Ministry of Foreign Affairs

Smallholder Farmer Support Analysis Part 1:
Analysis of commercial value chain integration models

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Date: July 2019

Funded by: Netherlands Enterprise Agency (RVO)

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Executive summary

The Government of the Netherlands has supported several projects in the agricultural sector in South Africa with the aim to enhance the livelihoods for smallholder farmers that can contribute to transformation of the agricultural sector and food security in the country. Growing a strong segment of small-scale farmers in turn creates business opportunities for Dutch agribusinesses. This report presents an analysis of four such programmes that each enable smallholder participation in commercial value chains. It finds that private sector engagement with the development of the smallholder segment is conditioned by the business case it presents for the commercial partner, who is fundamental for creating market access and providing funding and expertise. But the value proposal needs to be equally attractive to the smallholder farmers, who are particularly looking for risk mitigation. To establish and build relationships between commercial agribusinesses and smallholders, additional partners play an essential role at different stages during the programme. In particular, programme managers bring partners together, donors mitigate financial risks, and technical service providers train and mentor the smallholders on the ground. Equally important is a participatory approach towards the smallholders, which lacks in many smallholder support programmes. Despite the right mix of partners and resources, challenges inevitably emerge in the implementation. Allowances need to be made for smallholders struggling with strict contracting rules, and even exiting the programme. To alleviate some of the challenges, partners need to be transparent in their actions and decisions, be flexible in their approach, and realise that these partnerships need time to establish and crystallise. Nevertheless, the four programmes have illustrated that risks for smallholder farmers can be mitigated, albeit their ownership levels, their participation in decision-making and even the rewards remain limited. True inclusion evolves over many years of cooperation.

1. Introduction

The Government of the Netherlands, through the Netherlands Enterprise Agency (RVO) has supported numerous projects in the agricultural sector in South Africa with the aim to build a segment of emerging farmers that can contribute to transformation of the agricultural sector and food security in the country. Experiences in this field have been diverse, both in the projects supported by the Netherlands Government and other initiatives. Many lessons and experiences have been documented, but a comprehensive insight into the mechanisms of emerging farmer support programmes is lacking. This hampers the effective selection, design and implementation of such projects going forward. The objective of this report is to firstly add to the insights gained from individual cases, in particular those in South Africa, and secondly, to use this as a basis for a concise and practical Theory of Change (ToC) to guide stakeholders in the design and implementation of smallholder support programmes in the future. This ToC, which will be presented in a separate publication, will also incorporate findings from other studies, but will stretch beyond the more general recommendations usually given in existing reports.

To build the foundation for the ToC, this particular document analyses four emerging farmer support programmes supported by the Netherlands Government, through RVO, in the period from 2014 until 2020. Whereas support for some programmes has ended, others are still operating within the funding period. All programmes aim to improve the integration of smallholder farmers into commercial value chains in order to develop the livelihoods of these farmers. Each programme incorporates a domestic commercial partner. The support from the Netherlands Government for these programmes is partly motivated by the idea that growing a group of successful emerging farmers creates business opportunities for Dutch companies in the agricultural sector. Thus, a condition for funding for each of the programmes analysed in this report is the participation of one or multiple Dutch organisations, be it corporate partners, research institutes, or other actors. The four programmes are: barley emerging farmers economic development with Heineken (BE-FED), Nwanedi New Generation Cooperative (NNGC), water footprint reduction of small-scale sugarcane growers (SSCGs) with TsGro, and the SPAR Rural Hub project.

The next section presents the methodology applied for data collection and analysis. Section 3 outlines the key elements of each of the programmes to provide a comprehensive comparison between the programmes. Subsequently, a number of elements that appear to be crucial in each of the programmes are further analysed. Section 4 looks at the value proposition for both the farmer and the firm, Section 5 delves into the aspect of partnerships and elaborates on the stakeholders and their roles in an emerging farmer support programme, and Section 6 analyses a number of aspects in the actual implementation of the programme. This analysis provides the groundwork for the assessment of the inclusiveness of each of the programmes which is presented in Section 7. The manner in which the supported smallholders are included in the value creation and appropriation processes is a potential indicator of the extent to which these smallholders benefit from their value chain inclusion and if they are able to drive the transformation of the agricultural sector required in South Africa. The report ends with some broad recommendations and conclusions.

2. Methodology

This report is based on four smallholder support programmes in South Africa. This country offers a pertinent context for smallholder support programmes due to the dualistic structure of the agricultural sector. On the one hand large-scale commercial farmers produce for the highly concentrated domestic processing and retail sectors. On the other hand, the approximately two million smallholders are mostly excluded from these marketing channels. The Netherlands Embassy in South Africa, with funding through RVO, aims to contribute to the development of the smallholders by using the expertise of Dutch agribusiness. To this end, it supports a large number of initiatives, from which the four cases were selected. The criteria for inclusion were not firm, but a critical element was that the programmes were designed to establish and improve links between smallholder farmers and commercial value chains. These programmes present potential lessons for other Dutch agribusinesses looking to engage with smallholder farmers in South Africa. Furthermore, the programmes needed to be a few years into their implementation to observe the lessons learned. Also, all the programmes were still operational as this eased the access to all the stakeholders. Programmes focusing on subsistence farmers were not considered. The selected programmes were jointly agreed on between the Netherlands Embassy and the consultant.

The applied case study approach allows for an in-depth description and analysis of each of the selected programmes. An initial characterisation of each programme was gained through documentation shared by the Netherlands Embassy and programme managers. In particular annual progress reports to the funder served as a useful source of detailed information. Face-to-face, semi-structured interviews with key stakeholders provided further insights on the motivation of each of the programme partners, their particular experiences, the challenges faced, and how they see the way forward. These stakeholders included representatives of the commercial agribusiness, the programme manager and mentors. After these interviews, visits were made to the programmes to observe the activities. During these visits, randomly selected smallholders were interviewed using a short questionnaire. This allowed for insights into the involvement and experiences of the smallholders, and if and how they benefitted from the programmes. A representative from the programme team accompanied the consultant during these visits. Due to time constraints, no smallholders participating in the SPAR Rural Hub programme were interviewed.

The analysis of each of the programmes is presented in separate reports. These reports contain a general outline of the business model, the stakeholders and their motivation, the funding and the implementation. It furthermore addresses the outcomes, challenges and the sustainability of the programmes. These reports form the basis of this analysis report. Besides drawing from the analysed programmes, this analysis report also includes findings from the literature on other initiatives implemented in South Africa, and other countries to contextualise the lessons from the four programmes. Section 7 contains a separate methodology description on the determination of the inclusiveness level of each of the programmes.

3. Programme characteristics

Although each of the programmes that have been analysed aim to support emerging farmers, significant differences exist in the stakeholders, the scope, the business model and the funding of the project. This section presents the core elements of the programmes in order to build a general understanding of each of these programmes and to serve as a foundation for the further analysis in the remainder of the report.

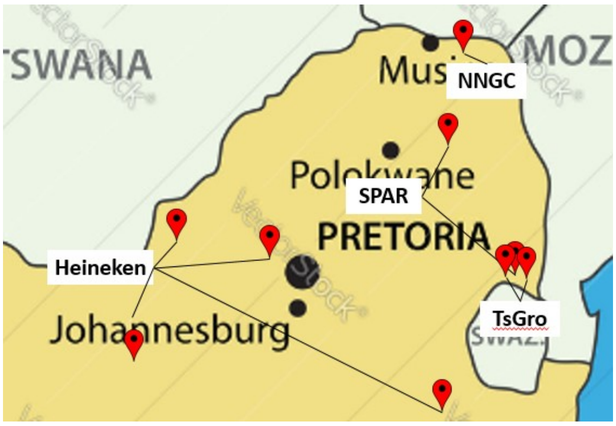

Figure 1: Location of programmes analysed

Table presents the basic elements such as geographic location, crop, and the scale of the project. Most programmes are spread over multiple locations (Figure). This is partly motivated by the need for a sufficient number of suitable smallholders. Both Heineken and SPAR have faced challenges to contract the targeted number of qualifying farmers in a single geographic location. Many smallholder landowners in the targeted areas farm at a subsistence level, and have insufficient access to water and assets to classify for commercial value chain engagement. On the other hand, TsGro, through its parent company RCL, has had a long-standing relationship with a large number of smallholder farmers in two of the regions where RCL operates sugar mills. These smallholders were part of a large government-led sugarcane irrigation scheme rolled out during the apartheid era, and whom have continued to grow this crop since. The focus of the TsGro programme is to rehabilitate the aged bulk water supply infrastructure to increase the income from cane farming for these smallholders under increasingly challenging water resource conditions.

All programmes target cash crops, rather than staples (Table 1). These crops can economically be grown on a smaller parcel of land, widening the pool of potential smallholders who often have access to an area much less than 50 ha (Okunlola, Ngubane, Cousins, & du Toit, 2016). Of the three programmes, only the farmers contracted by Heineken grow on average more than 10ha, with barley being the least labour-intensive crop. Each of the programmes target market-oriented smallholders who grow (surplus) crops for sale. TsGro works with smallholder farmers who have grown sugarcane for its parent company RCL on a supply contract for over 20 years. The other programmes built new relationships between the smallholders and a commercial partner.

Table 1: Basic characteristics per programme

	Heineken BE-FED	NNGC	TsGro Water Footprint	SPAR Rural Hub
Location	North-West (3 locations), KwaZulu-Natal (1 location)	Limpopo (1 location)	Mpumalanga (2 locations)	Mpumalanga (2 locations), Limpopo (1 location)
Crop	Barley	Tomatoes, other vegetables	Sugarcane	Vegetables
# beneficiaries	Year 1: 5 End: *80* Anticipated: 200	Year 1: 16 End: 16 Anticipated: 15	Year 1: 462 End: 508 (individuals and cooperatives, total 1,667 farmers). No target # SSCGs	Year 1: 5 End: *31* Anticipated: 100
Smallholder type	Market-oriented in informal value chains	Market-oriented in informal value chains	Market-oriented in formal value chains	Market-oriented in informal value chains
Ha planted	Year 1: 106 End: *1,500* Anticipated: 8,600	Year 1: 48 End: *96* Anticipated: 700 (Medium term)	Year 1: 6,544 End: 8,865 Anticipated: No target	Year 1: unknown End: *96* Anticipated: No target
Existing supply relationship	No	No	Yes	No

Figures in italic are targets for the current season and have not been fully realised.

The programmes each have a time frame of 3-4 years, which is considered the minimum time to pilot and scale a programme. In practice, the implementation is more challenging than anticipated, often leading to an extension of the spending horizon (Table). The budgets vary widely, from around €1.5 million to €5 million. Those programmes with a high budget incorporate considerable capital expenses: for bulk water infrastructure in the case of the SSCGs under TsGro, and for the establishment and operation of packhouses in the SPAR programme and the NNGC. RVO grant funding makes up between a quarter and a third of the overall budget, with the remainder contributed by commercial partners. TsGro has been able to secure a much larger grant share using its sister organisation Akwanze, a Development Finance Institute, through which it was able to secure a grant from a South African funder. The NNGC is primarily funded by the South African government, which has had a negative impact on the implementation of this programme as will be outlined later in the report. All programmes incorporate production loan financing, and (crop-specific) agro-economic training for the smallholder farmers. Those programmes that work with farmer collectives also address the need for governance training. Certification is of a lower priority: where it is incorporated in the scope, it has often not been implemented.

Table 2: Administrative details and scope per programme

	Heineken BE-FED	NNGC	TsGro Water Footprint	SPAR Rural Hub
Duration	4 years (initial 3 years)	3 years	3 years	5 years (initial 4 years)
Budget	€1 – 2 million	€1 – 2 million	€4 – 5 million	€4 – 5 million
Commercial partners funding	Mentor, Programme mgt, In-kind, Production loans	Cooperative manager, In-kind	In-kind	Packhouse capex + opex In-kind Seed provision
Grant funding	Programme mgt, Mentor	Training, Cooperative capex + opex	Hardware, Software, Training, Programme mgt	Programme mgt, Training
Government support	No	DSBD funding	No	No
Hardware	No	Office building and pack shed	Bulk water supply infrastructure	Packhouses with cold storage
Input provision	Interest-free loan	Interest-free loan	Interest-bearing loan	Interest-free loan
Certification	No	No	Yes, Bonsucro	Yes, localg.a.p.
Training	Agro-economic	Agro-economic, Collective governance	Agro-economic, Collective governance	Agro-economic

Integration of smallholder farmers in commercial value chains with the participation of commercial partners is organised through specific business models. These so-called inclusive business models are diverse structures made up of standard instruments: collective organisation, equity, lease/management contracts, mentorship, and supply contracts (Chamberlain & Anseeuw, 2019). Each of the programmes analysed in this report is based on a supply contract with additional mentorship support for the contracted smallholders (Table 1). This model allows the corporate partner access to the crops produced by the smallholders, who are equipped with the technical skills to grow according to the specifications required by the commercial offtaker through a mentorship programme. As such, the model offers benefits to both partners. Collective organisation enables the commercial offtaker to efficiently source from a large number of smallholders, but also allows bundling of the smallholders' interest and their ownership in assets. Considering the scope of market-oriented smallholders, none of the programmes has implemented lease/management agreements where the commercial partner takes over the management of the farmers' land. Only TsGro actively farms sugarcane for some smallholders on a management contract. Albeit the supply contract is the core instrument for all programmes, offtake of the smallholders' crops is not guaranteed. Only produce that adheres to the stringent quality standards set by the offtaker is accepted. In the case of sugarcane, this is not applicable, but for the barley farmers supplying Heineken and the vegetable farmers growing for the NNGC and SPAR Rural Hubs, achieving high-quality produce is a major challenge at inception.

Table 1: Instruments implemented in business model

	Heineken BE-FED	NNGC	TsGro Water Footprint	SPAR Rural Hub
Collective organisation	No	Yes (next-generation cooperative)	Yes (SSCGs organised in 38 irrigation schemes)	No
Equity	No	Yes, NNGC builds pack shed	Yes, SSCGs have ownership in TsGro and Akwandze	Yes, farmers to co-own the packhouse
Lease/ management contract	No	No	Yes, TsGro manages land of some SSCGs and irrigation schemes on contract	No
Mentorship	Yes, by technical service provider (Buhle)	Yes, commercial partner gives agronomic help, partnership trains in governance.	Yes, by TsGro itself	Yes, by technical service provider (TechnoServe) and commercial farmer
Supply contract	Yes	Yes, between NNGC and All Joy	Yes	Yes, farmer to hub

4. Business case

For a smallholder support programme to be effective and sustainable, the value proposition to both the farmer and the commercial firm must be attractive (Kahlmann, 2019; Kelly, Vergara, & Bammann, 2015). When the business model proofs it can generate benefits for smallholders, smallholder retention rates will increase and the programme can scale in or out. Scaling in means an increase in the level of inclusiveness of the smallholders, intensifying their participation in, and benefits from the partnership. Scaling out occurs through the inclusion of more smallholders, either within an existing structure or through replication (Chamberlain & Anseeuw, 2016). Both options provide opportunities to strengthen the livelihoods in the smallholder segment. This section highlights core elements the firms and farmers assess when engaging in an inclusive business partnership as observed in the four programmes, and in other smallholder farmer inclusion models. The elements are summarised in Table 2 at the end of this section.

4.1 Smallholders: improved livelihoods at acceptable risk

Smallholders are primarily looking for options to improve their livelihoods from their farming business. They show an entrepreneurial attitude and willingness to take risks by entering into these novel partnerships, but there needs to be a balance with the anticipated rewards. The farmers that have entered into the contracts with commercial partners need to be ensured that they can earn an income from their new value chain integration. This requires three particular aspects: a guaranteed offtake, tools that enable the farmers to obtain a marketable and profitable crop, and the ability to diversify their income streams. In particular those farmers who participate from the inception of a programme take a considerable risk as the outcomes of the model have not been demonstrated. These farmers must be allowed leniency and time to learn from the actual implementation, and to adjust where necessary (Kelly et al., 2015).

A **guaranteed market** is mentioned by most of the smallholders engaged in the four programmes as one of the main motivators to sign up to the programme. Guaranteed offtake greatly reduces the market risks for these farmers who often don't know at the moment of planting if they will be able to sell their crops, when, and to whom, and certainly not at what price. The certainty of guaranteed offtake motivates the smallholders in their farming activities in the reality that they produce for a specific offtaker. However, the commercial partner generally only takes produce that adheres to predefined quality and production standards. It is precisely these standards that form one of the barriers to market these smallholders face (Carden, Manderson, Lister-James, Moore, & Pilusa, 2015; German et al., 2018). This has two implications: firstly, the smallholders need to be equipped to be able to achieve the high standards (see next paragraph), and secondly, an alternative market must be available for sub-standard produce that does not reach the specifications. In its BE-FED programme, Heineken thus committed to purchasing sub-standard barley which it then sold as animal fodder. In the first year, the contracted farmers would receive the full price of malting barley for sub-standard crops, with this price being reduced to closer to the market-related price for animal fodder barley in subsequent years as the farmers become more experience with this new crop. But, despite the guaranteed offtake of sub-standard produce, bolstered by a mentoring programme, a number of farmers still experience the risk related to barley farming as unfavourable. Whereas the potential income for barley is higher than that for the alternative of wheat, the risks are also higher. A sub-standard barley crop fetches a much lower price than a grade 3 wheat crop, and the production process for wheat is less accurate. The smallholders supplying the rural hubs established by SPAR transfer the responsibility for finding a market to the hubs who are contractually obliged to buy the smallholders’ contracted crops, but this responsibility does not extend to sub-standard produce. The NNGC members on the other hand have only been able to find a guaranteed market for jam tomatoes through the cooperative, with the individual smallholders remaining responsible for their other crops.

Smallholders subsequently need the tools that enable them to achieve the standards and yields of a crop that can be sold in the commercial value chain at a profitable price. Each of the four programmes have made both production loan **financing** and technical assistance available to the contracted smallholders. The loan provision allows the smallholders to purchase the required (high quality) inputs such as seed and fertiliser, and to cover production related expenses such as electricity and labour. This set-up alleviates the need for credit which these smallholders cannot access through commercial finance institutions. The commercial partners in each of the programmes experienced the challenge of smallholder financing in the existing financial system, compelling them to provide the required funds for the production loans themselves. Thus, financial risk is partly transferred to the commercial partner, with both Heineken and SPAR having to write off some of the loan financing provided. For the current year, 2019, the NNGC has managed to obtain inputs from an external supplier on an interest-free loan on behalf of its members after none of the smallholders were able to repay their initial loan for 2018 production costs to the NNGC. RCL, as parent company of TsGro, has established its own subsidiary which sources wholesale financing for SSCGs, and other cane suppliers. The high numbers of suppliers and the extremely high level of control by the commercial partner over the smallholders contribute to the viability of this particular structure. The need for the corporate partner to provide smallholder loan financing poses two challenges: the individual employees representing the commercial partner in the IB partnership need to secure an internal budget that does not meet the strict financial requirements of the corporate partner, and, related to this, there is a limit to the number of smallholders that can be funded with corporate partner financing, posing limits to the scalability of the programme. It must be recognised that the financial risk related to smallholder loan funding nevertheless mostly lies with the farmer (see Section 7 on Risks). Adverse growing circumstances have an immediate effect on the ability of the farmer to repay the loan. Numerous cases of debt dependency by smallholders have been documented, and have been observed in three of the four cases analysed in this report (Chamberlain & Anseeuw, 2017; Prowse, 2012; Tapela, 2008).

Regarding the **technical support**, each of the commercial partners has realised the deep need for extension services among smallholder farmers. Heterogeneous as smallholders are, the vast majority have not received formal farming or business training (Mabaya, Tihanyi, Karaan, & van Rooyen, 2016). This contributes to their inability to grow the consistent quality and high yields needed for commercial value chain integration. Smallholder support hence needs to encompass not only skills training, but also on-the-farm mentoring. Heineken, SPAR and NNGC have all struggled with insufficient mentoring of the contracted smallholders in the implementation of their emerging farmer programmes. Issues relate to technical service providers who were not suitable for the job, lack of clarity regarding the training requirements, insufficient ground staff, or the involvement of too many intermediaries. Only TsGro has the required extension team, whom they train and employ themselves, and who are dedicated to support the SSCGs supplying the RCL sugar mills. Even in this case, the targeted certification of smallholders that was included in the original programme plan has not been achieved as yet. This indicates the high training demands and grave challenges that need to be overcome by smallholder farmers to achieve profitable yields, and to partake in value chains with high standards regarding quality, processes and certification. The new regulation on food hygiene and safety adopted by the South Africa government pose further requirements on smallholder support programmes to enable them to adhere to these legal requirements. Whereas in all the programmes the partners understand the need for operational support of the smallholders, providing these services is not among the core activities of the commercial partner (excluding TsGro), and hence a dedicated effort is required to either free up budget within the profit-driven corporates, or to find alternative sources of funding. This is where RVO, and other donors, have played an important role.

The last element relating to smallholder risk mitigation is their applied strategy of **diversification**. This relates to both crops grown and marketing channel sold to (Chikazunga, 2013; Okunlola et al., 2016). Growing different crops and engagement with different markets allows in particular for price risk mitigation. The commercial partners also need to acknowledge that small-scale farmers with a small plot of land are not able to achieve a living income by solely growing low-income crops and hence need to allow for crop diversification and, if possible, also offer a market for high-value crops. Smallholders specifically grow staple crops for household consumption, which form a crucial addition to their food basket. Furthermore, despite a guaranteed market under a contract with a commercial partner, smallholders are likely to persist with selling food crops through informal channels, either at different times or concurrently due to higher prices or immediate cash payments (Kelly et al., 2015; Okunlola et al., 2016). Risk spreading is particularly important for the smallholders in the four programmes analysed in this study. The majority of these farmers solely depend on their farming business for their income. Very few have alternative streams of income, for example from wage-labour or other business interests. Their vulnerable position does not allow them to "put all their eggs into the same basket". The commercial partners need to take this economic reality into account when engaging with smallholders.

4.2 Commercial interests: economic, or external context

Equally important for the smallholder support programme to succeed is that there is a business case for the commercial partner. For both Heineken and RCL smallholder farmers play a crucial role in their overall business. Heineken is forced to include so-called "empowering suppliers", or small-scale/black farmers, in their supply chain as condition for their liquor licence. The sugar mills owned by RCL depend on sugarcane grown on land owned by smallholder farmers. In both these cases the South African government plays a fundamental role in creating dependencies of the corporate entities on smallholder farmers. In contrast, both the NNGC and SPAR programmes have struggled to present an attractive business case for crucial commercial stakeholders to engage in the project. ZZ2 was to provide agronomic support to the NNGC farmers, and it was to offer them the use of its equipment and facilities. However, there was no incentive other than good corporate citizenship for this company to contribute to the smallholder cooperative. And whereas SPAR South Africa is motivated to grow a network of smallholder farmer suppliers, it has little control over the actual demand for the produce supplied through its rural hubs, as this is determined by the independent SPAR store owners. Both programmes have struggled to achieve to secure livelihood opportunities for the smallholders they work with, partly as a consequence of this lack of economic incentive for a crucial partner in the model. These cases illustrate that a developmental motivation is not sufficient for smallholder development. Rather, a commercial strategy and developmental objectives need to be combined if smallholders are successfully to be integrated in commercial value chains.

The commercial interests can lie in improving an existing relationship, such as the TsGro initiative. Other programmes expand or adapt existing value chains through building new relationships, for example Heineken engaging with emerging farmers who already have previous experience in barley production for a competing brewer. Alternatively, a programme can aim to establish alternative value chains, which is the case in the SPAR Rural Hub initiative. Programmes in this last category are likely to have a more difficult business case to build as there are more unknown elements, and more extended partnerships are required for the successful implementation.

Table 2: Value proposition elements per programme

	Heineken BE-FED	NNGC	TsGro Water Footprint	SPAR Rural Hub
Guaranteed market	Yes, sub-standard produce at lower price	Yes, jam tomatoes only on collective supply contract	Yes, individual supply agreement for all cane	Yes, hub is responsible for marketing, excluding sub-standard produce
Financing	Interest-free production loan @70% of estimated min. yield	Interest-free loan for inputs only	Interest-bearing loans for production and infrastructure	Interest-free production loan @100% of estimated costs
Technical support	Crop specific, on- and off-farm	Collective organisation; no on-farm mentoring	Collective organisation; irrigation management; on-farm mentoring	Agronomic; on-farm mentoring
Diversification	No, large area required for barley	Yes, farmer decides on area for NNGC	No, multi-year supply contract	Yes, farmer decides on area for hub
Business case for corporate partner	B-BBEE requirement tied to liquor license	No	SSCGs needed for mill efficiency	No, particularly not for store owners

5. Partnerships

The analysed programmes bring corporate businesses and smallholders together. Traditionally, these actors have operated in separate areas. Hence, they are unfamiliar in their strategies, creating an uncertain operating environment. To navigate this novel relationship, other stakeholders are incorporated in the programme. Such multi-actor partnerships have been observed in inclusive business models across the world to assist in access to resources, labour and local knowledge, and to build trust among the targeted communities (London & Hart, 2004; Reficco & Márquez, 2012; Schuster & Holtbrügge, 2014). In particular technical service providers, financial donors, and programme managers are new partners for the commercial actors and smallholders to work with, but who play a crucial role in the smallholder support programmes. The technical service provider needs to have a deep understanding of the local communities which the smallholders belong to, the financial donor is able to alleviate the financial risks for the farmers and the firm, and the project manager ensures that all the partners understand each other and work towards the same goals. But, these wider partnerships in themselves bring new challenges, which are listed in Table 3 at the end of this Section.

5.1 Project manager: building bridges at a cost

Firstly, the project manager serves as a valuable bridge between the project partners, in particular the commercial partner and the financial donor. This actor is often familiar with budget and reporting requirements of the donor. Furthermore, it knows the general smallholder issues that need to be addressed, can identify external actors needed for aspects of the programme implementation, and is aware of the wider context in which the programme is to be implemented. But this programme manager often takes a large share of the financial resources which does not necessarily weigh up to the value it adds to the overall programme, particularly once the programme has gone through a year of implementation. Both Heineken and TsGro have indicated that they would be able to do the administrative and reporting activities at lower costs than the programme manager, but do acknowledge the important role of the programme manager in securing funding and establishing the initial partnerships. Furthermore, with international partnerships like the ones analysed in this report, the programme manager tends to be an organisation that is able to straddle the bridge between the actors from the different countries, but at the same time lacks the fine network on the ground in South Africa. This limits its function to management activities only, without a role in the implementation. Interaction with the smallholders is to be left to the commercial partner or a dedicated technical service provider to prevent confusion among smallholders as to who their contact point is. The NNGC programme illustrates the caveats of a lack of programme management: the absence of such a person allowed one of the commercial partners and the donor to shirk on their respective responsibilities.

5.2 Commercial partner: innovative market access and financing

The commercial partner has two very clear responsibilities: providing market access (input and output) and funding. The agribusinesses are dominant partners in their respective value chains with the resources and expertise to create a context in which smallholder businesses can participate in these chains. This requires innovative thinking by so-called intrapreneurs, employees who incorporate social aspects into the traditionally operating corporate business they work for (Halme, Lindeman, & Linna, 2012; Scholl, 2011). As such, they go beyond CSR by integrating corporate social responsibility within the mainstream business operation, acknowledging the dependence of the business on society, and the need for shared value creation with poor communities (Porter & Kramer, 2006). In the programmes analysed here, the social objective is to create livelihood opportunities for smallholder farmers through crop sourcing. Considering the companies' resources and the expected commercial benefits from smallholder sourcing (see Section 0), the commercial partners are in the best position to fund the measures required to overcome the barriers to value chain entry, such as loan provision, skills development, and infrastructure establishment. The other partners enable the commercial partner and the smallholders to initiate and build their mutual relationships and to ameliorate the risk of these new business relations. Working together within a larger partnership for a limited period of time enables the corporate partner to pilot a workable model and balance the short-term costs with the long-term benefits. It is thus imperative that the commercial partner creates a direct connection with the smallholders, understands the challenges of these smallholders, and builds a trusting relationship with them.

5.3 Technical service providers: on-the-ground smallholder support

Technical service providers are intermediate actors that are responsible for the on-the-ground implementation of the programme. These can be NGOs, dedicated training institutes, commodity organisations, local commercial farmers, or even a unit within the commercial partner. They usually identify suitable smallholders and roll out training programmes to address skills gaps. As such, it is imperative that this actor has a solid understanding of the context in which the smallholders farm, the local community, their activities and internal relationships, and that it has a presence on the ground to mentor the selected farmers. In essence, they are to build the skills of the smallholders to prepare them to independently supply the commercial offtakers, and thus their involvement is temporary. They must address not just agricultural training and implement any standards the smallholders need to adhere to, but equally important is to build an understanding of farming as a business. This partner also serves as a neutral intermediary which enables the development of a trusting relationship between farmer and firm (Kelly et al., 2015). Once the smallholders' skills have been developed, and the relationships between the offtaker and smallholders have been crystallised, the intermediary becomes redundant in that particular location, and communication will be direct between farmer and firm. An exit-strategy for this intermediary partner must be clear from inception. In a few cases, the commercial agribusiness itself is able to train and mentor the smallholders, as observed in the cases of TsGro and ZZ2. The NNGC experience with ZZ2 however underlines that a business case needs to exist for the commercial partner to invest in the training activities as highlighted in Section 0 (see also Chamberlain & Anseeuw, 2019). Regardless of the crop and value chain, the commercial partner needs to acknowledge particular circumstances of the smallholders, among which is the need for swift payment and diversified income streams. Not only does this align with the reality of smallholder households (Okunlola et al., 2016), it also prevents an overdependence on a single buyer (Kelly et al., 2015; Prowse, 2012).

5.4 Donor: financial risk mitigation

The additional expenses required to be able to source from smallholder farmers, such as training costs, are primarily to be carried by the commercial partner who has the financial resources and is to benefit from the smallholder development. The economic reality is that the risks and return on investment do not align with the business rationale of the corporate offtaker. Hence, external funding plays an important role in reducing the financial barriers of smallholder sourcing for the corporate partner. This external funding needs to address a temporary need, rather than be used for operational funding. As such, RVO grants have been used for skills development (Heineken BE-FED, SPAR Rural Hub) and for investment in hardware (TsGro) that are to create a local context in which the smallholders can operate independently. Any subsidy for operational expenses runs the risk of creating a model that depends on this funding stream, undermining the sustainability of the venture (Kelly et al., 2015; Lerner, 2009).

5.5 Smallholders: limited representation

A noticeable absence in many partnerships is smallholder representation. Despite the central aim to 'develop' smallholders, these farmers have no input into defining what this development should look like, and what their actual needs and challenges are. Assumptions are based on the experiences of the programme manager, are influenced by the funder, or dictated by the needs of the commercial offtaker. This approach not only marginalises the objective of the programme, but also undermines the preparation for the realities on the ground. For example, the smallholders in both the Heineken BE-FED and SPAR Rural Hub programmes struggle with access to machinery, which negatively impacts their ability to implement the optimal agronomical schedule to obtain a profitable crop, and hence has a downward influence on their income from the programme. And despite the mentoring support provided by Heineken, many smallholders still choose to grow wheat rather than barley as this crop better suits their particular context and risk profile. Not taking the voice of the smallholders into consideration jeopardies the programmes' impact and sustainability.

Table 3: Stakeholder challenges per programme

	Programme manager	Commercial agribusiness	Technical service provider	Donor	Others
Heineken BE-FED	Little value add after initialisation	Lag in demand growth for crop	Too many partners confusing to smallholders		No business case for commercial seed provider; No smallholder representative
NNGC	Little presence on the ground	Lack of guaranteed demand	No business case for commercial mentor	Funding mechanism does not align with pilot character	
TsGro Water Footprint	Little value add after initialisation	Does not allow for crop diversification			High expenses for Dutch service provider; Limited smallholder engagement
SPAR Rural Hub		No demand guarantee	Insufficient capabilities	Skills funds matched to hardware expenditure	No smallholder representative

5.6 Government: creating a stimulating framework rather than direct engagement

The South African government aims to transform the agricultural sector by supporting historically disadvantaged people in this sector. It has implemented policies along three pillars: land restitution, land redistribution and tenure security. The aim of these policies is to increase land ownership among black communities, which subsequently creates a dependency of agribusinesses on these new landowners. The B-BBEE, and specifically Agri-BEE, policy forms an additional impetus for partnerships between agribusiness and emerging farmers (Chamberlain & Anseeuw, 2018a). This policy framework was a direct motivation for Heineken to establish a network of emerging barley farmers for the new maltery. To reach the objectives of rural development and agricultural transformation a suite of programmes and projects to support smallholder farmers has been designed. These include grant funding, infrastructure investments, mechanisation programmes, mentorship programmes, loan financing, and production input supplies (Greenberg, Swanepoel, & Lewis, 2018). In practice, many of these programmes are not implemented efficiently and effectively, with detrimental effects on the smallholders or the public-private partnerships that were to be supported (Khulisa Management Services & University of Cape Town, 2016; Lahiff, Davis, & Manenzhe, 2012; Witt, 2018). Unfortunately, this has also been the case for the NNGC, the only programme analysed in this study that has direct government involvement. Grant funding to establish this new-generation cooperative has been extremely slow to be issued, putting the NNGC under severe financial strain. Equally disappointing has been the experience of SPAR in its intention to partner with the provincial department of KwaZulu-Natal. Despite the large potential in cooperation and integration with government initiatives, the reality is that government intervention tends to threaten a programme rather than benefit it. Nevertheless, government engagement remains important to maintain good relationships with this important stakeholder and to keep options for future collaboration open.

6. Implementation

Once the business case and the partnership have been established, the stakeholders have to turn to the actual implementation. This section outlines four essential elements that need to be taken into account. These relate to farmer selection and retention, communication and transparency, flexibility and time.

6.1 Farmer selection and retention

At the basis of each support programme needs to be a well-defined target group of farmers in terms of ability and location. The smallholders must be able to deliver on the requirements drawn up by the commercial partner to satisfy its business case. Vice versa, the support programme also has to fit the smallholders it is to work with. But, whereas terms such as small-scale (black) farmer, emerging farmer, and smallholder are often used, the reality is that these cover a heterogenous group of people with vastly different abilities and support requirements. The typology to characterise the broad groups of farmers in South Africa as used by DAFF identifies household producers, smallholder producers, medium-scale commercial producers, large-scale commercial producers, and mega producers (Ngaka, 2019). This categorisation predominantly applies the criterium of turnover to define the particular groups, and straddles the complete range of farmers in the country. An alternative typology excludes the larger farmers and identifies subsistence-oriented smallholders, market-oriented[1] smallholders in

[1] A market can be both formal (supermarkets, convenience stores, restaurants, food service sector, fresh produce markets, processors) or informal (bakkie traders, hawkers, street markets, tuck shops, spaza shops, street vendors, flea markets).

loose value chains, market-oriented smallholders in tight value chains, and small-scale capitalist farmers (Cousins & Chikazunga, 2013). Excluding subsistence smallholders, these farmers aim to sell at least half of their produce but also farm for home production, use family labour within the farming operation to some degree combined with hired labour, and farming contributes a highly variable, but significant amount of cash income. Levels of mechanisation, capital intensity and access to finance are variable among such smallholder farmers (Cousins & Chikazunga, 2013). These groups of farmers make up between 210,000 to 270,000 households in South Africa (Okunlola et al., 2016). The private sector is best suited to support these smallholders in both loose and tight value chains, as well as small-scale commercial farmers (Khulisa Management Services & University of Cape Town, 2016). The four programmes analysed in this report also target smallholders in these three categories. They look for farmers who produce predominantly for markets, be it formal, informal, or both, and whose farming activities contribute significantly to the household's income. Broadly, these farmers' needs relate to skills, finance and infrastructure to increase their yields and quality of their produce, as well as better market information. The private sector is well equipped to address these needs.

It is also important to take into account the needs of the commercial partner looking to integrate small-scale farmers into their value chains, the specific crop, and the existing value chain actors (German et al., 2018; Kelly et al., 2015). An agro-processor such as Heineken needs large volumes of barley that meet stringent quality specifications. Market agent RSA, who works closely with the NNGC, or SPAR retailers, have more flexibility to accommodate smaller volumes and different levels of quality. As such, it is likely that these different offtakers will work with different kinds of smallholders. Despite this differentiation, all offtakers analysed for this report require that smallholders have access to a minimum area of land, have a workable irrigation system, and they need to show experience in farming.

However, whereas the stated conditions that the smallholders have to adhere to are fairly well defined by the commercial partner, the needs of the smallholder are generally assumed by the programme partners when designing the support programme: input provision and technical support will allow the smallholders to produce the required crop for a guaranteed offtake. Collective infrastructure, in particular central packing facilities, is considered as an instrument to facilitate the bundling of smallholder produce to reach the volume requirements of the formal offtakers. A lack of smallholder engagement in the design of the programme creates a potential situation where the smallholders are incorporated into value chains where little room exists for the specific context in which these farmers operate. 'Adverse incorporation' is often the case as a result (du Toit & Neves, 2007).

This adverse incorporation, particularly in tight value chains, is one of the factors why the corporate partners have faced difficulties to retain smallholders in their programmes. The smallholders struggled to achieve the quality standards set by the offtakers, they did not have insight into the price calculation, were unable to deal with the financial, operational and compliance risks related to commercial value chain inclusion, and more generally, the tight contracts do not fit the pluri-active nature of their farming businesses and household incomes (Aliber et al., 2010; Chamberlain & Anseeuw, 2017; Okunlola et al., 2016). These aspects have also been experienced by both Heineken

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Alternative marketing channels are cooperatives, local fresh produce markets, local government procurement, farmers' market/box schemes, hospitality/tourism, or commercial farmers (Louw, Kirsten, & Madevu, 2005).

and SPAR. The adverse effects are reinforced in the relatively small communities in which these smallholders operate, where the negative experiences of the first participants can have a detrimental effect on more risk-averse farmers in the same area who become reluctant to sign up to the programme. In contrast, RCL/TsGro has illustrated through its BWS programme that positive experiences convince the more risk-averse smallholder to sign up to the programme, allowing the sugarcane processor not only to retain smallholders in their value chain, but grow their number. The NNGC has not been able to increase its membership numbers, partly due to the mentioned issues of quality and financial risks, but mostly because funding challenges have not allowed the cooperative to grow its market.

The implementation of new and innovative partnerships between unfamiliar actors will inevitably encounter unexpected challenges that will discourage a number of selected smallholders. This should be factored in to the overall project plan. Essential is that the partners learn from the experiences of the exited smallholders.

6.2 Communication and transparency

As stated in Section 0, inclusive business models that integrate smallholder farmers in commercial value chains bring partners together that have divergent backgrounds. Their ways of working, priorities, and expectations do not necessarily align. In particular, there is significant information asymmetry between the smallholder farmer and the offtaker. It is important to address this asymmetry through clear communication and transparency, particularly in regard to price mechanisms and quality standards (Vorley, Lundy, & MacGregor, 2009). To smallholder farmers it is often unclear what price they will receive for the crop, and how this price is calculated. Unclear pricing mechanisms have been identified as one of the main reasons why contracted smallholders engage in side-selling (Kelly et al., 2015). In particular pricing mechanisms that are linked to spot market values cause considerable confusion, and hence disputes (Prowse, 2012). SPAR has decided to change its pricing mechanism from a complex market-linked method to a pre-determined cost + profit model as it experienced significant challenges with the initial structure. There also needs to be transparency around what benefits accrue throughout the value chain. For example, smallholders delivering spinach to a local Pick n Pay retail store wonder why their bunches are sold to the consumer for multiple times the price they receive from the retailer (Chamberlain, Banda, & Anseeuw, 2017).

Transparency also needs to apply to the required standards as set by the offtaker. The quality of the produce impacts the price and potentially the marketing channel available to the smallholder. The example of the previously-mentioned spinach farmers delivering to Pick n Pay is a case in point. A lack of written standards that specify quality levels leaves room for the smallholders to interpret some dealings of the retailers as favouritism (Chamberlain et al., 2017). Despite clear written standards in the contract, Heineken still struggled with a number of smallholders who were uncertain in the quality of the crop they delivered and hence the price they received, and whom exited the programme partly because of this issue. Clarity on standards extends beyond the crop to production processes (for example the amount of fertiliser), and more recently to food safety. Smallholders need to understand the reasons behind these requirements, but also be transparent towards the offtakers as to how they adhere to them.

Equally important is the coordination of communication, in particular to the smallholders. Farmers in several smallholder support programmes receive communication from numerous stakeholders in the programme. This causes confusion, particularly when the instructions are conflicting. For example, farmers contracted by Heineken were not sure whom to contact for support: the mentor who visits their farms, the programme manager who issues the contracts and arranges payments, or the commercial partner who determines the crop specifications and purchases their crop.

For the development of a sustainable relationship between smallholder and commercial partner, open communication between these actors is essential (Vollman, 2014). This relates to the highlighted elements of pricing mechanisms, the allocation of financial benefits throughout the value chain, and standards, but also to how and why decisions within the programme are made. Transparency needs to be accompanied by accountability where each of the stakeholders adheres to their roles and responsibilities. Smallholders need to be equipped to engage as informed partners, which requires an understanding of business principles and (global) value chains. Lastly, transparency and accountability need to be accompanied by a realistic expectation management. Particularly smallholders need to understand that benefits, both financial and skills, take time to materialise for them, but equally for the commercial partner.

6.3 Flexibility

Business models that bring together commercial agribusinesses and smallholder farmers are innovative, if not in nature, then at least for the partners involved. These business models are then piloted on a small scale with the intention to scale up once the model has proven itself. Considering the novel character of the relationships and business model, all actors need to be flexible in their approach. For example, the requirements for smallholder selection might need to be loosened to allow for certain farmers to participate. The agribusiness must adapt its business practices, for example in paying farmers upon delivery rather than after an extended payment period, or by accepting smaller and more frequent deliveries. And it needs to allow for flexibility in marketing channels for the contracted farmers, enabling the smallholders to adjust to new production methods and market dynamics (Kelly et al., 2015). For example, a commercial offtaker in Colombia introduced a clause that permitted the contracted smallholders to sell up to 20% of their produce through other channels when the local market price was high. In return, the offtaker was allowed to purchase up to 20% of the contracted volume from non-contracted suppliers when market prices were low (Guidi, 2011).

A pilot project also needs a flexible approach to adjust to local circumstances. The experience of SPAR illustrates this point well. In both the Mopani and Ikhwezi areas the programme established a packing facility, but with different structures and stakeholders. TsGro equally has variations of its business model that enables it to work with both individual smallholders, co-operatives, and situations where it manages SSCG land itself. These variations are not detailed in an initial project plan, but evolve during the implementation when lessons are learned on the ground. Such lessons might also dictate a re-allocation of budget lines, and even a change in partners. Each of the four programmes analysed have dropped at least one of the initial project partners, for different reasons. Adjustment of the model, the partners, or the smallholders included is not necessarily a failure of the programme. Rather they should be considered as costs of learning which can only be discovered once the innovative idea is being implemented on the ground.

6.4 Time

Related to the previous point is that sustainable inclusion of smallholder farmers in commercial value chains through projects as analysed in this study takes time (Aliber et al., 2010; Guidi, 2011). The business model needs to be tested and adjusted, and agricultural activities have to be developed. The capacitation of smallholders, the effective transfer of knowledge and know-how, and developing them into informed negotiators and decision makers needs time and experience. Trust in the relationship between commercial partner and smallholders is build up over numerous growing seasons and through continued interaction between these actors. And these models need to operate for a number of years to start to reap financial gains, particularly for the commercial partner who often has invested significant funds to establish the model.

7. Inclusiveness assessment

Integrating smallholder farmers in commercial value chains doesn't necessarily constitute an inclusive business model. Inclusion rather relates to the terms on which the smallholders participate in the value creation and allocation processes within the business set-up. As such, it assesses questions related to who owns and controls which assets, how are decisions made, and how are risks and benefits distributed? Higher levels of inclusion in these processes can be considered as a higher potential to increase smallholder livelihoods and contribute to transforming the agricultural sector in South Africa. This section applies a methodology that assesses four elements of the business model: ownership, voice, risks, and rewards (Chamberlain & Anseeuw, 2018b). Assessment is done both for the institutional set-up of the model, as combination of instruments presented in Table 1, and for the actual implementation, where inclusion often lags behind. The applied methodology is not an impact assessment which compares a before and after situation. It also does not assess absolute numbers such as number of smallholders included or income generated. This approach allows for a comparison of programmes of different size, but it might exaggerate the level of inclusion as a minimum of value-sharing scores equal to a deeper value-sharing measure. The mechanism also does not evaluate the impact at an individual level. In many programmes impacts on individual smallholders vary with some farmers benefiting whilst others perceive their inclusion as negative. Rather, the methodology applied provides insight into the value-sharing potential of each of the structures of the inclusive business models. Table 4 presents the four dimensions with their sub-categories and the scoring mechanism.

Table 4: Methodology for inclusiveness assessment

		Score (high = most inclusive)				
	Categories	**5**	**4**	**3**	**2**	**1**
Ownership	**Land + fixed assets**	Individual land and collectively-owned assets	Individual land, no collectively-owned assets	Collectively owned land and assets	Land and assets shared between collective and commercial partner	Commercial partner OR Rent
	Moveable assets	Individual beneficiary all assets	Some individually owned, some collectively owned	Collective OR Some individual, some other	Shared between collective and commercial partner	Commercial partner
	Produce	Individual all	Some individual, some off-taker	Collective	Shared between collective and commercial partner	Commercial partner/off-taker
Voice	**Pre-implementation**	Impact on governance structure, partner, and opt-in/out decision 1 point each; 2 points if voice belongs to individual, 1 for collective engagement in negotiations, with individual feedback loop.				
	Day-to-day and IB operation	Part individual + commercial partner, part independent individual with additional involvement in collective	Part individual + commercial partner, part independent individual	Individual + commercial partner OR Collective	Collective + commercial partner	Commercial partner
	Medium to long-term	Impact on strategy, structure 2 points each for individual voice, 1 point for collective voice; opt-in/out option for individual beneficiary, 1 point				
Risk	**Financial**	Individual funds (incl. loan financing)	Individual funds plus grant/ commercial partner support	Collective funds (incl. loan financing)	Collective funds plus grant/ commercial partner support	No financial commitment for beneficiaries
	Operational	All for individual	Individual shared with beneficiary collective	Individual shared with collective and commercial partner OR all for collective	Shared between collective and commercial partner	No operational risk for beneficiaries
	Community	1 point each for membership, individual behaviour, collective leadership challenges and external frictions				No community / collective risks
Reward	**Market access**	Input, output and credit: 1 point each if collectively, 2 points each for individual access. Maximum score of 5 points. Total 1 point if market access is as IB.				
	Financial	Rent, produce and dividends/assets: 2 points each for individual income, 1 point each for collective income; 1 point for income for IB as whole.				
	Employment & skills	Jobs exclusively for beneficiaries: 2 points; shared with wider community: 1 point; operational training: 1 point; external training: 1 point; bursaries: 1 point. Experience through IB participation default 1 point.				

Source: Chamberlain & Anseeuw, 2018, p. 3

7.1 Ownership

Considering the fact that all the programmes work with individual smallholders who farm with a certain level of independence, the ownership scores for each of the programme's institutional set-up is high (Figure 2). Land is owned by the smallholders, even if this is most often with a permission-to-occupy, or a construction that allows individual access to communal land. Only a few smallholders have an individual title deed to their land. Through the programmes, smallholders are set to gain collective ownership of fixed assets, such as bulk water infrastructure or a packhouse. Each of the programmes relies on the individual smallholders to provide their own moveable assets. Both the land and moveable asset categories thus result in a high ownership score. In contrast, through the supply contracts in all of the programmes, produce ownership is transferred to the commercial offtaker.

Category	Institutional set-up	Implemen-tation
Land/fixed assets	4.75	4.25
Moveable assets	4.75	3.50
Produce	2.75	3.25
Total	**12.25**	**11.00**

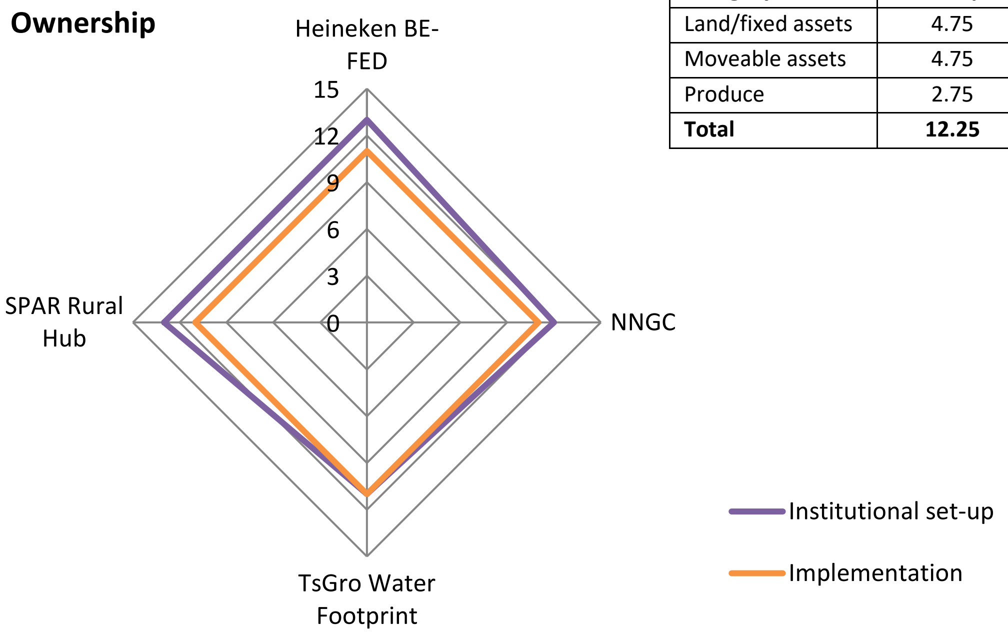


Figure 1: Ownership score per programme

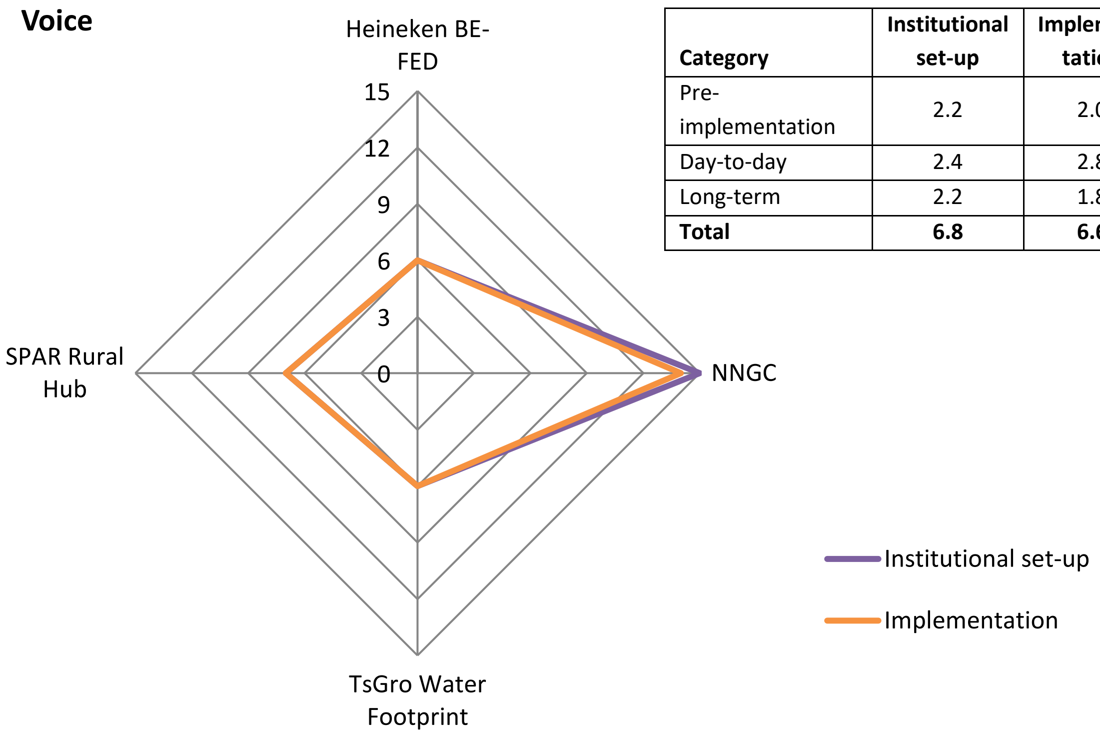
In the programme implementation ownership levels turn out to be lower than planned. Firstly, the smallholders demonstrate a lack of financial means to accumulate productive assets. Most of the interviewed smallholders depend on external contractors for machinery, negatively impacting on the performance of their farming activities. Secondly, both the NNGC and SPAR have not yet achieved the anticipated packhouse ownership by the smallholders. In the case of the NNGC financial challenges have delayed the construction of this asset. The SPAR hubs have not achieved financial sustainability, a condition of ownership transfer of the facility to the smallholders. The smallholders thus also don't have ownership of the machinery purchased by the hub. On the other hand, produce ownership in both these cases is higher than envisaged in the institutional set-up. Demand for smallholder produce is lower than anticipated, forcing the smallholders to grow other crops without offtake agreement. Whereas this gives them a higher level of produce ownership, the smallholders do indicate that they would like to increase their certainty regarding the market they can supply. A higher level of ownership is thus not necessarily perceived as positive. Despite the different set-ups, which envisages different ownership structures for the smallholders participating in the different programmes, the implementation demonstrates that so far, on the ground there is a large similarity of asset ownership:

smallholders have individual access to land, are largely dependent on external service providers for machinery, and grow only part of their crops on a supply contract. Participation in any of the programmes has had limited effect on smallholder asset ownership so far.

7.2 Voice

One of the central aspects of smallholder integration into commercial value chains is their agency, or their ability "to choose, act and ultimately effect change, whether individually or collectively" (Cotula, Polack, Berger, & Schwartz, 2019, p. 1). This section analyses how the smallholders are able to participate in decision-making processes within the partnership.

Figure 3 illustrates that, aside from the NNGC members, the smallholders have a limited say in the inclusive business. In Section 5 it was highlighted that smallholders are not engaged in the design of the business model. This is reflected in the low score in the pre-implementation category. Only the members of the NNGC actively participated in the design and management of the cooperative. The smallholders in the other programmes are limited to a simple opt-in decision. The farmers have more influence on the day-to-day operation of the IB, which relates to the activities on their own farms. Entering into a supply contract does have a negative impact on the freedom of the farmers, as they need to adhere to the growing instructions dictated by the offtaker. However, the limited period of these contracts does give the smallholder the annual option to opt-out, which has a positive impact on the long-term voice of the farmer.



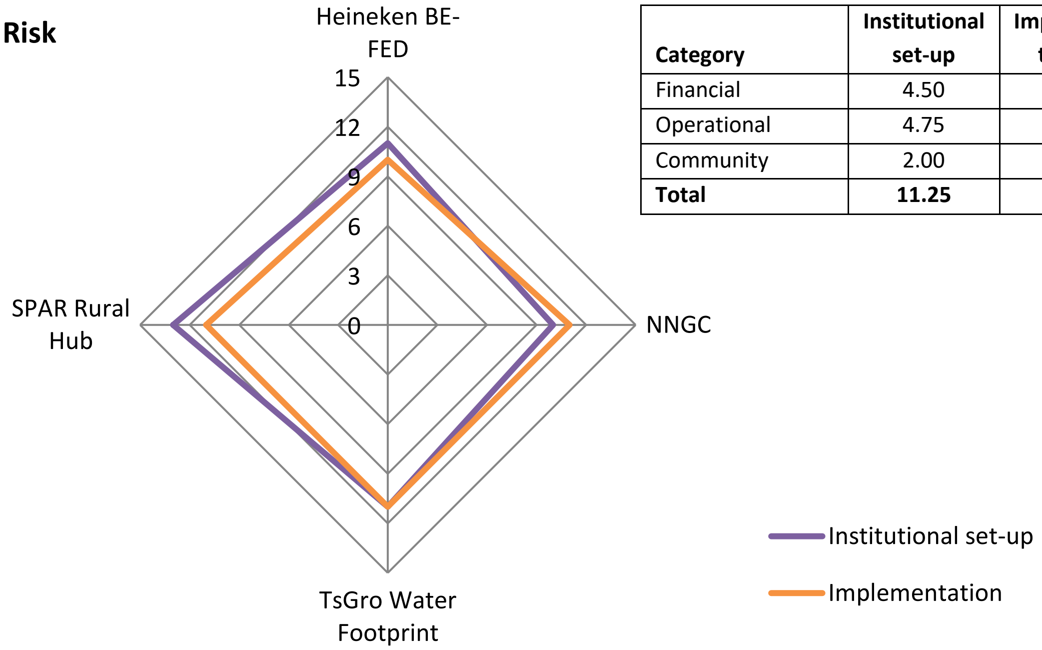
Category	Institutional set-up	Implemen-tation
Pre-implementation	2.2	2.0
Day-to-day	2.4	2.8
Long-term	2.2	1.8
Total	**6.8**	**6.6**

Figure 2: Voice score per programme

In practice, the programmes demonstrate that even less decision-making power is held by the smallholders than was expected. Inherent power discrepancies and financial dependency between the small-scale farmers and the generally large-scale offtakers lead to the farmers' voice remaining inferior. Ironically, this effect can be reinforced by the financial donor, as observed in the analysed programmes. Requirements for the participation of predefined actors, in particular Dutch organisations, further side-lines the active engagement of the smallholders in the programme, even where these actors are to operate on behalf of these smallholders. For example, the commercial partner in the NNGC and its role had already been determined before the cooperative was established. Although the scores of the voice category are lower than that of the ownership category, the implementation of the business model has similar effects. Thus, growing crops outside of the programme increases the impact of the smallholders on their farms, whereas the delay in ownership of assets reduces their say in how these assets are managed. In general, participation in the commercial value chain seems to lessen the control smallholders have over their assets, as decision-making and decision-control is partially transferred to the commercial partner. The programme partners, and the commercial offtaker in particular, need to be aware that insufficient smallholder empowerment weakens the long-term ability of these farmers to become independent players with increased participation in the agricultural sector (Chamberlain & Anseeuw, 2018a).

7.3 Risks

Participation in commercial value chains exposes the smallholder farmers to a number of risks. Whereas the smallholders who decide to participate in the novel support programmes, which have no track record yet, have a certain appetite for risk, their economic situation necessitates them to avert large risks (Patt, Suarez, & Hess, 2010; van Averbeke & Mohamed, 2006). To address this need, the programmes have implemented mentorship structures to mitigate the risk of low yields, whereas the supply contract takes away most of the risk related to not finding a market for the produced crops. Despite these instruments, operational risks in each of the programmes remain with the individual smallholders. The NNGC members were largely unable to harvest a profitable crop after their plants had been affected by disease. Similarly, financial risks also rest with the farmer. The financing provided by the offtaker or other financers is on a loan basis, and hence needs to be repaid. In a situation where the smallholder is unable to recover the loan, a situation of debt is created, one of the negative aspects raised in the literature on contract farming (Bijman, 2008; Prowse, 2012). These risks are partially ameliorated when the smallholders organise in a collective, such as the NNGC. Experience shows that



Category	Institutional set-up	Implemen-tation
Financial	4.50	4.25
Operational	4.75	4.75
Community	2.00	1.75
Total	**11.25**	**10.75**

Figure 3: Risk score per programme

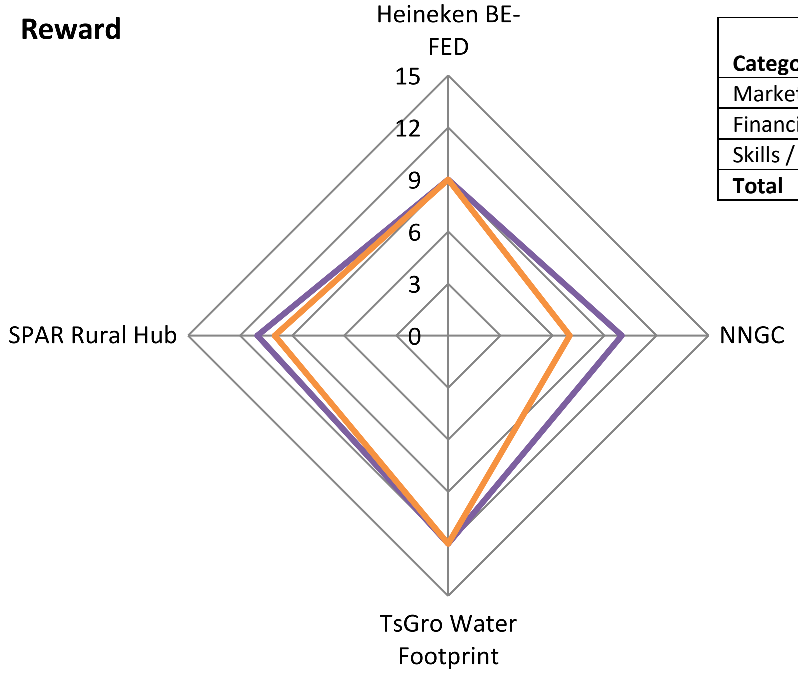
this strategy brings additional risks relating to internal power and distribution struggles (Ortmann & King, 2007), but also to their relationship with the wider community (Chamberlain & Anseeuw, 2017).

Whereas in other inclusive business models the corporate partners were able to transfer further risks to the smallholders in the actual implementation (Chamberlain & Anseeuw, 2017), the programmes in this analysis have been able to reduce the risk exposure of the farmers slightly (Figure 4). Both Heineken and SPAR have written off smallholders' debt which has had a positive impact on the financial risk of the farmers. This is however not a sustainable situation for the commercial partners. Heineken has already included a specific clause in the supply contract that explicitly states that the farmer needs to pay back any loan provided. Regarding the risk related to collective organisation, the two cases that incorporate this instrument in this study, NNGC and TsGro, have largely been able to evade these issues. NNGC because it is a small collective, and has not yet demonstrated financial benefits that can cause internal and external conflicts. The collectives in the TsGro programme are well established and clearly demarcated, with the individual members being responsible for their own farming activities. Hence, there is limited opportunity for free-riding and corruption in these collectives.

The analysed programmes show that individual smallholders can experience alleviated risks through the participation in an inclusive business structure. Financial exposure is eased through favourable financing, and the expertise of the commercial partner and mentor restrict the operational risk, albeit at the expense of decision-making power. Nevertheless, the risks related to the complex and unequal relationship place severe pressure on the smallholders.

7.4 Reward

The objective of smallholder support programmes is to allow the smallholders to gain a better livelihood from their farming activities. Therefore, integration into commercial value chains is to generate monetary or non-monetary rewards for the smallholders. Aside from financial income, the smallholder can benefit from better market access, be it for produce, inputs or finances, or they can gain through skills development or job opportunities (Table 4). The central aim of the programmes, aside from the bulk water supply project under TsGro, is to create market access. Hence, all of the programmes score high on this aspect, in particular through the implementation of supply contracts. This analysis does not illustrate the negative effects of the short-term validity of these contracts, which generally cover only one season, as perceived by the small-scale farmers. Smallholders have indicated that they would prefer longer-term contracts to remain certain that they will have access to the same market for future seasons. Aside from market access, the smallholders benefit from training and mentorship agreements which build their skills. Training programmes relate to the specific crop they grow for the offtaker, but also to collective organisation governance for those programmes which have implemented this instrument. The support programmes benefit not only the smallholders, livelihood opportunities are also created for the wider community. In this study, the packhouse facilities in the NNGC and SPAR Rural Hub programmes create jobs in these rural areas. Lastly, the financial rewards come from crop sales to the offtaker. Additional income streams, in particular through collective ownership in assets, is promised. In the implementation, only RCL has been able to offer financial benefits to SSCGs through their shareholding in TsGro's sister company Akwandze. It needs to be noted that these dividends are not related to the water footprint programme.



Category	Institutional set-up	Implemen-tation
Market access	4.50	4.50
Financial	3.00	2.25
Skills / jobs	3.00	2.75
Total	**10.50**	**9.50**

Figure 4: Reward score per programme

Whereas the cases with a clear commercial business case, namely Heineken and TsGro, have been able to deliver on the anticipated categories of rewards, albeit not necessarily at the expected intensity, SPAR and particularly the NNGC have struggled to achieve the envisaged rewards for the smallholders (Figure 5). Establishing a viable, new organisation, either a cooperative or a packhouse, is a time-consuming process that requires financial investments that delay monetary rewards accruing to the smallholder members. In particular the NNGC farmers have struggled to even gain income from the crops grown for the cooperative. A high agency in how their development is to take place still seems to need a commercial, or at least financial, partner to actually make this development happen. Heineken has opted to not invest in any new infrastructure or collective organisation, and TsGro uses a well-established network of SSCGs, cooperatives and existing supply relationships which it is merely upgrading and improving. Both contexts allow for a much quicker generation of rewards, particularly financially.

8. Recommendations and Conclusion

Smallholder support programmes take the form of innovative models designed and implemented by innovative partnerships. This requires an open mind and a flexible, pragmatic approach from all stakeholders involved: commercial partner, smallholders, service providers and also the financing agent, both in the design, but particularly in the implementation of the programme. Experiences across many such initiatives underline that unexpected incidences inevitable hamper the planned roll-out. These can relate to the behaviour of programme partners, smallholder organisation, but also natural occurrences such as drought or diseases. In these situations, clear communication and understanding between unfamiliar partners, including the smallholders, is a challenging, but necessary condition for these programmes to continue towards the ultimate objective of building sustainable livelihoods for the farmers involved.

Such challenges in the implementation can undermine the buy-in of the smallholders. The partnership needs to assure that risks for the smallholders during the first years are ameliorated, rather than deepened, and that the farmers are able to diversify their livelihood strategies. In particular, smallholders cannot be made financially accountable for unforeseen occurrences within the support programme. On the other hand, their expectations on short-term financial gains have to be managed, as these rewards take time to materialise.

These are general lessons that are independent from the model that has been implemented. Different value chains, budgets, and individual partner objectives will result in unique ways of integrating smallholders in these commercial chains, and each will have to deal with their unique challenges. The forthcoming Theory of Change document is to provide guidelines for the design of an inclusive business model to enable the stakeholders to anticipate common pitfalls, and give handholds to enable a more efficient and effective implementation.

A last remark relates in particular to opportunities for Dutch agribusinesses through smallholder support programmes. Where these businesses are offtakers of smallholder crops, they can play an essential role through integrating the smallholders into their supplier base in a fair manner. Even if this initially is a more costly option than sourcing from large-scale framers, a business case on the longer term is certainly viable, particularly in the socio-political context in South Africa. Business opportunities where smallholders are clients of agribusiness suppliers are hampered by the limited financial resources in this segment. Products and services either need to be subsidised, or they need to be adjusted to the economical and natural realities in which these farmers operate. High-cost infrastructure, inputs, and services are out of reach for the large majority of the smallholders. For these agribusinesses, the target market lies mostly in the established, larger-scale commercial farmers who are able to recuperate the financial costs. They nevertheless can make a valuable contribution to smallholder development, but on a CSR rather than on a profit basis, as the business case is difficult to build.

9. References

Aliber, M., Baiphethi, M., De Satge, R., Dension, J., Hart, T., Jacobs, P., … Tapela, B. N. (2010). *Strategies to support South African smallholders as a contributon to government's second economy stategy. Volume 1: Situation analysis, fieldwork findings and main conclusions*. Cape Town: Institute for Poverty, Land and Agrarian Studies.

Bijman, J. (2008). *Contract Farming in Developing Countries. An overview*. Wageningen: Wageningen University.

Carden, K., Manderson, A., Lister-James, J., Moore, D., & Pilusa, T. (2015). *Supporting smallholder agriculture. Building local economies: How smallholder farmers make markets work for them & food safety, ethical, and environmental standards*. Stellenbosch: Southern Africa Food Lab.

Chamberlain, W. O., & Anseeuw, W. (2016). The Scalability Potential of Inclusive Business in Agriculture: Can Bigger Be Better and For Whom? In *World Bank Conference on Land and Poverty, March 14-18*. Washington D.C.: The World Bank.

Chamberlain, W. O., & Anseeuw, W. (2017). *Inclusive Businesses in Agriculture. What, how and for whom? Critical insights based on South African cases*. Stellenbosch: SUN MeDIA MeTRO. https://doi.org/10.18820/9781928355090

Chamberlain, W. O., & Anseeuw, W. (2018a). Inclusive Businesses and Land Reform: Corporatization or Transformation? *Land*, *7*(1), 18. https://doi.org/10.3390/land7010018

Chamberlain, W. O., & Anseeuw, W. (2018b). Inclusiveness revisited: Assessing Inclusive Businesses in South African Agriculture. *Development Southern Africa*.

Chamberlain, W. O., & Anseeuw, W. (2019). Inclusive businesses in agriculture: Defining the concept and its complex and evolving partnership structures in the field. *Land Use Policy*, *83*. https://doi.org/10.1016/j.landusepol.2019.02.008

Chamberlain, W. O., Banda, K., & Anseeuw, W. (2017). Collective and loose contracting, reinforced by equity, to consolidate diversified production models - Winterveld United Farmers Association. In W. O. Chamberlain & W. Anseeuw (Eds.), *Inclusive Businesses in Agriculture - What, how and for whom? Critical insights based on South African cases* (pp. 43–63). Stellenbosch: SUN MeDIA MeTRO. https://doi.org/10.18820/9781928355090

Chikazunga, D. (2013). Determinants of smallholder farmers' participation in modern food markets: the case of tomato supply chains in Limpopo. In S. Greenberg (Ed.), *Smallholders and agro-food value chains in South Africa: Emerging practices, emerging challenges* (pp. 15–22). Cape Town: Institute for Poverty, Land and Agrarian Studies.

Cotula, L., Polack, E., Berger, T., & Schwartz, B. (2019). *Rural producer agency and agricultural value chains: What role for socio-legal empowerment?* London: IIED.

Cousins, B., & Chikazunga, D. (2013). "Defining smallholder farmers in South Africa."

du Toit, A., & Neves, D. (2007). *In search of South Africa's second economy: Chronic poverty, vulnerability and adverse incorporation in Mt. Frere and Khayelitsha* (CPRC Working Paper No. 102). *Living on the Margins*. Belville/Manchester.

German, L., Cotula, L., Gibson, K., Locke, A., Bonanno, A., & Quan, J. (2018). *Land governance and inclusive business in agriculture: advancing the debate*. London.

Greenberg, S., Swanepoel, S., & Lewis, L. (2018). *Input supply in South Africa's smallholder farmer support programmes: A tale of neo-apartheid plans, dodgy dealings and corporate capture*. Johannesburg.

Guidi, D. (2011). *Sustainable Agriculture Enterprise: Framing Strategies to Support Smallholder Inclusive Value Chains for Rural Poverty Alleviation* (No. 53). Retrieved from http://www.hks.harvard.edu/centers/cid/publications/research-fellow-graduate- student-working-papers/cid-research-fellow-and-graduate-student-working-paper-no.-53

Halme, M., Lindeman, S., & Linna, P. (2012). Innovation for Inclusive Business: Intrapreneurial Bricolage in Multinational Corporations. *Journal of Management Studies*, *49*(4), 743–784. https://doi.org/10.1111/j.1467-6486.2012.01045.x

Kahlmann, K. (2019). Inclusive business creates opportunity at every level. Retrieved May 6, 2019, from https://www.inclusivebusiness.net/clued-in/4/article/4531

Kelly, S., Vergara, N., & Bammann, H. (2015). *Inclusive business models - Guidelines for improving linkages between producer groups and buyers of agricultural produce*. Rome: FAO.

Khulisa Management Services, & University of Cape Town. (2016). *Summary Report of Diagnostic Evaluation of the Government - Supported Smallholder Farmer Sector*. Cape Town.

Lahiff, E., Davis, N., & Manenzhe, T. (2012). *Joint ventures in agriculture: Lessons from land reform projects in South Africa*. London/Rome/Cape Town: IIED/IFAD/FAO/PLAAS.

Lerner, J. (2009). *Boulevard of broken dreams: why public efforts to boost entrepreneurship and venture capital have failed - and what to do about it*. Princeton: Princeton University Press.

London, T., & Hart, S. L. (2004). Reinventing Strategies for Emerging Markets: Beyond the Transnational Model. *Journal of International Business Studies*, *35*, 350–370. https://doi.org/10.1057/palgrave.jibs.8400099

Louw, A., Kirsten, J., & Madevu, H. (2005). Securing small producer participation in restructured agri-food systems in South Africa. In *Annual World Food and 15th Agribusiness Forum, Symposium and Case Conference on the International Food and Agribusiness Management Association*. Illinois, USA.

Mabaya, E., Tihanyi, K., Karaan, M., & van Rooyen, J. (Eds.). (2016). *Case Studies of Emerging Farmers and Agribusinesses in South Africa*. *Case Studies of Emerging Farmers and Agribusinesses in South Africa*. Stellenbosch: SUN Press. https://doi.org/10.18820/9781920338664

Ngaka, J. (2019). The draft National Policy on Comprehensive Producer Development Support (NPCPDS) - draft 6.1. In *National Stakeholder Workshop*. Benoni, Johannesburg: Department of Agriculture, Forestry and Fisheries.

Okunlola, A., Ngubane, M., Cousins, B., & du Toit, A. (2016). *Challenging the stereotypes: Small-scale black farmers and private sector support programmes in South Africa. A national scan* (Vol. 53). Cape Town. Retrieved from https://repository.uwc.ac.za/bitstream/handle/10566/2454/PLAAS_RR53_web_ssca.pdf?sequence=1&isAllowed=y

Ortmann, G. F., & King, R. P. (2007). Agricultural Cooperatives I: History, Theory and Problems. *Agrekon*, *46*(1), 40–68. https://doi.org/10.1080/03031853.2007.9523760

Patt, A., Suarez, P., & Hess, U. (2010). How do small-holder farmers understand insurance, and how much do they want it? Evidence from Africa. *Global Environmental Change*, *20*, 153–161. https://doi.org/10.1016/j.gloenvcha.2009.10.007

Porter, M. E., & Kramer, M. R. (2006). Strategy and Society: The Link Between Competitive Advantage and Corporate Social Responsibility. *Harvard Business Review*, *84*(12), 78–92. Retrieved from http://search.ebscohost.com/login.aspx?direct=true&db=bth&AN=97080282&site=ehost-live

Prowse, M. (2012). *Contract Farming in Developing Countries - A Review*. *A Savoir*. Paris.

Reficco, E., & Márquez, P. (2012). Inclusive Networks for Building BOP Markets. *Business & Society*, *51*(3), 512–554. https://doi.org/10.1177/0007650309332353

Scholl, J. (2011). Inclusive Business Models as a Key Driver for Social Innovation. In T. Osburg & R. Schmidpeter (Eds.), *Social Innovation - Solutions for a Sustainable Future* (pp. 99–109). Heidelberg/New York/Dordrecht/London: Springer. https://doi.org/10.1007/978-3-642-36540-9

Schuster, T., & Holtbrügge, D. (2014). Resource Dependency, Innovative Strategies, and Firm Performance in BOP Markets. *Journal of Product Innovation Management*, *31*(S1), 43–59. https://doi.org/10.1111/jpim.12191

Tapela, B. N. (2008). Livelihoods in the wake of agricultural commercialisation in South Africa's poverty nodes: insights from small-scale irrigation schemes in Limpopo Province. *Development Policy Review*, *25*(2), 181–198. https://doi.org/10.1080/03768350802090584

van Averbeke, W., & Mohamed, S. (2006). Smallholder farming styles and development policy in South Africa: The case of Dzindi Irrigation Scheme. *Agrekon*, *45*(2), 136–157. https://doi.org/10.1080/03031853.2006.9523739

Vollman, M. (2014). Inclusive Business is reaching the mainstream but the focus needs to remain on impact and people. Retrieved August 5, 2015, from http://www.inclusivebusinesshub.org/profiles/blogs/pioneered-by-intrinsically-motivated-social-entrepreneurs

Vorley, B., Lundy, M., & MacGregor, J. (2009). Business Models That Are Inclusive of Small Farmers. In C. A. da Silva, D. Baker, A. W. Shepherd, C. Jenane, & S. Miranda-da-Cruz (Eds.), *Agro-industries for Development* (pp. 186–222). Rome: FAO and CABI.

Witt, H. (2018). *Policy impacts: The impact of governmental agricultural and rural development policy on small-holder farmers in KwaZulu-Natal* (Biowatch Research Paper). Durban.

This is a publication of
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This publication was commissioned by the ministry of Foreign Affairs.

© Netherlands Enterprise Agency | November 2019
Publication number: RVO-147-1901/RP-INT

NL Enterprise Agency is a department of the Dutch ministry of Economic Affairs and Climate Policy that implements government policy for Agricultural, sustainability, innovation, and international business and cooperation. NL Enterprise Agency is the contact point for businesses, educational institutions and government bodies for information and advice, financing, networking and regulatory matters.

Netherlands Enterprise Agency is part of the ministry of Economic Affairs and Climate Policy.