered by Namibia, Ngamiland's 100,000km² is traversed by wildlife not only from within Botswana but from Namibia, Angola, Zimbabwe and Zambia²⁰. This free movement of wildlife has not only favoured the local ecology and tourism, but also community and commercial hunting. In 2001, hunting contributed €1.6 million (US\$1.84 million) to Botswana's economy, derived from trophy hunters who pay fees to safari operators who are leased concessions by local communities.

Europe's Responsibility to Act

The latest partnership agreement between members of the ACP countries and the European Community nations was ratified in April 2003²¹. The Cotonou Agreement contains strong language on the need to promote and protect environmental sustainability, traditional cultural values and sustainable tourism ventures. Erecting a further fence around the Okavango Delta would clearly run counter to these commitments.

Such action would breach two of the Cotonou Agreement's five stated cooperation strategies, those of "promoting the cultural values of communities" and "promoting environmental sustainability...and the preservation of a natural resource base."²² (Article 20 etc). The European Union is financing the agreement with €13.5 billion (US\$1.55 billion) in development funding during 2003-2007²³.

Above right: Elephant are a major revenue earner, as a draw card for photographic tourists and safari hunters

Regarding tourism, the agreement commits countries of both regions to promote:

- Sustainable development of the tourism industry in ACP countries recognising its increasing importance...and the role it can play in poverty eradication.
- The development of indigenous cultures in ACP countries.
- Improving the competitive position of the (tourism) sector, especially small and medium-sized enterprises.

Building more fences in Ngamiland would achieve none of these things. On the contrary, it would undermine fledgling attempts to develop community-based tourism and threaten the existing market for tour operators and safari hunters.



© Mary Rice/Environmental Investigation Agency

ACP/EU countries shall aim at "mainstreaming environmental sustainability into all aspects of development cooperation and support programmes and projects."

Article 32, Cotonou Agreement

How European Taxpayers Fuel Botswana's Beef Industry

Botswana is entitled to a 92% reduction in Customs duties on 18,916 metric tons of boneless beef exports a year to European Union countries²⁴.

In 2001, Botswana was the third biggest EU supplier of fresh/chilled beef imports - 7,616 metric tons; and frozen beef imports - 7,453 metric tons²⁵.

Diamonds make up 82.5% of exports to the EU, worth €452.2 million (US\$519.5 million). Beef comes second at 7.9% of exports worth €44.6 million²⁶.

Conclusions

The export subsidies provided by Europe to ACP nations for more than 30 years may be phased out in the near future, as free trade arrangements become the global rule. The Cotonou Agreement presents an opportunity to help countries such as Botswana move towards ecologically sustainable and socially progressive policies which promote industries with long-term futures such as eco-tourism.

The beef and other subsidies, which Cotonou provides for, will end in 2007. Although they may be renegotiated for a short period, they are unlikely to last for more than a further decade. As this briefing paper has shown, Botswana's cattle industry is not viable without these subsidies and tourism clearly offers much greater potential for long-term economic growth. Yet the history of veterinary fences shows that once erected they are not easily removed.

Below:
Nxuka Xishee,
Development
Facilitator,
Xai Xai Trust,
Ngamiland,
July 2003

If Option 3 is approved, the Okavango Delta will effectively be enclosed on three sides and wildlife migration routes cut off. All other compromise options will therefore be lost. Huge sums will be spent on creating a new cattle export zone, which at the very best might eke out a small, highly subsidised profit for a few years before becoming unviable. In the meantime, local wildlife and people will suffer. Option 4, supported by all Botswana stakeholders other than the cattle ranchers, provides a good compromise which would allow some increased commercial ranching while protecting wildlife corridors and local people's livelihoods.

A decision on which option to adopt is before Botswana's Cabinet.

Recommendations

- EIA urges European Union governments and Members of the European Parliament to convey to the Government of Botswana their concern at the prospect of a disastrous new cattle zone on the fringes of the world's largest inland delta.
- EIA urges European Union governments and Members of the European Parliament to uphold the commitments of the Cotonou Agreement to promote and protect environmental sustainability, traditional cultural values and sustainable tourism ventures in Botswana.
- EIA urges Members of the European Parliament to uphold the commitments of the Cotonou Agreement chapter endorsing the equality, participation and ownership of non-state actors in development strategies.
- EIA urges the Botswana government to respect the recommendations of the Environmental Impact Assessment which advises for a compromise (Option 4) that allocates development opportunities for local communities and cattle ranching.





© Craig Gibson/Environmental Investigation Agency

References

1. *A Thin Line: Botswana's Cattle Fences*, Robin Keene-Young, *Africa Environment and Wildlife Magazine*, March/April 2003.
2. *Environmental Assessment of Veterinary Fences in Ngamiland*. Summary Report, Scott Wilson, 2000.
3. *Northern Botswana Veterinary Fences: Critical Ecological Impacts*, Arthur Albertson, 1998. Quoted in *A Thin Line* as in Reference 1.
4. Scott Wilson Summary Report 2000. Table 10.1.
5. *Ibid*. Pg 96.
6. *The Challenges to Sustainable Beef Production in Botswana: Implications on Rangeland Management*. Mulale, K. 2001.
7. Scott Wilson Summary Report, 2000.
8. *Economic Returns to Selected Land Uses in Ngamiland, Botswana*. Barnes et al for Conservation International. 2001. Pg 3-4.
9. *Ibid*. Pg 34.
10. *The Challenges to Sustainable Beef Production in Botswana: Implications on Rangeland Management*. Mulale, K. 2001.
11. Scott Wilson Summary Report, pg viii.
12. Figures for 2000 quoted in *The Impact of the EU Beef Regime on Southern Africa: A Review of the Experience and Issues Arising by the European Research Office and Oxfam UK*, August 2001.
13. *The Challenges to Sustainable Beef Production in Botswana: Implications on Rangeland Management*. Mulale, K. 2001.
14. Personal Communication, 2003.
15. Scott Wilson Summary Report, pg viii.
16. *The socio-economic and environmental impacts of tourism development on the Okavango Delta, north-western Botswana*. Mbaiwa, J.E. *Journal of Arid Environments* 2003. 54: 447-467.
17. *Ibid*. As above.
18. Botswana government's tourism page at www.gov.bw. September 2003.
19. *Economic Returns to Selected Land Uses in Ngamiland, Botswana*. Barnes et al for Conservation International . Pg 14.
20. *A Thin Line*, as reference 1.
21. *Partnership Agreement Between the Members of the African, Caribbean and Pacific Group of States of the One Part and the European Community and Its Member States of the Other Part*, Cotonou, Benin, 23 June 2000.
22. Article 20, Cotonou Agreement, Benin, 2000.
23. EU Commission Press Release Anouncing Cotonou Agreement Entry Into Force, 1 April 2003.
24. Annex V, Protocol 4, Article 2, Cotonou Agreement, Benin, 2000.
25. Eurostat.
26. Figures for 2000 quoted in *The Impact of the EU Beef Regime on Southern Africa: A Review of the Experience and Issues Arising by the European Research Office and Oxfam UK*, August 2001.

Above:
Aerial view of
Okavango Delta,
July 2003



environmental investigation agency

<p>EIA UK 62-63 Upper Street London N1 0NY United Kingdom info@eia-international.org Tel (+44) 20 7354 7960 Fax (+44) 20 7354 7961</p>	<p>EIA US P.O. Box 53343 Washington DC 20009 USA EIAgency@email.msn.com Tel (+1) 202 483 6621 Fax (+1) 202 986 8626</p>
---	--

www.eia-international.org