

## Developing New Value Chains for Small-Scale and Emerging Cattle Farmers in South Africa

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### ABSTRACT

In this paper we look back on the first year of a three-year project which aims to undertake the research necessary to develop a wider range of market outlets, products and value chains for beef produced by the small-scale and emerging sector in South Africa. We discuss the difficulties encountered in designing and implementing the project, and we review progress towards achieving the economic, social and environmental outcomes that we are seeking.

**Keywords:** *Beef; value chain; small-scale farmers; South Africa; project design*

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### Background and Rationale

It is widely recognised that cattle managed by small-scale and emerging farmers in South Africa are a significantly under-utilised resource for generating income for rural families and communities and for contributing to feeding the nation's poor consumers. A previous project funded by the Australian government, commonly termed the Beef Profit Partnerships (BPP) project, focused on integrating this sector into the existing feedlot value chain, which provides about 75% of the beef consumed in South Africa. Valuable outcomes from this project at the farm level have been well documented (Madzivhandila et al. 2006, 2008; Madzivhandila, Groenewald and Griffith 2008; Griffith 2016) but little integration has been evident higher up the value chain. Further, many of the cattle managed by small-scale and emerging farmers are not suitable for feedlot finishing and many of these farmers prefer to keep older animals for social and cultural reasons rather than sell weaners into the feedlots. These older animals are discriminated against in the South African beef classification system and consistently receive lower prices/kg than younger grain-fed animals, even though there is no scientific evidence to support the basis for market prices being age based, all else being equal. Since these older animals are sold primarily into low-value local markets, there is little incentive for producers or value chain partners to invest in a high quality pasture-fed beef value chain.

Recent survey data (Mare et al. 2009; Schonfeldt 2012) has confirmed the existence of a large and growing segment of middle and high income South African consumers who prefer healthy and sustainable attributes in their food purchases. One of the major South African supermarket chains, Woolworths, is heavily involved in this market segment in most food groups, but only in a minor way in beef due to the constraints imposed by the current beef classification system. Woolworths in fact imports a small amount of high value pasture-fed beef from Namibia to try and meet the latent demand from their customers. South Africa is a net importer of both beef and feeder cattle.

The focus of the current three-year project is to undertake the research necessary to develop a wider range of market outlets, products and value chains for beef produced by the small-scale and emerging sector in South Africa. In this paper we look back on the first year of the project. We discuss the difficulties encountered in designing and implementing the project, and we review progress towards achieving the economic, social and environmental outcomes that we are seeking.

## Project Objectives

The project has funding for three years, heavily weighted towards years one and two. The plan is to design, trial and establish new value chains to supply high-quality niche-markets for pasture-finished cattle in South Africa, including cattle finished using other types of non-grain finishing systems, by the end of year two, thereby establishing “proof of concept” for the value chain partners. Year three will be devoted more towards securing further funding so that the concepts can be rolled out to further partners, regions and industries.

The specific research question posed is whether a high-quality pasture-finished beef product derived from the small-scale and emerging sector can be developed for the commercial market that meets consumers’ needs and that is cost-effective to produce and deliver to the market?

This question will be answered through meeting four distinct but inter-dependent research objectives:

1. **Develop, modify and evaluate the value chain and market requirements** needed to ensure South African small-scale and emerging cattle farmers better understand customer preferences and receive appropriate rewards from meeting the specifications of these expanded and diversified beef markets and value chains.
2. **Develop, modify, trial, implement, and evaluate the supporting production system, institutional and practice change elements** needed to ensure South African small-scale and emerging cattle farmers can meet the specifications of these expanded and diversified beef markets and value chains.
3. **Develop, evaluate and implement decision-support tools** to recommend the most appropriate and profitable production system for South African small-scale and emerging farmers.
4. **Measure, monitor and evaluate the ongoing performance of the project and its components.**

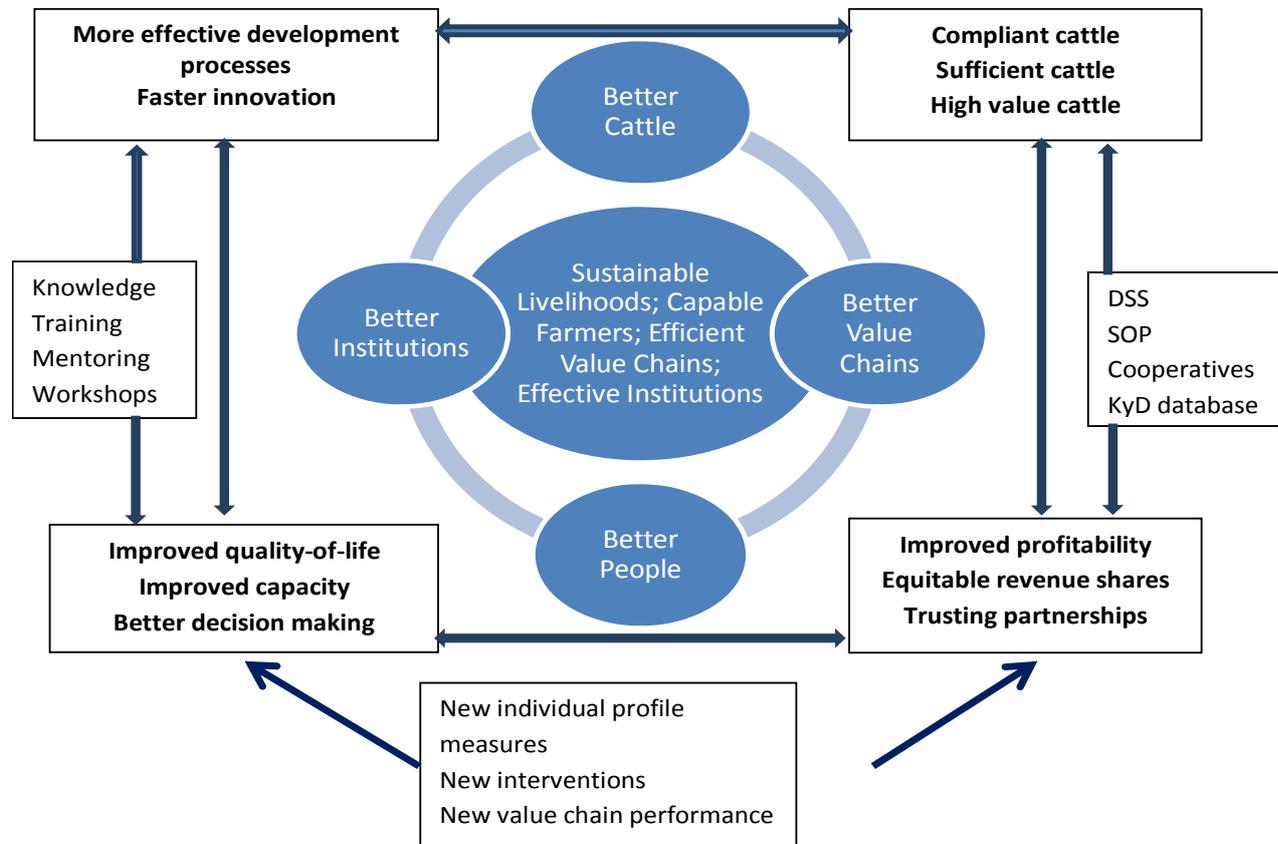
The longer term objectives or aspirations of the project are to develop (1) effective networks of farmer partnerships across the small-scale and emerging sector and with regional value chain partners; (2) increased capacity of the project's farmers, extension officers, technical staff, scientists and managers with regard to development of new market systems, value chains and partnerships for small-scale and emerging farmers; (3) better physical, natural, financial, social, environmental, human, knowledge and cultural forms of capital in rural communities; (4) new and/or improved theories, tools and mechanisms related to high-value beef products and effective and efficient value chain partnerships; and (5) enhanced capacity to realise sustainable beef industry growth in small-scale and emerging communities in South Africa. Meeting these longer term objectives might require a 5-10 year time frame.

All components of the project can be represented in Figure 1. The longer term objectives are summarised in the centre oval, and are reinforced by the four separate secondary ovals. The KPIs for each of the objectives are set out in the boxes on the corners, with the right hand side being more in the short term and the left hand side being more in the longer term. The right hand side KPIs will provide the proof of concept that the retail and processor partners are requiring to continue investing in the project. Inputs into meeting the project performance metrics are set out in the boxes in the east, west and south positions.

## Project Organisation

Some of the required inputs are already available. These include a large sample of small-scale and emerging farmers who were involved in the previous BPP project, some still part of farmer teams that were set up between 2001-2007; and many new farmers who came on board as part of the funding and rollout of the ‘KaonafatsoyaDikgomo’ (KyD - cattle improvement groups) policy from 2007 onwards. While there is said to be approximately 12,000 farmers involved in the current program, only about 8,500 of these have their farm and production details recorded on the official INTERGIS database. Many of these farmers have been trained in

animal production techniques and many also routinely calculate gross margins when contemplating new investments. Many are also part of small-scale production cooperatives, which is promoted by the South African government.



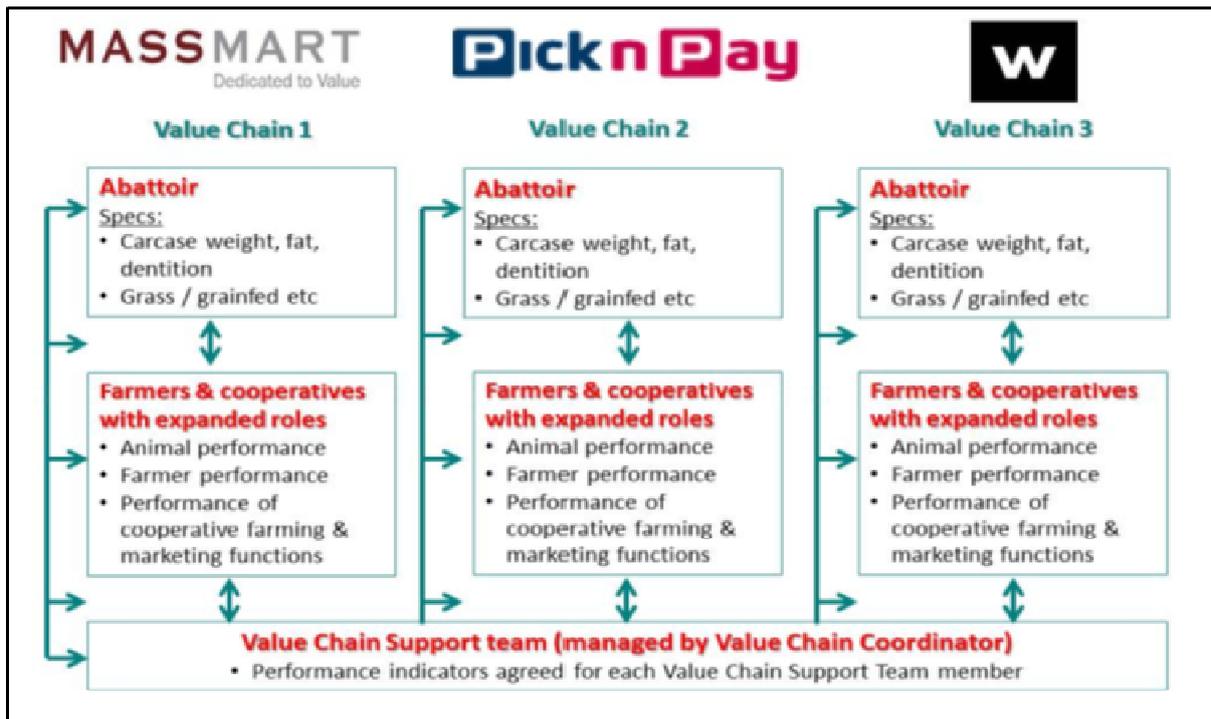
Also available are the Farmer Support Teams from the earlier BPP project and the KyD expansion. These are composed of extension officers and technical specialists who provide training and support for the Farmer Teams.

Finally, many of the required Standard Operating Procedures (SOPs) that provide guidelines on various technical and marketing processes are available in some form, although a lot of adjustment may be required for these to be relevant to the small-scale and emerging farmer production systems.

New inputs that will need to be developed during the project include the decision support tools for assessing feed quantity and quality, new measures of whole of chain performance, new measures of individual farmer profiles so that interventions can be better targeted to achieve productive and profitable changes in production and marketing systems, and new higher level marketing cooperatives that can negotiate directly with the processors and provide the scale and reliability necessary to convince the value chain partners that they should invest further into the longer term.

Three retail groups (Massmart, Pick n Pay, and Woolworths) have publically agreed to be part of this pilot project and to set up commercial value chains in different regions of South Africa. The broad outline of these value chains is shown in Figure 2. The design of the value chain component was based on reviewing material in the many value chain toolkits such as the Agrifood Chain Toolkit (2016), FAO (2014), Kaplinsky and Morris (2001), M4P (DID 2008), and ValueLinks (Springer-Heinze 2007).

Each retailer will set their own specifications that will meet the needs of their particular customer base, and they will work with their preferred processor partners and local cooperatives in a particular region. The three new value chains will be organised and managed by a Value Chain Support Team, under the oversight of a Value Chain Coordinator.



### Frustrations to Date

Many of the frustrations to date have been due to events outside of the control of the project management team. These include:

- Bureaucratic impediments (very lengthy delays in contract signing, in setting up finance arrangements, in appointment processes, and in project team members not being able to escape day to day administration requirements),
- Value chain partner commitment (the retail partners have all agreed in principle but there have been delays in expected start dates for various reasons, and there have been delays in completing new beef processing facilities),
- Weather (there are very distinct wet and dry seasons in the regions we will be targeting, and if pilot slaughterings are to occur in March, we need quality pasture available if targetting “free range” specifications. The rainy season was about 6 weeks late so there is an ongoing question mark over what the pasture will be like early this year), and
- Lack of success in John Allwright Fellowship applications (we have a strong focus on postgraduate training as part of the project and five potential PhD candidates applied for Australian government scholarships, all working on research questions attached to the project. Unofficially, none were supported, which raises some serious implications for project deliverables).

### Achievements to Date

The three major retailers have publicly committed to be part of the project:

- they have provided their standard specifications which include requirements for on-farm best practice, breed composition, sex, weight, identification and classification. They have said they will take class B (up to 4 teeth) as part of their preferred specification.
- they have also nominated their preferred processing facilities. Massmart will sell this product through their Mashcash stores in Limpopo Province and will use abattoirs in Gauteng province such as Morgan Meat. Pick ‘n Pay will sell through their large format stores in Gauteng and will also use Morgan Meat. Woolworths will use a processor at Craddock in the Eastern Cape and will sell into Cape Town as well as other major cities.
- The retailers have agreed to be flexible in the types of cattle they will take. Some markets/retailers will accept C class, provided the cattle are in proper condition – fat and

conformation. Some will also accept batches of cattle, including within and outside of standard specifications. If the cattle are within, they will receive an incentive price (compared with current values for these types of cattle), while if they are outside, they will be absorbed into other product lines.

New project partners have come on board since the original project approval:

- Eastern Cape Provincial Department of Agriculture
- Gauteng Provincial Department of Agriculture
- Universities of Stellenbosch, Pretoria, North West and Fort Hare
- Grass Fed Association of South Africa (commercial farmers)
- FarmVision (consultancy in cooperative development and mentoring)

The project is funding two full time staff:

- Project Coordinator
- Value Chain Coordinator

The project management team also works with a supportive and effective Industry and Scientific Advisory Council which meets twice a year.

### Ongoing Activity

- Finalising Standard Operating Procedures (SOPs) for animal husbandry, animal health, rangeland management, loading and transport, lairage, record keeping and data collection, etc
- Finalising survey instruments for the value chain benchmarking, the adoption science benchmarking and the cooperatives benchmarking
- Finalising performance measures for animal, person, cooperative and value chain components
- Planning trial runs in March to verify adherence to specifications, test some meat quality attributes in addition to animal/carcass specifications e.g. meat colour, tenderness, stress (pH), and recommend steps to rectify any problems
- Seeking alternative funding sources for the project's research students – in particular the UNE Professional Doctorate
- Seeking funding sources for the longer term roll-out of the project across other provinces, other countries and other industries

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