The influence of native capability on the impact of inclusive business models in the BoP context

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ABSTRACT,
Despite the attractive prospects of inclusive businesses that aspire to engage people at the Base of the Pyramid (BoP) to create a better future, these business models face a constant collision of economic and social objectives. According to existing literature, it is possible to increase the quality of life in BoP communities through applying business-as-usual strategies and business models, although the possibility of negative effects when firms are not familiar with the context they are operating in, constrain these business models to reduce poverty. Therefore, literature on BoP 2.0 argues that inclusive businesses should adapt to local conditions and become embedded in the context, when aiming to make an impact at the BoP. This means that in order to achieve economic, social and environmental value, firms need to create native capability in order to become a successful inclusive business: sustainably alleviating poverty at the BoP through mitigating negative effects on one hand, while taking advantage of its massive potential market on the other hand. This thesis aims to create insight in the components of native capability, and how they affect the impact that inclusive businesses seek to generate. The qualitative research method involving semi-structured, in-depth interviews with information-rich cases from the agricultural industry in Africa, might be an opportunity to fill the gap in existing literature on how inclusive business models create and capture value for a multitude of stakeholders. In addition, this thesis may be valuable to inclusive businesses that are currently operating at the BoP, by indicating the importance of developing native capability, so that negative outcomes are limited and poverty can be truly reduced.

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1. INTRODUCTION

Over the past decade there have been increasing calls for alternative ways of tackling poverty problems in developing countries and emerging economies (Halme et al., 2012). Rather than the aid and charity approaches that have dominated the scene for the past few decades, the alternative line of discussion around inclusive markets and Base of the Pyramid (BoP) approaches emphasize the role of innovation and pro-poor entrepreneurship (Halme et al., 2012). At the same time, most large companies seem to be mired in saturated markets, arising the question how they will be able to achieve high growth in the coming years (Hart & London, 2005). According to Prahalad and Hart (2002), addressing the needs at the Bottom/ Base of the Pyramid (BoP) presents a *''prodigious opportunity for the world's wealthiest companies to seek their fortunes and bring prosperity to the aspiring poor''* (Dembek et al., 2018). In other words, firms are in the unique position to innovate business models that can help to alleviate poverty at the BoP (Halme et al., 2012), while simultaneously taking advantage of its massive potential market that has remained largely invisible to the corporate sector (Hart & London, 2005).

However, this profit-driven approach to developing markets and alleviating poverty has proven far more challenging than anticipated (Dembek et al., 2018). In practice, there is an unresolved tension between firms' financial objectives and the social value they aim to realize in BoP communities (Oukes et al., 2020). To resolve this tension, existing literature focused on applying familiar (sustainable) business models with minor adaptations (for example Dembek et al., 2018). Yet, business-as-usual strategies and business models may possibly increase quality of life for BoP consumers, but they are unlikely to alleviate poverty and may even have destructive social outcomes in some cases (Dembek et al., 2018; Hall et al., 2012; Landrum, 2007). The fact that an inclusive business model can destroy rather than create value to the poorest, is caused when the model does not respond appropriately to the unique local challenges that need special attention in BoP settings (Oukes et al., 2020; Dreyer et al., 2017). Consequently, if general business modeling theory is applied at the BoP without accounting for the local situation, including diverse stakeholders as NGO's, government agencies, indigenous civil society organizations, and local suppliers and customers, this may result in conflict and a worsening of local business and social outcome (Oukes et al., 2020; Bittencourt Marconatto et al., 2016; Dembek et al., 2018; Oskam et al., 2018). Therefore, several authors plea that a more collaborative approach of business modeling is required to support the development of sustainable business in a BoP context (Oukes et al., 2020; Bittencourt Marconatto et al., 2016), so that a combination of economic, social and environmental value must be created and captured for a multitude of stakeholders (Oukes et al., 2020).

To align the inclusive business model with the BoP contexts, organizations need to build native capability. This is defined as *''the ability to develop fully contextualized solutions to real problems in ways that respect local culture and natural diversity''* (Oukes et al., 2020; Hart & London, 2005). When combined with firms' ability to provide technical resources, investment, and global learning, native capability can enable companies to become truly embedded in the local context (Hart & London, 2005). Therefore, it can be said that the extent to which a business model can create and capture economic, environmental and social value is not only dependent on the business model design (Oukes et al., 2020; Bittencourt Marconatto et al., 2016; Brehmer et al., 2018; Ciulli & Kolk, 2019; Kortmann & Piller, 2016), but also on the involved organizations' cooperative and native capabilities (Oukes et al., 2020; Bittencourt Marconatto et al., 2016; De Bernardi & Tirabeni, 2018; Evans et al., 2017). Consequently, this research aims to contribute to existing literature by investigating the role of native capability in creating impact through inclusive business models, leading to the following research question:

'' How do a firm's native capabilities influence the impact of inclusive business models in BoP contexts?''

For the purpose of answering this research questions, multiple sub-questions have been set up as well:

1. *How is native capability defined in existing literature?*
2. *How can the impact of inclusive businesses be measured?*
3. *To what extent do companies possess native capabilities?*

The first two sub-questions will be addressed in the theoretical framework in chapter two by using existing literature. In chapter three, the qualitative research method will be described, where after the findings will be discussed in chapter four along with the third sub-question. In chapter five the findings will be discussed and linked to existing theory, so that conclusions can be drawn in chapter six to answer the main research question.

The result of this research can contribute practically to inclusive businesses and BoP societies, in a sense that businesses might reconsider the impact of native capabilities in their work field. Accordingly, they will develop native capabilities in order to diminish negative impact in local BoP contexts, so that poverty can be truly reduced instead of just increasing quality of life for BoP consumers (Oukes et al., 2020; Dembek et al., 2018). In turn, this will create advantages for BoP societies as well as inclusive businesses itself, given that the inclusive business model ensures profitability while avoiding negative impact for society, resulting in mutual benefit.

2. THEORETICAL FRAMEWORK

This chapter will address the main concepts of this research: native capability (2.1), impact (2.2), and their relationship (2.3).

2.1 Native Capability

Firms have different approaches when operating at the Base of the Pyramid (BoP) resulting from contradicting literature that is available about the BoP. Early literature on BoP 1.0 focused on firms which tend to have a sense of 'corporate imperialism' (Prahalad & Lieberthal, 2003) and are not particularly concerned about adapting to the local context (Ausrød et al., 2012; Hart, 2012). Later on, BoP 2.0 responded with a greater emphasis on the local embeddedness and empowerment, shifting the focus from a top-down approach of 'selling to the poor' to one that seemed more bottom-up 'engaging the poor' through 'business co-venturing' and co-creating new products and services rather than just adapting existing ones (Dembek et al., 2018; Arora & Romijn, 2011; Simanis & Hart, 2008). While BoP 1.0 is focused on 'shaping of' the local context, BoP 2.0 is 'adapting to' the local context (Ausrød et al., 2012; Hart & London, 2005). Moving from BoP 1.0 to BoP 2.0, native capabilities came into the picture, following the assumption that firms must become socially embedded in order to succeed at the BoP (Ausrød et al., 2012; Hart & London, 2005). Native capability is defined by Hart and London (2005) as *''the ability to develop fully contextualized solutions to real problems in ways that respect local culture and natural diversity.''* In addition, Bittencourt Marconatto et al. (2016) described native capabilities as *''the expertise that allows companies to mobilize resources that are intrinsic to the communities they serve.''*

There are five competencies that together make up a firm's native capabilities: (1) working with non-traditional partners, (2) co-creation of local solutions, (3) development of local expertise, (4) coping with central government, and (5) building social, not legal, contracts (Oukes et al., 2020; Bittencourt Marconatto et al., 2016; Hart & London, 2005). Firstly, *''Firms should create a web of trustworthy relations with non-traditional partners, to generate bottom-up development and to understand, leverage, and build onto existing networks. Competitive advantage is then based on a deep understanding of local context, mutual commitment and trust''* (Bittencourt Marconatto et al., 2016). This will ensure that the products, services, and delivery are code signed (Hart & London, 2005) which may ease collaborations between local and foreign firms (Oukes et al., 2020). Secondly, the functionality of the product or service must be maximized in terms that are important to local users (Hart & London, 2005). This is based on the value co-creation logic, which assumes that specific value of tangible and intangible resources is determined by the way they are used ('value-in-use') and how they are embedded into an application-specific context ('value-in-context') (Bullinger et al., 2017). It means that firms should explore the opportunities for their products and services in a new context, rather than selling a defined end product (Hart & London, 2005). Thirdly, firms facing challenging new environments usually need to turn to partner organizations for missing expertise (Hart & London, 2005), because firms engaging with the BoP context usually lack prior knowledge of the conditions (Ausrød et al., 2012). Fourthly, firms should take into account that they have to cope with the central government when operating at the BoP. According to Hart and London (2005) avoiding dependence on central institutions – national governments, corrupt regimes, and central infrastructure planning – appears to be a critical aspect of native capability. This is called 'flying under the radar' of corruption, so that organizations can avoid all the problems that go along with having to deal with difficult central regimes (Hart & London, 2005). Lastly, successfully operating at the BoP requires the capability to understand and appreciate the benefits of the existing social infrastructure, where local government and civil society have a strong social orientation, resulting in relationships that are primarily grounded in social – not legal – contracts (Hart & London, 2005). All in all, developing native capability is involved with creating connections with local partners through social contracts, in order to create local solutions and expertise, and avoid difficult regimes. This is represented in figure 1. When firms successfully develop native capability over time, large corporations will become 'indigenous' to the places in which they operate (Hart & London, 2005). Moreover, the ongoing learning process cannot be easily replicated by competitors (Bittencourt Marconatto et al., 2016), leading to competitive advantage based upon deep understanding and integration with the local environment (Hart & London, 2005).

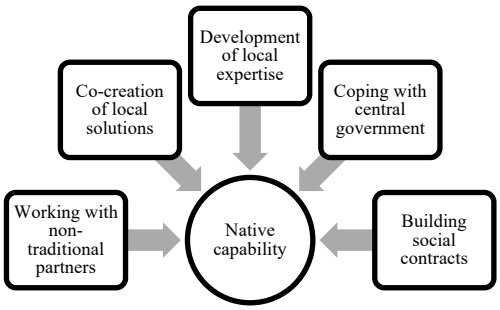

Figure 1. Components of native capability

2.2 Impact

According to the World Business Council for Sustainable Development (WBCSD), inclusive business is about *''business solutions providing access to affordable, high quality goods and services to low-income populations, creating positive and long-lasting impact''* (2016). But what exactly is this impact? And how can it be achieved?

Inclusive businesses operating at the BoP aim to create and capture a combination of economic, social and environmental value for a multitude of stakeholders (Oukes et al., 2020), in contrast to traditional businesses which mainly seek to maximize profits and therefore focus on the creation of economic value only. This implies that the objectives of inclusive businesses transcend the objectives of traditional businesses in creating impact – adding social and environmental value – for people living at the BoP. While most conceptualizations of business performance have generally tended to focus on financial performance indicators such as sales level, sales growth, profitability and stock price (Venkatraman & Ramanujam, 1986), these traditional performance indicators fail to capture the complete picture of a venture's impact. This requires managers of BoP ventures to take a more holistic, learning-oriented approach to assessing performance – one that factors in dimensions beyond economic well-being (London, 2009).

Several authors have developed assessment frameworks that reach beyond the measurement of economic factors, that may be suitable to measure the impact of inclusive businesses. One popular measurement framework addressing financial and non-financial indicators is the Balanced Scorecard by Kaplan and Norton. It was originally conceived as a means of measuring corporate performance in a manner which reflects not only financial indicators of performance, but also those other critical value drivers that enable an organization to compete successfully (Cousins et al., 2008). The scorecard provides executives with a comprehensive framework that translates a company's strategic objectives into a coherent set of performance measures, through considering four perspectives: (1) the financial perspective, (2) the customer perspective, (3) the internal processes perspective, and (4) the innovation and learning perspective (Kaplan & Norton, 1992). Companies come up with goals through answering perspective-specific questions, which will then be translated into specific measures (Kaplan & Norton, 1992). Consequently, the balanced scorecard is not a template that can be applied to businesses in general: different market situations, productions, product strategies, and competitive environments require different scorecards (Kaplan & Norton, 1993).

Another framework which process is similar to that of the balanced scorecard, is the Performance Prism. Neely, Adams and Kennerly (2002) introduce five interrelated perspectives with specific questions, leading to a structured business performance model. The prism highlights the complexity of an organization's relationships with its multiple stakeholders within the context of its particular operating environment through integrating five perspectives: (1) stakeholder satisfaction, (2) stakeholder contribution, (3) strategies, (4) processes, and (5) capabilities (Neely et al., 2001). Its comprehensive stakeholder orientation encourages executives to consider the wants and needs of all the organization's stakeholders, rather than a subset (Neely et al., 2001). This makes the Performance Prism suitable to be applied to inclusive business models.

The third framework that will be discussed is The Base of the Pyramid Impact Assessment Framework by London (2009). Other than the former two, this framework is specifically targeted at ventures operating at the BoP. The Base of the Pyramid Assessment Framework measures how the venture affects the

well-being of its critical constituencies in three important dimensions: their economic situation; their capabilities; and their relationships, in order to assess the impact initiatives are having locally (London, 2009). Firstly, it makes sense to focus on economic well-being when evaluating the effects of a venture: gains or losses in income, assets and liabilities for example (London, 2009). Secondly, ventures focused on the BoP also affect local capabilities – the skills, health, and confidence individuals and communities need to help themselves and influence the world around them (London, 2009). And thirdly, relationships of stakeholders will be influenced by BoP ventures as well, through its potential to help individuals and communities develop new partnerships and access new networks (London, 2009). According to London, the critical constituencies are identified to be three groups of local stakeholders which are mainly affected by BoP ventures as described above: (1) sellers: local distributors or producers, (2) buyers: local consumers or agents, and (3) communities. In sum, it offers managers a systematic process for measuring – and enhancing – the effects that their activities are having on the ground, by involving the positive- and negative impacts those activities have on the well-being of sellers, buyers and communities (London, 2009).

All three models described before are suitable to describe impact in BoP contexts due to their broadened view on performance. Although, the Base of the Pyramid Impact Assessment Framework is the best fit for this research due to its explicit focus on the BoP. For this reason, it is assumed that impact at the BoP is created through assessment of the economic situation, capabilities and relationships of the three critical constituency groups: sellers, buyers and communities. This is represented in figure 2.

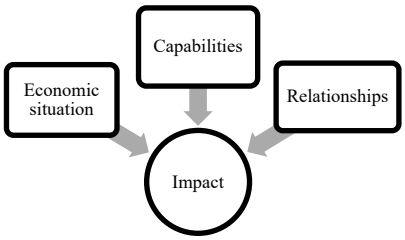

Figure 2. Components of impact

2.3 The Relationship Between Native Capability and Impact

Impact can be achieved through incorporation of BoP communities as consumers, distributors, and employees into conventional business models (Dembek et al., 2018). However, sustainable impact in the BoP context can only be achieved if the local entrepreneurs, and the broader societies that they serve, appropriate created value so that these communities can experience well-grounded growth, self-determinism and a long-term drive away from poverty and dependence (Oukes et al., 2020; Dembek et al., 2018; Goyal et al, 2014). Poverty is a systemic problem with a wide range of structural – political, social and economic – factors (Dembek et al., 2018). According to the theory of poverty by Sen (1999), poverty is not simply inadequate income, but it involves more deprivations in capability and opportunity (Nakata & Weidner, 2012). It is for this reason, that firms which concentrate on developing entrepreneurship and commercializing products and services at the BoP (Dembek et al., 2018; Hall, 2014), can help to overcome these structural problems. Though, the extent of poverty-reduction by a BoP venture is contingent on its practice on the ground, which will inevitably be shaped by local and global power relations (Aurora & Romijn, 2011). This means that ventures have to deal with BoP-specific poverty factors as adverse power relationships within poor communities, and social-epistemological hierarchies between the poor and outsiders who administer poverty-reduction interventions (Aurora & Romijn, 2011).

In that case, it can be implied that appropriate created value is most likely to be realized when ventures operating at the BoP become truly embedded in the context, so that poverty can effectively be reduced. As mentioned by Oukes et al. (2020), native capability helps organizations to manage the inherent and ongoing trade-off between economic, social and environmental goals (Bittencourt Marconatto et al., 2016; Matos & Silvestre, 2013), as well as the complex and ambiguous stakeholder relationships in BoP settings (Matos & Silvestre, 2013). This means that native capabilities must be created in order to alleviate poverty and make an impact at the BoP. Accordingly, it can be said that the extent to which a business model can create and capture economic, environmental and social value is not only dependent on the business model design (Oukes et al., 2020; Bittencourt Marconatto et al., 2016; Brehmer et al., 2018; Ciulli & Kolk, 2019; Kortmann & Piller, 2016), but also on the involved organizations' cooperative and native capabilities.

Besides, firms should acknowledge that their impact could be negative when they do not possess native capability. As an example, ventures might promote ineffective or socially inappropriate products, or prompt people to overuse or mistreat community assets (London, 2009), in case they are not familiar with the context they are active in. This implies that positive, sustainable impact – and successfully reduced poverty – through inclusive business models, can only be realized when organizations develop native capabilities.

Though the exact influence of native capability is not known yet, expectations can made based on existing literature. As native capability comprises working with non-traditional partners, it is expected to have a positive influence on the relationships with and between critical constituencies (sellers, buyers and communities). Furthermore, through co-creation of local solutions, native capability is likely to maximize the functionality of the product or service in terms that are important to local users (Hart & London, 2005), which will affect the capabilities and resultingly the economic situation of local people. In the same way, the economic situation and capabilities of sellers, buyers and communities will improve in case firms develop local expertise. The last two aspects of native capability, coping with central government and building social contracts, will benefit the relationships between the critical constituencies and foreign firms. These expectations are summarized in table 1. From the qualitative research that will be introduced in the next chapter, it will become clear whether the expectations are correct.

Table 1. Expected influence of native capability on impact

		Impact		
		Economic situation	Capabilities	Relationships
Native capability	Working with non-traditional partners			+
	Co-creation of local solutions	+	+	
	Development of local expertise	+	+	
	Coping with central government			+
	Building social contracts			+

3. METHODOLOGY

To identify the influence of native capabilities on the impact of inclusive business models in the BoP context, a qualitative research method has been used. A qualitative research method is applicable to this research problem and context considering its interpretative analysis for the purpose of discovering concepts and relationships in raw data (Strauss & Corbin, 1998).

3.1 Research Sample

Regarding the qualitative approach of the study, the relevance to the research topic rather than the representativeness determines the way in which the sample is selected (Khan, 2014). For this reason, purposeful sampling is applied, leading to information-rich cases which will yield high insights and in-depth understanding rather than empirical generalizations (Patton, 2002). Since Africa is one of the poorest continents in the world, it is the prime focus of inclusive business models to reduce poverty while generating profits. Consequently, there are numerous examples of inclusive businesses cases to be found in Africa which can provide in-depth understanding of the topic. According to Suri (2011) purposeful sampling requires access to key informants in the field who can help in identifying information-rich cases. Therefore, contact was established with multiple Dutch embassies in African countries, to build a database with potential cases for investigation. As a result, approximately 40 firms were included as potential cases, varying from for-profit to non-profit firms, from the energy to the finance sector, from small to very large. Considering the scope of this research, it was decided to limit the sample to one specific sector, namely agriculture. This offers the opportunity to make use of critical case sampling with subjects who have specific experiences (Marshall, 1996) to facilitate 'logical generalizations' (Patton, 2002). The criterion for deciding whether or not an example is 'critical' is generally decided using the following statements: ''If it happens there, will it happen anywhere?'' or ''if that group is having problems, then can we be sure all the groups are having problems?''(Etikan et al., 2016). The fact that the agricultural industry has a massive social and economic footprint, matches the topic of this research: more than 60 percent of the population of sub-Saharan Africa is smallholder farmers, and about 23 percent of sub-Saharan Africa's GDP comes from agriculture (Goedde et al., 2019), indicating the importance of agriculture in this area. According to Marshall (1996), an appropriate sample size for a qualitative study is one that adequately answers the research question. Due to the purposeful data collection, there is a higher likelihood of reaching data saturation (Suri, 2011). Hence, studying a small sample will already be sufficient for this research.

As a result of the previous assumptions, the following cases have been selected to investigate the research question. Firstly, the Center for Development of Potato Industry in Tanzania (hereafter called CDPIT) project has been set up in 2017 through a collaboration between the Tanzanian and Dutch government. Their goal is to optimize potato production and exchange knowledge about potato production to support the Tanzanian economy, by including the BoP as producers and consumers. Secondly, DADTCO Mandioca Mocambique Lda (hereafter called DADTCO) is a for-profit company initiated in 2002, helping smallholder farmers reach the market through their cassava processing services. Thirdly, ELAGA involves the Burundian population in several agricultural activities since 2012. Mainly through the production of patchouli and their intensive fish farming practices, they invest in building entrepreneurs and income. Fourthly, HortInvest Rwanda aims to help farmers gain more income through horticulture: producing fruits and vegetables. The non-profit project started in 2017 and is an outcome of an agreement between the Rwandan and Dutch government. Lastly, the for-profit company Van Oers Senegal (hereafter called VOS) started their subsidiary of Van Oers United in 2012, to provide their customers with 'round the clock' production of vegetables. While they benefit from the good climatic and geographical circumstances of the country, they also provide a huge amount of employment opportunities and other socially oriented programs to support the Senegalese population. One difference that have to be taken into account throughout the research, is the fact that some cases are temporary projects (CDPIT and HortInvest), while others are permanent companies (DADTCO, ELAGA, and VOS).

3.2 Data Collection

For qualitative research approaches the form of semi-structured in-depth interviews can be used to get data, in order to identify and explore the antecedents and factors associated with the phenomenon of the study (Kahn, 2014). Semi-structured interviews are very well suited for the exploration of the perceptions and opinions of respondents regarding complex and sometimes sensitive issues and enable probing for more information and clarification of answers (Barribal & While, 1994). In this research, the aim is therefore to explore the perceptions and opinions of antecedents and other important factors associated with native capabilities and impact. This involves prepared questioning, guided by identified themes in a consistent and systematic manner (Qu & Dumay, 2011). Therefore, interview questions have been set up on the basis of the theoretical frameworks by Hart & London (2005) on native capability, and London (2009) on impact (figure 1 & 2). These questions were asked during the interview with a representative of the local executing organizations mentioned above. This is for the reason that they can provide first-hand information about the circumstances, activities, relationships and experiences on the ground.

The interview procedure consisted out of two phases. Firstly, the introduction gave rise to the goal of the project and asked for informed consent of the units of analysis, in addition to consent for audio-recording the interview (*Appendix A*). Secondly, the researcher asked the interview questions, which can be found in *Appendix B*. All in all, the interview took approximately 45 minutes.

3.3 Data Analysis

In order to analyze the qualitative data that was collected, interviews have been transcribed to retain the original data as close as possible. The transcription of audiotaped interviews as a method for making data available in textual form for subsequent coding analysis, is widespread in qualitative research (Gubrium & Holstein, 2001). Because transcribing an interview is time-consuming and can take up to 8-10 hours per hour of talk (Harding & Whitehead, 2013), the program Amberscipt has been used to help with producing the transcriptions. Afterwards, content analysis was applied in order to systematically transform the large amount of text into a highly organized and concise summary of key results (Erlingsson & Brysiewicz, 2017). According to Hsieh & Shannon (2005), qualitative content analysis is defined as a research method for the subjective interpretation of the content of text data through the systematic classification process of coding and identifying themes or patterns. By using a directed approach, analysis starts with a theory or relevant research findings as guidance for initial codes (Hsieh & Shannon, 2005). Therefore, the transcribed text has been coded line-by-line according to the earlier identified components of native capability and impact, based on the theoretical frameworks by Hart & London (2005) and London (2009) (figure 1 & 2). Resultingly, these codes are grouped together in the following categories: (1) working with non-

traditional partners, (2) co-creation of local solutions, (3) development of local expertise, (4) coping with central government, (5) building social contracts, (6) economic situation, (7) capabilities, and (8) relationships. Where category 1,2,3,4, and 5 belong to the theme native capability, and code 6,7, and 8 belong to impact. Data that could not be coded was identified and analyzed later on, to determine if they represented a new category or a subcategory of an existing code (Hsieh & Shannon, 2005). Ultimately, these codes, categories and themes will be serving as a base to structurally answer the research question. In addition, cross-case analysis was applied to facilitate the comparison of commonalities and differences between the cases (Khan & VanWynsberghe, 2008). The approach that has been used is case-oriented research, for the reason that potential commonalities across cases may contribute to conditional generalizations (Khan & VanWynsberghe, 2008).

4. FINDINGS

This section will firstly present overall findings on native capability (4.1) and impact (4.2). Secondly, the findings per case will be compared in the case-oriented research (4.3) to facilitate the identification of relationships.

4.1 Findings on Native Capability

4.1.1 Working with non-traditional partners

All firms are working with non-traditional partners. Mainly with local providers of inputs: seed, fertilizer, but also complete end-products. According to VOS: *''Through the nature of our operation as an independent company, we are working together with local firms who provide us with inputs or all kind of materials.''* Moreover, multiple respondents work closely together with research institutes in order to investigate the best performing crops. This is considered to be very important, especially in the agricultural sector where prices of products are strongly dependent on quality. But support from other actors – the government and NGO's in the area – is crucial too, according to DADTCO: *''The chain is as strong as its weakest link. Besides, operating in a developing country is already hard enough, so we need help from other sectors to succeed.''*

4.1.2 Co-creation of local solutions

Respondents work together with the previously mentioned partners, in order to make sure that their services add real value to the community. They are in constant consultation about the use of pre-existing solutions in their specific context. According to DADTCO: *''Our founder wanted to contribute to the African smallholders by closing the gap between supply and demand: the cities used imports, while there was no sales market for the production of the countryside.''* To do so, this firm introduced a processing unit based on the Dutch potato industry, so that products can directly be processed, and transportation to the city is easier. Furthermore, the firms highlighted that their job requires collaboration with the community to ensure quality and growth. CDPIT: *''As we are mainly here to develop and contribute to the development of the sector, we work with the very local community around us. For example, through open days we welcome the community to come in and learn from what we do.''* Another example was given by ELAGA, arguing: *''It is better to involve all the population and to do work together in associations or cooperatives, for the same goal in education, poverty, social challenges, nutrition, and so on.''* So in sum, the firms are always collaborating with the community: *''Every socially oriented project we start, is always in agreement with our employees and local people''* (VOS).

4.1.3 Development of local expertise

In order to develop local expertise, most respondents are dependent on research institutions. They help the firms to gain knowledge on the crops, on how to improve production, on how to use water and fertilizer, as well as on how the market operates, so that this knowledge can be transferred to the farmers and they can better leverage the market. According to ELAGA: *''The national research institution helped us in giving the know-how, which is very crucial as our product is a new cash crop. It is not very well-known yet, there is no documentation about how much water we need for example, so we have to make our own with the help of our research institutes.''* The Dutch Wageningen University was emphasized multiple times in different interviews to help the firms gain theoretical local expertise. But practical expertise is also considered to be important: firms learn how to leverage local conditions over the years. For example, VOS learned how to manage challenges as drought and lack of water access by employing a 'drip' irrigation system: *''So that every plant gets the exact amount of water needed, and the water use remains really efficient.''*

4.1.4 Coping with central government

All firms that were interviewed underlined the importance of an involved government, because they provide support to increase the chances of success. *''The government is our partner: because we are promoting exportation, the government quotas license us to freely import and export, with exemption of taxes''* (ELAGA). HortInvest also receives help from the government: *''In order to export, you need good packaging which is usually done in particular packhouses. Now, in the ideal condition, every exporter should have these packhouses, but they are very expensive. So the government set up a common packinghouse in partnership with our program.''* Also according to DADTCO it is crucial to have a good relationship with the government: *''I can advise every company to spend a lot of time to build a good relationship with the government.''* Finally, it is argued by HortInvest that the government is necessary in order to sustain inclusive projects, as they can continue or extend (parts of) the project after its lifetime.

4.1.5 Building social contracts

It was found that there is a lot of variation in the type of contracts that are established between the firms and their partners. Generally, the relationships with commercial partners and the government is formally arranged in contracts: *''For different partners, we have arguments signed about how our collaboration is managed. It's an idea that we have some written papers which shows what different parties needs from us, and what we are allowed to do''* (ELAGA). However, relationships are also built based on mutual trust. According to multiple respondents, in their respective country the norm is more informal then in other parts of the world: *''The relationship with farmers and other traders is much more based on mutual trust. One thing in our culture is that people work in business based on trust''* (CDPIT). But this firm is now trying to make contracts more official, so that all parties are bound by law.

4.2 Findings on Impact

4.2.1 Economic situation

A main objective of all cases is to increase the revenue of the local community and thereby improve their economic situation. There are multiple ways to do so: buying products from local producers to generate income, organizing buyer-seller markets to start negotiations that lead to better prices for farmers, teaching about good agricultural practice and the right varieties that increase income, or providing employment opportunities. Another approach is to bring farmers in contact with banks which can pre-finance activities that take a lot of cost, to enable the producers to grow good products through loans. According to HortInvest: *''We have to improve their economic situation, otherwise we cannot justify ourselves.''* Therefore, they measure

baseline production and income before providing any support, where after they are going back to the farmers to measure production and income again. In some cases, the farmer's income has gone up with 60%. And this income benefits the whole society: ''*With the volumes we buy, 4500$ to 5000$ flows into the community each day. This is spread among the farmers which will buy other stuff again, so it flows through the entire economy. The community is now able to pay for education, build a roof on the houses or build water supply''* (DADTCO). Another example has been given by CDPIT: *''We met a processor in 2018 which could only process 200 kilos a day due to a 50% loss of production, through damages. We invited him to a workshop where we brought different actors together and discussed different ways on how to develop the sector. Later, I invited him to our farm where we introduced him to new varieties. What happened is that losses were reduced to less than 5%, and his revenue increased by 300%. Now, this guy holds almost 60% market share in all local supermarkets.''*

4.2.2 Capabilities

Respondents argue that development of capabilities of the local community is very crucial in BoP settings, and the firms have different approaches to contribute to this aspect. Obviously, training is helping the farmers to create and improve their farming skills. As said by HortInvest: *''Farmers have been doing agriculture for ages based on what they have learned from their parents. We have created demonstration plots to convince them that change brings good results, and then we provide training.''* The importance of the training is highlighted by ELAGA: *''We have to work with the farmers, we have to improve their skills to make sure that we have high standards for products, so that we meet the high standards and are eligible to export the products to the European market.''* Besides farming capabilities, the firms also focus on the development of other capabilities that will be valuable to the community in the future. For example, through organizing micro-finance projects so that people in the community are enabled to build their own businesses. *''It is so nice to see that with a small capital investment, women decide to start their own business and thereby also help others''* (VOS). Moreover, firms can also offer physical resources that may increase the capabilities of the local community as highlighted by DADTCO: *''We can't perform our business without a waterhole, toilets, an office and electricity. While we can only be at one site at the time, the other sites stay open so there is always water available in the region, and our other facilities can be used as well. This helps the community too.''*

4.2.3 Relationships

Linking different local actors can be seen as a main activity of the inclusive cases that have been interviewed. To start with, the firms bring farmers together through for example cooperatives, in order to increase their power. As mentioned by CDPIT this might be harder than expected: *''When we came into the sector, it was a very young sector with a high level of fragmentation. Everybody was working in isolation. So we started bringing them together, but a big challenge that we came across was that these people do not know how to own relationships.''* So, firms start by introducing farmers to companies that produce seed and fertilizer. Later on, when production of the crops is finished, buyer-seller meetings are arranged to boost the relationships in these areas with customers. ELAGA emphasizes the importance of these interventions: *''We have to make sure that when the farmers start producing, they know where to sell the product, and to whom. We have to make sure that it is like a chain.''* This is for the reason that if the businesses arrange everything from purchase to sales, they are not creating a sustainable linkage among the farmers and the private sector. *''When we will leave prematurely, there will be a disconnect and the farmers will not be able to continue on their own. That's why the project focuses on sustainability and adaptation of improved practices by the farmers, so that when the project ends, they continue following such practices''* (HortInvest). Not only do the respondents connect buyers and sellers of products and inputs, but also relationships with the financial institutions are constructed to capacitate the farmers to produce as many products as possible.

4.3 Case-oriented Research

It can be deduced from the findings that firms make use of different activities to achieve native capability and impact. This is depicted in table 2, where key characteristics per firm are summarized. Moreover, these activities reveal relationships that are clearly summarized in Appendix C, and later on further described in the discussion.

Looking at the first aspect of native capability, it can be found that local research institutions, Wageningen University, NGO's, government agencies, cooperatives, and local providers of inputs and services are very common non-traditional partners. According to ELAGA the local research institution helps to build local expertise on the crops (Appendix C.12), and according to CDPIT the linkage to cooperatives helps to strengthen the connection between farmers and reach other companies (C.2). Interesting partners are found to be the Investment and Innovation Fund connected to HortInvest, which helps the firm to give grants to farmers in order to develop their capabilities (C.1), and the local executing organization that was employed by CDPIT to ensure transfer of knowledge.

Furthermore, table 2 shows differing approaches to co-create local solutions. However, the essence of the approach of all firms is found to be collaboration with either cooperatives, other socially oriented projects, NGO's, or the local community to seek local solutions. According to VOS, local leaders help to identify solutions for urgent local problems. As an example, their onion project was set up in consultation with these leaders, to reduce the high unemployment rate after the end of the export season. Besides extra work opportunities that offer extra income (C.3), it involves workshops and open days through which transfer of knowledge is ensured, leading to improved capabilities as well (C4). This is confirmed by DADTCO, who is necessitated to work together with NGO's in order to reach all farmers for training (C.4), because their capacity as a private company is limited.

Continuing to the third aspect of native capability, findings show that research institutions are important in the development of local expertise for ELAGA, DADTCO and CDPIT. But HortInvest and VOS have also learnt to deal with constraining conditions as drought through local or foreign experts (e.g. Wageningen University). Examples hereof are irrigation systems, better farming- and soil management techniques, so that quality and production are improved (C.6), resulting in higher revenue for the farmers (C.5). Moreover, CDPIT investigates the market, and thereby gain information on the actors. This information can be used by farmers to better leverage the relationships with those actors (C.7).

Concerning the fourth component of native capability, coping with central government, a common finding is their supportive role. Though, all firms gave different examples of how this is done: ELAGA is exempt of import and export taxes, while HortInvest and VOS are provided with facilities (respectively packhouses and farmland), and CDPIT is supported in the decision-making process. DADTCO emphasized that in order to earn support from the government they have to follow local rules (C.8), which is confirmed by VOS.

The last findings on native capability show that four out of five firms (Hortinvest, DADTCO, CDPIT, and VOS) conclude both formal and social contracts, while ELAGA only desires to conclude formal contracts. According to HortInvest, mutual trust is the basis of relationships with the local community, resulting from daily interaction and engagement (C.9).

With the intention to create impact, firms aim to increase the economic situation of local constituencies. This is achieved in different manners. On one hand, firms can ensure that farmers earn income (ELAGA, DADTCO, and VOS), for example through offering a sales market. On the other hand, firms can facilitate farmers to earn income by creating competition in market centers (HortInvest) or capacitate farmers to increase production (CDPIT). Inclusive firms oftentimes use a combination of these practices.

Moreover, capabilities are influenced through all firms by teaching (better) farming practices, based on knowledge transfer through demonstrations (HortInvest, CDPIT, and VOS), workshops (VOS), community meetings (DADTCO).

But firms also focus on the development of other capabilities through mind skills trainings (ELAGA) and grants programs to stimulate innovative ideas (HortInvest and VOS). According to ELAGA, it is very important to provide good trainings to improve farmers capabilities, in order to ensure sufficient quality and quantity, which is the basis to create revenue (C.11).

Lastly, relationships are supported when firms bring people together through the creation of cooperatives (ELAGA and DADTCO), linkages between producers and buyers (ELAGA, HortInvest and CDPIT), producers and input providers (HortInvest and CDPIT) and community meetings (DADTCO). This is for the reason that sustainable linkages must be created in order to increase production and sales, and thereby income (C.12). For the same purpose, CDPIT teaches and intermediates when building relationships. Different from these approaches is that VOS connects people through a cascading effect, where supported farmers try to support others with their business idea, creating relationships as well.

Table 2. Overview of key characteristics

	ELAGA	***HortInvest***	***DADTCO***	***CDPIT***	***VOS***
Native capability					
1. Working with non-traditional partners	Local research institution Wageningen University Cooperative	Wageningen University NGO's Government agencies Cooperative Investment & Innovation Fund	Local research institution NGO's Government agencies Local providers of services Cooperative	Local research institution Wageningen University Local executing organization Government agencies Cooperative	NGO's Government agencies Local providers of inputs
2. Co-creation of local solutions	Cooperatives	Project collaboration	NGO's	Working with the local community to develop the sector	Projects are in agreement with local community
3. Developing local expertise	Research institution Irrigation	Wageningen University Drip irrigation Safeguarding farms	Research institution New farming techniques	Wageningen University Research institution Holistic approach	Drip irrigation Consultation with local experts Soil management
4. Coping with central government	Exemption of import/ export taxes	Host for projects Continuation Common packhouses	Adjust to local rules to get support	Vote in decision making	Adjust to local rules to get support Provide farmland
5. Building social contracts	Formal contracts	Formal contracts Social contracts	Formal contracts Social contracts	Formal contracts Social contracts	Formal contracts Social contracts
Impact					
1. Economic Situation	Buying farmer's products	Market centers for competition	Buying farmer's products	Increase production	Income through employment
2. Capabilities	Teach farming practices Train mind skills	Teach farming practices Demonstrations Grants program	Teach farming practices Community meetings	Teach farming practices Demonstrations	Teach farming practices Demonstrations Workshops Grants program
3. Relationships	Cooperative Link producers to buyers	Link producers to buyers Link producers to input providers	Cooperative Community meetings	Link producers to buyers Link producers to input providers Teach to build relationships	Stimulate internal trade relations Supported farmers support others: cascading effect

5. DISCUSSION AND IMPLICATIONS

Through data collection and analysis of information-rich cases this study aims to address the influence of native capabilities on the impact of inclusive businesses. By investigating how firms become embedded in a new context, it was found that all cases are working with non-traditional partners. This is in line with the first component of native capability: the ability to create a web of trustworthy relations with non-traditional partners and non-profit organizations, NGO's, informal actors, etc. to generate bottom-up development and to understand, leverage, and build onto existing social networks (Bittencourt Marconatto et al., 2016; London & Hart, 2004). Secondly, it was found that all cases are in constant consultation with the local community to create local solutions. According to Hart & London (2005), it is necessary to maximize the functionality of the product or service in terms that are important to local users, in order to become successfully embedded in the local community. A good example of a local solution that was co-created with local users, was given by DADTCO. They introduced a technology based on the Dutch potato industry, and adjusted it to solve local problems with transportation. This kind of solutions, where developed countries support developing countries by introducing new technologies, happens more often. In these cases, it is found to be important to work together with the local community, in order to maximize the functionality of the product for BoP specific conditions. Thirdly, findings show that local expertise is created through research institutions that support inclusive businesses by gaining know-how on how to cope with specific conditions as drought or bad infrastructure. This is an example of how critical knowledge for success lies beyond the firm's boundaries (Hart & London, 2005), and how inclusive businesses deal with that. Fourthly, the cases all emphasized the importance of a good relationship with the government. This is for the reason that the government oftentimes support inclusive projects, and that they are necessary in order to sustain them. There has been some contradiction on this aspect of native capability in existing literature. While Hart & London (2005) argue that inclusive businesses should avoid central regimes by 'flying under the radar' of the government, Bittencourt Marconatto et al. (2016) found that native capabilities can be mobilized to turn government regulations and programs in favor of firms operating in the BoP contexts. It can be said that this research found evidence to support the latter, as multiple cases suggest that adapting to local regulation is a prerequisite for a good relationship with the government. Moreover, all firms indicated that support from the government is necessary in order to succeed as an inclusive firm. Fifthly, it was found that inclusive businesses build social contracts with the local community through the informal, trust based culture, which matches existing literature that emphasizes close interaction with people at the BoP (Ausrød et al., 2017). Although, basis principles on which the agricultural firms are built, for example on arrangements on land ownership, are formally arranged with the government, as well as all arrangements with this actor. On the basis of these outcomes, it can be concluded that all firms comply on all aspects of native capability, except for ELAGA which rather builds formal contracts than social contracts (Appendix D). Finally, it was found that native capability by Hart & London (2005) is a completed, as results of the interviews that do not propose any additions to the five existing components.

The findings also show positive impact on all three aspects of native capability. Firstly, the economic situation is found to be improved after the establishment of inclusive businesses. This can be said on the basis of multiple examples that were given by the cases, in which baseline measurements indicated an increase in revenue. According to London (2009) the economic situation also comprises better prices, greater access to needed products and the number of jobs available, which are all provided by the inclusive firms in this research. Secondly, findings of the interviews show that the firms are supporting farmers by providing trainings, demonstrations, open days, micro-financing projects, but also physical resources as access to water, offices and toilets. It can be said that these opportunities, intellectual resources, and physical resources affect the self-esteem, contentment and aspirations of the community (London, 2009), resulting in a wider range of capabilities. Thirdly, it can be said that the findings show an increase in the development of partnerships and networks through the facilitation of inclusive businesses, as proposed in literature by London (2009).

Given these findings, it can be concluded that all cases possess native capability and successfully create impact at the BoP (Appendix D). However, as found in the cross-oriented research, firms use many different approaches to achieve this. As a result, it was found how the components of native capability influenced impact, aiming to give an answer to the proposed effects in table 1. According to HortInvest, creating sustainable linkages among the farmers and the private sector is a main activity in order for farmers to sustainably reduce poverty: building relationships with potential customers, but also with financial institutions for example, to expand the sales market (C.2) and improve access to resources (C.1), will enable critical constituencies to move away from poverty on their own. This is confirming the expected relationship between the capability to work with **non-traditional partners** and impact that is created through **relationships**, and additionally it also effects the creation of **capabilities**. VOS showed that collaboration with the local community fosters the creation of local solutions. An example is the onion project that has been created with help of local leaders: the employment opportunities positively influence famers' economic situation (C.3) and the trainings positively influence farmers' capabilities (C.4). This confirms the relationship between **co-creation of local solutions** and impact in terms of improving the **economic situation** as well as **capabilities**. Through ELAGA and DADTCO it has been found that local expertise on the crops leads to better (intellectual) capabilities of the farmers (C.6), as well as a chance at higher revenue (C.5) through better quality and higher quantity production. This implies a positive effect between working with **non-traditional partners** and development of **local expertise**, and confirms the expected relationship between the development of **local expertise** and impact in terms of the **economic situation** as well as **capabilities**. Moreover, CDPIT showed that gaining expertise on the local market helps to build relationships as well (C.7), implying an additional positive relationship between the native capability to develop **local expertise** and impact in terms of **relationships**. Moving to the influence of **coping with the government**, the fourth component of native capability, DADTCO shows that sticking to governmental regulation fosters the **relationship** (C.8). Continuing with the results of CDPIT, it was found that actors are brought together to create sustainable relationships on a trust-based culture, thus without formal contracts. This indicates a positive relationship between the capability to **build social contracts** and impact in terms of **relationships** (C.9), as assumed in table 1. All in all, the findings of the interviews show significant evidence to confirm the proposed relationships in table 1. But findings also reveal five new relationships. Firstly C.1, and secondly C.7, which have been explained above, have not been expected in table 1. Thirdly, through ELAGA, it has been found that by collaborating with **non-traditional partners**, the firms **build local expertise** (C.10). Fourthly, through ELAGA it has also been found that trainings improve the capabilities of farmers, which results in production of higher quality and more quantity, providing more

revenue. This implies a positive relationship between the **capabilities** and the **economic situation** of critical constituencies (C.11). And finally, HortInvest implied that sustainable linkages among the farmers and the private sector ensure that farmers can produce more products, sell more products, and resultingly earn more money (C.12). This suggest a positive effect of **relationships** on the **economic situation** of buyers, sellers, and the community.

6. CONCLUSION

6.1 Main Findings

In order to answer the research question *''How do a firm's native capabilities influence the impact of inclusive business models in BoP contexts?''* three sub-questions have been investigated throughout this paper.

Firstly: *''How is native capability defined in existing literature?''*, has been answered in the theoretical framework. Based on existing literature by Hart & London (2005), Bittencourt Marconatto et al. (2016) and Ausrød et al. (2017), it was found that native capability is the ability to become embedded in the local landscape, to become indigenous to local conditions, and to show respect to the local culture and natural diversity, by: (1) working with non-traditional partners, (2) co-creating local solutions, (3) developing local expertise, (4) coping with the government, and (5) building social contracts.

Secondly: *''How can the impact of inclusive businesses be measured''*, has been answered in the theoretical framework as well. The Balanced Scorecard by Kaplan and Norton (1992), the Performance Prism by Neely, Adams and Kennerly (2001), and the Base of the Pyramid Assessment Framework by London (2009) are all found to be suitable to measure the impact of inclusive businesses at the BoP, considering their measures are reaching beyond financial performance indicators. By taking a closer look at the dimensions of the frameworks, it was decided that the framework by London is best suitable to explicitly measure the impact of inclusive businesses in BoP contexts, as it is specifically developed to do so. This holds that impact is achieved when firms improve the economic situation, capabilities and relationship of critical constituencies as sellers, buyers, and the community.

Thirdly: *''To what extent do companies possess native capabilities''* required qualitative research methods to be answered. Therefore, interviews have been held with five cases operating in the agricultural industry in different African countries. In the findings it became clear that all cases, except for ELAGA, complied on all components of native capability. While ELAGA complied on all components, except for 'building social contracts' (Appendix D). For this reason, it can be said that inclusive businesses in the agricultural sector in Africa sufficiently possess native capabilities.

Finally, the main research question *''How do a firm's native capabilities influence the impact of inclusive business models in BoP contexts?''* has been answered in the findings and discussion. Besides that all seven proposed relationships (table 1) have been confirmed, five new relationships have been found as well, resulting in twelve relationships between the respective components of native capability and impact. A table similar to table 1 would not be able to represent these expected and newly found relationships, as it only shows nine out of twelve relationships (Appendix E). Therefore, figure 3 is created, showing how native capability influences the impact of inclusive businesses in the BoP context, and thereby giving answer to the main research question of this thesis.

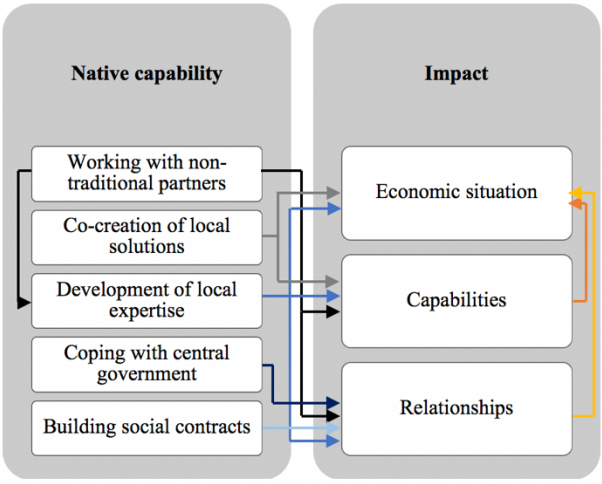

Figure 3. The influence of native capability on impact

6.2 Limitations and Future Research

Although it was tried to minimize limitations, some of them were inevitable and might be addressed by future research. First of all, the qualitative nature of the study brings some implications regarding data collection and analysis (Atieno, 2009). As it is the researcher that takes the role of primary data collection instrument, the researcher may possible influence the behavior and speech that was witnessed (Mays, 1995). Second, it can be said that all cases showed extremely positive results considering their native capability and impact. In order to resolve these limitations, triangulation can be applied by future research to objectify the findings of this thesis. The use of different researchers, samples, time frames, methodological approaches, etc. will result in a more objective 'truth' of the findings (Barnham, 2015). Third, this research was conducted within a limited timeframe, resulting in a limited sample. Only five cases could be interviewed and analyzed, which offers no scientific basic for generalizations on the concepts. However, the research has compensated for this limitation through critical case sampling, resulting in information-rich cases, so that information saturation was achieved earlier. For the same cause, it was decided to focus on one specific sector. Therefore, future research could investigate the influence of native capabilities on impact in other sectors as well, to facilitate generalization and/or comparison.

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9. APPENDIX

Appendix A. Introduction of the interview

Firstly, I would like to thank you for your time to contribute to my research! I am Britt, a third-year student from the University of Twente, studying International Business Administration. For my thesis, I am doing research into the impact of inclusive business models in Africa, mainly focused on the agricultural sector. My thesis is part of a funded research project by the University of Twente and other partners, into scaling inclusive business models.

I want to highlight that participation in this interview is completely voluntary, and you have the right to withdraw from the research at any time. Besides, I want to mention that there are no risks or consequences related to this research, similarly no direct benefits. I expect the interview to take about 30-45 minutes.

I want to ask permission to record this interview, so that I can make effective use of everything that is said during the interview, without forgetting important parts. I am the only person who is going to listen to the record, and I will destroy it as soon as I am finished with my thesis. The transcripts will be shared with project members, and might be used for further investigation and research publications, unless indicated otherwise. We would also like to include your company name in the research, if permitted to do so. However, personal information (names, etc.) will never be used in publications.

Lastly, if you have any questions during or after the interview, please ask!

Appendix B. Interview questions template

1. How did [Company Name] start in [Year]? And why?

2. Could you give examples of local partners with whom you work together?

3. How important are the relationships with local partners?

4. How do the (agricultural) activities from [Company Name] create value for the local community in [Location]?

5. Does [Company Name] work together with the local community to create or improve products and services?

6. How does [Company Name] (learn to) cope with local conditions in [Location] as drought and bad infrastructure?

7. Is [Company Name] involved with the government when doing business?
   If yes, how is [Company Name]'s relationship with the government?

8. How are [Company Name] relationships with partners and government formed?
   Are agreements highly formalized or either based on mutual trust?

9. Does [Company Name] help to improve the economic situation of its sellers, buyers, and the community in [Location]? If yes, how?

10. Does [Company Name] suffer from competition of other agro-industrial firms in the area?

11. Does [Company Name] offer opportunities for its sellers, buyers, and people in the community to develop their capabilities? If yes, how?

12. Does [Company Name] help to form, build, and shape relationships between local stakeholders (for example sellers, buyers, and the community)? If yes, how?

13. Where do you want [Company Name] to go in the future? What is the ideal future situation?

14. What challenges does [Company Name] face to achieve this ideal situation?

Appendix C. Overview of relationships with supportive quotes

	Independent variable	Dependent variable	Quote
C.1	Working with non-traditional partners	Capabilities	*''At the national level we are working with many companies, from which an very interesting feature is the Investment and Innovation Fund. If the farmers have some very good ideas (…) that brings innovation, we give some grants on a competitive basis.''* (HortInvest)
C.2	Working with non-traditional partners	Relationships	*''One component of the project is potato business. The impact that we create is that we link farmers to cooperatives, to businesses. And by businesses I mean, let them be seed companies, financial institutions, and so on.''* (CDPIT)
C.3	Co-creation of local solutions	Economic situation	*''Together with local leaders we keep looking how we can add value to the local community. Therefore, we started the local onion project a few years ago.''* (VOS)
C.4	Co-creation of local solutions	Capabilities	*''We need to teach the farmers basic lessons in order to produce more volume, so that they can sell more and earn more money. That is an huge program, and that cannot be done by the private sector alone. So that is where the research institutions and the NGO's step in.''* (DADTCO)
C.5	Development of local expertise	Economic situation	*''For quality and production it is very crucial to have the national research institution with us. It gains a lot of experience in searching and building the crops.* (ELAGA)
C.6	Development of local expertise	Capabilities	*''Our supply chain starts with the local research institution, which investigate the best performing varieties.''*(DADTCO)
C.7	Development of local expertise	Relationships	*''In the potato market we try to do as much research as possible on the operation of the market. And we use that information, share that information with the farmers, so they can better leverage the markets.''* (CDPIT)
C.8	Coping with central government	Relationships	*''Our relationship with the government is really good. (…) We have to stick to the rules. A lot of people think that is nonsense in Africa, but we have to stick to the same environmental rules for example.''* (DADTCO)
C.9	Building social contracts	Relationships	*''There are relationships of course based on mutual trust as we have to engage, interact with these people on a daily basis.''* (HortInvest)
C.10	Working with non-traditional partners	Development of local expertise	*''For quality and production it is very crucial to have the national research institution with us. It gains a lot of experience in searching and building the crops. So that's why we have local partners in certain areas to help us in the project.''* (ELAGA)
C.11	Capabilities	Economic situation	*''We have to provide very good trainings, because otherwise we would not get the quality we meet, and then we are not allowed to export. To reach that quality, we have to follow and train the farmers.''* (ELAGA)
C.12	Relationships	Economic situation	*''We are trying to create sustainable linkages among the farmers and the private sector. (…) So the farmers can produce more and sell more, so their income increases.''* (HortInvest)

Appendix D. Overview of findings per firm

		Firm				
		ELAGA	*HortInvest*	*DADTCO*	*CDPIT*	*VOS*
Native Capability	*1.1 Working with non-traditional partners*	Yes	Yes	Yes	Yes	Yes
	1.2 Co-creation of local solutions	Yes	Yes	Yes	Yes	Yes
	1.3 Development of local expertise	Yes	Yes	Yes	Yes	Yes
	1.4 Coping with central government	Yes	Yes	Yes	Yes	Yes
	1.5 Building social contracts	No	Yes/ No	Yes/ No	Yes/ No	Yes/ No
Impact	*2.1 Economic situation*	+	+	+	+	+
	2.2 Capabilities	+	+	+	+	+
	2.3 Relationships	+	+	+	+	+

Appendix E. Influence of native capability on impact

		Impact		
		Economic situation	Capabilities	Relationships
Native capability	Working with non-traditional partners		+	+
	Co-creation of local solutions	+	+	
	Development of local expertise	+	+	+
	Coping with central government			+
	Building social contracts			+