

A report for:



## **Improving rural livelihoods through the optimisation of beef cattle production and marketing by smallholder farmers in Zimbabwe**

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## Executive Summary

Smallholder beef cattle farming is central to Zimbabwe's rural economy, providing livelihoods for millions while sustaining cultural traditions and food security. However, systemic challenges climate variability, fragmented markets, disease burdens, and underdeveloped infrastructure hinder productivity and resilience. This report proposes an integrated strategy to transform Zimbabwe's beef sector by harmonising indigenous knowledge, sustainable practices, and global innovations.

Key insights reveal that Zimbabwe's indigenous cattle breeds, such as the Mashona, are uniquely adapted to local conditions. Combining traditional pastoralism with holistic management, rotational grazing, regenerative land use, and One Health principles can restore degraded rangelands, improve herd health, and mitigate climate risks. Digital tools like blockchain traceability and mobile auction platforms further empower farmers to bypass exploitative middlemen and access fair markets.

Lessons from Botswana's centralised export systems, Namibia's cooperative models, and Kenya's digital innovations demonstrate pathways to formalise value chains. Strategic investments in public-private partnerships (PPPs) for rural abattoirs, cold storage, and microfinance (e.g., SACCOs) are critical to scaling these efforts. Aligning policy frameworks with grassroots initiatives will ensure equitable growth, while branding indigenous breeds could unlock premium export markets.

This report concludes with actionable recommendations:

- Strengthen village-level cooperatives to aggregate produce and negotiate prices.
- Prioritise climate-smart practices like rotational grazing and fodder diversification.
- Foster PPPs to build infrastructure and expand veterinary services.
- Leverage digital platforms for real-time market access and traceability.

In addition, a roadmap for resuming livestock exports is presented. Zimbabwe's beef industry once commanded lucrative markets in the European Union and Middle East but lost access due to recurring foot and mouth disease (FMD), collapsing infrastructure, and weak governance. Reviving exports requires:

- Establishing disease-free zones and rolling out comprehensive FMD vaccination campaigns.
- Rehabilitating major abattoirs (USD 10 – 15 million per facility) and investing in mobile abattoirs, cold storage units, and veterinary laboratories.
- Implementing a national RFID/LITS traceability system and digital cattle passports.

- Strengthening veterinary capacity (targeting 1 vet per 10,000 cattle compared to the current 1 per 100,000).
- Introducing stricter controls on cattle movement through quarantine zones, checkpoints, and digital monitoring.

A phased plan proposes:

- Short-term (one to two years): Repair key abattoirs, pilot disease-free zones, begin vaccination campaigns.
- Medium-term (three to five years): Scale up disease control, expand cold-chain logistics, implement national traceability.
- Long-term (five – 10 years): Restore Zimbabwe's presence in export markets, build brand equity around indigenous breeds, and sustain export capacity.

Implementing these strategies will enhance smallholder incomes, rehabilitate ecosystems, and position Zimbabwe's beef sector as a driver of sustainable rural development while re-establishing the country as a competitive exporter.

**Keywords:** Beef cattle, rural livelihoods, Zimbabwe, value chain, climate resilience exports, FMD control.

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## Foreword

I am Ranga Huruba, and I have been involved in agriculture for 15 years, with a deep and growing focus on beef production. Growing up in a rural community in Zimbabwe, I witnessed firsthand both the immense potential and the persistent challenges faced by smallholder cattle farmers. Cattle were never just livestock – they represented wealth, status, security, and the heartbeat of rural livelihoods. Yet limited market access, climate variability, weak infrastructure, and inadequate support services kept many hardworking farmers from realising the full value of their herds.

My Nuffield journey grew out of this tension between potential and constraint. Over the years, my work in conservation, operations management, and community engagement repeatedly brought me back to one central question: *How can beef cattle systems be optimised to genuinely improve rural livelihoods?* I realised that Zimbabwe and much of southern Africa needed solutions that were not only technically sound but also scalable, community-driven, and resilient to economic and climatic shocks.

Nuffield offered exactly the platform I needed: an opportunity to step outside my context, learn from global systems, benchmark against world-class beef value chains, and bring back insights that could transform how smallholder farmers engage with markets. Being selected for this scholarship affirmed my commitment to bridging agriculture, conservation, and rural development. It also challenged me to think boldly about the future of cattle farming in Zimbabwe.

This journey is helping me clarify the models, partnerships, and practical mechanisms required to unlock value for farmers whether through market-led production systems, strengthened animal health frameworks, innovative financing, or export-oriented value chains. Ultimately, Nuffield is not just a study experience for me; it is a pathway to becoming a catalyst for change, contributing to systems that enable farmers to thrive, communities to prosper, and the livestock sector to play its rightful role in national development.

During this Nuffield Scholarship, I travelled to:

**Table 1. Travel Itinerary**

| Travel Date                               | Location       | Visits/Contacts  |
|---|----------------|--|
| <b>(Week 1)<br/>15 – 21<br/>June 2022</b> | United Kingdom | 15 June (Wed):<br><ul style="list-style-type: none"><li>• Arrive Heathrow, travel to **Cranfield University** for research presentations (erosion control, water</li></ul> |

|  |  |
|--|--|
|  | <p>use efficiency, post-harvest storage, remote sensing) and a tour of the CHAP Phenotyping &amp; Soil Health Facility.</p> <ul style="list-style-type: none"><li>• Overnight in Peterborough.</li></ul> <p>16 June (Thu):</p> <ul style="list-style-type: none"><li>• Visit Blankney Estate &amp; Instar Farming (Lincolnshire) for an overview of regenerative arable practices, followed by a tour of the estate.</li><li>• Afternoon visit to the GWCT Allerton Project, focusing on farmland resilience, biodiversity, and regenerative systems.</li></ul> <p>17 June (Fri):</p> <ul style="list-style-type: none"><li>• Morning at NIAB (Cambridge): Introduction to NIAB, field trials walk, and discussion on alternative proteins.</li><li>• Afternoon at Kingsclere Estates (Basingstoke): Regenerative farming, soil health, and “circular community farm” initiatives.</li><li>• Move on to Meon Springs (Hampshire) for three nights’ stay; diversified dairy farm with nutrient offsetting project.</li></ul> <p>18–19 June (Sat–Sun) at Meon Springs:</p> <ul style="list-style-type: none"><li>• Farm walk, clay shooting, fly fishing, project discussions/Q&amp;A.</li></ul> <p>20 June (Mon):</p> <ul style="list-style-type: none"><li>• Visit Goodwood Home Farm (Chichester): Organic livestock and dairy production supplying estate events/restaurants.</li><li>• Afternoon at Rathfinny Wine Estate: Vineyard and winery producing award-winning English sparkling wines.</li><li>• Evening farm walk at Cockhaise Farm (Haywards Heath) hosted by FCN and local farmers.</li></ul> |
|--|--|

|   |                  |  |
|---|------------------|--|
|   |                  | <p>21 June (Tue):</p> <ul style="list-style-type: none"><li>• Visit NIAB East Malling (Kent): Tour of WET Centre, Green Tech Hub, and fruit/viticulture research facilities.</li></ul> |
| <b>(Week 2)</b><br><b>22 – 28</b><br><b>June 2022</b> | Canada (Alberta) | Integrated value chains  |

These visits broadened my perspective on holistic management, value chain organisation, and community-driven approaches that are directly relevant to Zimbabwe's smallholder beef sector.

## Acknowledgements

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- **Mr Ndoro**, from Livestock and Meat Advisory Council, Zimbabwe for sharing invaluable insights on smallholder farmers.
- **Gary Lewis** in Alberta, Canada, for demonstrating low-input production methods that could be replicated in Zimbabwe.
- Zimbabwe Ministry of Lands, Agriculture, Fisheries, Water and Rural Development, for facilitating farm visits and stakeholder meetings.

Special thanks to the smallholder farmers and cooperatives who opened their homes and shared their day-to-day realities, shaping much of the content and recommendations in this report.

## Abbreviations

CSA – Climate-Smart Agriculture

FAWC – Farm Animal Welfare Committee

GFP – Global Focus Program

HM – Holistic Management

IKS – Indigenous Knowledge Systems

One Health – Integrated concept of animal, human, and environmental health

PPP – Public Private Partnership

SACCO – Savings and Credit Cooperative

UN – United Nations

\$ – United States dollar

## Objectives

- Investigate existing challenges and constraints faced by smallholder farmers in Zimbabwe's beef cattle production and marketing sectors.
- Analyse opportunities for improving livelihoods through the optimisation of beef cattle production and marketing practices.
- Develop a framework for smallholder farmers to overcome challenges and achieve improved livelihood outcomes.

## Introduction

### A history of cattle domestication: Africa and Zimbabwe

Cattle domestication is one of the earliest and most significant changes through which humans have developed as a species. Genetic data indicates that modern cattle are descended from the now extinct aurochs (*Bos primigenius*), which once ranged throughout Eurasia and North Africa. It is assumed that domestication took place in two different places: in the Neolithic or New Stone Age about 10,000 years ago in South Asia, which gave birth to the humped Zebu cattle, *Bos indicus*, and in the Middle East, which gave rise to the humpless Taurine cattle, *Bos taurus* (Felius et al., 2011). The Taurine cattle reached Africa from the Saharan-Sahelian corridor about 6000 – 5000 BC and the Long horned African cattle included the Boran, Nguni, and Mashona of Zimbabwe (Kim et al., 2017).

The Mashona cattle that are native to Zimbabwe are a good example of adaptation. These are small, and strong cattle that are well adapted to feed on limited forages, resistant to tick-borne diseases, and can survive in prolonged droughts and have been improved through selection (Mapiye et al., 2021). In the pre-colonial era cattle were not only raised for meat but also for ceremonial purposes and were considered a measure of wealth and power. For instance, the Great Zimbabwe civilisation, which was in existence between the 11<sup>th</sup> and 15<sup>th</sup> centuries AD got its food, and social structure from cattle (Pikirai, 2013). Traditional geopolitics helped shape the development and management of cattle in Zimbabwe. This included the tribal wars and raids, which affected management and security. Colonialism came and affected the traditional practices with the introduction of commercial farming, game reserves, numbers per household, movement and introduction of exotic breeds, thereby inhibiting the development of smallholder farmers; an effect that is still seen in the current land tenure systems.



Figure 1. Indigenous bull (Source: Ranga Huruba)

## Socioeconomic and cultural importance of cattle in Zimbabwe

Beef cattle production remains a vital component of Zimbabwe's agricultural economy, contributing significantly to the livestock sector. Livestock accounts for approximately 19% of the agricultural GDP, with beef, dairy, and draught power making up about 70% of that livestock contribution (Mavedzenge et al., 2006). Small-scale farmers, who own 90% of the national herd (5.4 million cattle), use the livestock in various ways: draught animals are used to cultivate 65% of the area under communal management – milk and meat are important sources of food and income. These multiple uses draw the argument of communal cattle value versus that of a commercial animal. The informal cattle trade is worth more than \$1.2 billion, but formal exports are worth less than 15% of the sector's revenue due to frequent foot and mouth disease outbreaks and the EU quality-sanitary standards (Scoones and Wolmer, 2008).

Culturally, cattle are an integral part of the life of Zimbabweans and Africans as a whole. *Lobola*, or bride price, stands at 8 – 15 cattle per union and has been criticised for perpetuating gender discrimination, since women have limited control over the livestock received. There is great disparity in the understanding of this practice leading to misconceptions thereof. For example, cattle paid are not for the bride but for the family. Rituals like *kurova guva* (ancestor appeasing ceremonies and memorials) demand cattle to be slaughtered and thus prove their spiritual importance in the relationship between the living and the dead (Bourdillon, 1991). Cattle also have a social role – having a herd raises an individual's social status and, in turn, improves community leadership consideration for an individual or family.

The ecological role of cattle is that they serve as a source of manure, which supports the agro-pastoral production system and is used by 40% of the population living in the rural areas who practice subsistence farming (Parwada et.al, 2024). The grazing pressure in the communal lands, which support 80% of the herd, has led to degradation of soils in 35% of the arable land, which results in a 20 – 30% reduction in crop yields. Although the potential of rotational grazing is to recover 1.2 million hectares per year, the current adoption rate is less than 10% due to problems in land tenure, lack of extension services and support.



Figure 2. Household cattle (Source: Ranga Huruba)

## Beef cattle production: Challenges and prospects

### Climate vulnerability

Climate change and its related factors (including weather disasters) impact negatively on the beef cattle industry in Zimbabwe and affects the livelihoods of the rural population. Over the past decade, recurrent droughts were a major driver and have reduced the national cattle population by 23% (2015 – 2022) as farmers struggled to restock herds because of limited pasture. The situation became critical in 2023 when the El Niño weather phenomenon further exacerbated the drought, affecting about 2.7 million people in the country. Figure 3 demonstrates the need for supplementation to avert disaster in drought years. Due to increased costs of fodder and water shortages many smallholders had to sell off their animals at low prices, which in the long run reduced their rural income.

In addition to the direct impact of losses from drought, heat stress affects cattle performance and reproduction negatively. According to Rust et.al 2013, high temperatures lower the fertility

of animals by 15 – 20% since the animals are unable to produce hormones that control fertility. This also make them prone to tick-borne and other diseases. Water shortage compounds these challenges; livestock are left weak and prone to parasitic infestations that arise when dipping schedules and feed quality are poor. The forecast is not looking good for cattle production if we continue to experience temperature increases.

Such recurring crises reveal the general sensitivity of Zimbabwe's livestock-dependent populations to climate change shocks. Irregular rainfall patterns not only affect the availability of forage but also affect cropping schedules. This then reduces the availability of residual feed crops and limits the availability of feed to the livestock in all regions. The resulting poor body condition of cows leads to low milk production, hampering herd growth and forcing smallholders into a cycle of livestock disposal. This leads to an inability to recover and rebuild the herd after the next shock.

### **Disease burden**

Disease outbreaks are still a significant threat across Africa. Foot and mouth disease is still a major problem in Zimbabwe and causes \$50 million worth of losses every year. These losses are through export bans, especially to the EU and Middle East markets (Scoones et.al, 2009). However, vaccination efforts are still low because of barriers, including low resources and access. This results in less than 40% of the population having access to essential vaccinations. Tick-borne diseases, such as January disease (*theileriosis*), affect more than 500,000 cattle every year. The mortality rate is more than 70% for non-treated herds and this remains a reality, and pain, for the smallholder farmers (Maposa et al., 2023).

The veterinary infrastructure is severely underfunded: The country has one state vet for every 100,000 cattle, when the FAO recommendation is one vet for every 5,000 head. The private sector participation is limited with acaricides and antibiotics expensive to purchase. They are at least 300% more expensive than the neighbouring regions and therefore beyond the reach of 80% of the smallholders.

### **Resource constraints**

Smallholders are constrained by lack of fodder, especially during the dry season, which extends from May to October. Most farmers depend on crop residues to supplement depleted grazing. A 2023 survey established that 75% of the farmers use crop residues and this feed only meets 40% of the cattle's nutritional needs (Mutibyu et.al, 2012). Less than 12% of communal farmers can access subsidised protein supplements, such as cottonseed cake. Silage production is virtually non-existent due to high costs and lack of technical knowledge (ibid).

Water scarcity also adds to the feed problems, yet water is the most important mineral. Only 30% of the communal boreholes are functional and many farmers must take their cattle to water points as far as 15 km away. This practice is unsustainable, especially with limited energy in the animal's diet. Surface water and dams are thus the only option but with mostly poor water quality, this option is associated with an increase in waterborne parasites like *Fasciola gigantica* (liver fluke).



Figure 3: Water provision (Source: Ranga Huruba)

### Market dynamics and access barriers

Besides having the most cattle in Zimbabwe, these communal farmers face several challenges when they seek to sell their products to the formal market. It is estimated that only 12% of these farmers can meet the strict sanitary requirements and the high transport costs that are required for trade in the formal channel. For this reason, the majority are confined to the informal market where they receive 30 – 40% less than the market price (Fortune et.al, 2015). This persistent undervaluation of their products keeps them in poverty since they are unable

to reinvest in improving infrastructure, animal health and breeding. There is also a significant information gap and lack of infrastructure, which allows exploitation leading to further impoverishment.

## Chapter 1: Current production and management landscape

The livestock sector in Zimbabwe, specifically the smallholder cattle subsector, is characterised by communal grazing, limited or no access to veterinary services, weak extension services, indigenous knowledge systems, and market barriers. All these factors combine to determine the levels of productivity, profitability, and sustainability of rural livelihoods. Recent events, including the change of policy regarding livestock taxation, the establishment of village business centres, and the formation of crop and livestock cooperatives, have also impacted how farmers manage their herds and relate to the market. This section examines the present realities of production and management.

### Communal grazing systems

Social herd management is one of the oldest forms of rangeland management in Zimbabwe, where 80% of cattle are grazed on common pasture. In Figure 4 below, cattle are grazing communally and close to crop fields. Traditional grazing systems are also characterised by social norms and the collective management of natural resources, where grazing areas are allocated by the village heads through consultation and referring to area development plans. This, in most cases, can be abused and people settle on grazing lands further shrinking the resource pool for cattle.



**Figure 4. Cattle grazing (Source: Ranga Huruba)**

However, the fact that many people share the territory with limited management leads to overgrazing of the pastures. Over time, uncontrolled access has led to the depletion of grass

and forage resources, and 45% of the communal pastures are degraded. At one time, these lands were adequate for larger herds, but now, sources indicate that the capacity of these lands has reduced by 30%. For instance, Masvingo Province is a case in point; communal grazing lands in the area provided 12 cattle per household in the year 2000 but now support only seven due to soil erosion and poor fodder (Tavirimirwa et.al 2019). Climate change compounds these problems, since it causes factors that accelerate the degradation of the fragile grazing zones.

Socio-economic factors also affect the practice of communal grazing. The young people are more likely to prefer the urban lifestyle and leave the elderly behind to take care of the cattle. This outmigration compromises the community resource management structures that are based on the participation of the active population. However, the current tax regulations on livestock that were introduced in 2022 to enhance revenue collection by local authorities have become a subject of debate among the people in the communal areas. A small levy can be used to fund range management and veterinary services. The tax was designed to broaden revenue collection, but for many farmers it is unclear how the funds will be used or how the system supports them. When structured well, a small, transparent levy on livestock could be reinvested into essential public goods such as rangeland management, water point maintenance, and veterinary services – areas that are currently underfunded and overstretched, partly due to reduced community labour and weakened institutions. In this way, the levy has the potential to strengthen local resource governance and improve herd productivity, provided communities understand the purpose, see clear benefits, and participate in deciding how the funds are allocated.

The village business centres that have emerged in the past decade offer a possible solution to some of these challenges. These centres function as the source of resources, a market for fodder seeds, and a meeting point for extension officers and the farmers. Some of the communities are experimenting with rotational grazing management from these centres to be able to monitor the movement of livestock and control disease outbreaks. An example of this is in Matabeleland North, where a pilot project is mapping the communal rangelands with the help of drones to determine the carrying capacity and rest periods for grass growth. There are also experiments being conducted through Rangelands Regenerative in Matabeleland South, Beitbridge, to this effect.

## **Animal health infrastructure**

Dip tanks are an essential aspect of livestock health management in Zimbabwe, as they are used to prevent and control tick-borne diseases such as Theileriosis (also known as January Disease), Babesiosis, and Anaplasmosis. These structures, which are cone-shaped cement-

lined troughs that contain acaricide solutions, enable farmers to submerge their cattle and remove the ticks that can cause a drop in livestock productivity. However, based on recent assessments, only 60% of rural areas have functional dip tanks, leaving many of the smallholder farmers unprotected. Where dip tanks are functional, the results are incredibly impressive. For example, in the Chiredzi District, repairing 15 dip tanks in 2022 reduced the incidence of tick-borne diseases by 50% (Moyo et.al, 2013). Success was attributable to both physical repair of the structures, such as filling up cracks and leaks, as well as the availability of acaricides, which must be replenished from time to time for the product to be effective. Local people, together with government veterinary officers, set the time for dipping and collected money from farmers for use in maintaining the dip tanks, illustrating that grassroots level management is possible.



**Figure 5. Communal cattle dipping (Source: Ranga Huruba)**

However, there are still some constraints that make such successes difficult to replicate. Inconsistent funding from central government sometimes results in a shortage of acaricides, which affects the frequency of dipping thus making the control ineffective and encourages tick resistance. Transport costs, which are high due to the poor rural roads network, are a major factor that hampers the availability of veterinary supplies with some communities having to travel long distances to collect acaricides from village business centres. Also, new tax

regulations on livestock transactions meant to enhance government revenues at the local government level can sometimes compromise the resources that would have been used in dip tank maintenance or the purchase of drugs. Private sector and donor-funded interventions seek to fill these gaps, but coordination remains a problem. SNV Zimbabwe has partnered with local authorities to train community members as dip tank stewards who will keep records and enforce the dipping regimen. This approach enhances accountability and community participation, but its sustainability often depends on the availability of financial support from other sources.

## **Traditional knowledge vs modern techniques**

Traditional knowledge has been the backbone of livestock production in Zimbabwe for many generations, and the practices employed are in harmony with the local environment. According to Descheemaeker, et.al, 2017, techniques such as pastoralism, which involves the movement of herds in search of pastures and water according to the seasons are helpful in the context of climate change as the farmers can adapt their practices to the new environmental conditions. Many households still use indigenous veterinary solutions, for example, using plant materials to treat minor infections or to prevent parasites. However, such traditional methods are currently under considerable scrutiny owing to factors including climate change, shortage of resources, and market demands. This has led to the development of the ethno-veterinary practice, and it is gaining traction. Ethno-veterinary medicine (ethno-vet) refers to the traditional knowledge, practices, and beliefs used by local or indigenous communities to treat and manage animal health problems.

Demand for healthier food is growing globally, and communal production systems have been proven to offer good quality on the market, but this demand has implications of higher efficiency, standards, and continuity that the traditional systems cannot always meet. Hence, there is a need to incorporate some form of technology into the management of cattle.

However, scepticism towards external interventions is still rather high, particularly when the farmers believe that the new methods are costly and not suitable for their particular situation. The traditional approach that integrates indigenous knowledge with science and technology applications is most likely to be effective. Such an approach not only guarantees the protection of the environment and cultural features but also allows smallholder farmers to seize market opportunities and enhance their resilience in the constantly changing agricultural sector.

## **Government, private sector, and NGOs.**

Extension services are important in improving the livelihood of smallholder livestock keepers by providing them with information, advice, training and market information. The government

of Zimbabwe through the Agritex department has historically provided these extension services. A lot of focus has been on animal health issues and neglect in building the capacity of areas like forage, animal breeding, and business management. This has left NGOs to come in to fill the gaps that are identified in the society. For instance, SNV Zimbabwe in 2022 educated 5,000 farmers on how to conserve fodder, this increased the dry season cattle survival rate by 40%. Some of these programs include encouraging the growth of forage crops such as lablab, velvet beans, and grasses to minimise dependency on overpopulated and degraded communal rangelands and also to ease the pressure on feed during periods of drought. Another NGO, the International Rescue Committee (IRC) has adopted village-based extension approaches where leader farmers within the community are trained first and they then go and train other members.

Several NGOs and their partners have been working in Zimbabwe's smallholder cattle value chain. These include CARE International, Heifer International, SNV, Practical Action, Oxfam, World Vision, Land O'Lakes International Development, WeEffect, Catholic Relief Services, Mercy Corps, and the Food and Agriculture Organization of the United Nations (FAO, 2023). The Government of Zimbabwe (through its relevant ministries and departments), the Zimbabwe Farmers Union (ZFU), Zimbabwe Beef Producers Society (ZBPS), various private-sector companies (e.g., feed manufacturers, abattoirs), and local community-based organisations have also been active. Collectively, their goal has been to enhance cattle productivity, improve animal health and husbandry, foster inclusive marketing opportunities, and strengthen rural livelihoods. As a result of their combined efforts, many smallholder farmers have accessed better genetics, gained skills in fodder production and disease control, formed producer groups and cooperatives, and built stronger linkages to formal markets leading to higher household incomes, improved resilience to shocks such as drought and disease outbreaks, and greater participation of women and youth in livestock-based enterprises. The major challenge is to have aligned programs between NGOs and government to ensure sustainability of interventions. Training remains the most accessible, but with limited financial resources or access to funding it hinders being able to put into practice what has been learnt.

## **Farmers' unions and associations**

Farmers' unions and associations in Zimbabwe have historically been the main actors in the development of the smallholder agricultural sector as the platform for collective bargaining, policy formulation and capacity building. In the livestock sector, these organisations have grown important in the face of challenges such as climate change, market price fluctuations, and new livestock tax regulations. One of the organisations that is currently influencing the

beef value chain in Zimbabwe, both small-scale and commercial, is the Zimbabwe Beef Producers Society (ZBPS).

Farmers' unions and associations, including the ZFU and CFU, continue to play an important role in the enhancement of Zimbabwe's livestock sector. These organisations are able to engage in policy dialogue and provide training and information to the cattle producers to enable them to navigate through the challenges that face the sector and enhance their profits.

## **Market channels for smallholder beef farmers in Zimbabwe**

Marketing of beef in Zimbabwe takes place through a complex web of formal and informal market channels, which are influenced by certain economic, infrastructural and policy environments. It is, therefore, crucial for the smallholder producers to identify and effectively navigate these diverse outlets in order to achieve the highest possible returns, herd health, and sustainability. Direct village sales and intermediaries remain common channels today, but recently emerged models such as cooperatives, and digital marketplaces are gradually changing how smallholders are linking with buyers. This chapter looks at the various market channels currently available for Zimbabwe's smallholder beef farmers.

### **Local village markets and community sales**

Local village markets are the most easily accessible market for many smallholder farmers. In these informal venues, money is exchanged and there is little or no bureaucracy. For the households that are in rural or remote areas, village sales are convenient because they do not have to spend money on transportation or meet other requirements for selling to other markets. The prices in these local markets are usually lower and sometimes take the form of barter trade or direct exchanges. In part, these low prices are because the market information and power are stacked against the farmers, who are often manipulated by the buyers, who always want to pay the lowest price.

### **Middlemen (Traders)**

Middlemen remain an important factor in the beef value chain in Zimbabwe especially in the remote areas. They provide a ready market for the farmers especially when there is a need for money, for instance in cases of drought, sickness, or other events. Traders help the producers to avoid transport costs and other fees and levies. The only downside is that this convenience comes at a price: according to the RBZ, farmers receive an average of \$200 per animal, while the same cattle can be sold for between \$600 and \$1,000 in urban markets.

These drastic price differences are an indication that some intermediaries are taking advantage of the situation, and this calls for alternative marketing strategies.

### **Auction floors**

Auction floors, which are public and private (Rural Councils and CC Sales Model) provide a more organised way of selling livestock than the market or middlemen. Auctions can fetch better prices than village markets or direct sales to middlemen. These platforms also offer some level of accountability since the cattle are weighed and graded according to a set of standards. However, there is the issue of high costs associated with transporting the animals to auction floors, which are usually situated in large towns or on the main highways. This is because poor rural road infrastructure and limited access to reliable transport still present a major challenge to smallholders in areas like Binga, Gutu and Mwenezi.

### **Formal abattoirs and meat processors**

Selling to abattoirs or meat processors directly is also lucrative, especially for those farmers who are in a position to meet the required standards in terms of quality, health, and classification. These buyers usually offer more stable contracts and better prices for the cattle, especially if the cattle are well fed and free of diseases. However, only a small portion of Zimbabwe's smallholders are capable of meeting these strict requirements due to limited access to veterinary services and lack of cold chain facilities in rural areas. Even though you can have access to council abattoirs, managing sanitation and cold chain remains a challenge. One option is to deliver to the private abattoirs, but the volumes required to make sensible revenue are usually unattainable. The majority still resort to the informal or semi-formal channels, thus the need for proper improvement of extension services and infrastructure.

### **Cooperatives and collectives**

Recently, the use of cooperatives and other types of farmer groups has been on the rise in order to enhance the market power of smallholders. This enables the farmers to group together and then sell their produce to the supermarkets or other buying centres directly or when there is high demand, buying and selling in bulk and at a lower cost, and also combining transport with sales. Beef Collectives can get 25% higher prices for their members by selling directly to the supermarkets (Melesse et.al, 2023). Such models require strong governance, transparency and trust among the participants. When they are well managed, cooperatives can reduce the power of middlemen and enhance the rural economy in the long run.

### **Digital and online platforms**

According to Benhildah et.al, 2025, rapid advances in mobile technology are beginning to reshape livestock marketing in Zimbabwe. The Kurima Mari App, launched in 2018, now links over 500,000 farmers to urban buyers, cutting intermediary margins by 20% (TechZim, 2018). Through this platform, farmers can access real-time price information, schedule pick-ups, and receive payments electronically, thereby enhancing transparency and reducing the possibility of exploitation. Use of electronic traceability and IoT for real-time monitoring of herd health is gaining traction (Kamilaris et al., 2019). Still, challenges persist and only a minority of smallholders (around 8%) own smartphones with reliable internet coverage. Digital literacy and data costs also remain limiting factors, underscoring the need for training programs and expanded telecommunications infrastructure in rural areas. Starlink can be a game changer in this regard and development partners need to investigate rolling it out to solve cost and connection issues.

### **Export markets**

Zimbabwe has historically exported beef to regional and international destinations, yet smallholders rarely access this channel due to strict disease-control protocols, traceability requirements, and capital-intensive logistics (Gawande, 2007). Reviving exports could be profitable if supply chains become more organised, but this would necessitate significant investment in veterinary services, cold-chain systems, and certification processes. For most communal farmers, meeting such standards without external support remains unattainable leaving them to more accessible channels, which are less profitable.

## **Chapter 2: Global insights for local impact – adapting best practices to Zimbabwe's context**

While Zimbabwe's context is unique, there is much to learn from neighbouring and regional countries that have successfully integrated smallholders into profitable, export-oriented beef value chains. This chapter explores key African examples and relevant insights that can inform Zimbabwe's efforts to strengthen its own livestock sector.

## Lessons from Africa

### Botswana (Botswana Meat Commission)

Botswana's approach to beef marketing and disease control has demanded attention across the continent.

- Centralised export framework and coordination

The Botswana Meat Commission (BMC) operates as a state-owned entity with exclusive export rights, ensuring that the country's beef meets the desired stringent international standards (*ibid*). By centralising the process, BMC can enforce uniform quality, traceability, and sanitary measures, which are essential for exporting to lucrative markets like the European Union. This framework assures smallholders of a stable buyer while offering competitive and transparent prices. This model parallels the old Cold Storage Commission in Zimbabwe in the days when it was still viable.

- Strict disease control measures

Botswana's rigorous foot-and-mouth-disease (FMD) zoning effectively safeguards disease-free regions. Quarantine stations and regular inspections enable cattle producers to maintain robust health standards, instilling consumer confidence in the beef. Coupled with the Livestock Identification and Trace-back System (LITS) using RFID boluses for individual animal tracking this ensures compliance with EU sanitary standards. In Zimbabwe, adopting stricter zonal segregation especially in regions prone to FMD could unlock higher-value export markets. Another way will also be to accept the fate regarding country wide spread of FMD and invest in technologies to ensure meat quality standards are still met. An example of this will Commodity Based Trade (CBT) which allows the export of beef products that meet specific safety standards, regardless of whether FMD is present in the country or region.

- Transparent pricing

BMC's price-setting mechanism is relatively transparent, accounting for global market trends and carcass grading. Producers receive up-to-date information on price categories, stimulating farmers to improve herd quality. Zimbabwe can adapt elements of this system by rolling out more transparent and accessible grading standards at abattoirs, thereby incentivising quality-focused production.

- Relevance to Zimbabwe:

A state-backed or semi-autonomous institution like BMC could coordinate export strategies, enforce strict veterinary checks, offer stable prices and reliable access. In

areas with minimal disease incidence, Botswana's zoning approach provides a template for intensifying disease control to secure premium export markets. This calls for the revival of a CSC kind of model with much needed proper governance and management.

## **Namibia (Meatco)**

Namibia's Meat Corporation (Meatco) emphasises farmer participation through cooperative-like structures.

- Farmer-centred approaches

Smallholders have representation in Meatco's governance, ensuring that their concerns such as fair pricing, access to processing facilities, and timely payments guide corporate decisions (Meatco, 2023). The successes stem from proper representation and the right voices on the table. The Farm Assured Namibian Meat (FAN Meat) scheme, with electronic traceability (NamLITS), guarantees hormone-free, welfare-compliant beef. Additionally, Meatco sources 20 – 25% of cattle from communal farmers, integrating them into export supply chains. Zimbabwe's local beef committees could similarly scale up to a national platform, bridging the gap between rural producers and policymakers.

- Investments in processing, branding, and traceability

Meatco invests heavily in processing plants, brand development, and livestock traceability. By labelling products according to the region of origin and quality grade, it taps into niche markets that value provenance. In Zimbabwe, branding indigenous breeds (e.g., Nkone, Mashona) and highlighting unique rangeland attributes and management could command premiums in specialised or organic segments.

- Flexible payment models

Namibia's livestock sector embraces payment flexibility such as phased payments or partial upfront advances. This gives smallholder farmers liquidity while awaiting full settlement. This approach helps farmers cover immediate costs like feed, veterinary care, or school fees, thereby minimising the risk of distress sales at below-market prices.

- Relevance to Zimbabwe:

Namibia's success underscores the value of producer empowerment through cooperative structures and traceability. Building upon Zimbabwean cooperatives (e.g., Mhondoro Beef Collective) could pave the way for national entities that pool resources, market collectively, and invest in infrastructure to boost quality and export-readiness.

## Kenya

Kenya illustrates how a vibrant cooperative movement and innovative digital solutions can transform smallholder livestock markets.

- Producer cooperatives as the backbone

Kenyan dairy and beef sectors thrive on group marketing, where cooperatives bulk-sell produce and negotiate volume-based contracts with retailers (Kimani et.al, 2022). Although Zimbabwe has some local beef committees, scaling them into robust cooperatives could significantly raise bargaining power.

- Emergence of small-scale feedlots and digital auctions

Smaller feedlots in Kenya allow smallholders to finish cattle cost effectively, leading to uniform carcass quality. Kenya's digital auction platforms (e.g., MifugoTrade) offer transparent bidding, bridging farmers and buyers even in remote areas (SPARC\_Knowledge, 2015). Mobile applications could expand beyond simple price listings to encompass real-time auctions, fostering fairer competition and efficient sales. CC Sales online auction platforms also need to be utilised for this. Crop and Livestock Innovation Centres setup under the ZRBF could be aligned with this initiative.

- Mobile technology for transparency

SMS-based advisory services, digital payment solutions, and mobile veterinary apps inform Kenyan farmers about market trends, vaccination schedules, and early warnings for disease outbreaks at local context level. Zimbabwe has made initial strides with Econet, Netone and Potraz-led connectivity initiatives, but further investment in rural internet coverage would amplify the impact of digital tools.

- Relevance to Zimbabwe:

Kenya's experience with mobile technology and cooperative-fed feedlots underscores the importance of bridging information gaps. By leveraging user-friendly apps and broadening extension services, Zimbabwean smallholders could access timely data on diseases, feed prices, and buyer offers. This is a crucial step toward bolstering market participation and sensitivity.

## Tanzania

Tanzania's blend of public and private efforts has energised smallholder livestock markets.

- Public-Private Partnerships (PPPs)

Joint ventures in rural abattoirs, management, and cold-chain logistics have boosted Tanzania's meat export and local capacity. Through PPPs, local councils provide land, while private investors bring expertise and capital, resulting in modern facilities that adhere to international standards (TIC, 2023 & World Bank, 2024). Zimbabwe could replicate this model, especially in districts lacking functional abattoirs or refrigeration units.

- Relevance to Zimbabwe:

By prioritising PPP-driven infrastructure and consistent disease control, Tanzania shows a route to integrate smallholders into high-value chains. The Zimbabwean government, in partnership with private-sector players, could replicate these strategies to modernise rural slaughter facilities and elevate sanitary standards.

## **Ethiopia**

Ethiopia's livestock sector has increasingly oriented itself toward Middle Eastern markets for both live animals and processed beef.

- Export-oriented cooperatives and jointly owned infrastructure

Farmer-owned cooperatives in Ethiopia manage to meet export demand by pooling resources to meet large orders, consolidating transport, and ensuring uniform quality (Bernard & Spielman, 2009). Such collective structures also invest in shared slaughterhouses, guaranteeing fair prices, access and equitable profit distribution.

- Relevance to Zimbabwe:

Ethiopia highlights how export-oriented approaches can develop from grassroots efforts and how collaboration as well complementation benefit smallholder farmers. By combining cooperative marketing with targeted investments in processing facilities, Zimbabwe's smallholder farmers could gain access to emerging regional markets and particularly if disease-free zones are established and branding is emphasised.

## **South Africa**

South Africa features a more advanced, commercialised beef industry with well-integrated supply chains and a focus on brand development.

- Commercial feedlots and vertical integration

Large-scale feedlots contract farmers, ensuring a consistent supply of cattle finished to specific weight and fat cover standards. This vertical integration with major retailers offers stable prices, although smallholders need to meet stringent specifications.

- **Branding and specialised labelling**

Labels like Angus or Bonsmara (a South African-developed breed) highlight specific breed attributes, driving price premiums. Additionally, organic and free-range labels cater to niche markets willing to pay extra for traceable and ethically reared beef (Prinsloo et.al, 2014). Zimbabwe could pursue similar branding efforts, particularly around indigenous breeds (Tuli, Mashona, Nkone) that boast resilience and unique flavour profiles.

- **Relevance to Zimbabwe:**

South Africa's case underlines the potential of vertical integration and brand differentiation. While setting up large commercial feedlots may be capital-intensive, smaller feedlot operations, modelled after Kenyan examples could be adapted. Branding Zimbabwe's indigenous breeds and emphasising natural grazing systems could tap into high-value segments in both domestic and export markets.

## **Other global perspectives: Learning away from Africa**

Although African examples are useful in understanding the situation in countries with similar ecological and socio-economic environments, the global practice (from Latin America to Asia) presents other avenues that Zimbabwe can learn from to enhance its smallholder beef value chain. These regions demonstrate how large-scale coordination, technological innovation, and government-led incentives can transform production, processing, and marketing to the benefit of both commercial and small-scale producers.

### **Latin America: Brazil and Uruguay**

- **Brazil**

Brazil is one of the world's largest beef producers, with very large ranches and a firmly established feedlot segment. Nonetheless, small-scale producers also gain from government-sponsored credit facilities (PRONAF) and technical assistance initiatives that are aimed at enhancing farm practices (da Silva & de Souza, 2007). In some areas, cooperatives combine smallholders together to supply large processors, thus realising economies of scale in inputs such as vaccines and feed supplements. The Brazilian experience suggests that affordable funding, research-extension interfaces, and marketing alliances are critical for enhancing the competitive position of small-scale ranchers.

- Uruguay

Uruguay's cattle traceability system (SNIG – *Sistema Nacional de Información Ganadera*) requires that all cattle must be given an electronic ear tag when they are less than one year old, which must be retained throughout the animal's lifetime (Aguirre, 2024). This system provides a clear track and history of every animal from the farm to slaughter. It also helps in meeting the requirements of quality assurance measures to access the European Union market. It may be difficult to implement such sophisticated traceability in the communal areas of Zimbabwe, but the demonstration of electronic identification in certain districts could be the beginning of the implementation of such a system in the entire country, and more so in the disease-free areas that aspire to export markets.

- Relevance to Zimbabwe:

Smallholders need to have their breeding stock traced. It is therefore possible to develop digital or electronic traceability systems that can be gradually developed to support premium export markets (e.g. disease-free zones). Public research institutions can play an important role in innovation provided they are adequately funded, thus enabling Zimbabwe to emulate Brazil in the integration of farmers and extension workers to provide solutions to cattle production problems.

## **Asia: India and China**

- India

Despite the fact that Indian cattle are mainly destined for the milk market, its cooperative model (including AMUL in the dairy sector) has been able to transform the rural economy through integrated farming, processing, marketing and distribution (Meena, 2023). Important implications for Zimbabwe include the effectiveness of community-based businesses and the concept of vertical integration where the smallholders own the processing and marketing companies. Even in resource-poor areas, Indian cooperatives have been able to sustain growth by re-investing earnings into the development of local infrastructure such as chilling facilities and feed mills.

- China

China's economic growth has led to increased consumption of animal proteins including beef, which has been followed by the development of supply chains. According to Brown et.al, 2002 the government provides support to the agri-businesses by offering tax exemptions and low-interest loans for the development of rural infrastructure and storage facilities. Most smallholders enter supply relationships

with large feedlot companies or abattoirs to ensure market stability and minimise risk. Zimbabwe can consider a similar approach that offers incentives for private investors to locate facilities in the rural areas while at the same time the facilities must meet set quality and price regulations.

- Relevance to Zimbabwe:

Contracting can limit price risk for smallholders, while providing market security and quality standards to the buyer. A tax incentive for the development of rural infrastructure or slaughter facilities can therefore mimic the Tanzanian model and be scaled up with lessons from China.

## Chapter 3: Pathways to prosperity – strategic recommendations

### Recommendations

Building upon these conclusions, this chapter proposes five strategic recommendations to transform smallholder beef farming into a driver of rural prosperity.

#### Organised marketing at village level



**Figure 6. Paddock-to-fork concept in the United Kingdom – Goodwood Farm Shop This model inspires potential adaptations for Zimbabwean village markets (Source: Ranga Huruba)**

Marketing is an ongoing challenge for smallholders who often face unfavourable terms of trade, limited negotiation skills, and sporadic access to information on prevailing prices. Middlemen exploit these gaps, resulting in lower prices. Meanwhile, local village markets lack consistent organisation, leading to a fragmented supply base that struggles to meet bigger buyers' standards.

- Establish or strengthen beef committees or cooperatives

Aggregation and price negotiation: Village-level committees can pool livestock to achieve larger volumes, thereby attracting interest from formal abattoirs and supermarkets. This approach also distributes transportation costs among members, mitigating one of the major expenses that eat into smallholder profits. Organised

marketing can also help negotiate levies and taxes related to sales. A model was trialled in Beitbridge by Rangeland Regenerative and preliminary results are promising.

- Logistics management: Committees or cooperatives can coordinate trucking, cold-storage rental, and timing of sales to coincide with peak demand periods e.g., holidays. This ensures that animals fetch premium prices. This, together with market consolidation, will help deal with inefficiencies that can later reduce revenue for farmers.
- Promote community butcheries or mini-processing units
  - Local value addition: Instead of shipping live animals over long distances, smallholders can process carcasses within the community, retaining a greater share of the value chain locally. This not only boosts local economies but also preserves meat quality by reducing transit time and stress on animals. By-products like hides can add to revenue immensely.

Lessons from the Mhondoro Beef Collective show that community-driven processing reduces dependency on external abattoirs and middlemen. By adopting similar models, other villages could replicate this success, especially if supported by training in hygiene standards and basic processing techniques.

- Expected Impact: Organised marketing at the village level can raise producer incomes by upwards of 20 – 25%, while simultaneously spurring local job creation and capacity-building (IFAD, 2023). Improved community cohesion and collective bargaining further empower farmers to negotiate fair contracts, levies, taxes, facilitating a shift away from exploitative channels and tendencies.

## Sustainable beef production systems



**Figure 7. Herd health and holistic planned grazing training at a private ranch (Source: Ranga Huruba)**

Zimbabwe's history of communal grazing has led to land degradation, overgrazing, and declining pasture productivity. The semi-arid regions are most affected. Climate change exacerbates these conditions, thus manifesting in more frequent droughts and unpredictable rainfall patterns. Consequently, smallholders often struggle to maintain herd health and stock management, leading to forced sales at lower prices.

- Encourage holistic management and rotational grazing
  - Extension programs: Government agencies and NGOs can embed HM principles within existing extension services. By conducting demonstrations on rotational grazing, forage management, and soil regeneration, farmers can witness the tangible benefits of these practices. African Centre of Holistic Management can be involved in the training of extension workers and local village level natural resource monitors and champions. There are also private players that are now active in training in these regenerative practices.
  - Regenerative grazing practices: Rotating herds among and within subdivided paddocks (e.g., eight to 12 paddocks per community) gives pastures time to recover, increases ground cover, and curbs erosion (Huruba et.al, 2018). Over time, this results in more resilient ecosystems that can withstand climatic stresses.

Adoption of precision agriculture, remote sensing for pasture monitoring, can also bring success. Careful and collaborative communal grazing planning is a good starting point to success in sustainability for the rural production systems.

- Expected impact: Harnessing the benefits of sustainable production systems, which produce healthier livestock, reduced mortality, increased yields, and long-term restoration of communal rangelands. This approach positions farmers to supply better-quality beef, strengthening their market standing and resilience to external shocks.

### **Formal structures to attract investment**



**Figure 8. Carcasses hanging in a custom abattoir facility (Source: Ranga Huruba)**

A major bottleneck for smallholder beef farmers is the lack of adequate physical infrastructure like cold storage, abattoirs, and feedlots. Financial support systems are also lacking as private investors often hesitate to invest in rural areas due to perceived risks and uncertainty over returns. Simultaneously, smallholders also lack the collateral to finance costly infrastructure instalments and upgrades.

- Facilitate public-private partnership models for rural abattoirs, cold storage, and feedlots

- **Public-Private Partnerships (PPPs):** Encouraging partnerships between government bodies, local authorities, and private investors can mobilise the capital required to build or upgrade rural infrastructure. This includes road networks for ease of logistics, electricity supply and abattoirs. These abattoir facilities would ideally include refrigeration, quality control, and basic processing lines to improve meat handling and reduce spoilage.
- **Mobile abattoirs and cold chain expansion:** There is a need to develop and further establish mobile abattoirs, which can be shared by villages or at ward level. This, coupled with cold chain management, can be a game changer for accessing better markets and improved processing efficiencies. Scaling these interventions could dramatically cut transport costs and reduce post-slaughter losses.



**Figure 9. Mobile abattoir facility (Source: AES Food Equipment: <https://www.aesfoodequipment.com/services/mobile-and-modular-abattoir/>)**



**Figure 10. Mobile abattoir facility (Source: AES Food Equipment: <https://www.aesfoodequipment.com/services/mobile-and-modular-abattoir/>)**

### **Expand microfinance and crowdfunding (SACCOs, Community Revolving Funds)**

- Financial inclusion: Savings and Credit Cooperative Organisations (SACCOs) and community revolving funds empower smallholders who lack traditional collateral. By offering low-interest loans earmarked for herd improvement, dip tank repairs, or feed production, these mechanisms help farmers invest in productivity enhancing inputs.
- Crowdfunding platforms: Digital technology can connect diaspora communities and socially conscious investors with smallholder projects. This model has already begun in some parts of Africa, raising capital for infrastructure in exchange for a share of future revenues. Examples in other sectors include the Stokvel Schemes prevalent in South Africa, with some platforms managing to invest in real estate.

- Expected impact: Improved infrastructure and reliable financing attract broader market participation, enabling price stability, and it incentivises best practices in production. Over time, well-structured PPPs can lead to standardised grading, certification processes, and traceability. This will pave the way for potential regional or even international export opportunities.

## **Foster collaborations within the sector**

The report notes that the fragmentation of efforts among NGOs, private-sector actors, and government agencies often results in duplicative or competing initiatives. At the same time best practices from one district do not always spread to others due to weak knowledge-sharing platforms and a lack of coherent policy frameworks.

- Enhance synergies among NGOs, private sector, and government agencies.
  - Coordinated training and disease control: Collaborative programs can pool resources for comprehensive farmer training modules. These should be covering health management, marketing techniques, and financial literacy. This then avoids piecemeal interventions.
  - Consolidated marketing: Joint ventures from NGOs, extension services, and private companies can establish larger, more consistent supply chains. This paves the way for premium market segments, including supermarkets and hotels in urban centres. It offers the necessary support to penetrate and compete.
- Emphasise knowledge-sharing platforms
  - Field days and demonstration plots: These events offer valuable peer-learning opportunities where successful farmers showcase their herd management systems.
  - Digital tools: WhatsApp groups, SMS alerts, and specialised apps like Kurima Mari App can disseminate market prices, weather forecasts, and training materials in real time. Expanding rural internet connectivity is crucial to maximise the reach of these tools.
- Expected impact: A more integrated ecosystem can accelerate the adoption of proven methods, reduce duplication of efforts, and enable economies of scale for smallholder beef farmers. When the sector moves in unison and supported by standardised frameworks, the outcomes become more predictable, sustainable, and beneficial to all stakeholders.

## **Looking ahead: A blueprint for rural livelihood transformation**

Zimbabwe's smallholder beef sector, which is underpinned by traditional communal grazing methods is at a pivotal point. The recommendations presented in this chapter are not singularly focused but provide a multi-tiered strategy to elevate rural livelihoods, enhance market competitiveness, and ensure environmental stewardship. The critical steps involve institutional strengthening, infrastructure development, financial innovation, and inclusive governance.

These measures should not be pursued in isolation, but through a holistic approach, that weaves together organised marketing, sustainable production, formal investment, cross-sector collaboration, and empowerment to have the greatest impact. Coordinating these efforts under a unifying policy framework that is supported by local authorities and national ministries can ensure improved rural livelihoods.

Data-driven decision-making will be paramount as the country contends with evolving climatic conditions and rapidly changing economic realities. Government agencies and research institutions should prioritise the collection and analysis of metrics such as pasture regeneration rates, herd growth, market price fluctuations, and digital platform adoption. These insights can refine extension materials, guide infrastructure investments, and spark innovations tailored to local contexts.

## **Final thoughts**

The pursuit of prosperity in Zimbabwe's rural communities is openly linked to the potential of smallholder beef farming. Enhanced by strategic investment, robust market systems, and ecological mindfulness, the sector can become a pillar of national development. Not just contributing to food security, but also to broader socio-economic advancement. It is high time every village is looked at as a business unit and its productivity treated with the attention it deserves. It is our duty to support rural farmers to be able to participate in and integrate the value chain with the right quality and quantity. Besides the challenges we might face through this journey, there is hope. With collaborative effort and genuine intent to make a difference our interventions can yield transformative outcomes. We need to embrace a cohesive agenda and merge strong environmental stewardship, forward thinking and inclusive governance for Zimbabwe to uplift countless rural families.

## Chapter 4: Roadmap for resuming livestock exports from Zimbabwe

Zimbabwe's beef industry once commanded strong export markets, particularly to the European Union and the Middle East, supported by the Cold Storage Commission (CSC) and well-maintained veterinary systems. However, recurrent foot and mouth disease (FMD) outbreaks, collapsing infrastructure, and inconsistent policy frameworks have eroded this export capability. Reviving livestock exports will require targeted investments, regulatory reforms, and collaborative action across the value chain.

### Steps required to resume exports

- Establish disease-free zones in high-potential provinces (e.g., Matabeleland, Midlands), using a phased zoning approach combined with strict quarantine controls.
- Rebuild and modernise the CSC or establish a new semi-autonomous body to coordinate quality assurance, grading, and export logistics.
- Introduce mandatory livestock identification and traceability systems (RFID boluses or electronic ear tags) to meet international sanitary standards.
- Strengthen partnerships between government, private abattoirs, and cooperatives to ensure consistent supply, quality grading, and hygiene standards.

### Cost estimation for infrastructure rehabilitation

Reviving export capacity will require substantial investment in slaughterhouses, cold-chain systems, and certification facilities. Based on regional benchmarks:

- Rehabilitation of major export abattoirs (e.g., CSC Bulawayo): Estimated \$10 to \$15 million per facility.
- Establishing mobile abattoirs and cold storage units at district level: \$250,000 – \$500,000 each.
- Implementation of a national RFID/LITS traceability system: \$5 million (initial setup), with annual maintenance costs around \$500,000.
- Veterinary laboratory upgrades for disease surveillance and certification: \$3 – \$5 million.

**Table 2. Estimated costs for livestock export infrastructure and services**

| Infrastructure/Item                                      | Estimated Cost (USD)                              |
|--|---|
| <b>Rehabilitation of major abattoirs</b>                 | \$10 to \$15 million per facility                 |
| <b>Mobile abattoirs and cold storage units</b>           | \$250,000 – \$500,000 each                        |
| <b>National RFID/LITS traceability system</b>            | \$5 million (setup), \$500,000/year (maintenance) |
| <b>Veterinary laboratory upgrades</b>                    | \$3 – \$5 million                                 |
| <b>FMD vaccination campaigns</b>                         | \$2 – \$3 million per year                        |
| <b>Quarantine and movement monitoring infrastructure</b> | \$2 million initial, \$500,000/year               |
| <b>Digital cattle passport system</b>                    | \$1 million setup, \$200,000/year                 |

## **Disease control measures – focus on FMD**

FMD remains the single greatest barrier to export resumption. A nationwide strategy should include:

- Vaccination campaigns to achieve at least 80% herd coverage within high-risk zones.
- Establishment of quarantine buffer zones around disease-prone districts.
- Increased funding for veterinary services, targeting a minimum ratio of 1 vet per 10,000 cattle (from the current 1 per 100,000).
- Public-private partnerships for vaccine procurement and community-based animal health monitoring.

## **Policing cattle movement**

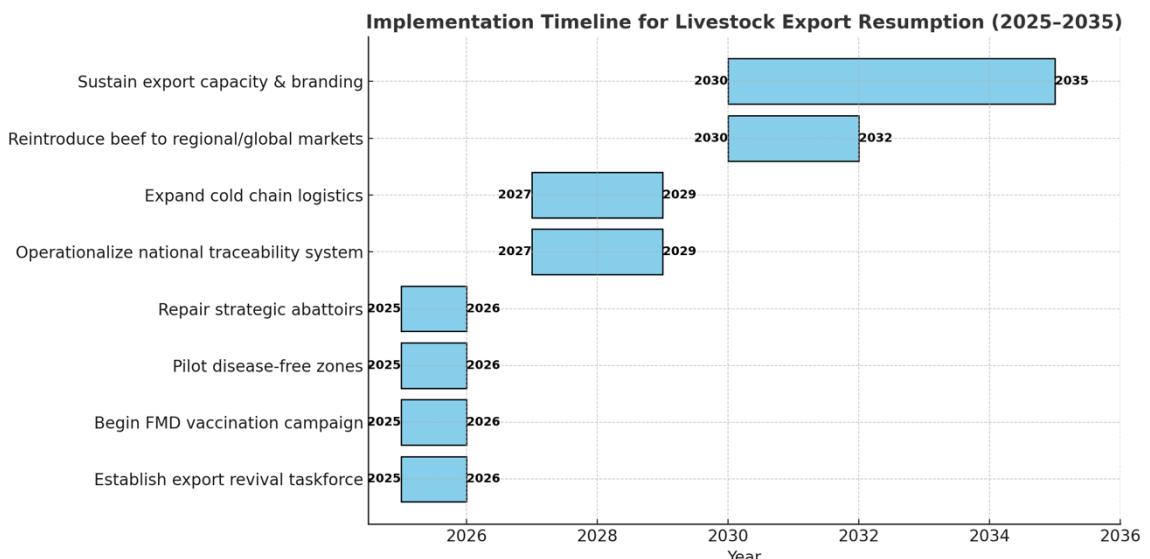
Unregulated cattle movement exacerbates disease spread. Key measures include:

- Deployment of livestock movement monitors at rural district council checkpoints.
- Introduction of digital cattle passports, linked to the LITS system, to track movement between provinces and across borders.
- Collaboration with farmers' unions and local leaders to enforce communal grazing and controlled transhumance.

## Implementation plan and timeline

The roadmap to restore exports can be phased as follows:

- Short-term (one to two years): Repair strategic abattoirs, pilot disease-free zones, and begin FMD vaccination campaigns. Establish a taskforce for export revival.
- Medium-term (three to five years): Scale up disease control measures, expand cold chain logistics, and operationalise national traceability systems.
- Long-term (five to 10 years): Reintroduce Zimbabwean beef to regional and global markets, build brand equity around indigenous breeds (e.g., Mashona, Nkone), and sustain export capacity.



**Figure 11. Implementation timeline for livestock export resumption (2025–2035)**

## Conclusion

Resuming livestock exports will not only revitalise Zimbabwe's beef value chain but also unlock rural prosperity through better prices, job creation, and value-added processing. This roadmap aligns with the recommendations outlined in Chapters 1 – 3, providing a practical pathway for policymakers, investors, and farmer organisations to collaborate in rebuilding a globally competitive industry.

## Recommendations

This region faces significant challenges in supporting livestock production, primarily due to resource constraints and limited access to necessary inputs. Smallholders rely heavily on crop residues as a supplemental feed source, which only meets 40% of the cattle's nutritional needs. The high cost of acaricides and antibiotics, combined with a lack of technical knowledge and poor water quality, further exacerbates these issues.

To address these challenges, the following recommendations are made:

1. **Establish or strengthen beef committees or cooperatives:** This approach can help smallholders pool their livestock, negotiate better prices with formal abattoirs and supermarkets, and distribute transportation costs among members. Organised marketing can also assist in negotiating levies and taxes related to sales.
2. **Promote community butcheries or mini-processing units:** This can help increase the value-added processing of livestock products, resulting in higher revenues for farmers. It also enables local businesses to capitalise on the growing demand for premium-quality beef products.
3. **Foster partnerships between external stakeholders and local communities:** Collaboration with organizations, such as ActionAid Zimbabwe, can facilitate access to essential resources, expertise, and markets. This partnership approach can also help build rural prosperity by unlocking better prices for farmers.
4. **Invest in integrated agricultural development programs:** These programs can support smallholder farmers by providing training, inputs, and infrastructure that can enhance livestock production. This will require supportive policies and external support for the sector to grow.
5. **Enhance local market access and improve transportation networks:** Improving local market connectivity can help farmers attend bigger buyers' standards, resulting in higher prices. Moreover, supportive policies and initiatives that promote resource efficiency can help farmers thrive.

Zimbabwe's livestock industry can overcome its current challenges and become more resilient to future shocks if we implement these recommendations.

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## **Appendix A: Case study: Zimbabwe Resilience Building Programme (ZRBF)**

### **Background and Context**

The Zambezi Valley, covering districts such as Mbire, Kariba, and Binga, is characterised by semi-arid conditions, recurrent droughts, and high vulnerability to climate shocks. Communities in this region are heavily dependent on mixed crops-livestock systems, with cattle and goats forming the backbone of household economies. However, the area has long suffered from poor infrastructure, weak market linkages, and high prevalence of livestock diseases, leaving smallholder farmers unable to fully benefit from their herds.

To address these challenges, the Zimbabwe Resilience Building Fund (ZRBF) was launched in 2016, supported by the EU, UNDP, and UKAid and implemented by ActionAid Zimbabwe with partners such as ZELA, AfroSoft and ABS-TCM. The programme aimed to strengthen household resilience against climate and economic shocks, while simultaneously commercialising smallholder production. Livestock interventions were central to this vision, implemented through Crop and Livestock Improvement Centres (CLICs) that became focal hubs for innovation, training and market access.

#### **Problem Statement**

Before the ZRBF interventions, livestock farmers in the Zambezi Valley faced:

- Low returns from cattle sales, farmers sold individually to middlemen at process significantly below market prices.
- Weak genetics and productivity for the local breeds were poorly adapted to commercial markets and low growth rates.
- Limited infrastructure like absence of feedlots, abattoirs, and transport infrastructure constrained formal markets access.
- High disease prevalence like tick-borne diseases and occasional FMD outbreaks reduced quality and size of herds.
- Exclusion of youth and women in livestock as well as decision making which were traditionally male dominated.

#### **Intervention**

Through the ZRBF, targeted interventions transformed livestock production and marketing in the valley:

- Pen fattening schemes; establishment of CLIC-based feedlots enabled farmers to bulk cattle, feed them intensively, and sell at higher weights and grades.

- Breed improvement through artificial insemination introduced genetics like beef master thus enhancing productivity and marketability.
- Goat breeding through hand over to women improved inclusivity and genetics.
- Market linkages through CLICs provided aggregation points, connecting farmers directly with traders and abattoirs, reducing reliance on middlemen.
- Skills transfer through training in animal husbandry, record keeping and business management built long-term capacity.

## Results and Impact

Table 3: ZRBF impact

| Indicator                        | Before ZRBF                                   | After ZRBF  |
|----------------------------------|---|---|
| Average cattle sale income       | \$200–300 per head (distress sales)           | \$450–580 per head through pen fattening and direct sales       |
| Breed quality                    | Local low-yielding breeds                     | Crossbreeds with Beefmaster/Brahman, better growth rates        |
| Goat ownership (per farmer)      | Typically <5, low commercial value            | >50 improved Boer goats in some households (e.g., Opha Mapundo) |
| Youth/women participation        | Minimal, often excluded from cattle ownership | Dedicated inclusion; youth-led feedlot enterprises established  |
| Household income diversification | Heavily crop-dependent, climate vulnerable    | Livestock now central, providing steady cashflow and resilience |

### Illustrative cases:

- Opha Mapundo, a woman from Mbire, turned a starter Boer goat package into a thriving herd of over 50 animals, generating approximately \$540 annually.
- Simbarashe Zinduru, a young farmer, used cattle fattening proceeds (about \$580 per animal) to install a solar-powered water system, reducing unpaid care work for his household.
- Bheki Nkomo a family has managed to increase monthly monthly income to \$220 to cater for their immediate needs in Sinampande.

### Lesson Learned

The ZRBF livestock programme highlighted several key lessons:

- Livestock can drive resilience
- Inclusion amplifies impact
- Market facilitation is essential
- Health and genetics matter
- Scaling challenges remain through infrastructure gaps (abattoirs, cold chain, transport) and continued disease risks still constrain full integration into high value markets.

## **Relevance and Policy Implications**

The ZRBF experience provides a tested model for livestock commercialisation underpinned by resilience-building. This resonates with Zimbabwe's policy ambitions through alignment with VBUs (Village Business Units). CLICs under ZRBF mirror the VBU framework by anchoring rural economic activity around livestock, with governance structures, value addition, and inclusivity. When all these are harmonised and aligned including existing frameworks like the Business Growth Points and technologies like mobile abattoirs this can unlock tremendous economic value.

## **Recommendations**

- Institutionalising CLICs and VBUs through formal recognition and financing could scale success nationally.
- Integrate with export pathways by linking improved cattle production to rehabilitated abattoirs and export-compliant supply chains.
- Leverage private partnerships by building synergies with mining, agribusiness, and donor partners to sustain the model.
- Prioritise infrastructure investment such as roads, abattoirs, and cold chains.