

# Commodity Based Trade

## Economic implications for the Caprivi region in Namibia

STDF Working Group Meeting

21 October 2011



## 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

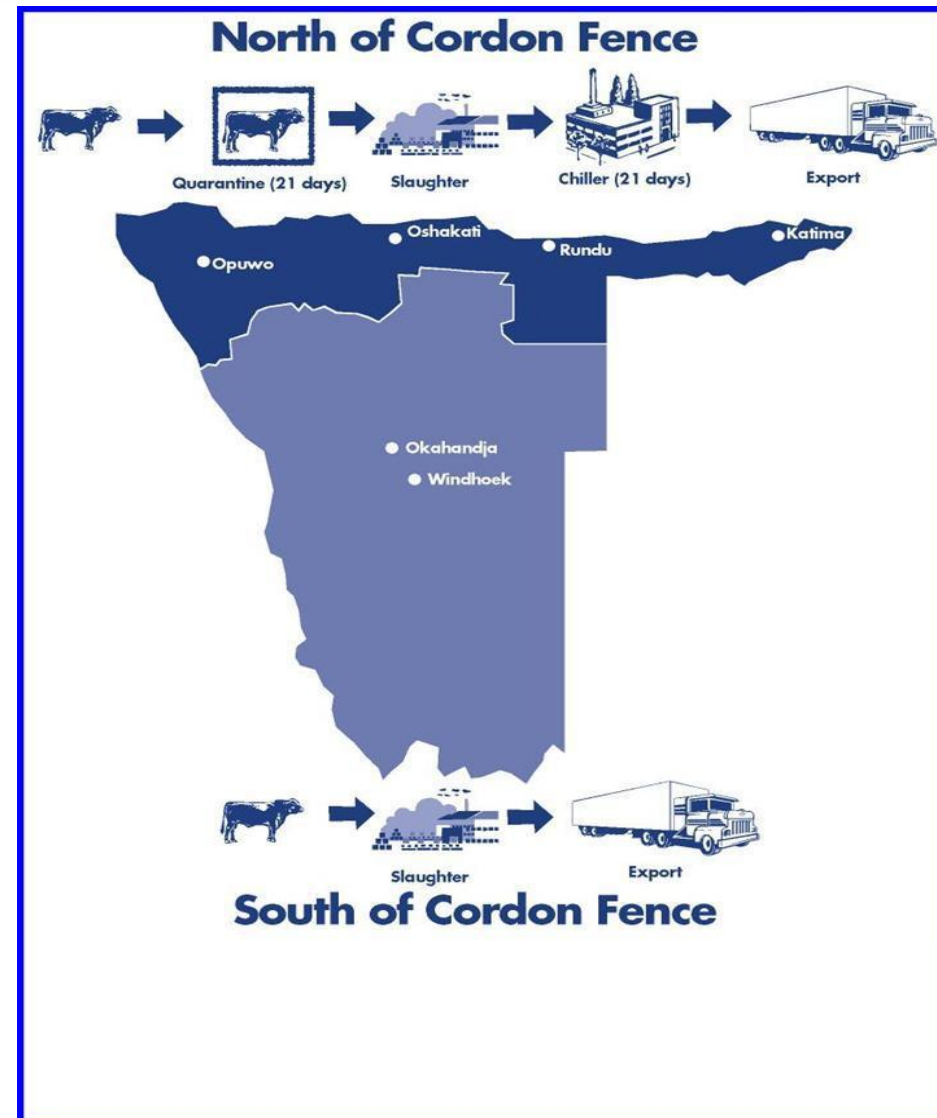
Translate the CBT concept into practice for one specific product (deboned beef) from a specific region of the developing world in which substantive trading opportunities with specific trading partners have been identified.

- 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
- Risk mitigation measures in place
- Approved CA and residues plan
- Traceability (FANMEAT)
- On going MCA funded project on CBT



## Who we are



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



Meat Board of Namibia



TAD SCIENTIFIC

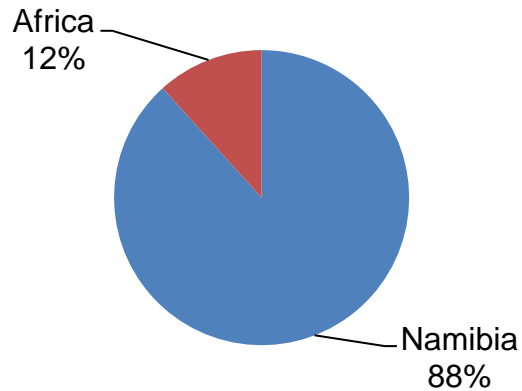


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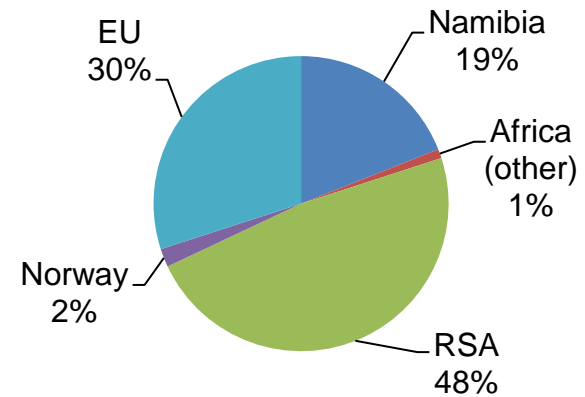


# Expected benefits

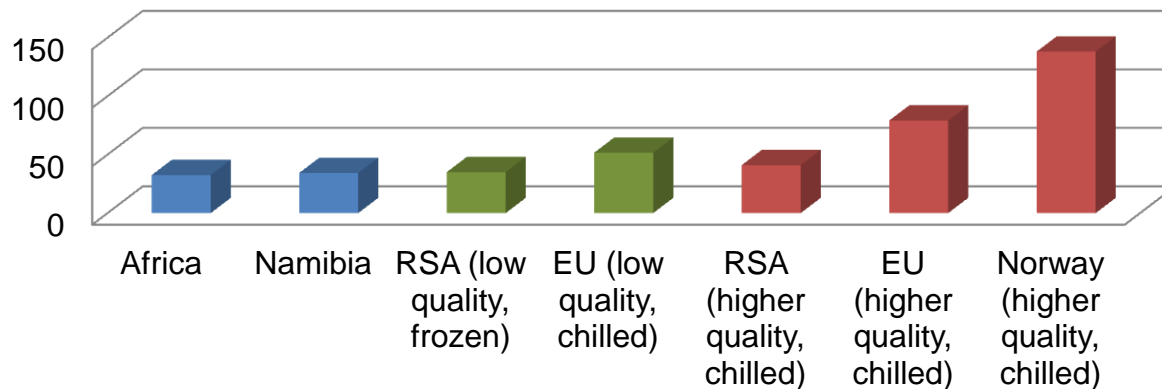
Caprivi - Destination markets (% volume)



SVF - Destination markets (% volume)



Price comparison for striploin (N\$/Kg)



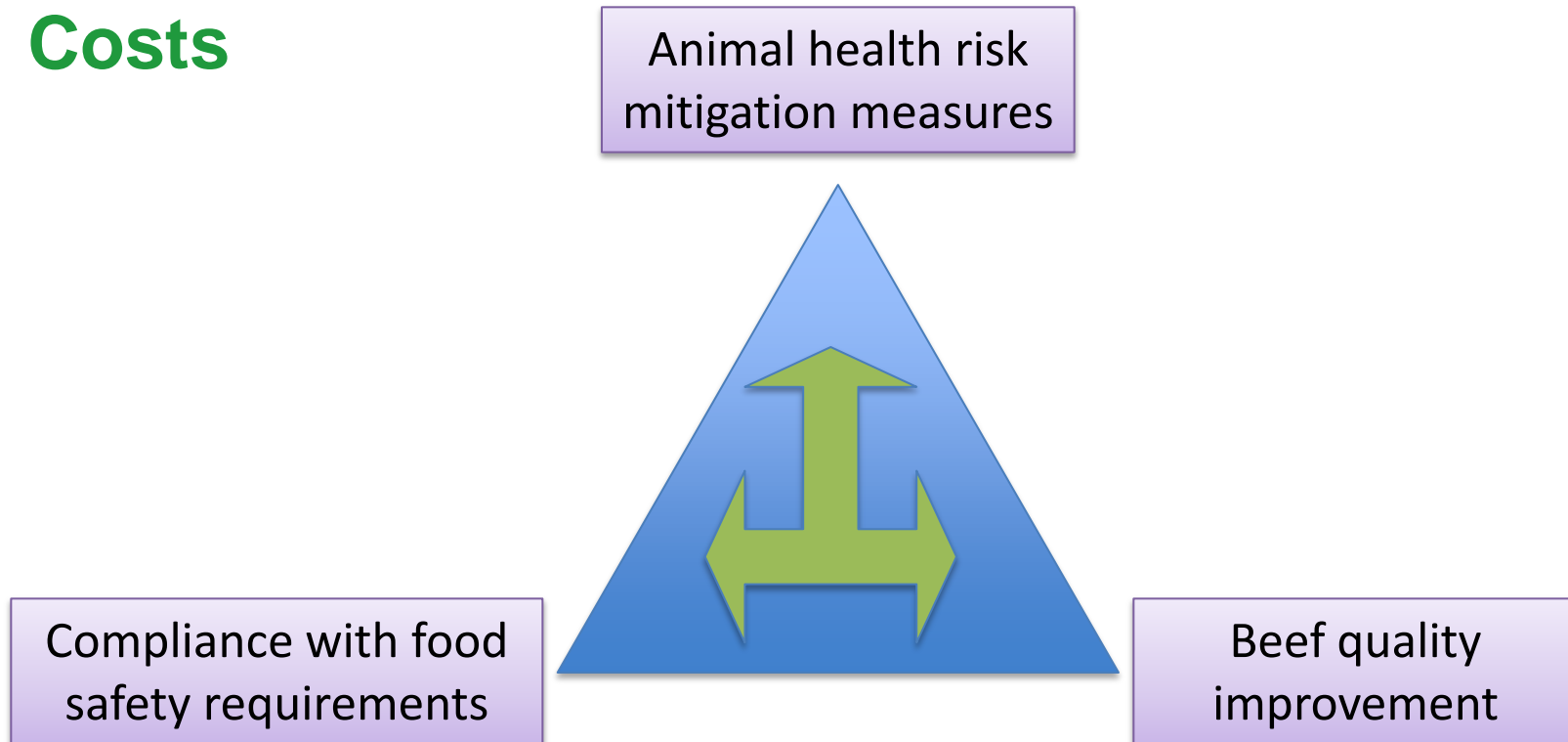
## Expected benefits

- 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 deglandng process (3 trained staff)  
Training for carrying out the serology test and supervising deglandng - 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)

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## 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**