THE JOBS FUND

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Building Inclusive Agricultural Value Chains

Lessons from a Jobs Fund Project

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The Jobs Fund is a R9 billion fund established by the South African Government in 2011. It was established to encourage innovation and give greater impetus to initiatives with potential to generate sustainable employment. The Fund aims to catalyse innovation in job creation through structured partnerships with the private and public sectors as well as NPOs by awarding once-off grants to organisations through a competitive process. The Jobs Fund operates on challenge fund principles and aims to incentivise innovation and investment in new business approaches that directly contribute to long term sustainable employment creation.

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Abstract

Agriculture is an important sector in South Africa, contributing significantly to employment creation and national income. The National Development Plan recognises that agriculture development will contribute to the country's poverty eradication efforts and to the development of an inclusive rural economy. It is within this overall context that the Jobs Fund has invested significantly in the testing of sustainable agricultural models for smallholder and emerging farmers, with more than 30% of its portfolio of projects implementing within this sector.

This paper highlights the findings from an independent evaluation on an agriculture development project that the Jobs Fund supported. The project intended to support the development of a more inclusive rural economy, through the establishment of an integrated maize value chain using a cooperative model. It aimed to control for the multiple challenges experienced in both primary and secondary production. Primary cooperatives were formed by community members as platforms to aggregate communal land to achieve economies of scale in maize production. Secondary cooperatives, on the other hand, were established to process the maize produced by the primary cooperatives, thereby adding value through agro-processing (milling).

The evaluation highlighted several lessons that can be utilised in the replication of the initiative with other agriculture commodities. These lessons include: the importance of stringent selection criteria for participant farmers and community members (to ensure alignment of interests and the motivation to succeed); the limitations of cooperatives in agriculture development; the provision of targeted support, monitoring and training for farmers; the engagement of an incremental approach to production expansion; the use of blended financing for agricultural inputs until the farmer can graduate to self-sufficiency; and the participation of a private sector commercial partner to assist in the establishment and operations of the agro-processing facilities.

1. Introduction

In the context of widespread poverty, agriculture plays a vital role in economic development and can contribute significantly to household food security. South Africa's National Development Plan (NDP) has included comprehensive rural development and land reform as two of its key outcomes. In particular, smallholder farming has been identified as a key driver of poverty reduction and rural development.

The smallholder farming (SHF) sector generally consists of small, labour-intensive farms that use traditional production techniques, have inadequate institutional capacity; access to finance; and access to skills development and support (Pienaar & Traub 2015). A critical factor, therefore, in the growth of the SHF sector is the sustained development of these farmers and farming operations to promote active participation and wider inclusion in the agriculture sector.

One of the core prerequisites to sustainable farming is the ability of the farmer to participate meaningfully in established value chains, including both primary and secondary activities. In addition, the drive to establish localised agro-processing facilities is highlighted in the literature as an important component of rural development and the inclusion of smallholder farmers in the broader system (Manikas et. al. 2019; NDP 2012; Meyer 2014). Agro-processing can also promote the reduction of uneven income distribution, because local communities can participate in value-added activities related to the primary product which may lead to opportunities beyond just the immediate farming and processing operations. The benefits include skills development (re-skilling or training a largely unskilled rural labour force in agro-processing); living standards and education upgrades (through the knock-on effects of increased economic activity); and new market creation for both raw and processed agricultural products.

Other agriculture development considerations include certainty about land tenure, which can be a key constraint to growth since small holder farmers may not want to take on the risks associated with

making financial investments to develop agricultural land that may not be available to them over a period that makes financial investment a viable option.

From an institutional design perspective, agricultural cooperatives have been put forward as having the potential to promote smallholder farmer growth by facilitating better access to production inputs and product markets. There is, however, a growing body of knowledge that suggests that cooperatives, in their traditional form, often face significant challenges, including poor management, difficulty with cooperative members (conflict between members, lack of training, unrealistic expectations from members, and members not understanding how the cooperative functions and the rights and responsibilities of all parties), and lack of access to finance (Rena 2017; King & Orthmann 2007). The effective implementation of cooperatives a significant capacity building period, which is time- and resource-intensive.

It is within this overall SHF context that the Jobs Fund has invested in the testing of sustainable agricultural models (drawing on the lessons from previous interventions), with more than 30% of its portfolio of projects implementing within this sector. The Jobs Fund agriculture interventions primarily focus on reducing barriers to entry for SHFs and emerging farmers, as well as addressing specific challenges that hamper their ability to grow sustainably.

A recent independent review of a Jobs Fund-supported initiative working with cooperatives in the maize value chain, highlighted the complexities and challenges associated with farming in a communal land ownership context and breaking down barriers to entry into established value chains. This paper highlights learnings and good practice in this regard.

2. About the Initiative

2.1 Project Model

The agriculture initiative under review focused on establishing an integrated value chain in two communities the Eastern Cape where maize is produced, stored and processed (using two local mills), and finally sold into both formal and informal markets. In addition to these activities, the participant farmers would also be supported with technical and farm management skills.

The farming communities involved were facing a number of challenges, which the project sought to solve for:

- Land-use conflicts between cattle and crop farmers,
- Lack of infrastructure such as adequate fencing, water and water rights, electricity, and irrigation,
- Access to and funding of production inputs,
- Changes in rainfall patterns because of climate change,
- Access to on-farm mechanisation support,
- Long distances to markets,
- Lack of business experience and financial management skills, and
- Meeting the requirements of formal retailers, such as volume, quality, and packaging.

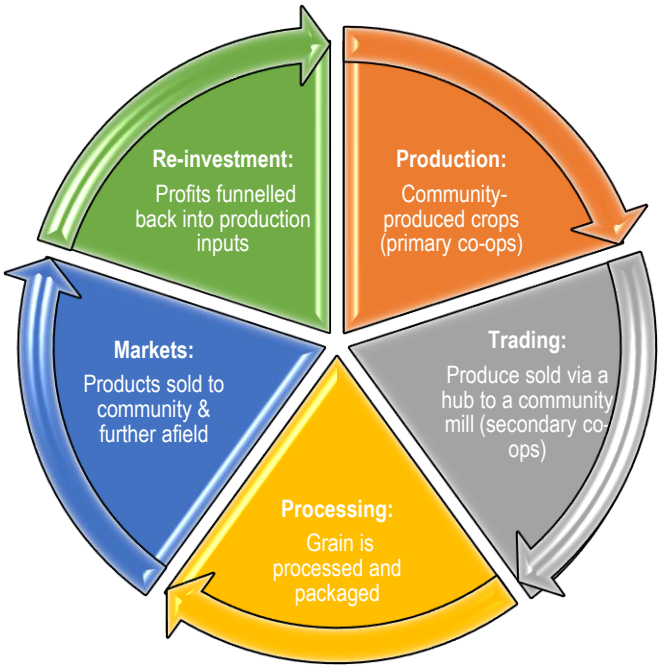
The project model was developed to deal with these shortcomings by considering the value chain as a whole, and engineering solutions collectively in a localised and practical manner. The systemic methodology underpinning the model aimed to control for the multiple challenges experienced in both primary and secondary production.

The model linked 3 market elements:

1. **Production** (supporting local growers in the production phase),
2. **Processing** (adding value to local produce through packaging and processing),
3. **Markets** (providing access to fair market value for goods).

By moving from a traditional linear market (i.e. produce crops and send them straight to the market) to a more circular method (which sought to keep all activities from production to processing and marketing within the community), the project would create a more sustainable system that encouraged the circulation of money in the local economy.

Figure 1 - Project Model: Value-add activities and sustainability cycle



The initiative comprised of two sets of cooperatives:

1. The primary cooperatives were formed by community members and created platforms to aggregate land to achieve economies of scale in maize production.
2. The secondary cooperatives were established to process the maize produced by the primary cooperatives and have subsidiaries in the form of a mechanisation unit and a processing mill.

Through the establishment of collective farmer-owned mills, these smallholders share in the benefits of processing their maize and have secure off-take for their maize (as long as it met the stipulated quality requirements). This model allows smallholders to grow their production, sales volumes and incomes by expanding their land under production and sharing production tasks through the use of a cooperative model. The income smallholders receive from the sale of processed maize can then be reinvested in production for the next season. Local communities also have access to low cost locally-processed maize products. These efforts promote the retention of money in the participant communities. The figure below shows the relationship.

The financing model involved providing a 100% production cost subsidy to primary cooperatives in the first year of production, with primary cooperatives then funding 25% of production costs in the second year of production, and an additional 25% of production costs for each subsequent year (i.e. 50% in year 3, 75% in year 4 and finally 100% in year 5).

In this way, farmers would eventually fund all their production costs and the project would become financially self-sustainable. The success of the primary cooperatives and the secondary cooperatives was mutually intertwined in that primary cooperatives need to supply sufficient maize volumes and quality for the mills to be viable and the mills needed to sell all the processed maize to cover their operating expenses and generate profits that could then be channelled back to the primary cooperatives to support their future planting seasons.

This financial model is well suited to a phased approach to independence that kick-starts production and builds primary cooperative capacity to become commercially sustainable over time. The main risk with this model is that the income generated from the first year of production is not necessarily guaranteed to cover the primary cooperatives contribution of 25% of production costs for the subsequent year. A lower than anticipated income may be the result of unfavourable climatic conditions or the production of insufficient quantities of good quality maize that is required to secure good prices from its sale.

3. Method

3.1 General Research Design & Approach

The evaluation used a theory-based non-experimental approach; using the project's Theory of Change (ToC) as the basis for assessing the progress made towards its intended goals, outcomes, and impacts.

3.2 Method of Data Collection & Analysis

A mixed-methods approach was used, with both quantitative (closed-ended) and qualitative (open-ended) information being collected and analysed. This included: the review of business trends from project beneficiaries; four surveys (including a survey of 129 primary cooperatives); two focus groups with project beneficiaries; key informant interviews; and observational site visits. In addition, a comparative case study was conducted to compare results and project designs with a similar case.

A convenience sampling methodology was utilised for the survey of cooperative members and trained beneficiaries. Convenience sampling is a type of non-probability or non-random sampling where members of the target population that meet certain practical criteria, such as easy accessibility, geographical proximity, availability at a given time, or the willingness to participate, are included for the purpose of a study (Etikan, et al., 2016). This means that caution needs to be exercised in assuming that the cooperative survey findings are necessarily representative of the whole population. However, given that the survey included 129 cooperative members, it is likely that the findings are reasonably representative of the identified project cooperative dynamics, experiences, and perspectives.

4. Results & Findings

Although the project saw some successes, it was not without its challenges. Farming in a communal land ownership context, coupled with a cooperative enterprise model for both primary and secondary production, increased the implementation complexity and had an impact on the timeline. Nevertheless, the findings extracted from the study have produced a set of useful learnings and good practice for initiatives wanting to build inclusive agricultural value chains.

4.1 Incremental Expansion

A critical component of the project was to ensure that good quality maize was produced at yields of between 4 to 5 tonnes per hectare. To achieve this, primary cooperatives would be established using local subsistence farmers, who would then aggregate their land and produce the requisite 5 tons per hectare. This amount unfortunately was not achieved, which impacted negatively on the project, particularly in terms of the anticipated primary cooperative's income, financial profitability, and members' household incomes. Reasons for low yields include soil quality issues, the timing of planting and the lack of fencing (high risk of livestock grazing in the maize fields), which also speaks to the functionality of the cooperative. The study shows that the level of preparation, support and monitoring required for cooperatives to establish sound operations and thus improve agricultural yields is significant. Part of achieving this operational stability is also selecting the right participant farmers from the onset. Participants with a passion for farming, coupled with a motivation to succeed, are the best candidates to enrol.

Good Practice 1 – Stringent selection criteria for participant farmers and community members (to ensure alignment of interests and the motivation to succeed).

That being said, an incremental growth approach over several years is still required (regardless of farmer motivation), whereby the size of land under cultivation is gradually increased. This will ensure that the requisite capacity and experience is effectively established over time, while controlling for the risk that comes with rapid growth. Importantly, this phased approach also allows support programmes to better identify skills gaps in participants, both on the technical side and farming operation management side and offer tailored capacity building solutions that the recipient farmer is likely

Good Practice 2 – An incremental growth approach whereby the size of land under cultivation is gradually increased over several years is required. This ensures that the requisite capacity and experience is effectively established over time, while controlling for the risk that comes with rapid growth.

to view as valuable. This brings greater alignment of the intervention to the farmer's responsibilities on the ground, which can include issues such as quality control, community liaison (which is particularly relevant in communal land settings) and negotiation.

4.2 Blended Finance for Smallholder Farmers

A context appropriate financial model should be developed, based on realistic targets, that will contribute to financial sustainability at both the project and the beneficiary/farmer levels. Blended finance support is most suitable in the smallholder farmer environment. These models start with a majority grant/minority loan finance component for production inputs in year one, and gradually increase the loan proportion per season over a realistic period. As farmers gain experience and increase their production capacity season-on-season, so they become less reliant on the grant portion of the funding. Over time, the operation becomes self-sustaining and can service its loans fully. Once more, the identification, recruitment and selection of relevant farmers and farming operations will significantly contribute to the success of the project. This may however result in community members being excluded which require skilful community facilitation interventions and risk management.

Good Practice 3 – Blended finance support model for inputs: Begin with a majority grant loan finance component and gradually decrease the grant portion over a realistic period.

4.3 On-going Social Facilitation

A consultative approach to social facilitation is also crucial for the success of smallholder support interventions, especially in communal farm settings. The development of an overall community consultation plan and ongoing communication is fundamental to the success of an initiative. Ideally, specialists should perform the coordination of this work, involving the community in each phase. Sufficient social facilitation capacity should be developed to embed the institutional arrangements and to resolve conflicts that may arise over time whether it be about community land usage, ownership, and revenue streams.

Good Practice 4 – On-going consultative social facilitation is crucial for the success of smallholder support interventions, especially in communal farm settings.

With regards to the evaluated project under consideration, more robust social facilitation at the beginning of the intervention would have gone a long way in ensuring that detailed and precise off-take agreements, with provision for removing primary cooperatives from the project if they did not fulfil their expected roles and responsibilities, were drawn up and understood by all cooperative members. This would need to include the adherence to specific planting and cultivation practices, and the delivery of the agreed production volumes and quality.

Good Practice 5 – Detailed and precise off-take agreements.

4.4 Appropriate Support to Farmers

Farmers need to be supported through intensive mentorship and on the ground production support for at least 6 to 7 months of the year (from planting to harvesting) to ensure they have the capacity to achieve the requisite volumes and quality standards. Mentors must also have sufficient practical experience in, and technical knowledge of, growing the relevant crops. It is critical that farmers are assisted with the selection of appropriate farming techniques and inputs, according to their land potential, as well as the application of sound environmental practices to optimise their use of their piece of land.

In addition, it is imperative that farmers receive the right agricultural inputs at the right time. If the timing of inputs is out of kilter, it will affect the yield both in terms of quality and quantity. This evidently has knock-on effects for the operation, including, loss of

income for the farmer and insufficient revenue available for inputs for the next season.

Some of the agricultural inputs in the project were supplied directly from government, and due to the long tendering and appointment processes required to secure suppliers, these inputs were oftentimes delayed. In general, government tendering processes have not support timeous provision of production inputs and were not able to respond flexibly to evolving project challenges and needs. In this regard, it is acknowledged that government departments and entities are better suited to Fund Management roles, but the actual roll-out of support initiatives and the securing and supply of agricultural inputs should rather be implemented by agriculture commodity associations, experienced non-profit service providers and consulting services. In addition to ensuring timely input supply, these entities would also be able to negotiate good discounts with input providers and can adapt to the changes in agricultural production.

Good Practice 6 – Farmers require intensive practical support from planting to harvesting to reach required production volumes and quality.

4.5 The Cooperative Structure

The success of the project was contingent on the effective operation and management of both the primary and the secondary cooperatives. However, both sets of cooperatives faced several challenges during implementation, the most prominent of which were: i) the lack of interest and commitment from some members, ii) the continued dependency challenges of cooperatives, and iii) insufficient governance, training and education. These challenges are discussed below.

The study found that some of the cooperative members were not interested in the management of the cooperatives and the ultimate success thereof. Many joined because they believed that the operations would be run by the government and that they would benefit by association. For example, there were instances where farmers were assisted with planting inputs but expected government to be responsible for crop management and maintenance. Without the motivation from co-op members to farm or to drive the success of the initiative, the cooperatives themselves cannot be sustainable.

Linked directly to the above issue, is the dependence of these cooperatives on government subsidies to remain operational. The sustainability of any cooperative is dependent on its ability to raise its own finances through membership fees, shares, members' funds, (Rena, 2017) and most importantly, its ability to provide a quality service/good that it can sell on the open market. In the case of both the primary and secondary cooperatives in the project, they had not yet reached this stage of independence.

Good Practice 7 – Farming cooperatives must establish formal governance frameworks and processes for financial transparency and will benefit from on-going technical skills development.

Lastly, the extent of governance training required for co-op members was underestimated and this ultimately contributed to poor cooperative management and led to conflict among members. This impacted on the cooperatives' ability to service their clients: the primary cooperatives could not deliver the quantity and quality of maize that was required by the mills, and the secondary cooperatives could not honour the obligations of the milling business.

Formal governance frameworks and processes for financial transparency need to be established at the onset. This and mandatory progress meetings between secondary and primary cooperatives are critical in building the necessary trust for such an initiative. Secondary cooperatives also need to work with operational partners with sufficient business expertise to ensure that any assets owned by these cooperatives are managed efficiently and effectively.

A further recommendation was that the secondary cooperatives should secure a private sector commercial partner to ensure growth and sustainability over time. The commercial partner would through its scale of operations be able to

make the mills more productive and would have greater access funds that can be invested to upgrade the mills over time.

4.6 Communal Land

Long-term sustainability of the initiative is the ability to compete in the open market. In the case of the evaluated project, the primary cooperative structure was established so that the farmers could produce collectively on a commercial basis and benefit from economies of scale. However, the realities of the communal land tenure system do not always allow for economies of scale since land tenure arrangements are often uneven and unsecured and access to commercially viable land is not always available. In these instances, some farmer development support programmes use the term 'economies of efficiency'; they acknowledge that farmers or groups of farmers may not have sufficient land that is commercially viable available, but that they may be able to attain a commercial yield on the land that they have access to. However, this requires modern methods of production, correct inputs, and advanced technical expertise.

Good Practice 8 – Security of land tenure must be in place.

Another consideration that needs to be explored, especially on communal land, is to have a land leasing system that will provide relative security of tenure and is not subject to potential uncertainty of changing preferences from traditional leaders. In many communities, arable land is left idle since community members do not have the skill to farm or would rather find employment elsewhere. A leasing system offers farmers an opportunity to expand their operations, but more so, the households not utilising the land and not willing to farm, are also able to earn a rental income from land previously left idle (Thomson, 1996).

A further factor to consider is access to capital. Private sector investments remain elusive because of the perceived unsecure tenure arrangements that are associated with communal land and the high costs of initial investment. Until tenure is legally secured, these farmers will continue to battle to secure the required funding to expand commercially.

4.7 Market Access

Some success was achieved in supplying processed maize to retailers. However, this could not be consistently sustained, mainly due to the lack of merchandising capacity of the project staff, insufficient processing capacity at the mills and inconsistent supply of maize of grade 1 quality.

To secure market access, a strategy should be developed by interacting with potential customers as part of the initial project scoping process. Thereafter, decisions can be made about which market segments to prioritise, how to meet customer requirements, and what investment is required to service these market segments. Failure to do this will result in funds being allocated to non-essential items or the premature ramping up of production.

Good Practice 9 – Prioritise development of marketing skills appropriate to market segment and allocate resources to fulfil those market requirements.

5. Conclusions & Recommendations

In conclusion, building inclusive agriculture value chains that scale-up smallholder farmer participation and offer commercial players reliable off-take, requires a multifaceted approach, particularly when paired with communal land tenure systems.

Access to land is not a sufficient condition for smallholder farmer participation in an agriculture value chain; a more nuanced approach is required that aligns land ownership solutions with crop types, blended finance (which is appropriately structured) and context-specific technical support.

The evaluation results have reiterated the complexity of this model, and the extensive planning, partnership, technical support and social facilitation requirements needed to ensure a smooth roll-out. In addition, the results show that the level of support and monitoring required for

cooperatives to improve agricultural yields is significant. Primary and secondary cooperatives require a well-developed and shared understanding of common goals and financial objectives if they are to unlock the full potential of co-operative production and processing synergies.

It can be argued that better success can be achieved by supporting individual farmers (with the requisite motivation) who already have reasonable experience with production and are able to contribute between 30-50% of production input costs from the beginning of a support process.

Building on the lessons learnt in the implementation of the project, the value chain development elements of the model do have the potential to incrementally strengthen the growth and commercial sustainability of carefully selected smallholder farmers and promote active participation in both production and agro-processing for the benefit of the local economy.

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