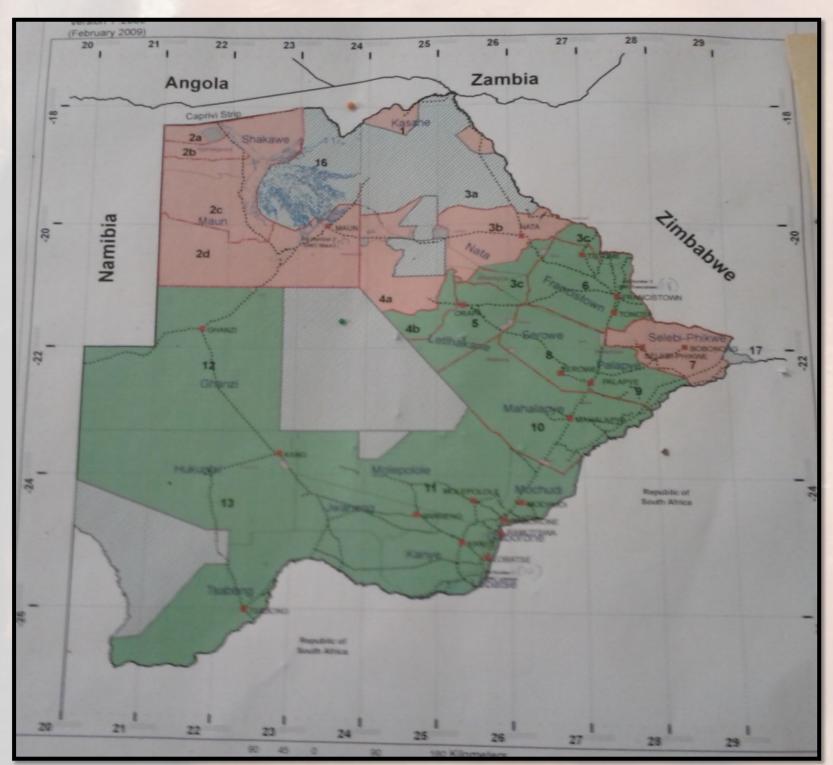
Introduction

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The present project describes and examines the value chain of cattle and the problems present in each section of the chain. Main economic factors are considered to improve the flow of the market and provide local development alternatives which enclose a set of procedure and recommendations to improve the value chain of cattle in the Ngamiland District

Objectives

- Based on a explanatory analysis of the value chain, provide a set of recommendations that improve the flow of the cattle market between the communities and the suppliers.
- Create opportunities to have greater access to the cattle market
- Develop alternatives that aim to increase the percentage of income that comes from cattle raising in Ngamiland communities.



Wildlife

Information from the Department of Wildlife and National Parks indicates that over the past few years there has been an upsurge in cases of negative interaction between livestock and wildlife. Strategies to avoid the problem (Department of Animal Health and **Production**):

- Fencing to minimize the contact between livestock and wildlife, though it is a good method, it doesn't solve the problem completely.
- A second method is to set watering points for both wildlife and livestock.
- The use of modern livestock husbandry techniques could play an important role preventing interactions between wildlife and livestock.

Foot & Mouth Disease

What is FMD?



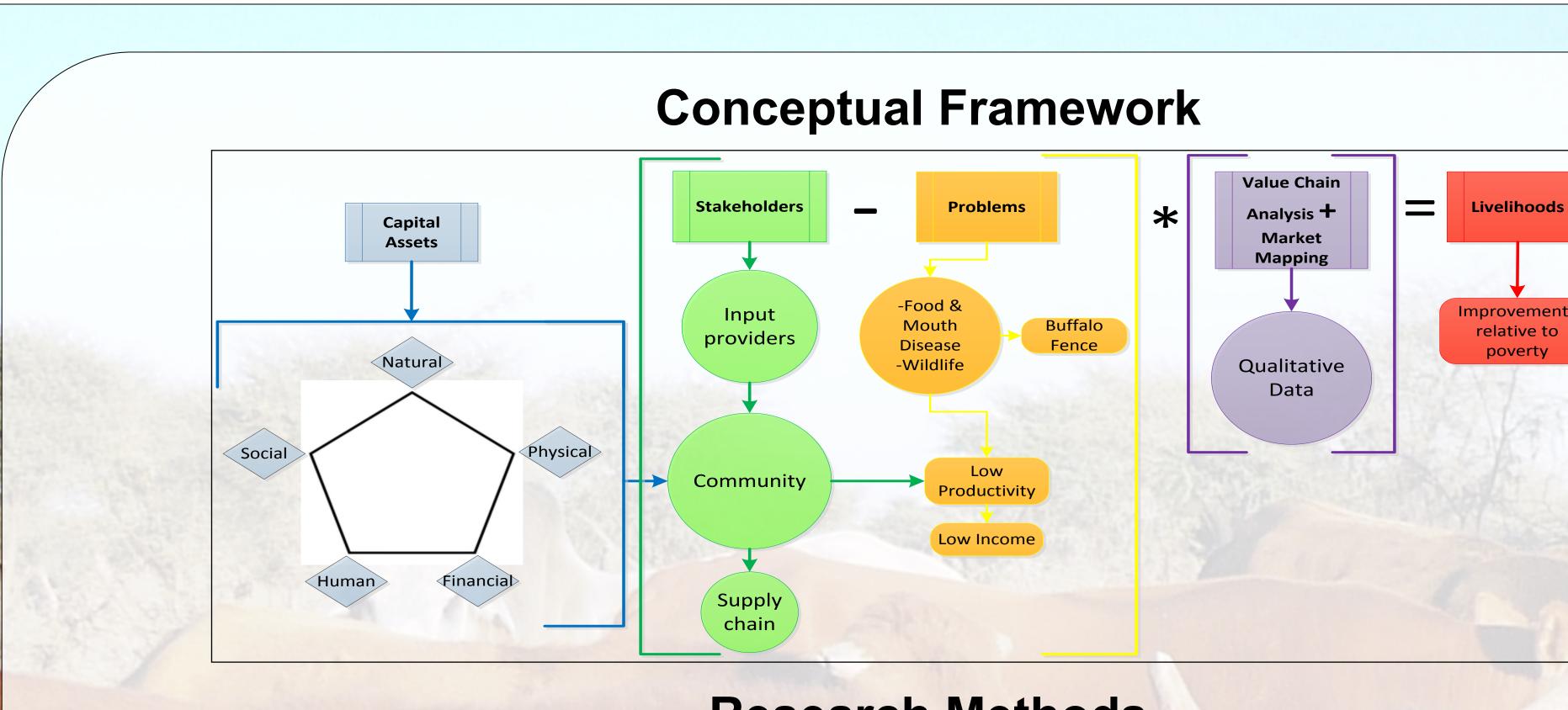


- It is an infectious and sometimes fatal viral disease that affects cloven-hoofed animals, including domestic and wild bovids. The virus survives in lymph nodes and bone marrow.
- It is a severe plague for the cattle business, it is highly contagious and is easily spread by infected animals through aerosols, contact with contaminated equipment, clothing, feed, vehicles, and by domestic and wild animals
- Contact between cattle and water buffalos creates an epidemic circle of food and mouth disease.
- Measures for containing the disease include considerable efforts in vaccination, monitoring, trade restrictions, quarantines and eventually the elimination of millions of animals

Context

Livelihoods improvement in Ngamiland Communities, Botswana through better market opportunities for cattle farmers Nícolas Vasconcellos – nvasconc@ufl.edu

University of Florida – Southern Afrinca Regional Environmental Program (SAREP)

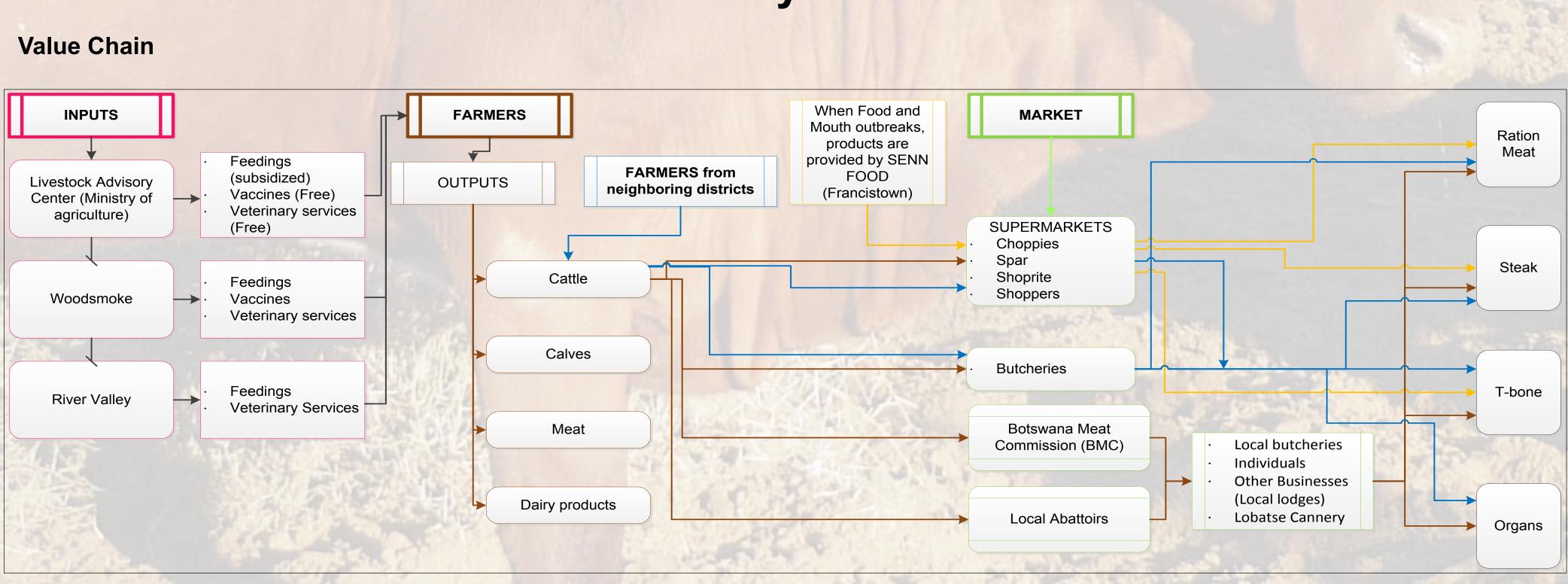


Research Methods

During the months of June and July the Value Chain Analysis covered the Shorobe, Sankuyo and Nokaneng communities making use of FGD with the cattle farmers of the community to collect the necessary data. • The methodology used to address the Value Chain Analysis of cattle was based on the following structure:

- o Input supplies: feeding supplements, vaccines, grazing areas, water sources, etc.
- Market information: prices, trends, buyers, suppliers.
- Financial services: such as credits, savings, and insurance.
- Transport services: provided by the country slaughter houses, buyers, local abattoirs.
- Support for product development and diversification
- The above mentioned were followed by a SWOT analysis performed by the cattle farmers after the Focus Group Discussion (FGD) in which they identified the strengths, weaknesses, opportunities and threats of cattle raising and the flaws in the market chain.
- The following step was interviewing the Veterinary Department, the Animal Production Department and the Livestock Advisory Centre in Maun, which provided information regarding the methods used to handle diseases in endemics areas, especially the ones neighboring the Buffalo Fence.

Analysis



Results

- More than 30% of the people in these communities own cattle.
- F&M disease reduces the selling rates of the cattle farmers, increasing their feeding and labor costs. Most of cattle farmers don't have a big amount of animals, this means the few animals they own represent a high percentage of their subsistence income. • In communities like Sankuyo, which is inside of the Buffalo Fence, wildlife represents 27% of cattle losses, this and F&M disease control strategies have forced the farmers to take their cattle to places such as Shokomoka, which is outside the Buffalo Fence. • Control measures undertaken by the Veterinary and Health Departments pushes butcheries and supermarkets to look for meat products outside the limits of Ngamiland; this represents higher logistic costs which raise prices up to 80% above normal (this is the case of ration meat which is the most purchased).

Vaccination campaigns does not provide the enough amount of shots to prevent the disease (currently only two shots are being provided per animal, when the necessary shots are three)

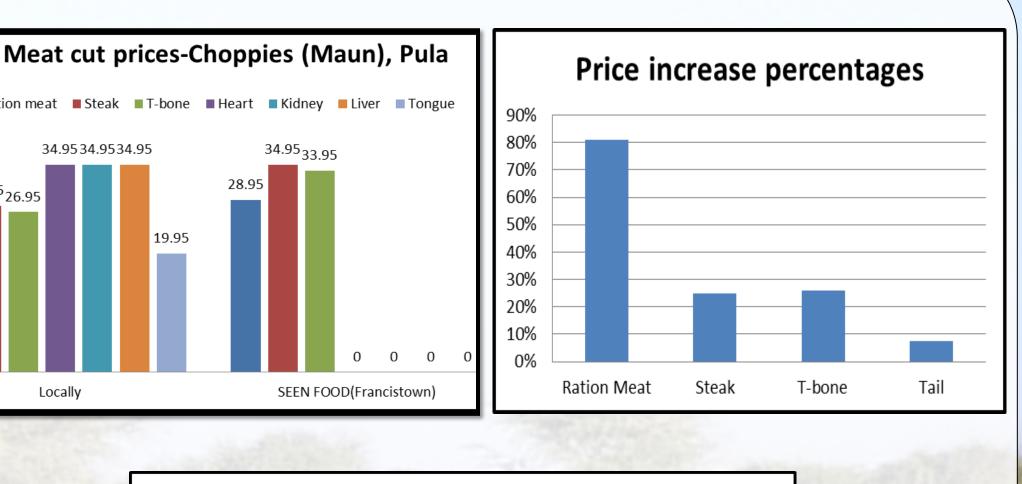
The Buffalo Fence is not being well maintained, i.e. there are damaged sections that allow wildlife and cattle to cross the other side.

When and FMD outbreak happens the Veterinary Department issues a quarantine period (time indefinitely) which keeps the cattle farmers from selling their cattle or derived products, but the authorities don't offer any compensation or alternative.

Farmers

Veterinary department

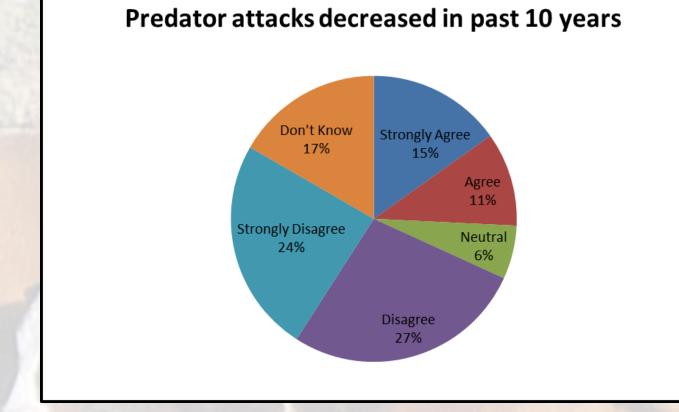




MASTER OF SUSTAINABLE

DEVELOPMEN

PRACTICE



Conclusions

Recommendations

• Keep cattle, not only separated from the Buffalo fence, but also at a far distance from it.

 Adopt measures in order to maintain hygiene within the areas inside their farms

• This should also include disinfection of tools and training the herd boys on hygiene measures when handling the cattle

• Train cattle farmers not only on raising techniques, but also on ways of creating a healthy environment for the animals to avoid the disease.

Enforce vaccination campaigns, by providing 3 shots a year (as recommended to avoid F&M disease) instead of 2 (as being done in present day).

Improve the diagnosis measures that determine if the animal carries the disease or not.

• Develop better kraal structures that can be easily built by the farmers to avoid cattle to escape or wildlife to attack cattle. **Government - Cattle Farmers Association**

· Look for different cattle purchasing points that break the monopoly system held by BMC.

Issue measures to regulate cattle price rates that farmers offer to buyers

Improve slaughtering techniques and hygienic measures in order to undertake the exports to the European market