NATURAL RESOURCES INSTITUTE

UNIVERSITY of GREENWICH

Commodity Based Trade

Economic implications for the Caprivi region in Namibia

STDF Working Group Meeting

21 October 2011

Dr. Diego Naziri

E-mail: d.naziri@gre.ac.uk

Commodity Based Trade (CBT)

OIE standards prevent the spread of diseases across the globe

Traditional focus on the recognition of disease-free status

Disease-free zones and disease-free compartments

CBT: different commodities present different levels of risks

Progressively applied in the *TAHC* on a disease by disease basis

Import of fresh beef from a country infected with FMD (Art. 8.5.25)

- ❑ Official control programme for FMD with compulsory systematic vaccination
- ❑ Animals vaccinated at least twice
- ❑ Past 30 days with no FMD outbreak within a 10 km radius
- ❑ Deboning and deglanding of the carcass
- ❑ Maturation of the carcass for at least 24 hours (pH below 6)

Constraints to wider acceptance

Reluctance to trade in commodities from infected countries

Still uncertainties (Paton et *al.*, 2009) > Further research

The *Code* should be read, used and applied in its entire context to assist decision-making

Importing countries can be reluctant to trust certification

CBT is not an alternative to good veterinary governance

Aim of the study

Translate the CBT concept into practice for one specific product (deboned beef) from a specific region of the developing world in which substantive trading opportunities with specific trading partners have been identified.

- What benefits from new market access opportunities?
- What additional costs incurred by the different stakeholders?
- Are these costs justified?
- How might CBT change the pattern of beef export from the Caprivi region?

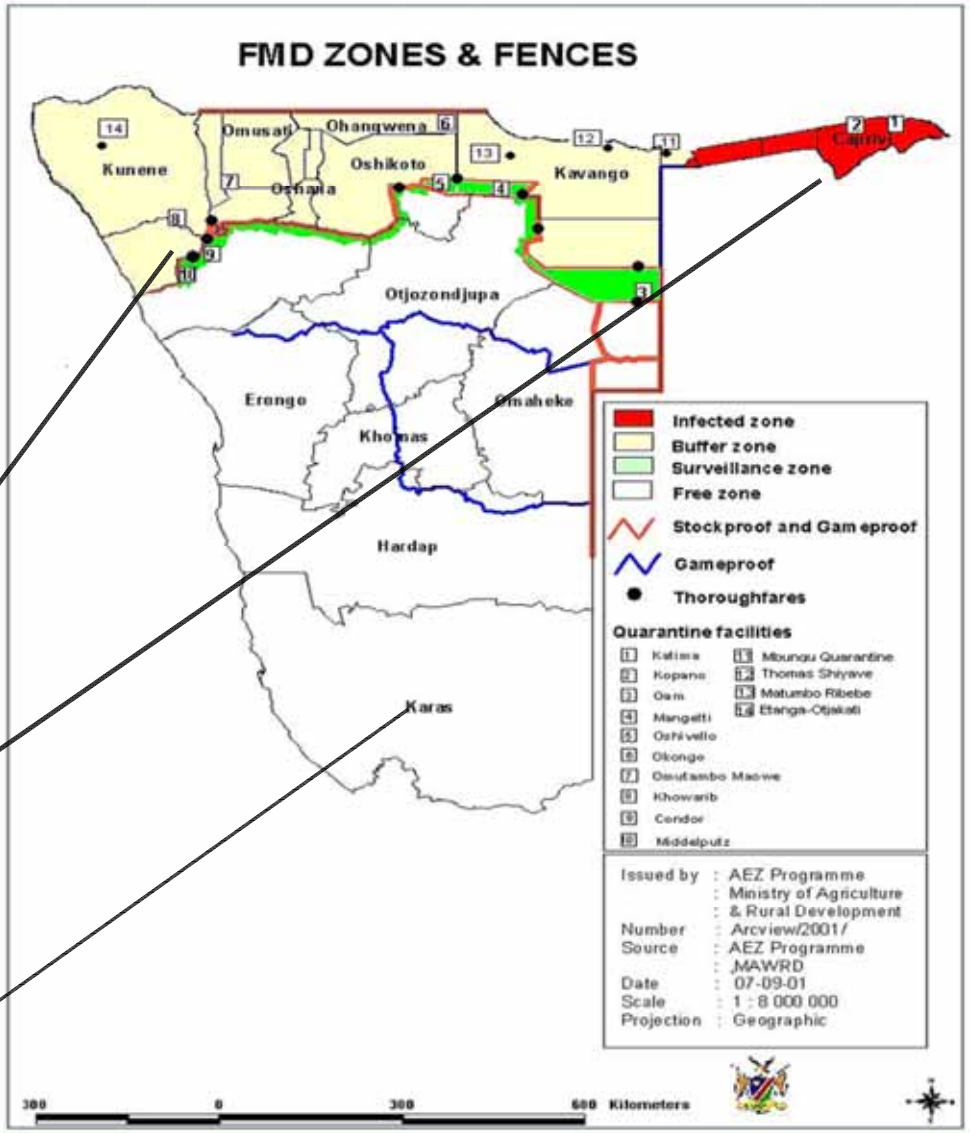
Rationale for the Caprivi region

- Beef industry is strategic for Namibia
- FMD status and zoning
- In the middle of KAZA-TFCA

Communal areas
150,000 HH (55% with cattle)
1.1 mln cattle (increasing)
Off-take rate: 2%

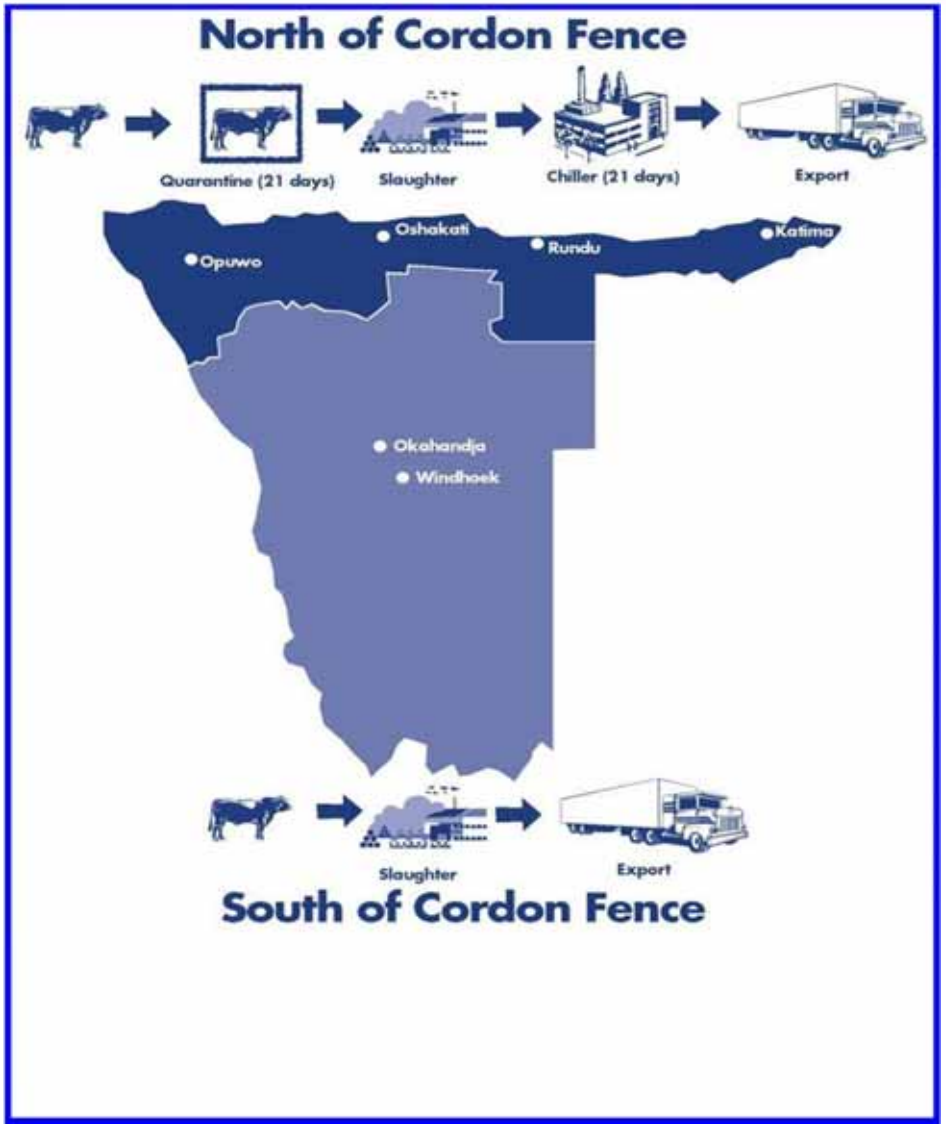
Communal areas
12,000 HH (75% with cattle)
150,000 cattle (increasing)
Off-take rate: 4%

Commercial sector
4,000 farmers
1 mln cattle (declining)
Off-take rate: 20 – 25%



Rationale for the Caprivi region

- Beef industry is strategic for Namibia
- FMD status and zoning
- In the middle of KAZA-TFCA
- Risk mitigation measures in place
- Approved CA and residues plan
- Traceability (FANMEAT)
- On going MCA funded project on CBT



Who we are

UNIVERSITY of GREENWICH | Natural Resources Institute

NUPI

D. Naziri - B. Bennett

K. Rich (Norwegian School of Veterinary Science; Norwegian Institute of International Affairs)

MCA NAMIBIA

Meat Board of Namibia

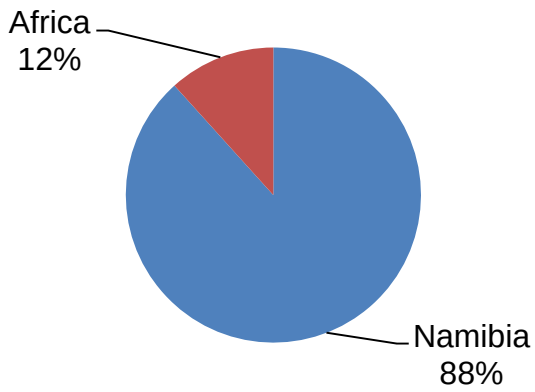
MEATCO Namibia

ISTITUTO G. CAPORALE TERAMO

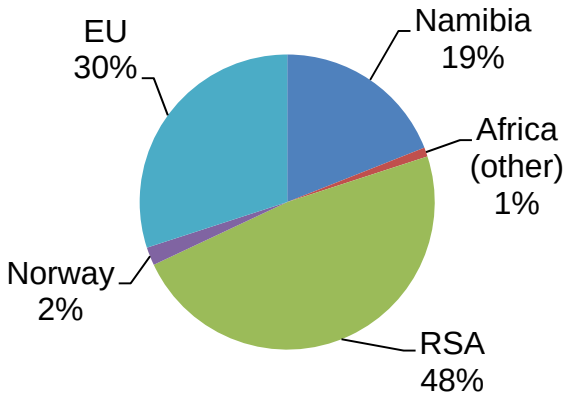
TAD SCIENTIFIC

Expected benefits

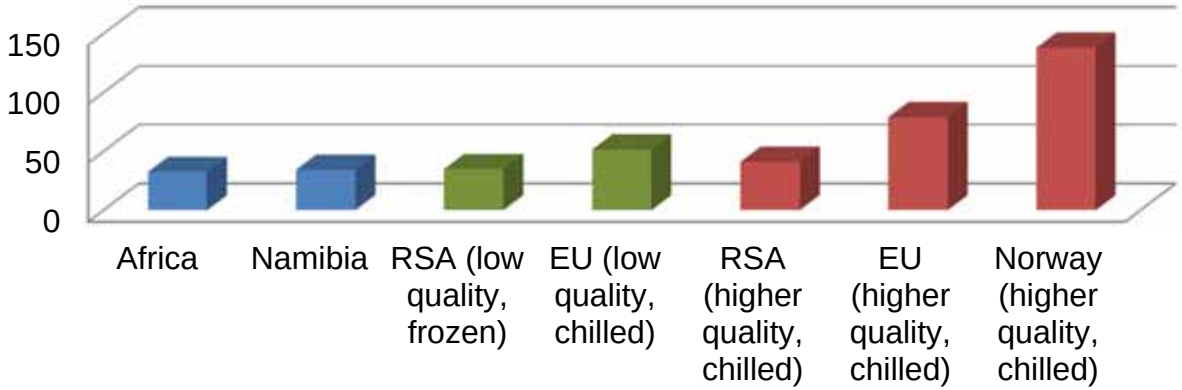
Caprivi - Destination markets (% volume)



SVF - Destination markets (% volume)



Price comparison for striploin (N$/Kg)



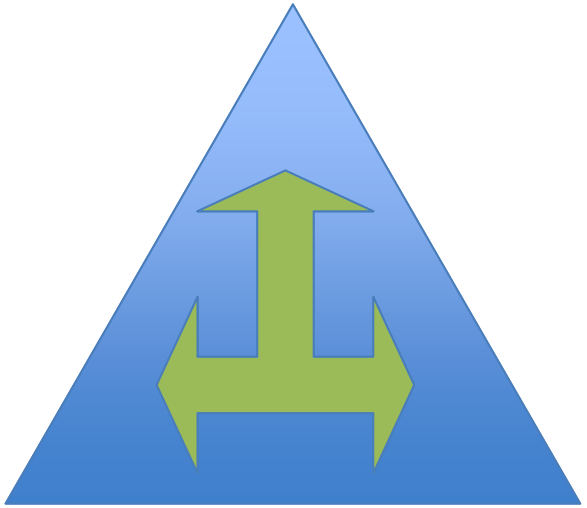
Expected benefits

- Trade diversion to more lucrative markets
- Increase the throughput of the abattoir
- Higher price paid to producers and decrease in cross-subsidization

Other benefits and spill-over effects (not included in analysis)

- Possibility of value addition
- Employment creation
- Decrease in cattle population and pressure on natural resources
- Increased tax earnings
- Enhanced compatibility wildlife conservation and ecotourism policies

Costs



Some costs are products and/or markets specific

Who incurs these additional costs? Private and public sector

Present situation Low quality beef	CBT Low quality beef	Additional requirements
Cattle producer	Cattle producer	Vaccines (FMP): SupaVac (Botulism, Black Quarter, Anthrax) and Brucellosis Parasites control (FMP): Flukezolc, Produx, Taktik Transport to Q by lorry (loading ramps in the procurement areas - pub. cost)
↓ Trekking	↓ Lorry	
Quarantine camp (21 days)	Quarantine camp (21 days)	2 extra FMD vaccinations (at the entry and after 2 weeks) Certification of good health
↓ Lorry	↓ Lorry	
Abattoir (slaughtering, deboning, cutting and 21 days meat quarantine)	Abattoir (slaughtering, deboning, cutting and 21 days meat quarantine)	Bleeding and serology test on a sample of animals Supervisors for deglanding process (3 trained staff) Training for carrying out the serology test and supervising deglanding - pub. cost EU approved abattoir (for export to either EU or Norway) - pub. cost Requirements for zero salmonella program (only for export to Norway)
↓	↓	
Buyer (domestic or neighbouring market)	Buyer (domestic or neighbouring market)	

CBT
Higher quality beef

Steer producer
(18 months old,
entry mass 250 kg)

⇩ Lorry

Combined Feedlot /Quarantine facility
(standing period 4 months)

⇩ Lorry

Abattoir
(slaughtering, deboning, cutting and 21 days meat quarantine)

⇩

Buyer
(domestic or international market)

Additional requirements

New Milk formula (for calves)
One year supplementary feed (winter licks, eco-licks, P12 mixed with salt)
Vaccines (FMP): SupaVac (Botulism, Black Quarter, Anthrax) and Brucellosis
Parasites control (FMP): Flukezolc, Produx, Taktik
Transport to Feedlot/Q by lorry (loading ramps in the procurement areas - pub. cost)

2 extra FMD vaccinations (at the entry and after 2 weeks)
Certification of good health
Animal procurement and feed
Infrastructure (capacity 800 cattle for 2400 cattle/year): pens, loading ramps, troughs, shed
Equipment: computer and scale
Labour: 1 manager, 20 workers (labour intensive)

Bleeding and serology test on a sample of animals
Supervisors for deglanding process (3 trained staff)
Training for carrying out the serology test and supervising deglanding - pub. cost
EU approved abattoir (for export to either EU or Norway) - pub. cost
Requirements for zero salmonella program (only for export to Norway)

System Dynamics model: why?

Simulation technique to analyze the behavior of complex systems over time

It can compute the evolution of costs and benefits from each step of the process

It allows to understand the feasibility of SPS compliance and identify other constraints for competitive meat exports

It allows to easily conduct sensitivity and scenario analysis

It is a powerful tool to deal with the problem of uncertainty (no change in current FMD management system foreseeable in the short to medium term)

Thank you

UNIVERSITY of GREENWICH

Natural Resources Institute
University of Greenwich
Medway Campus
Central Avenue
Chatham Maritime
Kent ME4 4TB

Telephone: 01634 880088
Telephone from outside the UK: +44 1634 880088
Fax: 01634 883386
Fax from outside the UK: +44 1634 883386
E-mail: nri@greenwich.ac.uk
Website: www.nri.org

THE QUEEN'S ANNIVERSARY PRIZES
FOR HIGHER AND FURTHER EDUCATION
2008

BSI
UKAS QUALITY MANAGEMENT
003

FS 54723
ISO 9001