Ministry of Foreign Affairs

Smallholder Farmer Support Analysis Part 2: Theory of Change – Business model design for smallholder farmer support

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Smallholder Farmer Support Analysis Part 2:

Theory of Change – Business model design for smallholder farmer support

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Date: September 2019

Funded by: Netherlands Enterprise Agency (RVO)

Contents

Executive Summary

This document presents a practically oriented Theory of Change for the design of support programmes that aim to integrate small-scale farmers in commercial value chains. The accepted theory is that by providing smallholder farmers with the right inputs and skills, they are able to increase their productivity and income from their farming activities, which will lead to the wider outcomes of agribusiness growth, enhanced food security, and rural development. Many different programmes have been implemented that lean on this general thinking, but struggle to deliver successful and sustainable smallholder integration. To increase the likelihood of smallholder support programmes contributing to smallholder development, a holistic approach that outlines the steps to implement such programmes, identifies the roles and responsibilities of programme partners, takes conscience of specific value chain characteristics, and addresses the more technical considerations regarding the business model is needed. This document addresses that need, and serves as a guideline for a range of practitioners: agribusinesses and smallholders, programme funders, NGOs, and policy makers.

Both smallholders and the agribusiness must first formulate their objectives of working together. Smallholder farmers are primarily looking for risk-mitigation within a diversified livelihood strategy. The agribusiness needs to look beyond mere financial performance, taking into account more socialrelated benefits that add to its overall business case. Agribusiness participation purely driven by developmental motivations is unlikely to succeed.

In subsequently designing the structure in which the agribusiness and smallholders work together, a number of elements are critical. The suitability of instruments to build a business model, and the way they are implemented, depend on the crop and value chain in which the smallholders are to be integrated. Following the overall objectives and capacities of the agribusiness and smallholders, additional partners need to be identified to address financing, mentoring and other services required within the partnership. A local assessment covering both the unique value chain in a specific location as well as the livelihoods in which the farmers operate is crucial to finetune the business model. The role-out starts with a pilot project to test the workings of the programme, leading to adaptation where needed. Regular monitoring and evaluation are to ensure that the programme remains on track to achieve the goals that the partners collectively agreed on. After a period of 3-5 years, the programme can be ready to scale, the support can be terminated but with a continuing commercial relationship between the smallholders and agribusiness, or the programme is terminated and all the partners exit the relationship. This journey from inception to exit is not a straightforward road, but rather an iterative process that requires continuous adaptations to the model and previous decisions made. Thus, regardless of the technical structure of the relationship, all partners involved need to have a flexible take on the planning and implementation. In innovative and novel partnerships, unexpected occurrences are inevitable, triggering adaptation of the original plans. Smallholder involvement from an early stage is more likely to result in shared objectives and identification of potential challenges. Furthermore, shared decision making allows for transparency and the building of trust, which increases the success of the partnership. Lastly, commercial integration and partnerships between agribusinesses and smallholder farmers need time to establish, to grow and to yield tangible results. A long-term strategy and expectation management are essential.

When each of the partners approaches the relationship with an attitude of assumed ability, reciprocal willingness to understand the other actors, and a readiness to try innovative ways of working, the programme is more likely to succeed. The outcome must be a cohort of empowered smallholders who are able to transact with commercial value chains, but more importantly, who can independently choose which marketing channels to trade with.

1. Introduction

The development of smallholder farmers has received much attention throughout the developing world. Equally, in the South African context much has been written about the need to develop a cohort of small-scale farmers: to stimulate wider rural development, but also to transform the agricultural sector that is dominated by large-scale, white farmers. A large number of publications outline policies and their impacts (Greenberg, Swanepoel, & Lewis, 2018; Hall, 2007; Khulisa Management Services & University of Cape Town, 2016), analyse specific case studies (Chamberlain & Anseeuw, 2017; Sopov, Saavedra, Sertse, Vellema, & Verjans, 2014), or instruments (Anseeuw et al., 2011; Ortmann & King, 2007a), or provide broad recommendations on potential strategies going forward (Berdegué, Biénabe, & Peppelenbos, 2008; Markelova, Meinzen-Dick, Hellin, & Dohrn, 2009; Vermeulen & Cotula, 2010). These, and additional, publications identify a range of challenges that smallholders face when trying to access commercial value chains. Often mentioned are limited access to resources, in particular land and water, a low level of mechanisation, lack of financing, insufficient knowledge, and inadequate infrastructure. These aspects are reinforced in highly concentrated market structures that require consistency in volume and quality of supply.

Whereas challenges for smallholder development have been well-documented, a holistic but practical Theory of Change (ToC) to guide stakeholders in the design and implementation of sustainable smallholder farmer support programmes is lacking. This document presents such a ToC for the design of business models that specifically aim to integrate small-scale farmers in commercial value chains. It leans on the thinking that by providing smallholder farmers with the right set of inputs, they are able to grow their agricultural activities, resulting in higher incomes, rural employment, and more sustainable farmer practices (CSAF, 2019). The ultimate objective of such support programmes must be to empower smallholders to make independent, well-informed decisions on how to manage their farms and what markets to engage with.

The ToC presented here depicts a process that identifies crucial steps and elements when creating partnerships between agribusinesses and smallholders. It uses a modular approach to build a suitable business model, combining instruments that enable commercial value chain integration with key characteristics of the particular value chain targeted. Using a process and business model approach allows for a widely applicable ToC but with details relating to specific contexts. As such, it offers the flexibility required to accommodate the unique characteristics observed in smallholder support programmes. It identifies stakeholders and their roles and responsibilities, as well as critical project elements. The ToC is considered to be a fundamental preparation that increases the impact and success of future smallholder farmer support projects, that grows an empowered cohort of emerging farmers, and hence enhances transformation and food security in South Africa.

The ToC is built on findings from a diverse set of South African case studies that have been supported by the Dutch government. A number of these cases are presented in separate documents, which are complemented by a transversal analysis. It furthermore draws from existing literature pertaining to smallholder support projects in South Africa and other countries, and from research on the particular instruments and value chain characteristics. This literature is listed in the Reference section at the end of this document.

The ToC presented here applies specifically to the DAFF categories of smallholder producers and medium-scale commercial producers. These categories are defined by an annual turnover from as little as R50,000 to up to R10 million (Ngaka, 2019). They are relatively small in size, but have the potential to grow. These farmers often produce for home consumption, and sell surplus produce to markets: informal or formal, local, domestic or export. They follow a diversified income strategy to which farming contributes significantly (Cousins & Chikazunga, 2013). In specific, they grow cash crops, such as fresh fruit and vegetables, but also sugarcane and grains. The reality of many of these small-scale

farmers is that, due to the limited size of their land, only high-value crops allow them to build a financially sustainable operation. This implies that access to commercial value chains is critical for their success. It is also particularly in the market-oriented smallholder segment where the private sector can contribute to farmer development in absence of government programmes (Khulisa Management Services & University of Cape Town, 2016).

This document follows a logical sequence for initiatives where agribusinesses and smallholder farmers want to work together to build a sustainable cohort of new farmers:

1. Define the project objectives and draw up the business and social impact case (see Section 2)
2. Design the broad business model, the instruments to be used, and the partners needed (Section 0 & 4)
3. Identify financing methods of the project (Section 5)
4. On-the-ground: local value chain analysis, and smallholder livelihood assessment (Section 6)
5. Fine-tune business model and draw up contracts, secure hardware & infrastructure, contract external partners (e.g. mentors, suppliers) (Section 7)
6. Implement pilot, evaluation and adapt model where necessary (Section 8 & 9)
7. Scale and exit (Section 0)

The first three steps determine the required inputs into the programme. The capacities of the agribusiness and other programme initiators form the basis of this process. This is then combined with the value chain characteristics in which the programme is to be implemented. The inputs identified relate to the programme partners (including the individuals responsible), the required services to be delivered to the smallholders, and finances. The output of these steps is a jointly formulated Memorandum of Understanding (MoU) which formulates the overall objectives, the scope of the programme, the roles and responsibilities of each of the programme partners, and the budget.

Steps 4 and 5 fine-tune the process through which the intended objectives are to be achieved. This relies heavily on the decisions made in the first steps of the programme initiation, but acknowledge the uniqueness of the context in which the project is to be implemented. As such, there are many feedback loops to the design sketched in the previous phases. The main deliverables of these steps are a local value chain map, as well as an implementation plan and a description of the farmer selection process. Step 6 revolves around the actual roll-out of a pilot, that is to result in the actual achievement of the objectives. The output of these steps should be better skilled and empowered smallholders with a higher degree of integration into the commercial value chains. During the pilot project implementation, regular monitoring and evaluation activities need to ensure that the programme efficiently and effectively delivers the outputs towards the overarching outcome of a cohort of independently operating smallholders that are empowered in their decision on interacting with commercial value chains.

This sequence, as depicted in *Figure 1*, in practice needs to be approached as an iterative process. Experiences in latter steps trigger reviews and re-adjustments in previous steps. Flexibility is essential for building inclusive partnerships between agribusinesses and smallholder farmers. Throughout the programme design, implementation and evaluation, a number of characteristics need to be applied. These are depicted in green in *Figure 1*.

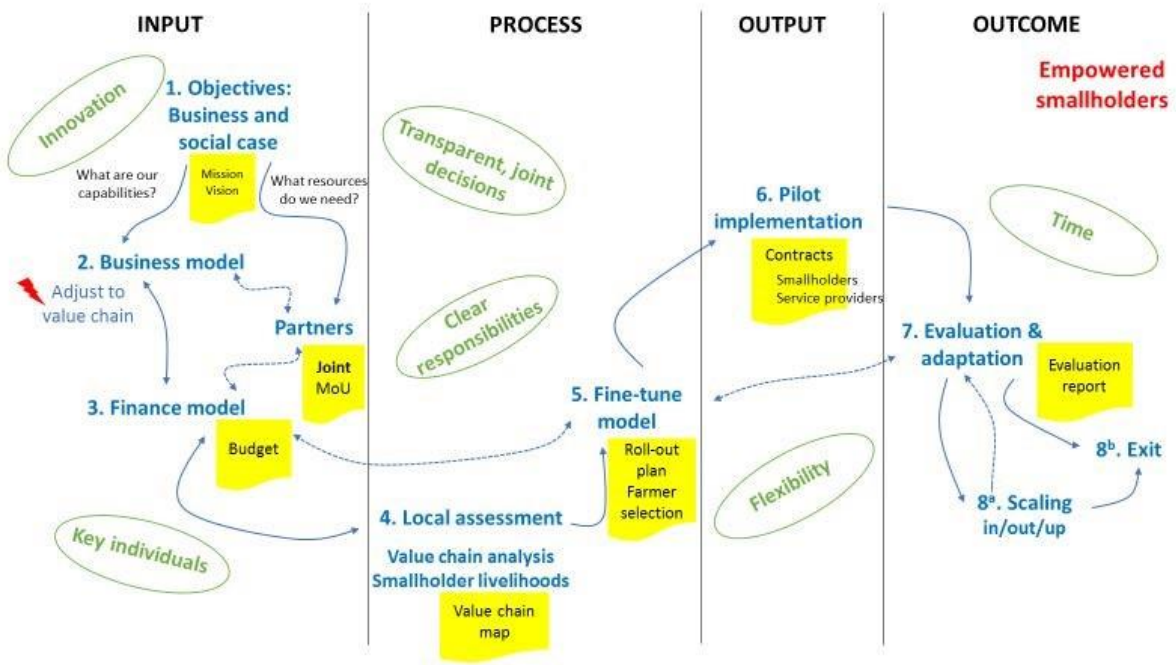

Figure 1: Theory of Change diagram

Table 1 summarises Sections 2-5, with each of the sections providing more details on each of the elements. It serves as a quick reference when initiating a smallholder support programme.

Table 1: Business model instruments and how to apply them

OBJECTIVE / OUTCOMES	BUSINESS MODEL – INSTRUMENTS	CONDITIONS (see also details per value chain element)	PROJECT PARTNERS & RESPONSIBILITIES	FINANCING
Smallholders: Improve livelihoods, not commercialisation • Increase yields/price • Higher value crops • Larger area ***Assess the smallholder context and their challenges***	**Supply contract**			
	Provides certainty for smallholder and offtaker	• Fair, transparent pricing • Alternative for sub-standard produce • Must allow for mixed cropping • Dispute resolution mechanism • Long-term contract and more services for well-performing smallholders	**Smallholder**: adhere to growing plans and other contractual requirements; **Offtaker**: create context in which smallholder can adhere to contract. Be aware of your bargaining power and better information, which puts you at an advantage.	**Offtaker**: interest-free loan financing (inputs + production costs); **Smallholder**: machinery and other fixed assets; **Financial service providers**: loans with contract as collateral
	Mentorship			
	Builds smallholder skills and network	• Significant presence on the ground: intensity and quality • Farmer participation in programme design to identify challenges • Wider scope than supply contract crop/offtaker • Non-traditional crops	**Smallholder**: active participation in mentorship programme; **Mentor**: training and on-farm support, Develop train-the-trainer programme; **Agribusiness**: provide technical support / standards / certification guidelines; **Input suppliers**: package with technical support.	**External grant** funding allows for independent mentor with wider scope than offtaker; **Offtaker**: Mentorship costs high for viable business plan, but offers monitoring option; **Smallholder**: can pay for some services
	Collective organisation			
	Increases overall smallholder voice; Reduces transaction costs	• Scope depends on crop and context • Must be well-established collective • Small size • Governance training • External manager for larger collectives	**Smallholder**: active and fair participation in collective; **Collective**: democratic leadership election, incentivedriven member remuneration options, internal dispute mechanism; **Mentor**: governance support; **Agribusiness**: look beyond transaction efficiency as collectives can be challenging business partners.	**Self-financing** through membership fees and operational margins; **Grant** funding for governance training (not for operational expenses); **NGO**: create linkages with agribusinesses, financers, etc. and act as mentor/service provider
Commercial partner:	**Equity**			

Business case, not CSR • Build local supplier base • B-BBBE requirements • Diversify supplier base • Land reform consequences	Increase asset base Better value proposition for smallholders	• Medium-term objective due to complexity • Expectation management	**Mentor**: governance and business training; **Smallholder**: active and fair participation in collective ownership body and training programme. Requires investment, not just benefits; **Agribusiness**: shared ownership must be reflected in shared decision making. No transfer pricing to downstream facilities without shared ownership to internalise financial benefits.	**External loan** through trust fund to finance smallholder equity to give smallholders sense of ownership and responsibility
	Lease/management contract			
Discover the business case	Enlarges area for production Includes not-active landowners	• Medium-term option • Fair, transparent contracts • Low degree of transformation • Fee construct depends on value chain	**Offtaker**: active management of smallholder-owned land with fixed rent component; **Smallholder**: no interference with operation	Any financing required to be funded by **company/lessor** leasing/managing smallholders land.

2. Objectives and self-assessment: business and social impact

At the basis of every specific smallholder support programme lie envisaged outcomes. These outcomes differ between the commercial partner and the smallholders, and even between participating smallholders. Understanding these diverse expectations is paramount when exploring partnership models. These desired outcomes should be supported by underlying principles that give orientation to the development of the business model, and are expressed in the vision and mission statements, but also in more practical concepts such as the adherence to accredited sustainable farming practices, gender equality, or zero-waste (Breuer, Fichter, Lüdeke-Freund, & Tiemann, 2018). The objectives capture both an economic business case and a social-impact case.

The preparation phase incorporates an assessment of what the actor (either agribusiness or smallholder) is able to do itself, and what external resources are required to achieve its objectives. It answers the questions of what do we have to offer, and what do we need? The value proposition to potential partners is based on this assessment. Depending on the degree of cooperation, the partners ultimately formulate overarching, shared objectives that form part of a *jointly* drawn-up Memorandum of Understanding (MoU) built on the respective objectives and resources. These objectives should be SMART (Specific, Measurable, Achievable, Realistic and Time-bound) (BCtA, n.d.)

2.1 Smallholders: improved and secure livelihoods

Smallholders in general are looking for ways to improve their livelihoods through their agricultural activities. This can be achieved via a number of avenues, which depend on the particular context the individual smallholder operates in. In short, three options for livelihood enhancement are: an increase in the yields and prices of crops traditionally grown by the smallholder, production of higher-value crops with higher margins, or an increase in the area under production. These three options can be implemented sequentially if the smallholders perform well. The smallholder needs to take into account that these strategies might incur additional costs, for example in the form of hired labour. Potential cost increases due to these strategies must not outweigh the extra income.

One of the most important aspects smallholders wish to achieve is a *more reliable and predictable income*. Market-oriented smallholders engage in ad-hoc, on-the-spot transactions. They plant not knowing if there will be demand for their crop at harvest time. In addition, they do not have access to risk mitigation instruments such as insurance. This stimulates a risk-averse attitude, where income streams are diversified as strategy to protect them from large income shocks. Related to this strategy are their trade-off decisions on how to use their scarce resources. Available capital needs to be split between competing demands from the household and the agricultural business, and a similar consideration needs to be made whether to farm for household use or for cash income, and whether to use available labour for farming or for external income-earning activities. The outcomes of such deliberations depend on the specific economic and non-economic situation the household finds itself in at the particular time it needs to take a decision. Through participation in support programmes, smallholders aim to reduce the uncertainty related to their farming activities. Models that aim to integrate smallholders into commercial value chains need to respond to this broad spectrum of smallholder risks and trade-offs. This makes an inclusive business model fundamentally different from partnerships between purely commercial actors (Gradl, Ströh de Martínez, Kükenshöner, & Schmidt, 2012). Thus, a crucial aspect for the other partners, be it agribusinesses, mentors or funders, is to understand and address the challenges the smallholders face in their agricultural activities and wider livelihoods, and to reduce the smallholders' risks (Okunlola, Ngubane, Cousins, & du Toit, 2016).

Livelihood improvement does not necessarily equate to commercialisation. Not every smallholder active in South Africa has the objective to become a medium-scale commercial farmer. Whereas some aim to expand their area under production and grow their farming turn-over to well over R1 million, others are content to remain active within their current land and water limits. Both these kinds of

smallholders should be considered for commercial value chain integration. Land tenure security, combined with a well-functioning land market (particularly in areas with communal ownership structures), as well as secure water rights, are crucial for long-term, sustainable integration of smallholder farmers into commercial value chains, but need to be coordinated by government and fall outside the scope of smallholder support programmes.

Regardless of their objectives, smallholders must map the competitive disadvantage they face compared to medium-to-large scale producers, and how they can address the aspects that create this disadvantage. This relates to efficiency improving assets, production techniques that allow for better yields and quality consistency. It is not the objective to compete with large-scale producers, but to build an attractive overall value proposition in which the smallholder advantages (e.g. implementation of sustainable production methods, local production) compensate for a potentially higher price and risk to the offtaker.

2.1.1 Method

To formulate their objectives, their capabilities and their needs, smallholders need to engage in an introspection. In addition, they should consult local peers regarding their plans and strategies. For those farmers who are members of a farmers group, they should also include the objectives and plans of this collective in their individual assessment. In particular, smallholders should ask themselves the following questions when looking at commercial value chain participation:

- Livelihood ○ Do I want to grow food for own consumption, and if so, what area do I need for this purpose?
    - What part of my income is derived from farming? How much profit (excl. costs) do I earn per annum?
    - What other sources of income do I have to spread my risk from farming?
    - What other livelihood strategies require capital that compete for investment into my farm? Which strategy is most important to our household?
    - Are there family members willing and able to work on the farm?
- Farming outlook ○ What are the main obstacles for me in selling my crops or growing better crops? ○ What are my immediate requirements to stabilise/grow my farm? ○ What access do I have to finance my farming activities? ○ What level of loan financing for my farming activities am I comfortable with?
    - What kind of farming business do I want to establish (e.g. mixed farming, organic, labour intensive)?
    - Do I want to increase my farm land, and if so, what are the options?
- Current activities ○ What current activities do I want to continue (e.g. existing supplier relations)?
    - What other farmers in my community do I work well with? In what areas do we work together (e.g. transport, knowledge exchange, marketing)?
    - Do I belong to a cooperative, and if so, what does it bring me? ○ Is there a commercial farmer that supports me or other farmers in the area?

2.1.2 Output

The self-assessment should result in the smallholder being able to express his/her overall desired livelihood strategy, and the particular role of farming in this wider strategy. Furthermore, the smallholder must have listed his/her capacities and strengths, as well as the challenges faced and requirements for achieving the envisaged farming operation. This will assist in evaluating a value proposition by a commercial agribusiness, as well as articulating the particular needs of the

smallholder from partnering with the commercial agribusiness. Lastly, the smallholder needs to have insight in which actors can assist in addressing the challenges and requirements.

2.2 Agribusiness: business opportunity

Smallholder engagement is not business-as-usual for commercial agribusinesses. The decision for an agribusiness to include smallholder farmers into its supply chain are not solely of an economic nature. Additional motivations can relate to a company's decision to diversify or localise its supplier base. In the case of South Africa, political drivers also create dependencies of agribusinesses on small-scale farmers, for example through land reform and the AgriBEE legislation. Regardless of the motivation, there needs to be an overall business case in the medium term for an agribusiness to involve smallholder farmers in their business structure. Even if profits are not necessarily anticipated, the company does expect to make some gain from working with smallholder farmers, for example in terms of its social image.

The business case is highly dependent on the specific agribusiness looking to work with smallholder farmers. Some companies are primarily motivated by increasing their overall business or market share. Others are more socially driven and are looking for ethical business opportunities. This can be combined with certification such as Fair Trade or UTZ. These motivations might be more relevant for export-oriented businesses. Domestically operating companies can build a competitive advantage through acceptation by local communities. External conditions can also form the reason why a company expands into business models that include smallholder farmers. For example, the South African government conditioned the takeover of Massmart by American retail giant Walmart, setting the company a target for small-scale supplier inclusion. Whereas in these cases the smallholder engagement programme itself might cost the agribusiness financially, there is a wider economic motive to implement smallholder programmes. Lastly, the business case depends on where in the value chain the smallholder is engaged: as client of inputs, as supplier of crops, or as processor. Recent developments in the area of technology, but also consumer awareness makes the business case easier (van der Velden et al., 2017).

The important messages here are that an agribusiness needs to understand what it aims to achieve with smallholder engagement, that such engagement should not be measured along mainstream performance targets, and that it must be part of its core business operation. Smallholder integration is not a CSR exercise, but a long-term business opportunity. It needs dedicated "intrapreneurs" to drive such programmes who are able to convince top-management and employees within the agribusiness to buy in to the innovative proposal, and to implement these business solutions within the organisation they work for.

2.2.1 Method

This initial step requires an internal assessment with the participation of multiple divisions within the agribusiness. Purchasing/supply chain management need to contribute to identify potential products, whereas marketing has insights into the consumer needs and requirements. Financing needs to be consulted on available budget; the CSR department can identify existing relationships with potential partners as well as share experiences. The health and safety department is essential to provide the legal requirements that determine the framework which the smallholders need to adhere to. Importantly, top management needs to be engaged to ensure it supports and commits to the new, unconventional initiative, understands the potential challenges, and endorses the programme over a longer period of time.

This assessment is to answer the overall questions of what the capabilities of the agribusiness are, and what resources are required to achieve the overarching objective. The following detailed questions are relevant in preparing for smallholder engagement (Gradl et al., 2012, p. 23):

- Location ○ Where are the agro-ecologically suitable areas for the product/service in scope?
    - What are the other transactional costs related to this location? E.g. transportation, crime, institutional conditions.
    - Are there opportunities for intensification/expansion by smallholder farmers in these areas?
    - What hurdles are to be expected, both formal and informal?
- Product or service:
    - Will the company sell/source an existing or new product, and/or provide services? ○ Does the product or service need to be adjusted to meet local conditions, and if so, how?
    - How does smallholder integration affect the company's current operation?
    - What kind of smallholders are suitable to work with/what are the minimum capacities the smallholders need to have?
- Internal organisation:
    - Where should the new business be located within the company organisation? ○ What organisational opportunities and constraints follow from this decision? ○ Are leaders committed and patient enough to allow the new business to grow? ○ How can company overhead be reduced?
    - Is the organisational culture open enough for a new kind of business with smallholder partners?

2.2.2 Output

The agribusiness internal assessment is the first step to become familiar with the idea of smallholder partnerships by identifying the business opportunities of such partnerships. It brings the different internal key staff together to visualise how the agribusiness will engage with these unknown actors. This process must produce the following outcomes:

- Vision and mission that expresses the objective of the programme;
- Placement of the programme (which department/separate unit/separate business entity);
- Key personnel resources, who is going to lead the programme and who will assist?
- Draft business model and scope (which instruments, what market, what crop?);
- Value proposal to partners and smallholders based on the draft business model;
- Partner identification;
- Budget indication;
- Geographical location preference;
- Any standards to be adhered to.

3. Instruments: building blocks for a suitable business model

After smallholders have decided that they are able and willing to participate in commercial value chains, and agribusinesses have assessed their objective for smallholder integration, a business model must be designed to bring the partners together. A number of standard instruments can establish relationships, each addressing particular needs to make these relationships work. The instruments are: supply contract, mentorship, collective organisation, equity, and lease-/management contracts (Chamberlain & Anseeuw, 2019). This section describes the working of these individual instruments and how they contribute to sharing in the value creation process. In particular the instruments of supply contract, mentorship and collective organisation are explored in detail as these are the most important instruments within smallholder support programmes that aim to increase commercial value chain participation. Section 4 then links the instruments to critical value chain elements that

characterise potential crops that can be grown by smallholder farmers for commercial value chains. This combination informs the basis of the business model that then is adapted to the actual situation in the local context in which it is to be implemented (Section 6).

3.1 Supply contract: mitigated farmer risk and guaranteed supply under mutual responsibility

A supply contract, or offtake agreement, is an agreement between a farmer and an offtaker that specifies elements such as the crop to be grown by the farmer, and a mechanism to determine the price. Additional aspects such as volume, standards, time and delivery details can be included. In theory, the contract serves as a tool that provides certainty for both the agribusiness as offtaker, and the smallholder farmer (Prowse, 2012). The smallholder is secured by a guaranteed market, whereas the offtaker is certain of crop supply.

3.1.1 Elements to consider

In the framework of smallholder integration, two types of supply contract are particularly suitable: production-management, and resource-providing contracts. These types of contracts overcome market failures experienced by smallholder farmers (Barrett et al., 2012). Both models create an environment that enable the smallholders to produce according to the requirements of the offtaker. Under a *production-management* structure contracted farmers follow specific production methods and input applications (Bijman, 2008). Such a model partially overcomes the lack of technical skills that prevent smallholder farmers to produce for formal markets. It transfers control over the production process from the farmer to the offtaker, who also takes on a larger share of the risks. *Resource-provision* contracts interlink offtake with the provision of key inputs to the contracted smallholder (Bijman, 2008). The costs related to these inputs are recovered through deductions at product delivery. Resource provision as part of the supply contract serves as an in-kind credit which reduces the challenges smallholder farmers face when accessing financing for upfront input cost. Whereas this eases the financial barriers to entry, and creates a shared risk between smallholder and offtaker, a considerable chance exists that smallholders become trapped in debt. It must be stressed that input provision requires the offtaker to monitor the use of these inputs, which increases its transaction costs. Combined with the financial resources the offtaker needs to free up, this poses a limit to the number of smallholders that can be contracted (Poku, Birner, & Gupta, 2018). Pure marketspecification contracts, which merely ensure a guaranteed market for contracted farmers, are less applicable in a smallholder framework as it transfers most of the risks to the farmer who often is unable to carry this risk. Other than input financing, smallholders should finance any other assets required. External assistance, for example government grants for fencing or irrigation infrastructure, does help the smallholders without undermining the financial sustainability of a contracting agreement.

When designing a supply contract, a number of components need to be considered. The first element of attention is the manner in which the price for the crop is determined. *Pricing mechanisms* can be based on ex-ante fixed prices for graded produce, be linked to a floor, a spot, or industry index price, or use a cost-based formula (Prowse, 2012). Each of these mechanisms has positive and negative aspects. Whereas fixed prices are largely transparent (conflicts on the produce grade may still arise), they create tensions when spot prices are higher than the contract price. In such a situation, the smallholders are inclined to sell their crops on the open market where they can fetch a higher price. Vice versa, the offtaker is tempted to source on the open market when prices there are lower than the fixed price agreed on in the contract. Various mechanisms exist to accommodate for situations where considerable differences between the contract and the spot market price occur. Bonuses can be applied when the market prices are high, or allowances for extra-contractual sales/sourcing can be specified (Guidi, 2011; Prowse, 2012). Contracts with a cost-based price formula guarantee the farmer

a margin on production, but equally have to deal with situations where the contract price and market price deviate. Linking the contract price to the prevailing market price does prevent such challenges, but create an uncertain situation for the smallholders, particularly for items where spot prices are highly volatile. In one reported case, the offtaker offered the smallholder the choice between an exante fixed price, or a percentage of the spot price (Prowse, 2012). This allows the individual smallholder to choose the most suitable risk profile. A final alternative is a revenue-sharing construction where the farmer and the offtaker agree to proportionally share the profits (Baumann, 2000). This mechanism incentivises both parties to increase efficiency and distributes risk, but can be difficult to implement in practice. The most important consideration is that the price determination is transparent and clearly understood by the contracted smallholders. Furthermore, the payment to the farmer needs to take place within a few days of delivery. Smallholder farmers lack the financial buffer to accommodate extended payment terms. They will opt to sell (part of) their crop for cash to another trader if the offtaker does not provide quick payment. Lastly, it needs to be well-understood who is responsible for transportation costs from field to the offtaker's facility.

A second important element is that of *substandard produce*. Whereas a contract provides a guaranteed market, this is only for the crop that meets the standards set by the offtaker. Due to many circumstances, smallholders struggle to produce to these standards, particularly in the first year of production. Thus, it is imperative that the partners agree beforehand on a solution for sub-standard produce. The offtaker should strive to take responsibility for this crop, providing full certainty for the smallholders that they will receive an income for their efforts. On the other hand, there needs to be an incentive for the smallholders to achieve the standards set. Thus, any sub-standard produce solution needs to be temporary, allowing time for the partners to iron out any issues during the implementation, but the smallholders need to understand their responsibility towards the offtaker. Interlinked insurance against low yields can also be considered by both partners (Casaburi & Willis, 2018).

Thirdly, offtakers need to be aware of the *livelihood strategies* followed by the smallholders. These often consist of diversified income streams and farming partially for self-consumption. Such strategies form a safety net that otherwise is absent for most small-scale farmers. It is therefore imperative for offtakers to stimulate the smallholders to reserve part of their land for other activities. Overdependency on one offtaker, and certainly one crop, poses severe risks for these farmers, particularly if the business model hasn't proven itself yet. The diversified livelihood strategies potentially contribute to the high level of smallholder turnover in contract farming arrangements. Only when the business partners have established a settled relationship can the scale of production can be increased.

Overall, supply contracts should be kept simple and concise. This eases the understanding by the smallholders and increases efficiency in contract design. Simple contracts also accommodate the reality of high levels of non-compliance and turnover in contract farming agreements (by both farm and firm) (Barrett et al., 2012). Particular value chains will require more details as will be outlined in Section 4. *Table 2* specifies a number of design features that can be included in a supply contract.

Table 2: Contract design features

Element	**Guideline**
Nature of contract	Oral – if no strict requirements (e.g. input use, timing of harvest, quality standards, etc.) Written – reduces unclarity of requirements and responsibilities, but needs to be well understood by smallholders (translate to vernacular) Keep it simple!

Selection of farmers	Access to land and water, experience, cooperative member
Duration of contract	Seasonal, with automatic renewal; long-term for delayed crops; offer longer-term for well-performing smallholders.
Supply volume	Minimum, but no maximum. Increase over time.
Smallholder numbers	Increase over time.
Pricing	Fixed (e.g. based on expected price processed product) with bonuses, industry index. Offer smallholder choice of preferred mechanism. Participatory approach. It must be transparent.
Payment	Upon delivery, max weekly cycle. If multiple deliveries, ensure payment is made from first delivery, even if there are still outstanding input loans.
Quality / verification	Clear procedure and communication. Indication before delivery to manage expectation. Include temporary sub-standard produce offtake.
Crop delivery	Offtaker to arrange transport – often challenges for smallholders to arrange this individually. Particularly important for highly perishable crops. Explore the use of local intermediaries (e.g. commercial farmer, bakkie traders).
Technical assistance	Increases smallholder performance, but incurs monitoring costs for offtaker.
Input provision	Increases smallholder performance, but incurs monitoring costs for offtaker.
Conflict resolution	Requires impartial actor. Costs of enforcement often outweigh benefits.

Based on Poku et al. (2018)

3.1.2 Roles and responsibilities

Offtaker

The offtaker has to draw up the *contract* according to its own requirements, but also taking into account the risk mitigation it has to offer the smallholders. The relevant elements depend on the type of contract and the value chain in which the contract is set, which are shortly highlighted above and further outlined in Section 4. The local context also plays a role in the final contract. Hence, the ultimate contract is finalised after the local assessment as described in Section 6. The on-the-ground visit needs to ascertain aspects such as the risks of side-selling, the capabilities and challenges of the smallholders, and the state of the required infrastructure. Such findings need to be incorporated in the contract in order to offer a value proposal that is acceptable to both offtaker and farmer. This may result in more elaborate clauses to increase control over the smallholders' activities, whereas in other situations it is more appropriate to leave out elements, allowing for more flexibility and less mutual dependence. The ultimate contract is the responsibility of the offtaker, as is making it understandable to the smallholders. The farmers need to comprehend what they sign up for, and what risks they are exposed to.

The supply contract is the instrument that overcomes barriers to market previously experienced by the smallholders. This is possible through the provision of *financial and technical support*, which needs to be provided, or at least organised, by the agribusiness. Such assistance needs to mitigate the risks of market interaction, rather than increase it. These financing and training tasks require resources from the agribusiness: manhours for the administration and training where applicable, and financial reserves to loan to the smallholders. It is critical, particularly at the inception of the relationship, to have very frequent, on-the-ground support for the smallholders. To prevent the mis-use of

prefinancing for inputs, offtakers can collaborate with input providers to issue vouchers, rather than loans.

Lastly, the offtaker is responsible for the *selection of the smallholders* it is going to work with. It sets the parameters the smallholders have to be able to achieve, such as the certification standards, which is a significant determinant of the abilities of the smallholders. Also, the agribusiness caries the majority of the risk in the partnership and hence needs to be able to have control over the smallholders it is going to work with. As such, it has the final say in who can be contracted and who cannot.

Even though the agribusiness is responsible for the contract, the financial and technical support, and the smallholder selection, it can work with external partners. A local partner, such as an NGO, can assist in the identification, assessment and training of potential farmers. This NGO can also execute some of the administrative tasks related to loan management, where such a facility is included in the contract agreement. A financial service provider can fund smallholder loans, with the agribusiness serving as guarantee for the loan. But whereas such intermediaries can play an important role at the inception of the supply contract, it is important for the agribusiness to build a relationship with the smallholders, understand the circumstances in which they operate, and listen to their concerns. This will serve both the partners in the longer term, when they will be able to interact directly, without external actors.

Smallholder

Smallholder farmers entering into a supply contract with a commercial offtaker are ensured of a market for their crop. But this security comes with responsibilities. They have to *adhere to the contract* they have signed, even if, at some points, this is might not always be favourable in the short term. To make the contract relationship work for them, they have to voice their issues, concerns and questions timeously. It is also in their interest to build a positive relationship with the offtaker and understand the wider business context in which they operate.

External partner

A local partner, who is familiar with the smallholders and with the wider community can play a vital role in bringing the agribusiness and the farmers together and assisting in the *implementation* of the project. Such a partner, whether it is an NGO, a commercial farmer, or another type of actor, builds on existing trust *relationships* which can reduce the uncertainty between offtaker and smallholder. It is in a position to articulate and bundle the voice of the smallholders towards the offtaker. Furthermore, such a local stakeholder has a presence on the ground that can assist in the day-to-day support, monitoring, and mentoring of the farmers. Particularly in the initial stages of the support programme, when relationships need to be established and developed, is such a local partner of value. The external partner needs to articulate what added value it can bring to the partnership and what it is not able to do. Importantly, such a partner has to formulate an exit strategy, stating the conditions when it will step out of the partnership. Such a local implementation partner is likely to be a signatory to the MoU.

Other local partners can be used by the partners on a service contract. For example, a local *training* provider can be hired to train the smallholders in a number of courses pertaining to agricultural or business practices. A commercial farmer can be contracted for temporary use of packing facilities. Or an engineering business can be asked to build irrigation systems. Whereas such services are crucial to the implementation of the project, these service providers are not a party to the partnership.

Lastly, a *financial service provider* is essential to provide loan financing to smallholder farmers. Practice has shown that these farmers face considerable barriers to access commercial loans. But the agribusiness is not able to provide and manage such financing to a large number of smallholders.

Hence, to scale smallholder sourcing requires the participation of a dedicated financial service provider who is willing and able to engage in innovative constructions to overcome the barriers to the conventional credit market.

3.2 Mentorship: developing skills and networks

A lack of knowledge and skills is often mentioned as a major barrier for smallholders to participate in commercial value chains. This knowledge relates to agronomic practices that result in low yields and low-quality produce, to market-related aspects such as pricing and packaging needs, and to overall business insights. Smallholder farmers have rarely received comprehensive formal farming-related training and instead rely on their (and their parents') experience in traditional farming ways, supplemented by ad-hoc trainings from a range of service providers. A lack of knowledge becomes more problematic when engaging in commercial value chains for non-traditional crops, or where suppliers have to adhere to stringent production and quality standards. Considering the wide need for skills development, mentorships become inevitable.

A mentorship is a personal relationship between an experienced mentor and a less experienced mentee (Goosen, 2009; Young & Wright, 2001). Mentorship consists of a range of activities including teaching, providing feedback, coaching, encouragement and support. A mentorship is aimed to assist the mentee "to think and do for themselves" (Goosen, 2009, p. 43) and thus could be an important element to the overall objective of empowered smallholders. Mentorship goes beyond an impersonal training programme, where a trainer's task it is to deliver a set content to a larger number of students. Whereas such content-related knowledge transfer is important for the smallholders in a support programme, equally important is the support that allows them to implement this knowledge in their individual context. Considering the nature of a mentorship, mentors need to be able to combine agricultural and business knowledge with an ability to coach and guide the mentees. This is why one of the main challenges of mentorships is to find experienced persons that also have a developmental approach and who are willing and able to support smallholder farmers. Furthermore, the expectations of both the mentor and mentee of each other are often high, but also unrealistic, and in practice are difficult to achieve.

Mentoring can also have benefits for a commercial partner beyond smallholder skills development. In the particular situation when the agribusiness has made specific investments in the smallholder programme, for example through input supply financing, the presence of a mentor in the field allows for monitoring of the correct use of these inputs. Furthermore, offtaker-funded mentoring, whether provided by the offtaker or through a third-party service provider, has been shown to increase yields (Barrett et al., 2012). Thus, on-the-ground support for contracted smallholders reduces the risks of non-contractual behaviour by the farmers, and increases the certainty of targeted crop supply. In addition, a mentorship programme often fosters trust between the smallholders and the corporate offtaker. This is likely to have a positive effect on the retention rate, with well-mentored smallholders more likely to remain in a support programme (Goosen, 2009).

Whereas training and mentorship sponsored by a smallholder support programme has clear advantages in the form of skills development, these efforts are usually designed around the specific needs of the corporate agribusiness, and often do not form a holistic programme. Smallholders are not consulted on their particular development needs. This limits the smallholders in their ability to become more independent operators with an extended network of potential marketing opportunities. Similar reservations on smallholder benefits of training can be seen when input suppliers integrate extension services within their product package. Whereas these combined services can achieve significant yield gains for the smallholder purchasing the inputs, and stimulate business growth for these input providers (Gradl et al., 2012), such training tends to be even more one-sided than offtaker extension services, and does little to build the overall skill-set of the smallholders. In the case where

government purchases the inputs combined with extension services, large corporations become major beneficiaries of public resources, rather than the smallholders themselves (Greenberg et al., 2018).

A range of actors can serve as mentor to a smallholder within a wider support programme. Offtakers engaging in contract farming agreements (see Section 3.1) regularly incorporate extension services. In some cases, they employ their own extension officers. More often, companies lack the skills and resources to provide the required comprehensive training and mentoring themselves, or an offtake agreement is not part of the support programme. In such cases, the services of a third party need to be sourced. These can be local commercial farmers who have specific crop and business experience and wide networks with commercial partners, or NGOs who understand the developmental needs and context in which the smallholders operate. Dedicated training institutes can potentially extend their activities to deeper mentorships. This dedicated training actor should be selected based on its on-theground presence. An approach with a dedicated training facilitator can be particularly effective for crops with high local consumer demand, where a large number of smallholders also outside the support programme can benefit from skills development to serve informal local markets.

3.2.1 Elements to consider

The personal level of the relationship is crucial, which makes the outcome of a mentoring partnership difficult to predict. Despite this, a well thought out approach of a mentorship programme can mitigate the risks of failure. This section highlights a number of aspects that should be discussed and considered. Each of the aspects contributes to the potential success of the mentorship.

A first element is the determination of the *objectives* and *scope* of the mentorship. Does the mentor merely focus on technical aspects of farming such as crop and business-related topics, or is the scope wider to include marketing activities and networking? Research has found that linkages and partnerships formed during a mentorship programme, for example to input providers or offtakers, are crucial for the sustainability of the new farmer's enterprise (Terblanché, 2011). With particular regard to support programmes that involve collective organisation and/or shared equity (see Section 3.4) additional training related to governance is required. The scope partly depends on the knowledge and experience of the selected smallholders which is only established during the on-the-ground assessment. A level of flexibility by the mentor and the overall programme partners is required to accommodate for the different levels of expertise and learning capabilities of the individual smallholder mentees. The programme partners, together with the mentors, need to agree on the responsibilities of the mentor. The particular role of the mentor subsequently needs to be clear to the smallholder mentees in order to manage their expectations. Tied to the scope of the mentorship are the envisaged objectives of this programme. Mentor and mentee need to agree beforehand on what the mentorship is to achieve, and how this will be measured. Impact measurement can include farm performance indicators such as yield per ha or financial income, it can include specific training modules completed or certification standards obtained, or it can relate to access to services and markets.

Secondly, the programme partners need to agree on the *budget*. Aside from the scope, the costs depend on the time required by the mentor, the number of mentors needed (one mentor can only support a small number of mentees), and their remuneration. In general, mentorship programmes take at least three years to build and implement. In the ideal situation the first year is for the mentor to lead by example, in the second year the mentee takes over decision making, but with close coaching by the mentor, and in the third year the mentor steps back and mostly observes without interference. This allows the mentor to reduce hours dedicated to the mentorship, and hence the budget pressure on the overall programme. Under the guidance of the mentor, the smallholder should be able to increase the income from farming. This motivates a co-funding structure in which the mentee pays for a share of the mentor's costs. It is also argued that co-funding serves as an extra motivation for the mentee to commit to the mentorship programme. The viability of such a structure needs to be

assessed before the implementation, and the possibility of such a set-up needs to be clearly communicated with the smallholder upfront. Once again, a flexible approach is required, with the budget being able to cover for an extended period in which it is fully responsible for the mentor's funding. The mentor's remuneration can also be tied to improved smallholder performance as an incentive: part of income the mentor receives can be made dependent on the farming income of the mentored smallholders. This prevents a lack of commitment from the mentor and can overcome the challenge of low effectiveness at high costs (Greenberg et al., 2018), but might also lead to a more paternalistic approach in which the mentor takes over all decision-making from the smallholder in order to boost smallholder performance. Several mentoring partnerships have been implemented with no, or very little, financial reward to the mentor, who is merely motivated by developmental interests (Olubode-Awosola & Van Schalkwyk, 2006). This confirms that in general, commercial farmers are willing to assist local smallholders in their development.

A third element that closely relates to the first two aspects is how the *funding* of the budget is arranged. The commercial offtaker can be assigned as responsible partner, particularly if the mentorship is combined with a supply contract. The agribusiness can even employ its own extension officers in the field who take on the mentoring responsibility. The disadvantage of such a set-up is that the commercial partner is then likely to determine the scope, and that this scope does not stretch beyond the immediate needs of the offtaker. This creates a situation in which the smallholders might not be fully empowered to engage in the activities of their choice, but become dependent on the offtaker which has funded their mentorship. Funding by a third party, such as a DFI, allows for a more holistic approach to the mentoring programme. AgriSETA can potentially assist with mentor funding. The South African and provincial governments also run mentorship programmes, in particular for smallholders who have benefitted from land reform programmes. This can be an alternative source of funding, but has challenges regarding the timely payment of funds and these grants can come with additional requirements that do not align with the overall support project. Lastly, commodity organisations engage commercial farmers in smallholder support activities, and hence might be an alternative option to engage with.

A crucial condition for the sustainable development of a smallholder farmer under a mentorship is the *availability of necessary infrastructure and equipment*, sufficient financial resources for the operation of the farm and a solid business plan co-drafted by the mentor and mentee together. A mentor cannot recommend the use of a certain seed or pesticide if the smallholder does not have the financial resources to purchase such inputs. Equally, smallholders cannot implement business plans if they have no understanding of this plan, or do not support the overall view behind such plans. Hence, the mentor and mentee must work together on a viable plan to develop the farm. Forced mentorship as condition to loans or land access might thus undermine the overall objective of such mentorship support as mentor and mentee do not enter into such a relationship with the right motivation.

One of the most challenging aspects of a mentorship programme is to *pair a mentor and mentee*. These persons embark on a long-term and close relationship in which trust plays an important role. Their characters and personalities need to work together in order to motivate each other and learn from each other. This crucial role of the individuals contributes to the finding that mentorships tend to work best when participation in a mentorship programme is voluntary, both for the mentor and mentee. Indeed, a lack of commitment or a wrong attitude by either a mentor or mentee is mentioned as obstruction to a mentoring relationship (Terblanché, 2011).

Lastly, in the case of mentorships paid for by a third party, an *exit strategy* needs to be formulated before the programme is rolled out. The end term can be based on a number of years of implementation (at least 3-5 years), or it can be determined on the achievement of predefined goals. As outlined above, partial transfer of financial liability toward the mentee can contribute to the exit of

the funder. Where the mentee and mentor directly agree on a remuneration structure, they are able to determine when the paid-for services from the mentor are no longer required. Regardless of a formal exit strategy, a mentorship can grow into a relation that does not end, with contact between the mentor and mentee continuing in the long term, albeit at an ever-increasing level of equality.

Overall it is important in a mentorship programme to:

- Discuss smallholder skills-development needs with them and incorporate these needs in the training programme;
- Have clear communication channels to the smallholder (especially if a third party and commercial offtaker are involved);
- Source external funding to increase the scope of the training and mentoring programme and reduce dependence on commercial partner;
- Be rolled out in value chains with high production/quality standards, and/or a high capital outlay;
- Develop a train-the-trainer/mentor programme if a project is ready to scale.

3.2.2 Roles and responsibilities

The mentor

It is obvious that the mentor must have practical agricultural and business knowledge and experience. This person also needs *on-the-ground* presence to execute its task. The mentor needs to be easily contactable by and available to the mentee. Using local actors, for example commercial farmers and NGOs, has the benefit of close proximity to the smallholders, and they can build on existing trust relationships between such an actor and the smallholders, access the knowledge and networks of such an actor, and promote credibility among stakeholders (Menden, van der Vleuten, Pirzer, & von Blomberg, 2019). In addition to knowledge and trust, the mentor needs to be willing to invest time in the mentoring relationship and to share experience and knowledge. In particular a lack of time has frustrated smallholder farmers in earlier mentorship agreements (Terblanché, 2011). Lastly, the mentor is to be able to guide the mentee, rather than adopt an attitude of superiority. A mentor who takes decisions on behalf of the smallholder and manages the farm without the smallholder's involvement might succeed in establishing a productive enterprise, but does little to empower the smallholder and contribute to an independent actor.

The smallholder

For smallholder farmers to enter into a mentorship relationship, it is important to show respect and trust towards the mentor. The farmers need to be willing to enter into such a relationship. Their approach needs to be characterised by commitment and a willingness to learn (Young & Wright, 2001). As stated by Goosen and van Vuuren (2005, p. 62) "The protégé is someone the mentor regards highly enough to consider worthy of his or her time". This does not mean that they blindly follow the mentor. Rather, they must engage in the mentoring relationship with a critical attitude that ensures that the mentor contributes to their individual development. It is their duty to indicate where they need support, what works for them, but also where they have issues with the mentor. In this way, they can build a reciprocal relationship of trust and respect.

Programme partners

The programme partners need to decide on the elements mentioned in the previous section such as the scope and the budget. These aspects need to be included in the programme's MoU, and in the contract that the programme partners enter into with the mentor. Furthermore, the programme partners need to identify the mentors. If an agribusiness who is a programme partner itself is able to

provide the mentorship through its own extension officers, the identification will be the responsibility of the agribusiness. Alternatively, the agribusiness might be able to identify commercial farmers they already work with to assist in mentoring activities. Programme managers generally have national networks through which potential mentors can be identified. For example, they might have contacts with relevant commodity organisations who maintain a database of commercial farmers willing to mentor. Or they are familiar with local NGOs in the agricultural field. The programme partners need to be aware of the changing nature of mentorship relationships, the fact that mismatches of individual mentor and mentee occur, and that it takes time to build trusting relationships. This once again requires a flexible attitude and a willingness to learn from inevitable mistakes in the implementation.

Government

One of the alternatives for smallholder skills development is through *government implemented programmes*. Nevertheless, day-to-day support from government extension services is seen as insufficient to develop the smallholders' skills (Aliber et al., 2010; Greenberg et al., 2018). The positive impact of government-supported training and mentoring programmes in practice has been put into question. In their evaluation of government support programmers for smallholders, Khulisa Management states that there is insufficient evidence to support government supported mentorship (Khulisa Management Services & University of Cape Town, 2016). The ACB is harsher in its finding, stating that mentors are among the main beneficiaries of smallholder support programmes, with little evidence of the long-term value added by them (Greenberg et al., 2018). They observe that mentors are paid regardless of the production level of the mentored smallholders. Indeed, costs for training and mentoring efforts are considerable and might not weigh up to the benefits.

3.3 Collective organisation: bolstering voice and efficiency with challenges

Farmer cooperatives have shown a positive impact on the level of commercialisation of their members as they are able to overcome barriers to market faced by an individual smallholder, and provide a platform for dissemination of information and innovation (e.g. Holloway, Nicholson, Delgado, Staal, & Ehui, 2000; Markelova et al., 2009). Thus, this instrument can add value in smallholder support programmes that aim to stimulate commercial value chain interaction for these farmers. Collective organisation of smallholders in theory benefits both the farmer members and the agribusiness transacting with the collective. The agribusiness benefits from the reduction of transaction cost, both in the identification and contract preparations, as in the actual production process, and a producer collective gives a greater certainty of supplied volumes. A collective organisation furthermore offers a platform for building trust, dispute resolution, and group enforcement mechanisms (Barrett et al., 2012; Prowse, 2007). As such, a farmers' organisation is an attractive business partner for commercial agribusinesses. Bundling their voices through collective organisation allows smallholders to increase their bargaining power vis-à-vis the agribusiness. This could result in more favourable contracting arrangements for the smallholders, or lower prices for farming inputs. Individual smallholders can also spread their farming risks within a collective organisation, and equally benefit from lower transaction costs (Ortmann & King, 2007b). Aggregating their produce furthermore improves their value proposition to agribusinesses. Cooperatives have been promoted by the South African government, as illustrated by the Cooperatives Act of 2005, and the establishment of the Department of Small Business Development in 2014 that has a specific focus on the promotion of cooperatives.

However, delivering services to smallholder farmers through farmer organisations requires significant efforts to build the capacity of these collectives. In practice, farmer organisations are also prone to failure, including in South Africa (Okbandrias & Okem, 2016; Ortmann & King, 2007b; Prowse, 2007). Well-reported theoretical challenges relate to free-riding behaviour, the horizon, portfolio, and control problems, as well as control costs (Ortmann & King, 2007a). In the South African context several studies have investigated a number of cooperatives and their demise. Underlying the failures

of agricultural cooperatives are, among others, members' lack of understanding on cooperatives and their specific role in them, internal conflicts, poor or authoritative management, and a lack of financial means to generate economic benefits for the members (Machethe, 1990; van der Walt, 2005). Many occasions have been reported where smallholders join a cooperative because they expect to benefit, as an individual, from government grants, NGO funding or similar financial support, or where collective organisation is a condition for government support (Chamberlain & Anseeuw, 2017; Poku et al., 2018). This undermines member motivation and the raison d'etre of the collective, and with it the sustainability of the organisation.

3.3.1 Elements to consider

Taking into account the potential issues, smallholder support programmes should be mindful about working with collective smallholder organisations. This section addresses a number of facets that should be looked at when engaging smallholder organisations.

Collective organisations can engage in numerous activities for its members. For example, a distinction is made between marketing, production, or supply cooperatives. These types of cooperatives engage in the collective sales of crops, production activities, and purchasing of inputs respectively. Many cooperatives provide both supply and marketing support to their members, supplemented with credit provision and technical support. The *scope* of the collective organisation must align with the partnership's objectives and in particular with the activities and needs of the agribusiness partner.

Collective organisation has been shown to be more relevant to the production of high-value *crops*. These crops generally have higher transaction costs than staple crops, and serve more distant markets. Hence, transaction cost reductions are larger for these types of crops when marketed collectively (Verhofstadt & Maertens, 2014). Furthermore, the margins on these types of crops are higher, allowing the farmer members to offset the organisational costs of a collective. Smallholder producers of highly perishable crops can equally benefit from bundling, for example through collective investment in processing or cooling infrastructure, or through reducing the risk of spoilage in transport to market (Holloway et al., 2000).

More recently agricultural cooperatives have implemented novel *governance* structures which are based on more business-like principles. These so-called new-generation cooperatives for example can employ an external, professional CEO appointed by the board of directors. Such a construction splits decision management (the CEO) from decision control (the board of directors elected by the members), and separates operational and governance control (Chaddad & Iliopoulos, 2013; Shah, 2016). Similarly, their member remuneration model is more incentive driven. Those members who transact more produce through the cooperative, and hence contribute more to the organisation's income, receive a higher remuneration. It is found that individual performance remuneration has a positive effect on a member's farming achievements as well as on the cooperative's performance (Verhofstadt & Maertens, 2014). An additional aspect to consider is the role of the traditional authority in the cooperative. Interference of such a powerful player is likely to capture the decisionmaking within the collective, which undermines the interests of the smallholder members.

Programme partners looking for immediate integration of smallholders in their supplier network should work with collective organisations that are well-established and financially self-sustainable.
Older cooperatives tend to be more successful and may be able to generate higher financial benefits. Mature organisations are likely to be a more stable business partner (Fischer & Qaim, 2012). Established collectives have had time to organise their governance structure, and the members are aware of their role in the collective. Where no suitable smallholder collective exists, an alternative is to establish a new collective organisation. These can be existing groups with a different focus that can extent to farming, such as stokvels or burial societies. In this case, initial attention is on governance

training to equip the members in managing their activities effectively. Supply of produce in this scenario is understood by all partners to take time, as immediate attention is not on commercial value chain integration. Once a coherent group with strong leadership and membership has been formed will the attention turn to the growth of the operational activities.

3.3.2 Roles and responsibilities

Agribusiness

The private sector's key role when working with smallholder organisations is to provide these smallholders with commercialisation services. It can do this by entering into collective supply agreements, or by supplying inputs, depending on the core activities of the agribusiness. The agribusinesses in this scenario should also fulfil an important role as mentor, who arranges access to wider commercial networks, shares agronomic knowledge, and assists with temporary use of assets. A business case nevertheless needs to exist to motivate the investment of the corporate actor in the smallholder collective.

Collective organisation

The collective organisation is responsible for coordinating and managing the agricultural activities of its members. This includes the determination of pricing structures, harvesting schedules, and monitoring of the individual member practices. The collective organisation also determines the investment needs and residual income distribution from its activities. The financial sustainability of the collective organisation must be ensured through membership fees and positive cash-flow from operational activities, potentially supplemented by commercial loans for asset investments. Financial support by third parties for operational activities creates dependency. Besides, asset funding by grants stimulates free-rider behaviour with new members wanting to benefit from these assets without investing in the organisation. Lastly, collective organisations are responsible for their own governance through well-informed members, fair leadership elections, and unbiased dispute and sanctioning mechanisms.

Collective organisations must ensure active participation by their members. A number of strategies can ensure a more intensive engagement by members. Diversifying activities over multiple crops aligns with the diversified activities of their smallholder members as highlighted in Section 2.1, particularly where there is a significant local market for the supported crops (Fischer & Qaim, 2011). Furthermore, membership can be limited to on-the-ground farmer membership only, and exclude absentee farmers as members. Smaller groups have higher levels of social cohesion and peer observation, which reduces free-riding behaviour. Furthermore, regular benefits, be it financial, training, or other, need to accrue to the members to sustain their motivation. Payment delays need to be addressed (e.g. through advance payments) as this forms a disincentive to the smallholders to sell their crop to the cooperative. Lastly, larger cooperatives with a stable income stream must consider the employment an external manager to separate operational performance from cooperative governance.

Individual members

As the owners of the collective, the smallholder members hold rights, but also responsibilities. As such, they need to actively engage in the activities of the cooperative. Benefits from collective organisation are enabled through economies of scale, which depend on members transacting through the collective. This constitutes of timely membership fee payment, trading through the collective as agreed by the members collectively, but also the involvement in decision-making processes within the cooperative. Thus, members must refrain from behaviour that puts the interest of the individual above that of the collective. Observation and motivation of their peers assists in ensuring members adhere to the collective objectives.

Programme partners

Smallholder support programmes can assist smallholder collectives to enhance their management. Thus, these programmes can provide financial support for essential training on cooperative governance, including member roles and responsibilities. Additionally, a smallholder collective is an efficient platform for crop and farming-as-a-business training. Certification standards can also be implemented through a smallholder support programme with the overall programme responsible for the determination of the suitable certification standard, financing and contracting of a training partner. Overall, programme support to the smallholder organisation should be limited to training, both in agricultural practises and collective governance, but not extend to operational costs or assets. The programme partner should explore the expertise within the DSBD for strengthening the cooperative structures and DAFF for training through extension officers.

3.4 Equity – enhanced ownership in the value chain

Inclusive businesses can form an avenue for smallholders to increase their ownership levels throughout the value chain through shared equity of assets with commercial agribusinesses, or as a collective body of smallholders. Related to an increase in ownership is extension of their impact on decision-making throughout the value chain, and additional income streams for the smallholders. In theory, shared equity aligns the interests of both equity partners, who are both incentivised to increase the performance and value of the shared asset, and thus applies particularly to situations characterised by reciprocal interdependence. This reasoning has motivated the establishment of new business entities where smallholders and agribusiness (and additional shareholders) share ownership in a packhouse or other processing facilities (Chamberlain & Anseeuw, 2017; Cramb, 2013). Such an independent entity allows more freedom to engage in higher-risk, innovate practices compared to well-established corporate structures, but also requires more resources and closer collaboration between smallholder and agribusiness (Menden et al., 2019). Case studies have shown that corporate entities use shared equity for ethical and branding reasons, while the smallholders mostly use the agribusiness partner as a marketing channel that offers premium prices, and a higher quality product (de Koning & de Steenhuijsen Piters, 2009).

Whereas equity improves the value proposition to the smallholders, it also entails responsibilities. Firstly, the equity share of the smallholders needs to be funded. Government or agribusiness grants, trust funds, or DFI loans are among the instruments used to contribute to the required investment. Nevertheless, considering the risk related to loan funding, and particularly in cases where shares cannot be converted to cash, it is recommended that farmers do not take loans to purchase their shares (de Koning & de Steenhuijsen Piters, 2009). *Table 3* describes a decision model to determine a suitable equity financing option for smallholder organisations. Secondly, smallholders as shareholders need to invest in the asset for it to grow, and to maintain it. Financing conditions tend to specify that loans need to be repaid before dividends can be declared, and new entities such as a packhouse need time to become profitable. As such, there is very little immediate financial income from shareholding, particularly in the short term. Furthermore, the role of smallholders in decision-making processes is often negligible due to a lack of capacity vis-à-vis the commercial partner. Lastly, smallholder equity is often organised through a collective organisation. In practice, such a collective body creates additional challenges in the form of membership determination and leadership struggles (Section 3.3), and the costs for the management and operation of this collective body reduces financial rewards for individual members. It furthermore adds complexity for the individual smallholder members who often don't understand their shareholding and their roles and responsibilities as shareholders (Chamberlain & Anseeuw, 2017). Indeed, the level of farmer organisation is considered a key element for success in farmer equity constructions (de Koning & de Steenhuijsen Piters, 2009). The agribusiness is attracted to a shared equity structure to relieve its investment requirement, and it contributes to

adherence of agri-BEE regulations. Whereas this instrument indeed gives them access to favourable financing to increase their business activities, smallholder collectives often prove to be a challenging business partner (Chamberlain & Anseeuw, 2017). Additional reasons for failure of shared equity structures are a delay in the payment of government grants to fund the smallholders' equity, a lack of qualified management, and transfer pricing structures that allocate profits to a downstream entity owned by the commercial partner (Chamberlain & Anseeuw, 2017; Cramb, 2013; de Koning & de Steenhuijsen Piters, 2009; Lahiff, Davis, & Manenzhe, 2012). Whereas the first puts financial pressure on the agribusiness to compensate for the lack of funding, the second reduces the profit and hence the income the smallholders receive from their equity, as well as their trust in the commercial partner.

Table 3: Decision model for financing shares by farmer organisations

Does the farmer organisation possess private equity?	Yes	Finance shares as regular investment opportunity including assessment of risks and return on investment (share value and dividends).
	No	
Does the farmer organisation have access to public subsidies?	Yes	Obtain shares through a grant application.
	No	
Can a trust fund be established for the purpose of shareholding by the farmer organisation?	Yes	In time, buy the shares from the trust fund using dividends.
	No	
Is the farmer organisation eligible for obtaining a bank loan?	Yes	Apply for a loan, buy the shares and refund the loan with dividends (note that interest will be paid on the loan).
	No	
The farmer organisation is not eligible for buying shares.		

Source: de Koning & de Steenhuijsen Piters, 2009, p. 55

Considering the many obstacles observed in business models with shared equity between smallholders and agribusinesses, this tool is recommended only for medium-term implementation. This allows for a number of critical elements to be met: a relationship of trust between the equity partners, empowerment of the smallholders related to capacitation and representation, and establishment of a well-managed collective body with clear membership requirements and democratically elected leadership. Under such circumstances the equity partners are better able to resolve complex and sensitive questions around ownership, voice, risks and responsibilities. Business acumen, reciprocal understanding of the context in which each partner operates, joint agreement on roles and responsibilities, and expectation management are necessary ingredients to make shared equity successful. When implemented, all the shareholders, including the smallholder farmers, need to be very aware of their roles and their responsibilities towards the joint-venture. A conflict resolution procedure to solve disputes among shareholders, but also between shareholders and company management, needs to be part of the overall contract (de Koning & de Steenhuijsen Piters, 2009). Lastly, smallholder shareholders need to realise that any financial benefits for them as individual take time to materialise.

3.5 Lease-/management contracts

Lease and management contracts transfer control over smallholders' assets, in particular land, to a commercial operator. This allows smallholders to gain an income from their land ownership without

having to actively participate in the execution or management of the farming operation. However the level of value chain inclusion of such a set-up is minimal (Chamberlain & Anseeuw, 2018).

Considering that the scope of this report is on market-oriented smallholders, the lease-/management instrument mainly serves as an additional tool to increase land under production in geographical areas where a commercial partner already works with active smallholders. Thus, relationships are built between an agribusiness and active smallholder farmers in an area, for example through supply contracts or a collective organisation. Once these relationships are established, smallholders can look to expand access to land through rental agreements with landowners with unused land. Alternatively, the agribusiness can enter into lease or management agreements with smallholders not actively farming their land to establish their own farming activities. Many constructions exist, ranging from a fixed rental fee, via crop-share agreements, to management fees where the income from the farming activities accrue to the landowner.

Lease contracts require a land tenure system that allows for lease constructions, either formally or in an informal manner. For example, where land ownership is in the form of a permission-to-occupy (PtO), land can still be leased or rented from PtO holders (Chipfupa & Wale, 2018). However, security for both lessors and lessees is often low in such circumstances (Aliber et al., 2010; Van Averbeke, Denison, & Mnkeni, 2011). Where lease agreements are implemented, the lessee should be responsible for all financial expenditure such as inputs and machinery. The smallholder lessor is often not in a position to invest in farming, or is not interested to do so. Furthermore, the rental agreement must be transparent. A fixed rental agreement contributes to this, and takes away any risks from the lessor.

4. Value chain elements: adapting the model to the context

Different characteristics of the crop and the value chain foster a context that is more or less conducive to the implementation of a certain instrument in an inclusive business model, or that requires a certain instrument to be implemented in different ways. This section will highlight four particular value chain elements and how the identified instruments from the previous sections should be adjusted according to these elements. The section is summarised in *Table 4* with a cross-tabulation of the elements presented in

Table 5.

4.1 Capital outlay

Crops that require high capital investment are a high-risk option for smallholder farmers. They need to enter into high levels of debt for example to put up shade-netting or high-tech irrigation infrastructure. Other crops in this category are those with delayed returns, such as tree crops that can only be harvested after the trees have reached maturity.

Because of the great risks for the smallholder farmers to include such crops into their production plan, it is essential for the agribusiness partner to mitigate these risks. Offtake certainty can take the form of a multi-year supply agreement, which ensures the smallholder income over a longer term that allows repayment of loans entered into for the required infrastructure. In the case of delayed return crops, it is essential for the farmer to receive an income from seasonal crops during the period in which the contracted crop reaches production. Hence, not all land available to a smallholder should be dedicated to the delayed-return crop. Smallholder access to credit to make the required investment needs to be part of the overall package offered to the smallholder. A difference here should be made to capital required for farm assets such as irrigation infrastructure, and crop related investments such as tree saplings. Crop-related assets can be pre-financed by the agribusiness. A loan with a delayed repayment plan, linked to an offtake agreement is particularly suitable. The smallholder only has to service the loan once income is earned from the crop, whereas the agribusiness has some level of payment surety through the underlying supply agreement. Support packages for perennial crops also need to pay attention to rejuvenation to enable the smallholders to replace old, unproductive trees. Crop insurance, with clear pay-out conditions, can be included in the loan agreement, where a small premium is deducted upon crop delivery (Casaburi & Willis, 2018). Alternative ways of financing the farm-related assets can be explored through partnerships with financial service providers, DFIs, or government departments (See also Section 5). If no external funder can be found for the pilot phase, the agribusiness partner can consider to provide asset loan financing ad-interim. However, scaling up requires the engagement of a third-party financer.

The fact that the agribusiness has to largely cover the smallholders' capital requirements results in significant risks for this commercial partner. It needs to ensure that the smallholders adhere to the financing conditions and produce a profitable crop. Intense, on-the-ground, mentorship contributes to the ability to recoup the capital investments made. For those crops with delayed returns, this mentorship is of lesser intensity during the years in which the crop grows, and is intensified once the crop starts to mature towards harvesting. The agribusiness must select smallholders with a high level of tenure security and reliable access to water. These smallholders are better able to engage in the longer-term relationships required to earn back the capital investment.

A supply contract with loan provision and a subsequent mentorship are the two key instruments where an agribusiness is looking to integrate smallholders into growing crops with high capital outlay needs. Collective organisation of the smallholders can result in the reduction of transaction costs, in particular where many very small-scale farmers are engaged in the production. These farmers, with 12ha of land available, would struggle to engage in individual offtake agreements. The high value of the crop also allows the producer members to recuperate the costs related to collective organisation and benefit from training and input bundling. Where farmers can produce on larger areas of land, the highvalue nature of the crops does not put a premium on transaction cost reduction. Rather, the potential internal frictions might jeopardise the overall partnership. Lease-/ or management contracts are not suitable for capital intensive crops considering the generally low level of land tenure security and small plot sizes. Equity is mostly a longer-term instrument that can be attractive for increased smallholder participation downstream in the value chain.

For crops that require low capital requirements, such as staple crops, smallholders mostly need to be able to self-finance their farming activities. Collective organisation for input provision can assist them to reduce their costs and hence improve their margin. A loose membership structure with low overhead costs is best suited to such a scenario. Crops with medium capital requirements, such as a number of vegetables, benefit from seasonal production loans provided by agribusinesses as part of offtake agreements. When working with established farmer organisations, funding can be provided in the form of a revolving grant. In this scenario, a fixed sum is given to the collective and members are then responsible for the internal management. The size of the grant in subsequent years depends on the repayment level of each of the members. However, this solution is only suitable where the collective is well-established and has the ability to manage the fund. The agribusiness must consider this fund as an investment into the relationship with the smallholders, rather than an economic investment that is earned back. Farmers who are successful can benefit from lease agreements with neighbouring landowners to expand their business, considering the low investment requirements. Agribusinesses sourcing low-value crops are unlikely to invest into partnerships as the low margins do not build a business case for such specific investments. Hence, any offtake agreements will be simple and non-binding to reduce costs and risk exposure.

4.2 Quality standards

Crops that need to be grown and handled according to strict standards, or where the product itself needs to meet strict quality standards, require close vertical coordination between producer and offtaker. These crops carry a high risk for the smallholders involved in their production as nonadherence to these standards has an immediate negative impact on their income. The agribusiness again plays a critical role in risk mitigation for these farmers. Training and on-the-ground mentoring are crucial to guide the smallholders in the required steps to achieve the product standards set by the offtaker. This support needs to stretch over a number of years, where the intensity of support is gradually diminished as the farmers incorporate the knowledge into their daily practices. The agribusiness wants to ensure it is able to benefit from its mentoring programme. Through a supply contract the smallholder is obliged to sell the crop to the offtaker in exchange for the mentoring support. The duration of this contract needs to be at least as long as the mentoring programme. To further reduce the smallholders' risk, both partners need to agree on a solution for produce that does not meet the quality standards. This crop cannot be sold at the premium price of the higher-grade produce, which threatens the profitability of the smallholder's activities, but equally the supply certainty for the offtaker. Although the on-the-ground mentorship is implemented to reduce the chances of a sub-standard crop, this outcome cannot be guaranteed. Where offtakers are able to also purchase sub-standard produce, either for own use or for re-sell, this should be included in the supply contract. The responsibility for marketing sub-standard produce must not rest with the smallholders during the first years of contracting. Supply contract-linked insurance is an additional tool for smallholder risk mitigation.

Collective organisation can benefit smallholders producing crops with strict standards, and particularly where value chain access is restricted to certified producers only. Many examples exist where producer organisations play a central role in ensuring that members adopt good agronomic practices to enhance yields and produce quality crops, and to assist in obtaining certification (de Koning & de Steenhuijsen Piters, 2009; Markelova et al., 2009). To stress again though, these organisations need to be well established with clear membership structures, and accepted and competent leadership. Such collective farmer organisation equally benefits the agribusiness sourcing from the smallholders as it greatly reduces transaction costs, training coordination costs and smallholder observation costs. As with crops with high capital outlay, additional land can be brought under production through lease constructions between active smallholders or the agribusiness and neighbouring landowners.

Where quality and production standards are not of a concern, agribusinesses are unlikely to invest in a relationship with smallholder farmers. Rather, the smallholders will have to organise inputs, production and marketing themselves. In this situation, collective organisation might give them better terms of market access as they are able to supply larger quantities.

4.3 Perishability

Crops with a high perishability need to be processed within a short time after harvest. Similarly, there are crops where the time of harvesting is critical. For these types of crops coordination across the value chain, both horizontally and vertically, is essential. Planting and harvesting schedules need to be aligned to ensure continuous supply over an extended period. An agribusiness can achieve this coordination through supply contracts that stipulate such timing details, combined with extension officers to observe progress on the ground. The high perishability of a crop stimulates a situation of monopsony where farmers are highly dependent on a single offtaker (Baumann, 2000). Monopsony tends to trigger exploitative behaviour by the offtaker who is in a powerful position. The offtakers need to be aware of the vulnerable position of smallholders who produce perishable crops for them.

Perishable crops offer opportunities for smallholder farmers to increase their ownership of downstream processing facilities. For example, small-scale dairy farmers in Ethiopia own processing facilities through milk marketing groups (Redda, 2001). Similarly, a women's collective processes several tropical fruits into a range of products (Kruijssen, Keizer, & Giuliani, 2006). Such processing facilities also contribute to a higher share of the economic value to be allocated to the smallholders. Nevertheless, as has been remarked throughout this document, collective organisation is a challenging process with collective ownership of assets particularly difficult. In addition, the establishment of processing facilities requires financial capital and technical expertise (Markelova et al., 2009). As such, collective ownership of downstream processing facilities should be separated from the primary agricultural production aspect of an inclusive business establishment.

For low-value crops with a low degree of perishability gains for smallholders can mostly be enabled through access to storage facilities that allow them to delay sales in times of low market prices. Commercial silo operators offer storage agreements to smallholder farmers, but this is mostly on a spot-market transaction basis rather than structural partnership agreements. Overall, agribusiness partnerships with smallholder farmers for low-value, low-perishable crops are minimal, albeit a growing number of initiatives do exist particularly in the cotton and beer value chains where large multinationals such as IKEA and Heineken are integrating smallholder farmers into their supply chains through partnerships with NGOs (for coordination, training and implementation) and international financial sponsors. Whereas these initiatives rapidly reach thousands of smallholders, most smallscale farmers continue to rely on government support through input support programmes (seed, fertiliser) and infrastructure development.

4.4 Local demand

Agribusiness control over crops that are easy to sell locally on a spot-market basis is very low. Offtake contracts for such crops are exposed to a high risk of side-selling. Costs to observe contractual behaviour by smallholders are extremely high. Hence, if an agribusiness aims to integrate smallholders into their value chain for such crops, it needs to take into account these circumstances. Several options exist for crops with extensive local demand. In particular, they can engage with commodity organisations for training purposes to increase smallholder yields. Such indirect support and active participation to build local linkages and expertise, can build loyalty among smallholders. A potential cost effective, complementary, approach to reach a large number of smallholders is the use local radio channels, and of localised training videos featuring local farmers (van der Velden et al., 2017). And despite the risks of side-selling, supply contracts are an option to build relationships with small-scale

farmers. But such extra-contractual sales need to be anticipated and accommodated. Loose, nonbinding contracts with limited interlinked services are more appropriate for crops with ample marketing alternatives. Alternatively, side-selling conditions can be detailed as outlined in Section 3.1. Whereas challenges exist for offtakers in such value chains, input suppliers can grow their market through smallholder support, in particular when the company combines their product with extension services (Gradl et al., 2012). In theory, smallholder equity in the offtaker stimulates these shareowning smallholders to supply this offtaker as they have direct business interests in this agribusiness (de Koning & de Steenhuijsen Piters, 2009).

On the opposite side, agribusinesses in sectors where limited demand for their crop exists, for example high-value export crops, have a much higher level of control over the marketing activities of the smallholders. Contract farming with interlinked provision of services for such crops is an often-used instrument to engage smallholder farmers into such value chains. However, whereas the opportunities for such crops are significant, these kinds of crops also pose severe risks for the contracted smallholders. Many cases of dependency and debt traps have been reported. The developmental outcomes of such partnerships are highly doubtful. The agribusiness needs to engage with the smallholders to ensure that contracts are designed to also benefit the farmers.

Table 4: Adaptation of instrument by value chain element

Value chain element	Importance	Supply contract	Mentorship	Collective organisation	Equity	Lease/management
Value / capital outlay (including delayed returns crops)	High	Include interest-free loan with delayed repayment plan; Add solution for non-standard produce to recover costs; Include instant return/ staple crops in farmer production plan; Long-term contract to reduce market risk	Intense on-the-ground support to ensure capital investments are earned back; Can be linked to local commercial farmer or commodity organisation	Platform for credit, innovation and knowledge dissemination; Lower investment costs through scale;	Premium prices for shareholder farmers; Positive impact on commercial branding	Only suitable in case of high tenure security; Contract duration at least until investment has been earned back; Understanding on ownership of delayed return assets (e.g. trees) at contract end; Allows for non-active landowners to participate in high-value crop production; Profit-share plus fixed rental increases certainty for, and support of landowners
	Low	Include limited input provision loan; Simple, non-binding contracts	No business case to cover mentorship costs	Allows for lower input costs for smallholders; Loose organisation with low overhead costs; Revolving grant option.	No business case, dependent on other value chain elements	Fixed rental reduces uncertainty for lessor and lessee
Quality standards	High	Guarantee for return on mentorship costs; Solution for non-standard produce to reduce risks	Intense on-the-ground support essential	Training platform; Collective certification and quality control; Opportunistic behaviour	Equity to serve as access to market information and capacity building	Corporate control over production activities; Profit-share plus fixed rental increases certainty for, and support by landowners
	Low	Simple contract to minimise contracting and monitoring costs	Low intensity; For business skills and network creation	Bundling of produce can result in improved market access.	Processing facilities for low-quality crops (e.g. fruit juicing)	Fixed rental reduces uncertainty for lessor and lessee
Perishability	High	Supply contract specifying planting / harvesting instructions	Tight coordination of production activities	Collective organisation for ownership in processing facilities	On-farm / mobile processing facilities	Increase scale through lease of unused land close to processing facility, be aware of collective usage (this is *not* a good option for smallholder development)
	Low	Low viability due to little need for coordination	Low intensity support; Increases quality, yield, and network	Collective farmer-owned storage facilities to allow for longer sales period	Farmer-owned storage facilities to benefit from price developments	Small business case, dependent on other value chain elements; Needs lessor incentive to reduce theft
Local demand	High	Loose contract to allow for side-selling and reduce contract enforcement; Long-term contracts to build relationship	Centralised training and mentorship by commodity organisations / extension officers	Input bundling; Marketing transaction costs too low to off-set organisational costs	Farmer-owned packaging / processing; Shares in offtaker can reduce side-selling Higher local social capital	Crop-share agreement incentivises lessefficient farmers to lease to agribusiness (this is *not* a good option for smallholder development)

	Low	Allow diversification of crops to prevent high dependency on single offtaker	Dependent on other value chain specifics	Transaction cost reduction through collective marketing	Social branding for commercial retailer; Market insight for farmers	Increase scale of commercial lessor; Guarantee offtake to allow successful smallholders to lease neighbouring plots

Table 5: Cross-tabulation of value chain elements

Value chain element		**Quality standards**		**Perishability**		**Local demand**	
	Level	High	Low	High	Low	High	Low
Capital outlay (including delayed returns crops)	High	Resource-providing contracts with intense on-the-ground extension; Agreed solution for sub-standard produce.	Interlinked supply contracts, collective training.	Resource-providing contracts with intense coordination; Integrate established collectives; Agreed solution for substandard produce.	Resource-providing contract with fixed price mechanism	Limited resource-providing contract with profit-sharing price mechanism; Allowance for side-selling	Resource-providing contract with industryindex price mechanism
	Low	Intense on-the-ground extension; Productionmanagement contracts; Collective certification	Indirect agribusiness support through commodity organisation; Farmers can benefit from collective organisation; Spot-market transactions.	Market-specification contracts; Coordination through collective organisation	Collective organisation to improve market access	Indirect agribusiness support through commodity organisation; Spot-market transactions.	No business case for either agribusiness or smallholder.
Quality standards	High	N/A	N/A	Resource-providing contracts with intense coordination; Integrate established collectives; Agreed solution for substandard produce.	Resource-providing contract with extension; Agreed solution for sub-standard produce.	Limited resource-providing contract with premium price setting for quality produce; Guaranteed offtake for substandard produce; Opportunity for input providers.	Resource-providing contract with industryindex price mechanism; Collective organisation for certification

	Low	N/A	N/A			Indirect agribusiness support through commodity organisation; Spot-market transactions; Opportunity for input providers	No business case for either agribusiness or smallholder.
Perishability	High			N/A	N/A	Collective organisation for better market access	Market-specification contracts; Coordination through collective organisation.
	Low			N/A	N/A	Indirect agribusiness support through commodity organisation; Spot-market transactions; Opportunity for input providers	Limited business case for either agribusiness or smallholder; Collective organisation for better market access.

5. Financing: sources and models to mitigate risks

Once the design of the business model has been drawn up and the partners have been identified, a financing plan needs to be put in place. This financing plan foremost relates to the model itself, but also looks at smallholder financing within the model. The overall objective is to achieve financial sustainability of the smallholder-agribusiness relationship. This is achieved through a combination of commercial revenues accrued by the partners and through service fees paid by the farmers (van der Velden et al., 2017). Increased farmer performance which boosts their income increases their payment capacity and hence the ability to pay for the services they receive through the support programme.

In the short-term though, the implementation of the smallholder support programme requires additional funding, to cover for items such as set-up costs, innovation, capacity building, or infrastructure. A particular function of this initial funding is to de-risk the investments of the agribusiness and the participating smallholders. This section outlines a number of alternatives which are taken from a report published by the Inclusive Business Action Network and BoP Innovation Centre (IBAN & BoP Innovation Centre, 2018). A total of seven financing models for IBs in the agricultural sector are identified: PPP, project financing, blended finance, result-based financing, thematic bonds, agricultural value-chain financing, impact investment.

In Public Private Partnerships (PPPs) a special purpose vehicle (SPV) is established. This SPV is financed through pooling of public and private funds. Pooled financing equally pools, and hence reduces, risks for both the partners. In the case of South Africa, shared ownership funding with government equity has been disappointing in SA (Lahiff et al., 2012). A better set-up is where government funding is used for non-critical context investment such as fencing, water pumps, or market facility infrastructure. The business entity responsible for the smallholder integration should not depend on domestic government funding, unless provided by more efficient funds established by developed country governments (e.g. 2SCALE).

In a project financing structure, an SPV is created to protect the commercial partner from financial risk exposure. The SVP relies on its own income and assets. Taking into account the innovative character of the SVP and the fact that it is a newly-established entity, the investor must expect a long repayment period. Financing of the SVP can use either debt (loans/bonds) or equity financing from external financers, and even subsidies/grants. Project financing is mostly for larger projects, such as the formation of the Grameen Danone Foods, a joint venture between Groupe Danone and NGO Grameen Bank in Bangladesh for the production of fortified yoghurt from smallholder produced milk (Rodrigues & Baker, 2012).

Blended financing brings together private and development finance. The development finance serves to de-risk the investment for the private funder. In contrast to a PPP, blended financing does not require the establishment of a SPV. Several public entities in the developed world have created funding instrument to channel blended financing. An example is the Global Agriculture and Food Security Programme, which is funded by a number of governments and which works through the IFC. This financing model can also integrate non-financial incentives such as technical assistance and risk underwriting. In the South African context, blended finance can be sought through e.g. The Jobs Fund, the PIC, or the IDC, or international funds set up by developed governments.

Result-based financing (RBF) is an innovative approach that is focused on outcomes rather than activities. In an RBF model payment is based on pre-defined results to align incentives and improve accountability to beneficiaries (i.e. smallholder farmers) (Instiglio, 2017). It is a model that stimulates innovative approaches by the private sector, with financing by public agents or large NGOs. Although not much used in the agricultural sector, opportunities exist. For example, in Kenya an RBF approach will award prizes based on cumulative capacity of storage devices sold to reduce post-harvest losses,

whereas in Nigeria demand-side incentives are provided for the adoption of new biocontrol technology (Instiglio, 2017).

Thematic bonds have been launched by a range of financial service entities, as well as multi-national companies. These thematic bonds accumulate funds from institutional investors to be invested in a specified impact area, of which inclusive business is one. Projects applying for funding need to meet a set of criteria to align to the intended impact. These criteria relate to aspects such as transparency, and social and environmental standards. IFC and FMO are examples of institutions that have launched social investment bonds, with large companies such as Friesland Campina using these facilities.

Agricultural value-chain finance provides financing to an actor in the agricultural value chain, either by an external player or another actor in the chain. Such a financing model overcomes in particular short-term cash requirements such as for production inputs. Resource-providing offtake agreements is an often-used tool that falls under this financing model, where the offtaker in the value chain provides funds. Innovative security mechanisms can scale this model and include more traditional financial service providers. For example, an offtake agreement can serve as guarantee for a bank to issue a short-term loan to a farmer. Specialised financial actors such as a DFI can act on behalf of a large offtaker, where it manages a dedicated pool of offtaker funds, as can be seen from the partnership between Root Capital and Starbucks, or between Awethu Project and SAB Miller (Awethu Project, 2018; Starbucks, 2015).

The last model revolves around impact investment funds. These funds, which pool money from a large range of investors, focus on a specific impact area, which can relate to poverty reduction, sustainable agriculture or technology for small-scale farming. Businesses looking to such funds for financing are carefully vetted to assess if they meet all the fund's requirements. These funds can invest through debt, equity or other forms of funding. Aside from financial returns, impact investment funds apply a framework to measure the impact of the business invested in. A range of funds is available to businesses operating in the food and agricultural sector in Africa.

One pitfall of all these types of funding is that they are channelled to agribusinesses who have the capability to apply for the considerable amounts that usually are disbursed by the funders. It is often unclear how much of this funding is actually passed on to the benefit of the smallholders. In the transversal analysis that informed this ToC, it was observed for example that the programme manager costs take up a considerable share of the budget of a smallholder support programme. Equally, the agribusinesses often receive funding for short-term interventions, rather than for initiatives that affect the core of their business in the long term. The lenders should assess and monitor how their funds reach the smallholder on-the-ground, with the need for a transparent reporting system. A second challenge relates to co-funding requirements set by funders. Applicants have limited time to find additional funders that can contribute the remaining funds. Rather, funders should align their activities so a complete package can be offered to the applicants.

The financing of the support programme can change as the programme moves through different phases. Financing risks are high at inception and set up costs can be considerable. This requires donor grant funding. But, as the programme moves towards maturity and implementation costs have been covered, the agribusiness and smallholders should recover their own costs through performance supplemented by commercial loans. Regardless of the funding model pursued, the general rules that should be followed are that: operational activities should not be funded by grant funding to prevent dependency; grant funding to be used predominantly for one-time and high-capital expenses that are difficult to recover through commercial activities, and for initial capacity development; smallholders need to be responsible for those elements they control; any assets that are part of the business model should be financed by loans. These guidelines foster an economically sustainable business model that is able to fund itself in the middle to long-term.

Individual smallholder funding within a programme remains difficult. In the South African context, many of these smallholders have access to land via communal tenure systems. As such, they lack the required collateral for loan financing from the dominant commercial lending institutes. Financing products that accept alternative forms of collateral, such as supply contracts and skills, should be developed. Furthermore, South Africa has a distinct lack of micro-funders and other networks for smallholders to access credit. This situation puts pressure on the agribusinesses working with smallholders to provide loan financing from their own funds. This results in additional risks as well as administrative costs, and increases the barrier to work with these farmers.

6. On-the-ground assessment: the location-specific context

After the basic business model has been designed, it is crucial to engage in an on-the-ground assessment. Adaptation of the model to the local context is invaluable for success. For example, whereas in one region well-established farmer co-operations exist, these might be absent in other areas. Similar differences might be discovered in infrastructure, farmer experience, and other aspects that have an impact on the business model. Once again, adaptability, flexibility and innovation are critical characteristics when establishing a commercial relationship with smallholders.

The on-the-ground assessment incorporates two elements: the local value chains and the smallholder context. This process is to map the current smallholder activities, the local infrastructure and resources and local value chain actors. It identifies the structural challenges experienced by these stakeholders, such as a lack of information, a lack of skills, livelihood insecurity, insufficient resources and gaps in local infrastructure. Understanding these local challenges, and subsequently addressing them, is crucial for the commercial value chain integration of smallholders to be successful. This step not only informs the required fine-tuning of the model itself (see Section 7), but also influences the value-added services the agribusiness can offer to the wider community to build a better relationship and trust within the locality.

In this process a range of actors has to be engaged through methods such as group discussions and individual interviews. These actors include smallholders, commercial farmers, cooperative entities, service providers, traders and local politicians. Whereas participation by smallholders and other local actors is essential in this process, it can be a slow process that not only answers questions but equally creates new ones (Saarelainen & Sievers, 2011). During this process, it is also important to understand the impact of non-local actors such as export agents or large retailers. Field visits are important to identify any local partners that can be incorporated in the implementation of the project, e.g. mentors, contractors, or suppliers, as well as assess any existing infrastructure such as potential packing facilities. This process is *not* an individual smallholder assessment to select farmers to be included in the business model, albeit impressions from this phase do inform the later selection decisions.

6.1 Value chain and locality

A value chain analysis maps the actors and activities involved from pre-production through to marketing of the crops. This activity provides insight into the structure and dynamics in which the smallholders operate. It provides the framework to identify critical issues and needs for interventions that are most suitable for the inclusive business partnership to address, and the challenges it will have to accommodate for. Aside from the direct activities in the value chain, it also touches on elements such as product quality, environmental requirements, and the overall business environment in which the smallholders operate. The value chain assessment focusses on the crop(s) for which access to commercial value chains is to be created through the smallholder support programme. Although this somehow condenses the scope of the analysis, the partners executing the analysis need to clearly define the scope and aim of the analysis.

Several guidelines, manuals, and practical documents have been published on how to perform a value chain analysis in the agri-food sector (Attaie & Fourcadet, 2003; Bonney, Clark, Collins, Dent, & Fearne, 2009; Nang'ole, Mithöfer, & Franzel, 2011). Below are a number of questions that can be included in the value chain analysis:

- What do the existing value chains look like, both formally and informally?
- Whom do smallholders sell to? Why? Any formal/oral contracts?
- Whom do they not sell to? Why?
- How do the farmers obtain seeds? And other inputs?
- What access to finance do they have?
- How do they access service providers and what are the challenges?
- Do the farmers engage in any value chain activities in a collective manner?
- What information is required by smallholder business partners? Do they have access to it?
- What skills do smallholders require to use products or to produce to the required standards?
- Where are gaps and how can they be filled?
- Do they use farm labourers, how often, from where?
- Do they do any packaging/processing on the farm/locally?
- Are smallholders aware of any certification schemes?
- What kinds of red tape obstructs them?
- Whom do offtakers sell to?
- What other suppliers do the offtakers source from (i.e. who are the competitors of the smallholders)
- What are the offtakers' risks and challenges?
- Who are the ultimate consumers and where are they located?

Aside from the value chain itself, it is important to understand the context in which this value chain is situated. The details of the locality set limits to the achievements of the smallholders, but herein also lie the opportunities for the inclusive business to make a marked difference. These are some of the key questions that should be explored:

- What is the infrastructure like? Are smallholder farms and villages accessible during the entire season?
- Are farms electrified, enabling on-site product processing?
- What public utilities and services are available?
- Is there a risk of political or community insecurity?
- Are theft or robbery a common problem for smallholders?
- Have other offtakers previously engaged smallholders in this location, and was this considered positive or negative by the smallholders?

6.2 Smallholder livelihoods

In addition to an assessment of the relevant value chain, the project partners should also gain an understanding of the strategies applied by the smallholders to build their livelihoods. Many smallholder farmers apply a diversification approach in which they spread income sources. This holds for income within their agricultural activities through a spread of subsistence and cash crops, and supplying numerous marketing channels. But it also applies to developing alternative sources of income outside their farm. This part of the partnership preparation involves on-the-ground group meetings and face-to-face interviews. The involvement of a local NGO is recommended for

introductory reasons, and to provide more in-depth understanding of internal community relations. Questions to focus on evolve around:

- How do the smallholders live, work, produce?
- How do they have access to land (PtO, lease, title)?
- How secure do they feel in their land ownership?
- Do they grow crops year-round or only seasonal? Why?
- Do they have access to additional land & water? How?
- What irrigation systems are used? Do they pay for water use? And for electricity use?
- What part of their income is derived from agriculture?
- What other sources of income do they have and what are the associated risks?
- What insecurities do smallholders face?
- Do smallholders have access to social security nets or insurance?
- Do smallholders have access to credit and transactional banking services?
- Do smallholders have access to risk management tools such as savings, or resilient crops?
- Do they grow crops for household use?
- Do you keep records relating to your farming activities?
- How do the smallholders access mechanisation?
- What are their needs, preferences, priorities when purchasing and cultivating agricultural products?
- Are they organised in a collective? Why, why not? (Also include stokvels, burial society, etc.)
- Do they receive support for their farming activities? From whom?
- What risks do these smallholders face?
- What trade-offs do these smallholders have to make?
- What informal solutions do they use to overcome challenges?
- What cultural norms are prevalent?
- What do they expect from commercial value chain integration?

7. Fine-tuning: adaptation to local context

With the information gathered during the field visits, the local business model, the partners, the services, and the contract details can be finalised. Based on the on-the-ground assessment the programme partners have to decide which services are required. These can include: organisational support, farmer training, certification, crop protection, input provision, financial support, crop diversification, mechanisation, and more socially orientated services. The programme partners also have to decide if these services will be offered as a standard package or whether the participating smallholders can choose as if from a menu (van der Velden et al., 2017). Standard packages offer a holistic approach and are easier to administer. A menu-style offering allows a suite of services tailored to an individual farmer's needs and means.

Crucial in this phase is to determine the precise interventions the programme can establish to create smallholder access to the already existing local value chain as mapped in the previous phase. This extends to assessing how to work together with other local initiatives, such as those established by the traditional authority or municipality. Building on existing structures potentially has numerous benefits, such as lower costs and higher local buy-in. The initial objective as mutually agreed on by the programme partners remains leading, where local initiatives can play an enabling but not a defining role.

Another important outcome from this phase is the identification of participating smallholders. The selected smallholders have to meet predefined minimal standard requirements, often related to the availability of land and water, farming experience and potentially crop specific requirements. Together with the local smallholders and other stakeholders, the final model is designed. Before the project is implemented, all stakeholders (including the smallholders) must agree on their roles and responsibilities, well-defined goals, and measurable KPIs (Breuer et al., 2018). Once the a-priori agreement has been reached can the contracts for the smallholders be drawn up, and any hardware put into place. Questions that are answered between field assessment and implementation cover aspects such as:

- Are investments by the inclusive business/commercial partner/financial donor required for infrastructure?
- What are the main knowledge gaps among the smallholders and who is suited to fill those gaps?
- What price-setting is to be specified in the contract?
- What is the likelihood of side-selling, and what tools can be implemented to accommodate this?
- Is insurance to be included in the contract?
- How will sub-standard produce be dealt with?
- Are there collective organisations that the inclusive business can work with?
- What role will the provincial Department of Agriculture play?
- Is there any technology that can be used within the project (e.g. information via mobile phone, small-scale processing facilities)?
- What processes are required to formalise the business?
- Are all necessary regulations in place?
- How reliable and fast are administrative processes?
- What hardware needs to be invested in?

At the end of this phase, all project-related hardware should be in place, or at least in the pipeline. Contracts with all the local project partners should be signed and the first tranche of funding is available. A training programme, with training partners assigned, has been drawn up. All local stakeholders must be aware of their role. To get buy-in from the local community, it is important to engage a range of local actors, in particular those who already have relationships with the smallholders. Additional efforts in the wider community need to be assessed, such as supporting a life-skills programme.

Using the local assessment, the fine-tuning phase is to formulate the solutions the commercial value chain integration is to provide for the structural challenges that prevent smallholders from accessing these chains. This is visualised in *Figure 2*.

SOLUTIONS	CHALLENGES: LACK OF...				
	...information	...skills	...security	...resources	...infrastructure
1. Conduct research and develop innovations	Develop technology-based information services	Develop easy-to-use products	Develop more resistant product varieties and more resilient farming technologies	Develop cheap and reusable inputs Develop farming technologies that don't require much investment	Develop localised processing and packing technologies Develop ICT solutions to reduce travel
2. Upgrade smallholders' production factors	Provide access to radio, cell phone or Internet	Provide access to easily used farming tools	Provide insurance Provide irrigation and resilient varieties	Provide production factors directly Facilitate access to credit	Provide local processing, storage and packaging solutions
3. Inform, train and consult to transfer knowledge	Inform smallholders of market prices, marketing opportunities, product benefits etc.	Provide training on general and crop-specific business and agricultural skills	Train smallholders in pest management and other risk management techniques	Train smallholders on efficient usage of inputs	Train local trainers Train smallholders on conservation methods
4. Agree on and enforce rules	Specify information exchange in agreements	Agree on production and documentation processes	Guarantee market access with minimum purchase agreements, linked to smallholder meeting standards	Grant access to inputs as part of an agreement	Invest in local facilities based on long-term agreement Hire local staff to monitor and enforce compliance
5. Strengthen links within the value chain	Communicate via network of retailers Strengthen market information services and other intermediaries	Support local training and extension services	Improve access to roads and up- and downstream facilities to ensure market access	Collaborate with local financial institutions Distribute via local retailers	Strengthen local retailers, traders and other service providers

Figure 2: Example solutions to structural challenges to value chain access
Note: Highlighted boxes are dominant solutions

Source: Gradl et al., 2012, pp. 34–35

8. Implementation: iterative and flexible

Once all the infrastructure is in place and the contracts are signed, can the project be implemented. Any preparatory training must be conducted before operations start. In the first year of smallholder integration, on-the-ground presence is crucial. It allows for close support and mentoring of the farmers, project adjustments to occurrences on-the-ground, timely correction, and building of trust. The smallholders can be guided by a farmer field book that outlines detailed steps they need to implement, such as when to apply what kind of fertiliser, and in which they can record their activities. This document assists in clear communication and transparency between partners, which is fundamental in the implementation of the pilot project. In particular, a dedicated and consistent contact for the smallholders prevents confusion for them as whom to address with questions and concerns.

Inevitably, unanticipated incidences will occur. These might be related to the weather, to machinery, to individuals within the project, to name but a few. Considering the novelty of the partnership and the activities, it is not possible to plan too strictly. A flexible attitude that allows for learning by doing, and which is informed by a continuous on-the-ground monitoring, is more likely to bring success in the longer term. It is imperative to engage the smallholders when solutions need to be found for such unexpected happenings. During the implementation, the objectives set out in the business case must remain in focus. The processes and outcomes must be assessed on a regular basis (German et al., 2018). Only by measuring can any improvement be determined (see Section 9 next).

All stakeholders should be aware that implementation of inclusive business partnerships with smallholder farmers are iterative processes that require innovative approaches, flexible attitudes, by driven individuals. They evolve around transparent decisions within a partnership where the expectations of each of the stakeholders are managed to the particular conditions of unfamiliar actors working together. In particular, these partnerships take time to reach sustainability and build trust.

9. Monitoring & Evaluation: If you can't measure it, you can't manage it

Implementing a monitoring system means that you keep track of what you are doing. It is a coordinated way to know what your project achieves, who benefits from it, and whether you are effective in achieving your expected objectives (Parsons, Gokey, & Thornton, 2013). Monitoring gives feedback on progress and issues, both towards the developmental and commercial goals. Early detection of challenges allows for adaptation of the activities to ensure you remain on track to reach your objectives. Unexpected experiences are bound to happen, and systematic, continuous monitoring ensures that despite these obstacles, your project is still able to deliver the anticipated outcome. The transparency and efficiency of a smallholder support programme is also enhanced through a well set up monitoring and evaluation (M&E) programme (Gradl et al., 2012).

Monitoring takes place on a continuous basis and focuses mostly on what is happening. Monitoring takes multiple forms. Some aspects are paper-based. For example, a farmer field book can be designed in which the smallholder farmers record their activities from preparation to marketing, but also financial administration, challenges and solutions, and other elements of interest and relevance to the programme. This allows project partners, and in particular a mentor, to control the performance of the smallholders throughout the production process, and to identify where improvements are required. Equally important is to observe developments on the ground. Dedicated staff who are in regular contact with the smallholders are best suited for this aspect of monitoring. Visual observation combined with face-to-face feedback from the individual smallholders is a valuable source of information for the programme partners to identify challenges and opportunities. It is important that any concerns raised by the smallholders are addressed by the programme partners, and that feedback is provided to the farmers as to what is done to meet their concerns and why. Face-to-face contact and feedback loops develop relationships of trust. More critically, such a participatory process ensures that the experiences of the smallholders themselves are integrated in the overall evolution of the programme that, after all, is intended for their benefit.

Evaluation is an activity that is conducted at a specific point in time. Evaluation provides insight into the efficiency and effectiveness of the intervention. The objective of evaluation is to determine how progress is made towards pre-agreed targets as formulated in the MoU. Programme evaluation must be performed at least at the end of every growing season or financial/budget year. Well-formulated questions and KPIs that relate to the overall programme objectives underlie the evaluation process. The annual evaluation reports, which use a standard format for easy comparison of the progress over time, serve as a valuable tool of information for donors and other stakeholders within the programme. Quarterly progress reports can supplement the reporting. Appendix II contains an example list of categories and KPIs that can be used in the evaluation process.

Whereas the need for monitoring and evaluation is obvious, in practice it is often neglected. Preparatory work such as the definition of a Theory of Change, a log frame and a baseline assessment take time, particularly when the assumptions to such a ToC are to be based on evidence. Programme partners further suffer from the rigidity of donors when drawing up a ToC. The actual implementation of monitoring and evaluation activities cost further resources for data collection, analysis and reporting. As a result, M&E is limited to describing what has been done, and does not look at the progress made towards the objectives. To address the lack of attention for M&E, programme partners should budget for these activities at the inception of the programme to overcome later conflicts over resource allocation. At programme inception it should also be agreed who will be responsible for the monitoring and evaluation activities. The implementing partner plays a crucial role in the monitoring process as this actor is active on the ground and has a close relationship with the smallholders. A programme manager is more suited for the evaluation and reporting, as this actor is often familiar with the reporting requirements of the different programme partners. Alternatively, the agri-business might be able to execute the evaluation as part of its wider corporate reporting activities. In this

scenario the reporting team should have a sufficient understanding of the importance and interpretation of the developmental goals of the smallholder support programme. A third option is to engage the services of an objective third party. A note of caution for this option is that the use of such an external actor might confuse the smallholders. Overall, monitoring and evaluation must form a meaningful part of the overall process, without it being a drag on the overall implementation.

10. Scaling: growing reach and impact

Albeit not a goal in itself, scaling is perceived as important in order to increase the potential impact of "islands of success" and become "accepted common practice" (Sopov et al., 2014). Numerous concepts of scaling exist, but an approach that suits inclusive businesses is that of scaling in, out or up (Chamberlain & Anseeuw, 2016). Scaling in increases the level of inclusiveness for the existing beneficiaries without changing the overall structure of the support programme. This is achieved by intensifying the implementation of the four dimensions of inclusiveness, namely ownership, voice, risk, and reward. Scaling out takes place when the number of beneficiaries is increased within an existing structure of a support programme. Scaling out includes internal growth of the programme, but also the potential for replication. Scaling up enhances the complexity of the support programme through the application of additional instruments and stakeholders. Each of these scaling concepts can potentially increase the overall impact of inclusive business in achieving rural development and a more equal agricultural sector. Scaling of a smallholder support programme builds on the embedded relationship and trust that resulted from the pilot implementation.

Increasing the level of inclusion for smallholders in an existing commercial value chain partnership has potential particularly in the areas of ownership and voice. Higher levels of ownership over land can increase the commitment of a smallholder to the farming business. Increased asset ownership provides the smallholder with more control over the activities on the farm, or over downstream valueadding activities. Such an increase in ownership is one of the anticipated outcomes of several inclusive businesses. Indeed, it is envisaged that over time, the financial rewards from commercial value chain integration allows the smallholders to invest in their farming assets. Partners in the inclusive business should certainly stimulate the smallholder in building their assets, as ownership is an essential first step in the path of accumulation. As outlined in Section 5, smallholder assets should be funded by themselves, rather than through grants. Scaling in can furthermore take place by increasing the engagement of the smallholders in decision-making processes. A period of skill development is designed to serve this purpose. Knowledge gaps often result in lower levels of inclusiveness in practice than anticipated (Chamberlain & Anseeuw, 2017), but this should be overcome in time. The commercial partners need to be open to higher levels of decision-taking engagement by the smallholder partners. Involving the smallholders throughout the development, operation and management processes ensures that the objectives and concerns of the farmers are incorporated in the programme, which has a positive impact on their buy-in and builds trust in the programme. Giving the smallholders a voice improves the sustainability of the partnership.

Scaling out occurs through inclusion of more smallholders in the commercial value chain, either within the same project (e.g. Heineken BE-FED), or through the replication of a business model (e.g. SPAR Rural Hubs). Scaling out in practice has been limited. In particular, the transaction costs related to smallholder farming interaction, the performance of the smallholders, and internal struggles within smallholder communities have made commercial partners reluctant to enhance the number of smallholders they work with. The option of increasing the number of members in a collective organisation raises questions regarding property and residual rights (Cook, 1995). Replication is impeded by the critical role of the main managers of an inclusive business. Individual drive cannot be replicated, causing a successful model in one place to fail elsewhere. This shows that there are still significant hurdles for smallholder participation in commercial value chains.

Scaling up can be needed to achieve scaling in or out. In particular, smallholders might have to organise themselves into collective organisations to increase their voice in an inclusive partnership. Or the commercial partner might request such a group structure to reduce its transaction costs in order to increase the number of smallholders it works with. However, a collective organisation adds complexity and challenges such as control, influence and free-rider problems (Section 3.3). Another example is the expansion of the partnership to include external financial service providers. Such a partner has the resources to fund and manage larger numbers of smallholders. Experience with a particular model has motivated partners to adjust the way in which their partnership is structured, sometimes resulting in more inclusion, more often in less inclusive models (Chamberlain & Anseeuw, 2016).

Smallholders support programmes initially pay high learning costs. These relate to agricultural practices, but also to a mutual understanding between commercial partner and smallholders. Only after the pilot has been proven stable and successful can scaling been rolled out. Without a proven model and value proposition, the risks for smallholders will be too high, and they will not remain in the relationship. Similarly, commercial partners need to see the financial sustainability of working with smallholder farmers. These results cannot be expected in a short timeframe. A minimum of five years is a guideline for such partnerships to stabilise and bear fruit.

Alternative to scaling smallholder participation in commercial value chains, the partners can opt to end or exit the initiative. Several elements can cause a smallholder support programme to end. In particular, funding can be limited to a certain time frame. Partners such as project managers, NGOs, donors and other service providers need to plan for their exit, preferably setting a clear point in time for the commercial partner and smallholders as to when their collaboration has to reach financial sustainability. This reality already needs to be spelled out in the MoU, providing clarity for all actors engaged. An exit strategy can be based on goals achieved, a fixed term or can be reached on mutual agreement (Menden et al., 2019). But, even when certain partners exit the partnership, the smallholders and commercial agribusiness can continue their alliance, either with additional support to the farmers or on an independent footing. If the project is successful, the smallholders are able to choose if, how and with whom they want to work. Other projects end more suddenly when a partner decides to withdraw their committed support. In such situations, it is important for this partner to be transparent as to the reason why they exit the programme. Questions that need to be anticipated before such a situation occurs relate to the rights of the other partners to continue with the initiative, financial responsibilities and legal implications. Alternatively, all partners can agree to terminate a programme, in particular because objectives are not being met. Consequences of non-performance of the programme equally need to be discussed at the time when the MoU is being drafted.

Overall, exit strategies for particular partners and for the overall partnership have to be talked about and detailed before the actual implementation on-the-ground.

11. Conclusion

This Theory of Change aims to provide a practical guideline for agribusinesses, NGOs, financers and other stakeholders to engage in successful and sustainable partnerships with smallholder farmers. It provides details on the processes, pitfalls and critical factors that apply to all initiatives that aim to engage smallholder farmers in commercial value chains. An initiative needs to start with the identification of the business case in which partners formulate their objectives, their capacities and their needs. Subsequently, the partners and most suitability business need to be identified. The value chain in which the partnership operates partly determines the instruments that make up the most suitable business model. Finetuning the details of the model is and iterative process that needs to take note of the local context in which the project is to be rolled out. Regardless of the partners, value chain,

and local circumstances, the following characteristics are crucial to agribusiness-smallholder partnerships:

- Joint transparent decision making – the smallholders need to be empowered in the partnership;
- Clear demarcation of roles and responsibilities per partner;
- Adaptability and flexibility – new approaches in an unfamiliar context require regular adjustments and a learning-by-doing attitude;
- Innovation – in partners, in business model, in products/services, etc.;
- The central role of key individuals – driven individuals who look beyond business-as-usual are indispensable in building and implementing the partnerships;
- Time – to build trust, knowledge and to reach results.

Once a successful pilot has been established in which the business model has proven itself, the partners have learned through the pilot implementation and relationships of trust have been build can the inclusive business be scaled. As with the initial project, the above-mentioned characteristics need to be applied anew, with the business model being adjusted to a new local context.

Albeit partnerships with smallholder farmers are challenging, the business climate is becoming more attuned to commercial actors taking more note of their role as corporate citizens. Consumers, large organisations, NGOs and governments become more critical of profit-driven corporate actors. This stimulates the business case for agribusinesses to engage with local smallholders. Numerous successful initiatives have been implemented and the ever-increasing lessons, also from failed projects, improve the likelihood of success. This guide is to assist those embarking on future endeavours to grow inclusive businesses with the aim to improve the livelihoods of smallholders through commercial value chain engagement.

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Appendix I – Example KPIs for monitoring and evaluation purposes

This appendix lists a number of potential KPIs. These are selected and adapted from a longer list of KPIs as published in Van der Velden et al. (2017).

Category	Definition	Methodology
Case owner	Programme staff – overhead	Number of staff dedicated to the programme
Scope & context	Location	The region in which the programme is implemented
Scope & context	Total number of farmers	The total number of farmers (agree on how to deal with collectives with non-active members)
Farmer economics	Productivity	Production per ha
Farmer economics	Profitability	Profitability per ha
Efficiency	Total cost per farmer (% production value)	Total cost of programme per farmer as % of total value of crop revenues per farmer
Efficiency	Total cost per farmer (% product sourced)	Total cost of programme per farmer as % of total value of crop sourced per farmer
Efficiency	Cost per farmer per year	Average annual programme cost per farmer
Efficiency	Loyalty rate	% of production sold through the programme
Sustainability	Total programme cost	Total net income incl. service revenues and donor funding, excl. commercial revenues
Sustainability	% programme costs recovered from payment for services	% of programme expenses recovered by revenues from programme services
Sustainability	Value creation at farm level	Total value created at farm level per Rand invested in the programme. Includes adopting and non-adopting farmers
Costs	Programme costs	Differentiate % per activity (training, certification, input support, etc.)
Service: training	Cost per farmer	Total and average annual cost per farmer
Service: training	Price charged to farmer	Avg. annual price charged to farmer as % of total costs to per farmer (Rand and %)
Service: training	Training per farmer	Avg. annual number of training days per farmer
Service: inputs	Amount applied	% of amount of fertiliser/crop protection applied compared to recommended
Service: inputs	Costs	Costs of fertiliser/crop protection (per ha) incurred by farmer
Service: inputs	Price charged to farmer	Price charged to farmer for fertiliser/crop protection
Service: finance	Avg. loan per farmer	Avg. annual amount of cash or input credit a farmer receives
Service: finance	Avg. loan duration	Avg. time (in months) until loan is repaid

Service: finance	Default rate	% of farmers not repaying their debts
Service: diversification	Crops included in service provision	Number of crops the programme provides services on (e.g. training, provision of seeds)
Service: diversification	Food crops included in service provision	Number of food crops the programme provides services on
Service: diversification	Degree of diversification	% of gross revenue not coming from main crop supported within the programme

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

Publication number: RVO148-1901/RP-INT

Netherlands 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.