



## Strengthening

Agribusiness Ethics,

Quality Standards,

& ICT Usage in

Uganda's Value Chains

# AGRI-QUEST

## RESEARCH PAPER SERIES

Research Paper No. 1:

### **Institutional Voids and the Consequences for Food Security: An Examination of the Agricultural Industry in Uganda**

**Zoë M.A. Donker, Christopher Wickert**  
(VU University)

**David Katamba, Andrew Seruma**  
(Makerere University Business School)

**AGRI-QUEST Research Paper Series** provide state-of-the-art background evidence-based knowledge about topics related to ethics, quality standards; sustainability, and Corporate Social Responsibility (CSR) in agriculture in the context of Uganda. They are part of the broader AGRI-QUEST research project funded by The Netherlands Organisation for Scientific Research (NWO-WOTRO).

For more AGRI-QUEST details, contact:

**David Katamba,**  
AGRI-QUEST Lead Researcher  
Website: [www.agriquestuganda.com](http://www.agriquestuganda.com)  
Email: [info@agriquestuganda.com](mailto:info@agriquestuganda.com)  
Tel: +256 774972532; +256 752794612

© AGRI-QUEST, July 2016

A project mainly financed by:



Implemented by:



## Abstract

When looking at the relatively young literature on institutional voids, a gap can be found on its effects on individual market players, as opposed to the market as a whole, and on mechanisms to deal with such voids. With food security being high on the priority list of the UN's Sustainable Development Goals, our aim is to uncover how institutional voids influence Ugandan food producers in their decision to export or produce for the local market; and how and by whom these institutional voids are dealt with, in addressing the issue of food security. This was done through an inductive research, conducting semi-structured interviews on the issues perceived and recognized by different stakeholders in the Ugandan food sector when targeting the local market and/or the export market, resulting in an overview of issues regarding the export market evolving around high costs, high quality standards and the pressure for continuous supply; and for the local market around the low returns, the risk and uncertainty, and interestingly the negative effect of regional export on the food security. These problems can be linked to institutional voids such as a lack of policies and regulations, enforcements mechanisms, institutions providing access to credit, and problems regarding infrastructure, physically and cognitive. Through associations and cooperatives, knowledge is shared, members are linked to important stakeholders within the value chain, chances of access to credit are higher, communication flows are improved and the so-called farmer-ownership model is introduced, which altogether seems to be successfully dealing with the major impediments caused by institutional voids. This implies that grouping into associations could be seen as bottom up mechanism to dealing with institutional voids. With the farmer-ownership model being introduced in the coffee industry, the recommendation to try to adjust and implement this model in other value chains as well.

## Introduction

The 17 Sustainable Development Goals (SDG), introduced by the United Nations (UN) in 2015, are part of the UN's 2030 Agenda for Sustainable Development and exist of 169 associated targets. They build on the Millennium Development Goals (MDG), set out by the UN in 2000 to tackle development issues, and they seek to complete what the MDGs failed to accomplish. The greatest challenge, the first goal, is eradicating poverty. This is followed by ending hunger, ensuring a healthy life and goals on education, gender equality, country equality, sanitation and energy as well as on climate change and the reversal of land degradation.

In 2012 the UN estimated that the continuous growth of the world population demands food production to double in the successive 20 years (Food and Agriculture Organization [FAO], 2012). This gave an extra impetus to adoption of the SDG's and is thus considered a pressing issue that asks for emphasis. Therefore we focus is on the second SDG to end hunger, achieve food security and improved nutrition and promote sustainable agriculture. However, improving food security globally is a very complex task as food security encompasses more than enough calories to survive alone. As defined by the FAO (2003, p. 29) 'food security exists when all people, at all times, have physical, social and economic access to sufficient, safe and nutritious food which meets their dietary needs and food preferences for an active and healthy life. Household food security is the application of this concept to the family level, with individuals within households as the focus of concern.'

Research on improving food security has been focused on techniques to improve yields, increasing production limits, reducing waste and changing diets (Godfray et al., 2010), on biodiversity management (Toledo & Burlingame, 2006), the problematic use of non-renewable resources (Cordell, Drangert & White, 2009), and the impact of climate change on food security (Schmidhuber & Tubiello, 2007). However, the effect of

A project mainly financed by:



Implemented by:



companies exporting or serving the local market on food security has not been considered widely. Western institutions and organizations promote trade liberalization and globalization and there is a clear push for increasing export of developing countries in the name of sustainable development (UN, 2015). On the other hand, issues with food insecurity are still pressing in most developing countries, causing the demand for food provision to the local market. Little attention has been given to this decision companies face in developing countries and how this influences their food security.

From examining the statistics, Uganda is an important country to conduct research on food security. A 2014 report by the United Nations Conference on Trade and Development (UNCTAD) on the Least Developed Countries (LDCs) shows that Uganda's progress towards the goal to eradicate extreme poverty and hunger is far behind on track. The proportion of undernourished people in the developing regions has fallen by almost half since 1990, from 23.3 per cent in 1990–1992 to 12.9 per cent in 2014–2016. In Uganda however, the progress on the proportion of undernourished population is stagnating/in reversal over the past 25 years, with 23,2 % in 1991 and 25,7% in 2013 (FAO, 2015; UNCTAD, 2014).

Data collected for this study suggests that the decision to target the local or the export market is largely influenced by issues caused by a lack of financial means, a lack of facilities, of knowledge and of enforcement mechanisms, creating difficulties for food producers in targeting both the local market and the international market. The issues pointed to a lack of institutional mechanisms, so-called 'institutional voids' (Khanna & Palepu, 1997, 2010; Mair & Martí, 2009; Mair, Martí, & Ventresca, 2012).

This raised the question: how are local food producers, such as farmers and processing companies, influenced by the lack of institutional mechanisms in their decision on their target market? Previous research on institutions pointed out the importance of

institutions in creating a successful functioning market economy and that they influence the actions of market actors (World Bank, 2002; Mair, Martí & Ventresca, 2012). Research on institutional voids however, has been focused on the effect on markets as a whole, and not on the individual market actors confronted with them.

It is important to address this gap in the literature because the consequences of institutional voids and how farmers and other food producer's deal with them might influence the effect they have on their own food security. Also it is important to find out by whom and in what manner the institutional voids are dealt with currently. When light is shed on the issues caused by institutional voids, their influence on the choice made between serving the local market or the export market, and how this affects food security, this could create more awareness for the consequences of choices made and thereby could open up the opportunity to deal with food security more effectively by food producing companies.

Therefore, the research question asks:  
*In addressing the issue of food security, how do institutional voids influence food producers in Uganda in their decision to export or produce for the local market; and how and by whom are these institutional voids dealt with?*

We addressed this question through an inductive research on the issues perceived and recognized by different stakeholders in the Ugandan food sector when targeting the local market and/or the export market. The qualitative data showed that issues regarding the export market evolve around high costs, high quality standards and the pressure for continuous supply. When targeting the local market, the difficulties are related to the low returns, the risk and uncertainty, and interestingly the perceived negative effect of regional export on the food security. Regional export causes produce initially meant to feed Ugandans to flow to neighboring countries, which negatively influences food security.

The analysis also gave some interesting insights to the second part of the main question on filling the institutional void, namely

that associations and cooperatives, bringing farmers and other stakeholders of the value chain together, and implementing the so-called farmer-ownership model, seem to be successfully dealing with the major impediments caused by institutional voids. This model was introduced in the coffee industry, which is focusing on export and only indirectly influences food security through improving income, but a detected move in the same direction by the potato industry leads to the recommendation to try to adjust and implement this model in other value chains as well.

The complex network of interrelated issues underlying the problem categories will be discussed in the result section, after giving insight into the current status of literature regarding institutional voids and an extended description on methods used. Finally we will end with the conclusion and discussion including suggestions for future research and limitations.

## Theoretical Background

### Institutions

Markets are seen as an effective mechanism to realize continuous improvement of living standards around the world (World Bank, 2002). Academics of multiple domains consider institutions prerequisites for the existence of markets and market based activity - e.g. property rights, control mechanisms, governance structures, exchange rules, money, autonomy - and successful functioning of them - e.g. enforcement, governance mechanisms, disclosure requirements and intermediaries (Mair & Martí, 2009). Institutions play a key role in developing a market economy and in determining the actions of market actors (World Bank, 2002; Mair, Martí & Ventresca, 2012). Institutions form, as North (1991) described it metaphorically, the 'rules of the game'. There are multiple definitions, one given by North (1991, p. 97) is: 'Institutions are the humanly devised constraints that structure political, economic and social interaction'. However, this is fairly broad, encompassing many social and political aspects on which economic decisions are based.

A more specific definition being: 'Economic institutions shape economic incentives, the incentives to become educated, to save and invest, to innovate and adopt new technologies, and so on. Political institutions determine the ability of citizens to control politicians' (Banerjee & Duflo, 2011, p. 360) seems more suitable for this research because it points to how organizational behavior is shaped by the institutions and institutional arrangements in place. This definition however says what institutions tend to do, not necessarily what they are.

The World Bank (2002 p. 6) in their report *World Development Report: Building institutions for markets* describe institutions succinctly as 'rules, enforcement mechanisms, and organizations.' They are 'the rules, including behavioral norms, by which agents interact, and the organizations that implement rules and codes of conduct to achieve desired outcomes'.

Institutions can be either informal, such as sanctions, taboos, habits, traditions, and codes of conduct; or formal, like constitutions, the law, property rights, and governmental regulations (North, 1991; World Bank, 2002; Mair, Martí, & Ventresca, 2012). In all countries, developing or developed, there is reliance on informal institutions such as social codes of conduct, but in poor countries the reliance on informal institutions is relatively high, since formal institutions are often less developed. Informal institutions tend to be substitutes for formal institutions, as opposed to being complementary, which they are in developed countries (World Bank, 2002).

### Institutional voids

When institutional arrangements that are supposed to be in place to enable and support market activity are weak, missing, or fail to accomplish what they intend to do this is referred to as 'institutional voids' (Khanna & Palepu, 1997, 2010; Mair & Martí, 2009; Mair, Martí, & Ventresca, 2012). The existence of institutional voids can negatively influence the formation of markets, development, and economic growth. Mair, Martí and Ventresca (2012) point out that a context in which there

are no institutional arrangements is very rare, if it exists at all. Most often there are some institutions or institutional arrangements in place, however, they may not be aligned and therefore create a complex context for markets to exist in.

Mair, Martí, and Ventresca (2012) examined the institutional void in the context of Bangladesh, a country rich in traditions and informal institutions, but lacking formal institutions as found in Western market economies. This context suggested that institutional voids are caused by an interaction between ‘the existing power structure, legacy institutions, and recently introduced institutional practices’ (Mair & Martí, 2009, p. 420), in their case micro financing. In their study they did not focus on the absence or weakness of modern market institutions, but on how they are situated in a context that is multi-institutional, what they refer to as an ‘institutionally complex context’. They examined how institutional voids arise and what the consequences are for market participation and access, focusing on two modern market institutions – autonomy and property rights – and they found that modern market institutions are in contradiction with the local arrangements often in place in a community (Mair, Martí, & Ventresca, 2012). These conflicts cause some parties, such as women and poor, to be denied access from ‘playing the game’, a topic not given much attention to in literature so far (Mair & Martí, 2009), but considered important by more and more development actors asking for attention for this exclusion as a consequence of institutions (World Bank, 2002). Therefore Mair, Martí and Ventresca’s (2012) approach focuses on those who are excluded from markets and how institutional interfaces are responsible for this.

Khanna and Palepu (2010) in their book ‘*Winning in emerging markets: A road map for strategy and execution*’ focus on how the institutional voids in emerging markets shape the opportunities and challenges for (international) businesses operating or entering these markets. They point out that emerging markets often fail to provide

institutions that are necessary to guide the functioning of it (Khanna and Palepu, 1997). Players in emerging markets for instance, often suffer from a lack of information. The infrastructure through which communication effortlessly takes place in the developed West is not as well organized in developing countries, which suffer from power shortages, high power prices and slow, unreliable postal services. The institutions and mechanisms that make capital markets successful in the developed world, such as venture capital firms and reliable financial reporting, are largely missing too in emerging markets, making it difficult to attract investors (Khanna & Palepu, 1997). Khanna & Palepu (2010) create a framework and toolkits for organizations to find out which institutions are present and which are absent, how the business model is affected by voids and how a competitive advantage can be created when working the voids right. Voids can thus be seen as opportunities as well, by serving as intermediaries (Khanna & Palepu, 2010). The focus of this book however is on directing the big players, Western multinationals or ‘emerging giants’, big companies based in emerging markets.

The literature on institutional voids has so far been focused around three broader aspects; the negative effect on a market’s functioning, the constricting effect on the development of markets, and the impediment of market participation. The market is the main subject in all three areas. This leaves a gap in theory on the impact of institutional voids on individual market players, such as in this case smallholder farmers and food producing firms. Literature does not explain how institutional voids influence their behavior and how institutional voids are dealt with; how they affect and constrain firm’s decisions and how it creates problems that companies and individuals face. Research on this would be beneficial to firms operating in an economic system suffering from institutional voids. Therefore we are interested not in the market as a whole, but in the level of the firm.

In the light of the second Sustainable Development Goal to end hunger it is also

important to know how local food security is impacted by the production for the export market or local market, a topic that has not been addressed by literature on institutional voids or by literature on food security.

With the focus on how food producers and smallholder farmers make the decision between producing for export or for local consumption and how this is influenced by the lack of institutional support, the question that follows is how these institutional voids are dealt with. Who is responsible for the existence of institutional voids and who steps in when they occur?

### Filling the void

Discussion about the markets in developing countries is largely focused on who is responsible for creating the institutions needed for markets to exist and function. Agreement is reached between different disciplines - political scientists, economic sociologists and an increasing number of economists - that building such institutions is the responsibility of the state and thus the government (Mair & Martí, 2009). The discussion evolves around the scope of intervention and how they intervene. The question relevant for most developing countries is what if the state does not fulfill this role and fails to create the necessary market institutions, when they are weak, or when the structures in place are corrupt?

The appearance of business groups as a mechanism between firms to fill in the institutional voids on firm level is increasingly mentioned in research (Khanna & Palepu, 2000; Khanna & Rivkin, 2001; Mair & Martí, 2009). Leff (1978, p. 663) describes a business group as 'a group of companies that does business in different markets under a common administrative or financial control', with its members connected by mutual trust based on a comparable personal, ethnic, or commercial background. With a lack of agreement on what a business group is exactly, Khanna and Rivkin (2001, p. 47/48) combined different studies to come to the broad definition of a business group as 'a set

of firms, which, though legally independent, are bound together by a constellation of formal and informal ties and are accustomed to taking coordinated action'. In emerging markets such business groups may arise in response to market failures and the high transaction costs related to that. The transaction costs tend to be high especially in emerging economies due to weak institutions (Khanna & Rivkin, 2001).

Business groups thus may assist in filling some voids, however, Mair and Martí (2009) argue that business groups tend to focus on their main objective; creating and capturing monetary value. Therefore they fill voids that offer them an interesting business case, it must be profitable. Voids that do not directly or immediately result in an economic yield are left unfilled. So what happens then when both the government and business groups fail or are not strong enough to form institutions necessary for the markets functioning?

Mair and Martí (2009) asked themselves this question and suggested another actor that might intervene to fill the voids, namely the social entrepreneur. As opposed to the regular entrepreneur who is mainly driven by the creation of economic value, like business groups, the social entrepreneur has as a main objective to create social value to stimulate sustainable development and secondly, in order to do so economic value must be created as well, otherwise the business would not be viable. The social entrepreneur does not consider the market as an end in itself just to generate revenue, but, as also stated by the World Bank (2002), as a means to continuously improve living standards, meaning social and economic development. To stimulate the creation of well-functioning markets, social entrepreneurs engage in building and shaping institutions. Mair and Martí (2009) and Mair, Martí and Ventresca (2012) used BRAC, an NGO in Bangladesh as a case study of such an entrepreneurial intervention to study when, where and how they act. With BRAC already reaching about 80 percent of the villages in Bangladesh it makes an excellent example to study social

entrepreneurship. But what if there isn't a big player such as BRAC active to fill the void?

This study aims to find out how the institutional voids are dealt with and who are the ones that are trying to address and fill them in a Ugandan context, where there is not one substantial NGO – like BRAC in Bangladesh – working on filling the institutional voids left by the government and where corruption is high, as mentioned by multiple interviewees as well, and civil society is not very powerful (Embassy of the Kingdom of the Netherlands in Kampala, Uganda, 2014). In such a situation market participants such as smallholder farmers and private firms might be the designees to step in and create their own mechanism to fill the voids where possible or deal with them together in an adequate and efficient way in order to minimize the impediment.

## Methods

A qualitative research method was followed in order to formulate and answer to the research question proposed earlier. According to theory on research methods, a qualitative method fits the question best (Van de Ven, 2007), since the theory on institutional voids is still fairly young and as to yet missing on firm level, making this research exploratory. According to Edmondson and Mc Manus (2007) a 'nascent theory' proposes tentative questions to how and why, which asks for qualitative approaches and methods. Taking both the strengths of the method and the limited timeframe for this research into account, interviews are chosen as a suitable method. Semi-structured interviews are a method that can provide in-depth information and allows the interviewer to probe for clarity and for more detailed information (Johnson & Turner, 2003). This is useful in an exploratory situation, especially where the difference in culture and different interpretation of concepts may ask for this flexibility. In the next sections the choice for the Ugandan research setting will be explained and we elaborate on the data collection and analysis methods.

## Research context

Uganda was chosen as a suitable context for this research for two reasons. Firstly, the country has not met the target of alleviating hunger. The 2015 Hunger Map by the FAO shows the achievement of the MDG hunger target towards halving, between 1990-92 and 2015, the proportion of people suffering from undernourishment, or to bring this proportion below 5 percent. It shows that Uganda is among the countries with the worst results, not having achieved the target, with lack of progress or deterioration. The proportion of undernourished people in the developing regions has fallen by almost half since 1990, from 23.3 per cent in 1990–1992 to 12.9 per cent in 2014–2016. In Uganda however, the progress on the proportion of undernourished population is stagnating/in reversal over the past 25 years, with 23,2 % in 1991 and 25,5% in 2014, an impairment of 10,2% so far, (FAO, 2015; UNCTAD, 2014). Undernourishment means that a person is not able to acquire enough food to meet the daily minimum dietary energy requirements, over a period of one year (FAO, 2015). FAO (2015) defines hunger as being synonymous with chronic undernourishment. The World Food Programme (WFP), 'world's largest humanitarian agency fighting hunger worldwide, reported in 2014 that 50% of the children were undernourished at that time. "Despite continued investment by the Government of Uganda and donors, malnutrition remains a serious problem" (WFP, 2014). This makes research to the impact of companies' decision making on food security very relevant and necessary for Uganda.

Secondly, its institutional situation makes Uganda a suitable country for this research. With its central location Uganda tries to strengthen its role in the East African economy, a fast growing regional market, with the goal of attaining middle income status in the next 25 years. These aspirations are threatened by, amongst other things, an imperfect functioning system of rule of law, and an unsatisfactory regulatory framework for doing business, ineffective governance institutions, and complications around land

access and ownership, and access to resources for exploitation or energy. Over 70 per cent of the workforce is active in the agriculture sector, but budgetary allocation to agriculture does not exceed 4.1%. As pointed out by the Dutch embassy (2014) 'the governments supporting and regulatory functions are weak: agricultural policies are all there and look well on paper but suffer from poor implementation'. A plan for strategy development of the agricultural sector by the Ugandan Ministry of Agriculture, Animal Industry & Fisheries (2010) on agriculture, to improve food and income security, pointed out that the agricultural sector suffers from implementation of agricultural laws and policies, and weak public agricultural institutions. This shows the failing institutional support and thus the existence of institutional voids (Khanna & Palepu, 1997, 2010; Mair & Martí, 2009; Mair, Martí, & Ventresca, 2012) that Ugandan food producers are dealing with.

Despite these issues, Uganda has a drive towards market based economic growth (Embassy of the Kingdom of the Netherlands, 2014). This makes Uganda an interesting country to research the issues market players experience in reaching a market, either locally or internationally.

### Data collection

Data collection took place in Uganda, between March 24<sup>th</sup> and April 12<sup>th</sup> 2016, coordinated by AGRI-QUEST and VU University. The data gathering was done through company visits, informal conversation, but mostly through formal, semi-structured, open-ended interviews and with different stakeholders of multiple food supply chains. An overview of the interviews and interviewees can be found in Appendix 1.

The data collection started by searching for suitable participants. Due to the relatively short stay in the country and the preference to have face-to-face interviews on site, it was necessary to rely on Ugandan colleague researchers to get in touch with suitable participants. Their existing social network and knowledge of the Ugandan culture made it possible to collect the necessary data within the limited timeframe. In consultation with all

researchers the different types of participants needed were mapped out and contacted by our Ugandan counterparts to set up interviews and visits during our stay. None of the candidates that were approached declined our request.

With Kampala being the capital and therefore the center of trade and export but also the biggest local market, it made a suitable area to talk to food producing companies involved in export and providing food to local markets. A three-day excursion to smaller cities and rural villages was planned to be able to talk to farmers in remote areas as well, in order to get an understanding of the difficulties they are facing in targeting a market, either export or locally. Besides interviews extensive field notes were taken, writing down every possible detail that might lead to extra insights later. We also consulted local papers to gain extra insights on the Ugandan context and to gather extra data relevant to this research.

Interviews were mostly held during company visits at companies' headquarters. This was interesting because it created the opportunity to have informal conversations before and after the interviews and in most cases a tour behind the scenes was offered or planned in advance to provide us with contextual details and insight in the daily processes of the businesses and to support the stories told during the interviews. During all visits and interviews handwritten notes were taken, which were further refined and extended immediately after leaving the companies' site.

The interviews held were semi-structured and exploratory, with an initial aim of finding out how food producers perceive the problems and the factors that influence the choice between production for the local market or for export. Questions were focused on the reasons and problems people encounter when they focus on either the export market or the local market, the internal and external factors that play a role in this decision and how their decision is related to the food security in the country and vice versa. The duration of the 15 interviews was between 9 minutes and 83 minutes, with an average of 45 minutes, and



all interviews were recorded on tape – with consent – and fully transcribed. To create trust and stimulate the participants to share as much information as possible it was assured that answers given would only be used in the context of this research and for no other means.

By re-listening the recorded interviews and going over field notes from visits as well as informal conversation, and even pictures from the field trips, the idea came to mind that the overarching problem behind the issues on both the local and the export market have to do with failing institutions. This led to the revision of the initial theoretical framework focused on paradoxical tensions (in this case between a push for export and the local issue of food insecurity), to a focus on institutional economics and specifically the problem of institutional voids.

### Data analysis and interpretation

After transcribing the recorded interviews, inductive coding (Gioia, Corley & Hamilton, 2013) was used as a method to extract theoretical categories from the data. Prior to coding the transcribed interviews from all 7 researchers were shared in order to create a more extensive database and in case interesting and useful information was shared during an interview held by colleagues. This was possible due to the strong relatedness of the different researches. Prior to the actual coding all interviews were thoroughly read and re-read.

After this a first round of open coding (Locke, 2001) resulted in a very large amount of labels describing (parts of) phrases that were closely linked to quotes in the data. Labels were assigned to different parts of text keeping the background such as the function of the interviewee in mind. During a second round we looked for similarities and revised the different labels, through which patterns emerged resulting in a list of around 30 1<sup>st</sup> order concepts. These concepts were abstracted from the data but still mostly expressed in terms of the interviewees (Gioia et al., 2013). During the process of creating the concepts we constantly switched between

reviewing the data and the arising categories in order to create concepts that fit the data best.

In the next step we moved to a higher level of abstracting 2<sup>nd</sup> order themes, grouping the 1<sup>st</sup> order concepts to build overarching categories with the aim of uncovering the issues experienced by food producers and the mechanism to deal with these issues, to fill a gap in the relatively young research field of institutional voids. Lastly we extracted three aggregate dimensions grouping the 2<sup>nd</sup> order themes based on the issues when focusing on exporting, on the local market, and an apparent successful mechanism to deal with the issues. The procedure of inductive coding resulted in a list of 1<sup>st</sup> order concepts, grouped into 2<sup>nd</sup> order themes, which are specified in Tables 1-8, and ultimately in aggregate dimensions, graphically represented in figure 1. The tables also show interview quotes to illustrate each theme.

In the following section we present the findings discussing the aggregate dimensions that emanated from the data, being issues food producers face when targeting the export market and the local market and how associations and cooperatives operate to fill the institutional voids to deal with these issues.

## Results

The interpretative analysis resulted in an overview of interrelating problems that food producers face when targeting export markets or focusing on the local markets that seem to be related to the existence of institutional voids, not reported in literature before. When focusing on the export market the food producer has to deal with high quality standards, high costs, and the need for continuous supply. Locally the problems seem related to risks and uncertainty and low financial returns. Secondly, the data analysis also suggests an impact of export on food security of individual households in Uganda, in particular regional export to neighboring countries. Both the issue of food insecurity and the problems food producers are facing in their

focus on the local or export market can be linked to the existence of institutional voids. Lastly the analysis shows how cooperatives and associations, seemingly successful in Uganda's coffee sector, are perceived and can be seen as useful coping mechanisms to deal with these problems caused by institutional voids, they are filling the voids.

#### Issues when focusing on export markets

During the analysis a subdivision of issues when targeting the export market led to three overarching categories; high quality standards, high costs, and need for continuous supply. Tables 1-3 show an overview of the statements made by participants regarding the issues discussed next.

#### Difficulties in meeting high foreign quality standards

One of the main issues mentioned by most respondents has to do with the high quality standards abroad to which Ugandan produce often does not comply. A coffee trader selling for export mentioned regarding difficulties with exporting food:

*“Most of the markets we want to export to, reject the Uganda food because it is below their standards. The quality here is good for the local market, but might not fit to the world market.”*

There are multiple issues with the quality of Ugandan food produce. This has to do with a lack of financial means to deal with some of these issues, or simply because to Ugandans it does not matter as long as they have food on the table. A production and marketing officer at the local government in Mbale explained:

*“Ugandans are not paying a lot of attention to sanitary and phytosanitary issues, the hygiene and health issues. [...] If you have to penetrate the international market, you have to meet certain standards, health, quality...”*

Looking at coffee, with progression in the development of the value chain and being the largest export product, there are international standards regarding moisture and screen size. The experienced coffee trader who collects coffee from farmers estimated that:

*“In the villages, up to 90% of the farmers cannot dry the coffee to the desired amount for export.”*

And not only are they not able to do so because of a lack of drying facilities, participants also point to a lack of knowledge. A senior advisor at an NGO said about the coffee farmers:

*“They don't know the specific percentage but they do know that there is a certain moisture level that they must have to sell the beans. They are not able to test it themselves. So they know, they have an idea of what is required, but they don't know the specifics.”*

When a farmer in a remote area was asked how to deal with over-raining or over-shining, which lowers the quality of the product, he responded:

*“There is no solution for that, it is natural. When it is raining it is raining, you cannot avoid it. Also when it over-shines you will lose the weight of the product. The coffee becomes of poor quality.”*

However, by talking to knowledgeable people such as an agriculture professor and board member of an association, and a researcher, I have come to learn about intercropping banana trees with coffee to create shade, about water harvesting to collect redundant water or make optimal use of rainfall during dry periods. Although there may be financial barriers to some solutions such as irrigation systems, some basic techniques such as intercropping are unknown to many.

#### Affordability of export: high costs and a lack of possibilities to access credit

One major barrier often mentioned is the high costs of production for export and exporting. With the high quality requirements comes the international demand for certification to prove one meets the quality standards of the importing country. The costs of certification are high and companies therefore have difficulties or are reluctant to obtain them. One respondent in coffee production and export stated:

*“The problem we are facing, some of those official trademarks are quite*

*expensive for us. I would not like spending a thousand plus dollars just for a trademark or certification.”*

The senior advisor at an NGO pointed to the long process of product testing by the Ugandan National Bureau of Standards, to get a specific mark for export and the costs that come with this:

*“There are also some international standards that you are required to meet and you have to test all the time you test I think every year, so it is expensive.”*

She and some other respondents also mentioned that besides certification, another big expense is transport. In and from Uganda, a landlocked country with two major rail tracks that are not in use transport is done by truck and airplane, for which the costs are significantly higher than per train and ship, making it difficult to compete internationally.

*“...the fright charges that they have to pay, they are very expensive for a small quantity of fruit.”*

Although high costs do not necessarily have to lead to problems as long as the returns make up for the expenses, it does become an issue in combination with the lack of possibilities to access credit and no starting capital to begin with. When asked about the possibilities to access credit the NGO senior advisor said:

*“That is not easy, first of all the interest rates are very high. I think that at the moment they are around 24% and they need a mortgage, like their houses or trucks. And when you have nothing to put in, you can't get anything.”*

The coffee trader also pointed out that there is a lack of banks and the possibilities for illiterates are limited:

*“...there are some villages with no banks, most of the banks are in the major towns. Most of the farmers they are illiterate, so they normally they have that problem. Yes, borrowing money in Uganda for them is not easy.”*

These different, relatively high expenses and the lack of access to affordable credit make it difficult to compete internationally with products shipped in from other countries with

lower costs for transport, and less problems with funding.

### **Difficulties to provide continuous supply**

Export markets ask for continuity, which is hard to assure when most produce is seasonal, perishable or both. When asked about the influence of seasonality on export the senior advisor of an NGO answered:

*“I think it has a huge effect.... First of all they may need it all the time but you cannot supply it all the time because of the seasonal changes.”*

Manager of an export company for fresh products explicitly points to the missing infrastructure and the lack of government support to export saying:

*“...because we lack infrastructure. Yes it is very expensive. It shouldn't be expensive, if it is done by governments. Why is it done in other countries? They use the same money. Other countries do it. When you go to Holland for example. They grow goods in the heat, in the winter. [...] It depends on how much money the governments are willing to put into horticulture and infrastructure. We lack a total quality chain from the field to the market.”*

As pointed out by a professor and soil scientist, there is a lack of facilities to irrigate in order to grow out of season and deal with changing weather patterns, which limits the ability of the producer to improve continuity in order to export:

*“Unless our farmers learn to grow out of season, that's irrigation, so that the crops are there all the time, we can't do that. This is one of the major limitations. I mean the markets are there, but the issue is, can we have consistent supply all the time?”*

The lack of facilities to irrigate is strongly related to the difficulties to access credit. An experienced coffee trader explained that farmers:

*“They can irrigate, but only a few can afford, because they don't even use pipes, they use trucks. They rent the*

*trucks, load them up with water somewhere and pour using a jerry can on each tree.”*

Also processing, which deals with perishability, to smoothen the fluctuating supply is not done enough, an assistant agricultural officer of the local government explained:

*“A challenge is agro-processing. There are structures available that do not allow the farmers to process... Actually they don't have adequate structures to process their produce. [...] They just do things of grading, sorting, creating a batch, not the real agro-processing, which is a challenge yes.”*

This makes export risky due to perishability in combination with the high quality standards increasing the chances of rejection abroad. A problem not necessarily recognized or felt by farmers but detected by others is that besides unstable supply and quality issues, the lack of processing possibilities and therefore the export of raw products also means a missed chance to add value and therefore a missed opportunity to increase income. Director of a soy processing company says:

*“The level of exporting is dangerous for Uganda. Because the raw beans that are exported for example to the Netherlands, [...] in Uganda we are losing jobs since we don't process any more, also the electricity and water companies are losing income. The key is processing, especially when you can afford the appropriate technology.”*

Summarizing, the interrelated problems when targeting the export market mainly evolve around the difference in quality requirements between the local and the export market, with foreign standards being too high for Ugandans to meet. Secondly the costs to produce for export are higher, also due to the high quality standards, but accessing credit on the other hand is very difficult, making export difficult for financial reasons. Thirdly, foreign markets demand for continuity of supply, for which the infrastructure in terms of facilities, finance and knowledge to deal with seasonality is largely missing.

### **Issues when producing for the local market**

Problems related to food provision to the local Ugandan market are, just like issues for exporting, strongly interrelated, but can be grouped as financial disadvantages, risk and uncertainty, and food security. Tables 4-6 show an overview of the statements made by participants regarding the issues discussed next.

#### **Financial disadvantages: low return, exploitation, and little processing**

A downside of the local market mentioned often is the low return in comparison to the returns on export markets. The managing director of an export supporting company among others points out that a reason not to focus on the local market is:

*“...the return per volume. The Ugandan market is much less so you have to really shift a lot of stuff to make this amount of money.”*

Besides this, seasonal production not only leads to a problem for the international markets, it also causes issues when targeting the local market. Due to a lack of storage facilities farmers are unable to deal with the oversupply during harvest periods, causing loss of products and therefore income. A district officer of the local government explained:

*“...that yield at some point used to get wasted, in terms of lack of storage facilities that everybody is harvesting at the same time and everybody is selling, sometimes the supply exceeds demand and they waste.”*

Another consequence is that the farmer gets very low prices for their produce, especially during peak periods, leaving them with little income for other commodities. Expressed by many interviewees is the vulnerability of individual farmers to exploitation by middlemen and processors. The managing director of a non-profit organization supporting profit-oriented agribusiness explained:

*“Basically we saw that maize, when everybody was saying maize or beans, when everybody was selling their beans,*

*they got very low prices. Then somewhere in the middle of the rain season the money is gone.” And: “The buyer is a businessman and they screw them up the whole time.”*

A company producing for export explains how difficult it is to compete with processed products in the local market. Due to high costs of power, taxes on fuel and difficulties of accessing credit, the director points out:

*“...we find our tomato sauce competing with American garden tomato sauce. Seriously we find our costs are much higher, because of power. [...] because you see, in America, the costs of power is 0.0something cents, here it is around 15 cents, so how can you work with that?”*

Little processing by farmers due to high costs or a lack of facilities means that value is not added and therefore an opportunity to increase ones income is missed. An assistant agriculture officer of the local government mainly dealing with fruits and vegetables highlights:

*“...value added products of course fetch more prices, so they would earn more if they add more value to their products than selling it raw. So that line would help farmers better, if such structures would be put in place to help them.”*

The financial downside of sticking to the local market is also related to the risk and uncertainty experienced when serving the local market.

#### **Risk and uncertainty: a lack of communication and enforcement mechanisms**

When producing for the local market, uncertainty due to a lack of communication and information may impose problems for producers. Manager of an export supporting company describes the issue:

*“If you’re a farmer, it is so difficult to get what is going to happen. Simply because last year you ran out of tomatoes by March, doesn’t mean you should plan to have tomatoes by March, because this year 5000 people might be planning the same thing. And so you say ok, last year if*

*I had tomatoes by the end of March I would have really made a lot of money. But so many other people are thinking like that.”*

The headmaster of an agriculture school explained how he is trying to commercialize. One issue he mentioned is that they do not know which crop is valuable and marketable:

*“There is a lack of knowledge regarding which crop is most profitable.”*

Although it is described as a lack of knowledge, this points to a lack of communication of the necessary information. Not knowing which crop is beneficial means that the signals of the market are not communicated. A research officer stated that information is key to improving ones income:

*“Access to information is one of the biggest challenges. If you don’t know it is hard to adapt.”*

Another factor that imposes a risk when dealing with the local market as described by the director of the non-profit organization is the problems with informal trade without the use of contracts and a lack of enforcement mechanisms necessary to protect both parties, forcing people to rely on trust and thereby creating vulnerability and risks the income of the grower.

*“It’s a big problem in Uganda and the rest of Africa. You come in and say hey, now it is this crop and blablabla and I want to buy from you this amount. Then everybody grows but they didn’t buy. It happened with bananas a few years back. Everybody grows and harvested it and now the companies that supposed to buy it say: ‘haha no no no’.”*

The bigger market players manage to misuse their power and disadvantage their suppliers without the possibility for these suppliers to take any action against it. It is therefore risky to invest in quality improvements or processing facilities to add value if the possibilities to export are still limited due to some barriers and the supermarkets are not reliable enough, as explained by the manager of an export supporting company.

*“...on the local market, if you try to differentiate the market and go for the*

*high-end sort of people, this is the supermarket; they have terrible behavior, because they have so much power. The terms of payment are not good. They'll pay after 90 days and they'll pay you when they chose too. You are really in a bad way. So you are forced to go back to what we call a support market, where you sell for lower prices again."*

He also points to the limitation the choice for the local market creates, since the local market is a final destination and does not offer the opportunity to dispatch it somewhere else.

*"So if you have chosen to take you stuff to Kampala market, that's it, it is local market. Anyone wanted to take produce to go to Kenya, Congo what have you, they don't come here, they go there where you came from [directly to the farmers]. So once you have made that decision, that's it, you are subject to the forces here. And that is really limiting. They can choke you, because you really have little leeway."*

Although export may logically be experienced as risky due to the distance, the foreign market and the high quality standards and the possibility to be rejected, this does not make the local market free of risk, as participants have pointed out due to the lack of communication and information flows and the missing structures to assure security regarding contract breach.

#### **Food insecurity due to regional export**

When asked about the status of food security in Uganda and the relationship with the choice to export or to serve the local market, some answered the two had nothing to do with each other. However, giving it a second thought many respondents pointed to the issue of regional export. Although the status of food security does not seem to influence the decision to export or not, regional export is mentioned as problematic for food security. The senior advisor at an NGO answered to the question if food security is influenced by the decision to export or not that it depends on the type of product:

*"...basic food is mainly like the maize,*

*millet and things like that, those ones are affected seasonally and mainly through informal trade like sometimes when there is a shortage in Kenya and a lot of maize goes to Kenya and then there is less maize here so it becomes expensive so even now it affects the poor households because then they have to buy maize at a high price [...] It does affect food security."*

Food that is not produced with the intention to export - either due to low quality, a lack of means to export, or the farmer simply does not think further than the local market in his village – seems to end up across borders. With South Sudan importing almost all of their food from Uganda and occasional shortages in Kenya, traders come to Uganda, visit farmers and offer to buy large quantities. Farmers, trying to increase their income on a short term in order to pay for school fees, medicines or other commodities are unaware of the consequences of selling too much, or sometimes their complete harvest, leaving them without food and only little revenue due to the low prices per batch. The manager of an export company said:

*"The export to Southern Sudan has an impact on pricing and food security in Uganda [...] Because sometimes our people go hungry because they sell a lot of food to Southern Sudan."*

As mentioned above, a consequence of this is that the food prices rise and food becomes unaffordable. With the problem of communication and distribution also mentioned as a reason for food insecurity, areas 'ransacked' are not provided with food from other parts of Uganda, where there is enough. Different areas do not know how the situation is beyond the border of their district. Chairman of a potato growers association explained this:

*"You see it is just a matter of networking. For example, if you go to the Mbale market here, you can get a lot of potatoes, a lot of many things to eat, matooke. You go somewhere in the next city, because they don't know what is happening here, they don't know."*

And even if they do, the lack of affordable transportation due to bad roads and rail way

that is out-of-order prohibits distribution, as mentioned by the manager of an export supporting company.

*“...food security in Uganda is not so much a quantity issue, it is a distribution issue. There is no mechanism to cause food to be moved from here to here [South to North].”*

Especially when talking about food security, the lack of institutional guidance and support is oftentimes mentioned, as by an officer at Mbale district local government:

*“We need an enabling food security policy by the government to ensure that people at all times access the food, that it is evenly distributed. That’s what is lacking.[...] You find us selling a lot to southern Sudan, Kenya, we are selling to Rwanda, Congo.”*

The lack of institutions necessary to build a functioning market and to protect its actors in this case leads to an outflow of produce that has a negative impact on the Ugandan community. This does not have to be the case. Neighboring countries can form an opportunity for Ugandan producers to sell their produce and benefit from it; however, the right institutions such as policies regarding export should be in place in order for it to be beneficial to both parties.

The issues found when both targeting the local and the export market can all be traced back to institutional voids. There is a lack of financial institutions offering access to credit, which also underlies the problem of a lack of different facilities (irrigation, drying, processing, storage etc.) an impediment to dealing with seasonality, causing vulnerability to exploitation, quality issues and no continuous supply. Also, there is a lack of physical and cognitive institutional infrastructure; the roads are bad and there is no functioning railway causing distribution issues; there is a lack of communication mechanisms causing people to not know what is happening around them in the rest of the country and on the market; and a lack of infrastructure to share knowledge and create awareness, there are schools, but if the knowledge does not reach the schools, it is not

taught. Also, an institutional void causes risk and uncertainty due to a lack of enforcement mechanisms, making contracts useless. Lastly there is a lack of institutional policies by the government to regulate regional export, consequentially leading to increased food insecurity.

Now that the issues for the local and export market and their linkages with institutional voids have been addressed, the question is how to cope with these issues to fill the voids.

### **Associations and cooperatives as coping mechanisms**

Our findings suggest that knowledge about Uganda’s coffee as a main export product resulted in the discovery of associations and cooperatives as a main mechanism to deal with the issues in both markets. Talking to a chairman of a potato growers association, which is successfully copying the model used in the coffee industry, it became clear that this might be a suitable effective bottom up solution to deal with the issues created by the lack of institutional guidance. Membership and involvement of farmers, processing companies, traders and exporters seems to be beneficial in multiple ways; it improves the financial benefits and offers affordable services. Tables 7-8 show an overview of the statements made by participants regarding the associations and their benefits.

### **Financial improvements through associations**

The individual farmer vulnerable to exploitation increases its bargaining power by becoming part of a group. They are able to determine the price and therefore generate a higher income. The Mbale district officer said:

*“When they bulk and collectively market, they will be able to fix suitable and favorable prices for themselves. They should determine it when they act collectively.”*

This collective marketing also has the advantage of international visibility, as mentioned by the potato grower:

*“...but now with the element of collective marketing we shall be able to be identified and people even from The Netherlands they can see us.”*

Also it increases their chances of successfully applying for credit. Banks seem more willing to lend money, for instance by pre-financing to associations than to individual farmers. A manager at a coffee association said:

*“We work with the bank to the extent that they can provide money in advance to the farmers, as a loan. This is pre-financing.”*

Also other forms of financing are easier to get access to in a group partially because the associations build linkages with such investors. Speaking to different stakeholders in the coffee value chain the farmer-ownership model was explained multiple times as a means to improve the farmers' position within the value chain. The idea is that farmers do not sell their produce right after harvesting. In return for fees, the coffee is roasted, packaged, marketed and collectively sold, but the farmer is the owner of the coffee during the whole process, after which they receive a higher price for their product, improving their income. Chairman of the potato association explained that their long-term vision is to implement this model as well:

*“Our long-term vision is to have the farmers taking charge of the whole value chain. From production all through processing and marketing, so that in between here, even those who are not directly involved in the farming can do business in the value chain. They can supply inputs; they can process, package and sell.”*

#### **Affordable services through associations**

Being a member of an associations or cooperatives offers multiple benefits. To implement the farmer-ownership model farmers are connected to service companies making their facilities available for a small fee. A manager at a the coffee association explained:

*“This allows the farmers to use the processing facility at negotiated prices,*

*and pay the user fees for the facility, and process your own coffee. The farmers do not have to money to build a factory at the individual level. But at the level of NUCAFE, as an organization, we negotiate with the factory owners and processors to have this processing facility.”*

Through the associations, meetings are organized to link the farmers to different parties that could help them add value and support the value chain, as explained by the chairman of the potato association:

*“Farmers need to know they can meet processors, traders, other partners in the service sectors, financial services, banking. But now when we bring them, they are finding themselves mixing with almost everybody.”*

Also mentioned frequently is the knowledge that is shared through associations. Associations and cooperatives being a platform where farmers, scientists, researchers etc. come together makes it an easy way to share knowledge about good practices with the farmers, as pointed out by a manager at the coffee association:

*“What we do is that we from time to time build awareness about what they should do. This is for instance about drainage, land-management practices especially when it comes to soil- and fertilizer use.”*

## **Discussion**

This paper centers on issues experienced by food producers due to institutional voids when focusing on export and/or the local market; how this relates to food security; and how and by whom they are dealt with in Uganda.

Addressing the first part of our research question about the influence of institutional voids on food producers in Uganda with regard to the choice to export or produce for the local market and the effect on food security; the data analysis has shown from multiple perspectives how food producers, mostly farmers but also processing companies, face multiple problems in serving export markets and local markets. Talking to people at



different organizations, from small-holder farmers, to managers of successful food-producing companies, people from NGO's, from associations, the government and in education, has shown how complex the issues companies face can be when the institutions in place do not support markets to function successfully; locally, regionally or internationally.

In line with the expectations of poor institutional mechanisms in developing countries (Khanna & Palepu, 1997) and reports by the Dutch embassy in Kampala (2014) and the Ugandan government (2010), data confirms the existence of institutional voids. The lack of capital and the poor accessibility of credit for many food producers points to the lack of financial institutions necessary to support them in accessing the market. The risk and uncertainty and therefore the importance of trust in the local market show the existence of inefficient judicial systems (Khanna & Palepu, 1997).

Previous research by Mair, Martí and Ventresca (2012) focused on examining the institutional voids caused by institutionally complex settings, in which informal institutions in the form of local arrangements are in conflict with modern/Western understandings of market institutions and how this affects market access and participation. The local arrangements turned out to prohibit some groups from participating in market activity. The focus was thus not on the absence or weakness of institutions, but on its 'situatedness' in a multi-institutional context (Mair, Martí and Ventresca, 2012), while this paper is indeed focusing on the effect of weak or absent institutions, in this case specifically on food producers' behavior regarding a focus on export or the local market, and how this relates to the food security in the country, a topic that has not previously been linked to institutional voids either.

This study contributes to and builds on current literature on institutional voids first of all by exploring the problems that food producing actors face due to institutional voids when either targeting the export or the local market. Literature has been focused on the effect of

institutional voids on the market development as a whole and its restricting effect, not on the specific issues market players are facing. Secondly, research by Khanna & Palepu (2010, 1997) was aimed at the consequences of institutional voids for Western companies trying to enter developing markets, establishing a guide for such companies to deal with them. This research however, aimed to highlight the issues for Ugandan companies, and explore how they can deal with institutional voids.

Previous research on improving food security has a focus on improving yields, increasing production limits, reducing waste and changing diets (Godfray et al., 2010), biodiversity management (Toledo & Burlingame, 2006), and mitigating the impact of climate change (Schmidhuber & Tubiello, 2007). An exception is a paper by Poulton, Kydd, Wiggins, and Dorward (2006) discussing the desirability of price stabilization of staple foods in Eastern and Southern Africa, carefully linking failing food systems and price fluctuations to trade liberalization, but without empirical research to back up these claims.

Research on the causes of food security does address the issue of distribution caused by failing institutions as a cause of food insecurity (Banerjee & Duflo, 2011). This paper contributes to this by discussing the effect of institutional voids causing food insecurity due to a lack of supporting and regulating mechanisms for cross border trade, especially regionally. In accordance with previous research (Godfray et al., 2010), food insecurity in Uganda turns out not to be just a problem of shortage of supply. Abundant food can be produced in a country facing high food insecurity rates. A focus on increasing yields is not a solution for farmers with perishable, seasonal produce without the facilities or the means to market the products in time (Godfray et al., 2010). Most recent famines have not been a consequence of a shortage of food but rather of failing institutions causing poor distribution (Banerjee & Duflo, 2011), a problem that Uganda suffers from as well.

One of the most interesting findings evolves around the effect on food security of

the choice for export or the local market in the context of a weak institutional system. Food producers who focus on export have to comply with certain quality standards requested by the international market. Their produce is tested and delivering substandard quality can have far-reaching consequences. The high returns on the other hand make export worth the investment. However, there is also another form of export that does not have these stringent terms neither does it offer good returns: regional export.

Neighboring countries in East Africa do not impose high quality requirements, nor do they pay a higher price. They do however, offer Uganda an extra market to export to, which could be and is perceived by some as a positive given. However, with the lack of institutional guidance the produce intended for the local market, to feed Ugandans, is exported to neighboring countries. Traders from Kenya and South Sudan come in right after harvesting and offer to buy large quantities for a low price. The individual farmers are not aware of the consequences of selling – a lack of knowledge and awareness – they have a short-term vision and are willing to sell everything they harvested to increase the amount of money they get, leaving them without food and not enough money to cope with the rising food prices caused by this high external demand. Regional export is therefore mentioned oftentimes as a negative influence on the food security of Uganda's poor.

Although South Sudan and Kenya can be seen as a good opportunity, currently there is a lack of regulation, policies and structures regarding regional export seemingly preventing Ugandan smallholder farmer to benefit from it, which leads to the conclusion that the push for this form of trade at this stage has negative consequences for their food security.

Policies set by Western institutions such as the World Bank focus on liberalization and globalization of trade. In the 17th SDG (Strengthen the means of implementation and revitalize the global partnership for sustainable development) we find a target on export, stating the goal is to “significantly increase the exports of developing countries, in particular

with a view to doubling the least developed countries' share of global exports by 2020”, and to “Realize timely implementation of duty-free and quota-free market access on a lasting basis for all least developed countries, consistent with World Trade Organization decisions” (UN, 2015). We thus see a clear focus on export in the goals and the policies set to sustainable development. With this widely accepted idea that trade is beneficial, the apparent negative influence of regional trade is meant to create awareness and as a critical note towards the neoliberal ideology that free markets are beneficial for everyone and will allocate resources optimally (Harvey, 2005). Liberalization and globalization of markets offers opportunities that developing countries can benefit from, but in order to reap the fruits from these opportunities, institutional support seems a prerequisite. To say Uganda is simply not ready yet is a bold statement, but an opportunity for further research is to dive into the impact of these market liberalizing policies in a context of weak, failing or contradicting market institutions.

The second part of the research question focused on the mechanisms to deal with institutional voids and its negative consequence; who deals with filling the void and how? We found that a coping mechanism mostly discussed in the context of the coffee industry, and picked up by some other value chains on a lower scale, is the emergence of associations and cooperatives. When successfully introduced they seem to be able to deal with most of the issues mentioned by food producers. Prior research (Khanna & Rivkin, 2001; Leff, 1978) discussed business groups as responses to market failures. Leff (1978) his description of a business group being a group of companies doing business in different markets, points to a difference between business groups and associations/cooperatives. The associations precisely comprise of smallholder farmers that are active in the same value chain and target the same market. Khanna and Rivkin (2001) explain that the financial benefits of such a business group on individual members is not clear cut, since

the group creates benefits for the members, but also imposes costs on them. They suggest further research should be done to how precisely could groups fill institutional voids, a gap in literature that has not been filled yet.

This research partially explored this gap, not by focusing on the business groups as previously described, but through associations, through which benefits are not shared, nor are costs imposed, but profitability of individual business increases as higher prices are bargained. Especially the farmer-ownership model implemented through associations, where the farmer is the owner of its produce throughout the value chain and is thereby offered the possibility to add value, by paying fees for the usage of facilities, and thus increase its price, seems to be a successful model. Also knowledge is shared to increase quality, members are linked to important stakeholders within the value chain, associations improve the chances of access to credit, either by a bank, or a through mechanisms within the groups, and communication flows are improved. With this research being exploratory and its results only indicating the positive effect of associations for its members, further research is necessary to support this implied causal relationship between the increasing income and membership of an association.

## Limitations and concluding remarks

This research is bound by limitation, as is common to most qualitative and interpretative research. First of all there is a limitation to generalizability. Due to the contextual circumstances of Uganda alone, little can be said about other countries in different areas, with other social and cultural climates and different institutional settings. Also this research explored by whom and how institutional voids are currently dealt with, detecting a seemingly successful bottom up strategy in the coffee industry, and although our recommendation for other value chains is to start cooperating through associations and apply the farmer ownership model, we cannot

claim that this is the best way of dealing with institutional voids. There might be other mechanisms more efficient and effective that were not mentioned because they are unknown to the interviewees or they have not been implemented. However, in a country where people are bounded by limited means, when a successful mechanism is created a logical next step would be to exploit this and therefore increase awareness as to the benefits of grouping together in associations or cooperatives.

Another limitation is that, due to the interpretative nature of this research, with the aim of mapping the difficulties experienced in targeting the export or the local market, the experienced relation to food security, and the coping mechanism to deal with the void, the cause-effect relationship that we expect to exist between these issues and the institutional voids that Uganda suffers from, has not been proven. The exploratory nature of this research asks for further research to examine this possible cause-effect relation between regional trade and food insecurity.

To conclude, the overview of interrelated problems food producers face and the conceptual framework proposed may be a useful starting point for further empirical research into a bottom up approach to dealing with institutional voids by grouping into associations and implementing the farmer-ownership model to improve food security, which has great importance for developing countries that haven't managed to decrease their hunger rates following the previous MDG, and the current SDG on hunger alleviation and food security.

## References

- Banerjee, A.V. & Duflo, E. (2011). *Poor economics: A radical rethinking of the way to fight global poverty*. New York: Public Affairs.
- Cordell, D., Drangert, J. O., & White, S. (2009). The story of phosphorus: global food security and food for thought. *Global environmental change*, 19(2), 292-305.

A project mainly financed by:

Implemented by:

Edmondson, A.C., & McManus, S.E. (2007). Methodological fit in Management field research. *Academy of Management Review*, 32(4): 1155–1179.

Embassy of the Kingdom of the Netherlands in Kampala, Uganda (2014). *Multi-Annual Strategic Plan (MASP) Uganda 2014-2017*. Retrieved from <http://uganda.nlembassy.org/appendices/development-cooperation/mjsp-2014-2017-uganda.html>

Food and Agriculture Organization of the United Nations (2015). *FAO Hunger Map 2015*. Retrieved from <http://www.fao.org/3/a-i4674e.pdf>

Food and Agriculture Organization of the United Nations (2012). *The state of food and agriculture*. Rome. Retrieved from <http://www.fao.org/docrep/017/i3028e/i3028e.pdf>

Food and Agriculture Organization of the United Nations (2003). *Trade reforms and food security: conceptualizing the linkages*. Rome. Retrieved from <ftp://ftp.fao.org/docrep/fao/005/y4671e/y4671e00.pdf>

Gioia, D. A., Corley, K. G., & Hamilton, A. L. (2013). Seeking qualitative rigor in inductive research notes on the Gioia methodology. *Organizational Research Methods*, 16(1), 15-31.

Godfray, H. C. J., Beddington, J. R., Crute, I. R., Haddad, L., Lawrence, D., Muir, J. F., ... & Toulmin, C. (2010). Food security: the challenge of feeding 9 billion people. *science*, 327(5967), 812-818.

Johnson, B., & Turner, L.A. (2003). Data collection strategies in mixed methods research. In: A. Tashakkori and C. Teddlie (eds.) *Handbook of Mixed Methods in Social and Behavioral Research*: 297-319. Thousand Oaks: Sage Publications.

Khanna, T., & Palepu, K. (2010). *Winning in emerging markets: A road map for strategy and execution*. Harvard Business Press.

Khanna, T., & Palepu, K. (1997). Why focused strategies may be wrong for emerging markets. *Harvard Business Review*, 75(4): 41-51.

Khanna, T., & Rivkin, J. W. (2001). Estimating the performance effects of business groups in emerging markets. *Strategic management journal*, 22(1), 45-74.

Leff, N. H. (1978). Industrial organization and entrepreneurship in the developing countries: The economic groups. *Economic development and cultural change*, 26(4), 661-675.

Locke, K. D. 2001. *Grounded Theory in Management Research*. London: Sage.

Mair, J., & Marti, I. (2009). Entrepreneurship in and around institutional voids: A case study from Bangladesh. *Journal of business venturing*, 24(5), 419-435. doi:10.1016/j.jbusvent.2008.04.006

Mair, J., Martí, I., & Ventresca, M. J. (2012). Building inclusive markets in rural Bangladesh: How intermediaries work institutional voids. *Academy of Management Journal*, 55(4), 819-850. doi:10.5465/amj.2010.0627

North, D.C. (1991). Institutions. *Journal of Economic Perspectives* 5(1): 97-112. doi:10.1257/jep.5.1.97

Poulton, C., Kydd, J., Wiggins, S., & Dorward, A. (2006). State intervention for food price stabilisation in Africa: Can it work?. *Food policy*, 31(4), 342-356. doi:10.1016/j.foodpol.2006.02.004

Republic of Uganda: Ministry of Agriculture, Animal Industry and Fisheries (2010). *Agriculture Sector Development Strategy and Investment Plan: 2010/11-2014/15*. Retrieved from

[http://agriculture.go.ug/userfiles/Agricultural%20Sector%20Development%20Strategy%20and%20Investment%20Plan\(2\).pdf](http://agriculture.go.ug/userfiles/Agricultural%20Sector%20Development%20Strategy%20and%20Investment%20Plan(2).pdf)

Schmidhuber, J., & Tubiello, F. N. (2007). Global food security under climate change. *Proceedings of the National Academy of Sciences*, 104(50), 19703-19708.

Toledo, Á., & Burlingame, B. (2006). Biodiversity and nutrition: A common path toward global food security and sustainable development. *Journal of food composition and analysis*, 19(6), 477-483.

UN 2015. *Transforming our World: the 2030 Agenda for Sustainable Development*. A/RES/70/1. Retrieved from <https://sustainabledevelopment.un.org/post2015/transformingourworld> on January 13th, 2016.

UNCTAD 2014. *The least developed countries report 2014: Growth with structural transformation: A post-2015 development agenda*. Retrieved from [http://unctad.org/en/PublicationsLibrary/ldc2014\\_en.pdf](http://unctad.org/en/PublicationsLibrary/ldc2014_en.pdf) on December 7th, 2015.

UNCTAD 2013. *Trade environment review 2013: The importance of international trade and trade rules for transforming global agriculture*. UNCTAD/DITC/TED/2012/3. Retrieved from [http://unctad.org/en/PublicationChapters/ditcted2012d3\\_ch5\\_en.pdf](http://unctad.org/en/PublicationChapters/ditcted2012d3_ch5_en.pdf) on January 13th, 2016.

Van de Ven, A.H. (2007). *Engaged scholarship: A guide for organizational and social research*. Oxford: Oxford University Press.

World Bank (2002). *World Development Report: Building institutions for markets*. Oxford University Press, New York.

World Food Programme (2014). *Working together for the future of Uganda*. Retrieved from <http://documents.wfp.org/stellent/groups/public/documents/newsroom/wfp281684.pdf>

A project mainly financed by:



Implemented by:



## TABLES AND FIGURES

**Table 1: Difficulties in meeting high foreign quality standards**

Sample interview quote	1 <sup>st</sup> order concept	2 <sup>nd</sup> order theme	Interviewee
<i>Most of the markets we want to export to, reject the Uganda food because it is below their standards. The quality here is good for the local market, but might not fit to the world market.</i>	Quality issues	Meeting foreign quality standards	Seguya Yassin
<i>Ugandans are not paying a lot of attention to sanitary and phytosanitary issues, the hygiene and health issues. [...] If you have to penetrate the international market, you have to meet certain standards, health, quality...</i>	Quality issues	Meeting foreign quality standards	George Davidson Wanakin a
<i>In the villages, up to 90% of the farmers cannot dry the coffee to the desired amount for export.</i>	Quality issues	Meeting foreign quality standards	Seguya Yassin
<i>...these vegetables most of them are perishable so they can't take long with the produce so that they can meet the market requirements abroad.</i>	Quality issues	Meeting foreign quality standards	Andrew Wamimb i
<i>...if you try to be reliable you are going to be maybe buying from many others and sometimes the quality will be different, the varieties will be different and ultimately maybe the buyer will not like what you bulk from them because of that.</i>	Quality issues	Meeting foreign quality standards	Sarah Mubiru
<i>Non-tariff barriers such as quality standards such as export requirements that that country imposes on people that want to export to your country. Those would be barriers that exist.</i>	Quality issues	Meeting foreign quality standards	James Ssemwanga
<i>[Barriers to export:] first of all the lack of infrastructure in the country to manage and maintain the quality [...] The big one is the lack of infrastructure from the farm to the market, is the big one. It reduces our growth, because you cannot export bad products every the other day and you get the market.</i>	Quality issues	Meeting foreign quality standards	James Kanyije
<i>I always say: let's have the national standard that can also fit in European standard. That is what I always talk about. But we are not yet there. In the 500 years to come maybe this country will be there, but today no.</i>	Quality issues	Meeting foreign quality standards	James Kanyije
<i>Yes so the other barriers to export are the quality aspects. That is also a big problem. And if any problem happens there in Europe with the products, then there is a block for the next 6 months.</i>	Quality issues	Meeting foreign quality standards	Apollo Segawa
<i>...when we had the Structural Adjustment Policies in the 80's. They opened up space and the issues of grading went off. The farmers began even drying coffee on the ground. Doing everything with it, picking it when it was not very ready [...] So regulation and controls, which used to be handled by government, relaxed a lot with the liberalization.</i>	Quality issues	Meeting foreign quality standards	George Davidson Wanakin a
<i>The leaders who are supposed to enforce are more worried with winning favor and support from the victims, so they don't enforce. When you come to me and you want to enforce I say ok, tomorrow when you come for election I will not vote you. So you stay away from enforcement. So yeah, you find leaders who are supposed to enforce more concerned with being voted back other than doing development work, enforcing for development.</i>	Lack of quality regulation and enforcement	Meeting foreign quality standards	George Davidson Wanakin a
<i>They don't know the specific percentage but they do know that there is a certain moister level that they must have to sell the beans. They are not able to test it themselves. So they know, they have an idea of what is required, but they don't know the specifics.</i>	Lack of knowledge	Meeting foreign quality standards	Sarah Mubiru
<i>...some people do things like that because they think that that is the only way to make profit. But when somebody tells them that you can still make profit without doing unethical behavior and when they show them how to, maybe they can take out the better practices [...] They have to realize that what they are doing is not worth it. So it is about talking to them. The regulators have to be strict. When you want to maintain quality, if those systems and mechanisms in place are functional, then the situation can change. Although, the best thing would be to get them to understand why they should not behave like that.</i>	Lack of knowledge	Meeting foreign quality standards	Sarah Mubiru
<i>The current problem is you do not know how to commercialize it [...] There is a lack of knowledge regarding which crop is most profitable.</i>	Lack of knowledge	Meeting foreign quality standards	Denis Okello
<i>We are trying to lobby through the consultancy of my father to get someone that can write us a project proposal to start an irrigation system.</i>	Lack of knowledge	Meeting foreign quality standards	Denis Okello
<i>We have to explain them the benefit and right way of growing commercially</i>	Lack of	Meeting	Julius

A project mainly financed by:

Implemented by:

<i>instead of for subsistence. The demand for this is there, but how do you fulfill the demand. Because you need to supply regularly, consistently.</i>	knowledge	foreign quality standards	Yoswa Zake
<i>There is no solution for that, it is natural. When it is raining it is raining, you cannot avoid it. Also when it over-shines you will lose the weight of the product. The coffee becomes of poor quality.</i>	Lack of knowledge	Meeting foreign quality standards	Frederik Kawanga

**Table 2: Affordability of export: high costs and a lack of possibilities to access credit**

Sample interview quote	1 <sup>st</sup> order concept	2 <sup>nd</sup> order theme	Interviewee
<i>The problem we are facing, some of those official trademarks are quite expensive for us. I would not like spending a thousand plus dollars just for a trademark or certification.</i>	High certification costs	Affordability of export	Michael Kijambu
<i>So, sometimes to sell abroad you must show the right certificate costing you a thousand to two thousand dollars. But domestically it does not make sense.</i>	High certification costs	Affordability of export	Michael Kijambu
<i>To be able for instance to export you must have certain kind of certification. Now getting that certification itself is expensive and many producers and many processors take time to get to that level where they can take their products to the Ugandan National Bureau of Standards have them tested and then beyond the S mark they need a Q mark to be able to export.</i>	High certification costs	Affordability of export	Sarah Mubiru
<i>There are also some international standards that you are required to meet and you have to test all the time you test I think every year, so it is expensive.</i>	High certification costs	Affordability of export	Sarah Mubiru
<i>For export you need a lot of money.</i>	High costs	Affordability of export	Seguya Yassin
<i>We have not yet build capacity that can afford us to go on the international market; there are many requirements that we must fulfill to go on the international market.</i>	High costs	Affordability of export	Charles Nsubuga
<i>The second reason why for instance food processors used to tell us, they do not export is because of the freight charges that they have to pay, they are very expensive for a small quantity of fruit.</i>	High costs of transport	Affordability of export	Sarah Mubiru
<i>There is little organization available for international markets for vegetables so far at sub-county level. [...] The infrastructure available can't meet the requirement. It costs them a lot.</i>	High costs of transport	Affordability of export	Andrew Wamambi
<i>Well we use a container up to Mombasa by truck, and from Mombasa we ship it. Because we cannot use planes to export it, that is too expensive.</i>	High costs of transport	Affordability of export	Seguya Yassin
<i>Because as a land-locked country for the export market by definition we are limited to the high end because our stuff is airlifted. So we cannot hope to compete in your Amsterdam market with pineapples with Costa Rica who brings them by boat or Ghana who brings them by boat.</i>	High costs of transport	Affordability of export	James Ssemwanga
<i>That is not easy, first of all the interest rates are very high. I think that at the moment they are around 24% and they need a mortgage, like their houses or trucks. And when you have nothing to put in, you can't get anything.</i>	Lack of affordable credit	Affordability of export	Sarah Mubiru
<i>One of the challenges, first thing for these farmers, is capital to invest in their production.</i>	Lack of accessible credit	Affordability of export	Andrew Wamambi
<i>...there are some villages with no banks, most of the banks are in the major towns. Most of the farmers they are illiterate, so they normally they have that problem. Yes, borrowing money in Uganda for them is not easy.</i>	Lack of accessible credit	Affordability of export	Seguya Yassin
<i>The problem is cash diversion. When the money comes for agriculture, the local farmer ends up not benefitting because it is diverted. It flows in the wrong direction, you might find that from a 30 million investment, the farmers will only receive 3 million. Just so they can say some money has been invested.</i>	Government budget not accessible	Affordability of export	Seguya Yassin
<i>Secondly finance, there is no finance to do this trade even when you have the infrastructure.</i>	Lack of credit	Affordability of export	James Kanyije
<i>For finance we are still not yet sure how to solve it, because we need to have something like revolving fund to our farmers because they are poor, so that we have some fund, which we put there, so the farmer can access, do production, sell to us and then we take back the money we lend him, so that the money can go back to the owner, but people are not yet there in that area.</i>	Lack of accessible credit	Affordability of export	James Kanyije
<i>But how do you tell a farmer if you don't have anything to go to the bank, when even the interest is more than 20%, where another country you are competing with is 0.4/5%, how do you compete?</i>	Lack of affordable credit	Affordability of export	James Kanyije

A project mainly financed by:

Implemented by:

<i>...most of the people do not go for loan because of that. If you have a small piece of land you cannot go to the bank for a loan.</i>	Lack of accessible credit	Affordability of export	Frederik Kawanga
<i>No it is not easy. Many banks do not lend money to farmers.</i>	Lack of accessible credit	Affordability of export	Nathan Mabonga

**Table 3: Difficulties to provide continuous supply**

Sample interview quote	1 <sup>st</sup> order concept	2 <sup>nd</sup> order theme	Interviewee
<i>I think it has a huge effect.... First of all they may need it all the time but you cannot supply it all the time because of the seasonal changes.</i>	Seasonal production	Providing continuous supply	Sarah Mubiru
<i>...because we lack infrastructure. Yes it is very expensive. It shouldn't be expensive, if it is done by governments. Why is it done in other countries? They use the same money. Other countries do it. When you go to Holland for example. They grow goods in the heat, in the winter. [...] It depends on how much money the governments are willing to put into horticulture and infrastructure. We lack a total quality chain from the field to the market.</i>	Lack of infrastructure dealing with seasonality	Providing continuous supply	James Kanyije
<i>Most of the food factories here produce for the local market. Because most of the companies don't have any storage facilities to be able to store the product and export it when the demand for it is highest. That's why most of it is sold immediately before the produce can perish.</i>	No facilities to deal with Seasonal production	Providing continuous supply	Seguya Yassin
<i>So they find it easier to at least sell it almost immediately, even the tomatoes, they sell immediately, because they are not able to keep the tomatoes for long. So they have that challenge.</i>	Seasonal production	Providing continuous supply	Andrew Wamimbiri
<i>But if they are from the same area, they may all be experiencing the same problem. And that is precisely why many exporters do not deal in fresh products, because the moment you deal in fresh products you are exposing yourself to those seasonal challenges.</i>	Seasonal challenges	Providing continuous supply	Sarah Mubiru
<i>When you go commercial you should be able to produce throughout the year. And if the market is there, the moment you fail to provide the market you are losing that market; a market should be sustained.</i>	Seasonal production	Providing continuous supply	Denis Okello
<i>Small-scale farmers can't have continuous production [...] Now as I said earlier, continuous production means also production in the dry season. When you want to export you have to sign a contract, which says I will supply this much per given period. Now the main problem here is when people grow things seasonally, at the peak period, we will have more than we can export. But when that is over, there is nothing.</i>	Seasonal production	Providing continuous supply	Julius Yoswa Zake
<i>Unless our farmers learn to grow out of season, that's irrigation, so that the crops are there all the time, we can't do that. This is one of the major limitations. I mean the markets are there, but the issue is, can we have consistent supply all the time?</i>	Lack of irrigation possibilities	Providing continuous supply	Julius Yoswa Zake
<i>So it definitely affects in many ways, and of course this is where maybe also like the government would be coming in to maybe set up things like irrigation schemes.</i>	Lack of irrigation possibilities	Providing continuous supply	Sarah Mubiru
<i>They can irrigate, but only a few can afford, because they don't even use pipes, they use trucks. They rent the trucks, load them up with water somewhere and pour using a jerry can on each tree. But some farmers have 7000 trees, so you can see this is very difficult. Some farmers have on between 500 to 20000 trees, but most of the farmers on average they can only afford 500 trees. But even someone with 500 trees, to irrigate them, doesn't have a car or a truck to collect water, so they are not able to water the trees every two days, which is necessary. For them, the season becomes really difficult.</i>	Lack of irrigation possibilities	Providing continuous supply	Seguya Yassin
<i>But the problem with that is again that fair trade in Uganda is very difficult because of the climate. The season might be delayed and the coffee will be delayed.</i>	Lack of irrigation possibilities	Providing continuous supply	Seguya Yassin
<i>...the weather patterns, so a lack of irrigation. We need water when it is hot, no water, when it is raining it is too much, so those three.</i>	Lack of irrigation possibilities	Providing continuous supply	James Kanyije
<i>If you look around as I move with you, we have three big water tanks filled with water but we cannot afford to initiate that irrigation system [...] If we were to produce for the market we need slightly more support with the help of irrigation. When we get irrigation I think it would also be more sustainable.</i>	Lack of irrigation possibilities	Providing continuous supply	Denis Okello



AGRI-QUEST RESEARCH PAPER SERIES – No. 1: Institutional Voids and the Consequences for Food Security

<i>This year the yield was low because the weeding and the rain weren't good last year. I lost half of the yield because my land is affected by too much drought. The growth is stagnated the last years.</i>	Lack of irrigation possibilities	Providing continuous supply	Mutwalibi Galugali
<i>A challenge is agro-processing. There are structures available that do not allow the farmers to process... Actually they don't have adequate structures to process their produce. [...] They just do things of grading, sorting, creating a batch, not the real agro-processing, which is a challenge yes.</i>	Lack of processing possibilities	Providing continuous supply	Andrew Wamimb i
<i>We are trying to see whether we can get finances to get a real processing facility in order to go international.</i>	Lack of processing possibilities	Providing continuous supply	Charles Nsubug a
<i>The biggest challenge has been largely the limitations in terms of the facilities to contribute to increased amounts of coffee to consume. We didn't have roasters, we had nothing.</i>	Lack of processing possibilities	Providing continuous supply	Deus Nuwaga ba
<i>The level of exporting is dangerous for Uganda. Because the raw beans that are exported for example to the Netherlands, [...] in Uganda we are losing jobs since we don't process any more, also the electricity and water companies are losing income. The key is processing, especially when you can afford the appropriate technology.</i>	Lack of processing possibilities	Providing continuous supply	Charles Nsubug a

**Table 4: Financial disadvantages: low return, exploitation, and little processing**

Sample interview quote	1 <sup>st</sup> order concept	2 <sup>nd</sup> order theme	Interviewee
<i>...the return per volume. The Ugandan market is much less so you have to really shift a lot of stuff to make this amount of money.</i>	Lower return on local market	Financial disadvantages	James Ssemwanga
<i>Of course profits are not as they would be for the international market. So they end up reaping less than they would have if they focused on the international market.</i>	Lower return on local market	Financial disadvantages	Andrew Wamimb i
<i>Normally they want to get their produce into markets that feature a high price. Ideally for me that is why they export.</i>	Lower return on local market	Financial disadvantages	Sarah Mubiru
<i>...in Europe they also need this produce and they can pay for it. So at the end of the day that's why we find the market forces determine the price that we sell at.</i>	Lower return on local market	Financial disadvantages	James Kanyije
<i>Farmers are getting much more interested in the high value kind of share. Because the motivation has been getting more money out of it. That's why they have more available for export.</i>	Lower return on local market	Financial disadvantages	Deus Nuwaga ba
<i>...that yield at some point used to get wasted, in terms of lack of storage facilities that everybody is harvesting at the same time and everybody is selling, sometimes the supply exceeds demand and they waste.</i>	Lack of storage facilities	Financial disadvantages	George Davidson Wanakin a
<i>We don't have silos, we don't have storage facilities, we don't have... when you produce, this quarter should be reserved for your home.</i>	Lack of storage facilities	Financial disadvantages	George Davidson Wanakin a
<i>...during peak periods, when we are harvesting, it is a lot. And because we don't have specialized markets the prices go low. It goes up to [down to] sometimes 200/300 shillings because the supply is much. And after these short periods the price again goes up.</i>	Lack of storage facilities	Financial disadvantages	George Shiondo
<i>When the farmers harvest, because they don't have maybe structures like warehouses where they can keep the produce for long periods of time. So they find it a little harder to keep the produce and find it cheaper at least to get some money as they dispatch off. They don't have adequate strategy space.</i>	Lack of storage facilities	Financial disadvantages	Andrew Wamimb i
<i>And quite challengingly the financial attachment, the prices are not high enough. Because they take advantage of bumper harvest.</i>	Individual farmers vulnerable to exploitation	Financial disadvantages	Andrew Wamimb i
<i>Basically we saw that maize, when everybody was saying maize or beans, when everybody was selling their beans, they got very low prices. Then somewhere in the middle of the rain season the money is gone." And: "The buyer is a businessman and they screw them up the whole time.</i>	Individual farmers vulnerable to exploitation	Financial disadvantages	Apollo Segawa
<i>...we can tell them look at the end of the value chain this is the price. If you do A, B and C you can get 60-70% of that end price. Sometimes of course there is some unethical behavior where the farmers are not empowered to</i>	Individual farmers vulnerable to	Financial disadvantages	Michael Kijambu

A project mainly financed by:

Implemented by:

25

AGRI-QUEST RESEARCH PAPER SERIES – No. 1: Institutional Voids and the Consequences for Food Security

<i>know. The farmers do not know and people in the value chain take advantage of that.</i>	exploitation		
<i>I think price is a big challenge. If you audit what the farmers put in and they get out, if you put it in numbers, the price is still too low.</i>	Individual farmers vulnerable to exploitation	Financial disadvantages	Michael Kijambu
<i>What is happening to the middle people, or what we can call middlemen, is that they get a lot of money but the farmers themselves get very very little.</i>	Individual farmers vulnerable to exploitation	Financial disadvantages	Julius Yoswa Zake
<i>The processors almost always exploit the farmers. They give them minimum amount of money. Of course the traders will not give more than the processors is giving. It is the processors who set the price, it is a liberalized market and the government does not intervene in anyway. It is left to the market forces. So a lot of farmers complain that the price is low; they are not happy.</i>	Individual farmers vulnerable to exploitation	Financial disadvantages	Sarah Mubiru
<i>The middlemen then get a good price from Kawacom. They buy from us at a low price and then they go to Kawacom and sell it at a high price.</i>	Individual farmers vulnerable to exploitation	Financial disadvantages	Frederik Kawanga
<i>So they are trying to eliminate the middlemen, when usually when there is a middle man, the farmer doesn't get anything.</i>	Individual farmers vulnerable to exploitation	Financial disadvantages	Fred Tabalamule
<i>...we find our tomato sauce competing with American garden tomato sauce. Seriously we find our costs are much higher, because of power. [...] because you see, in America, the costs of power is 0.0something cents, here it is around 15 cents, so how can you work with that?</i>	High processing costs	Financial disadvantages	James Kanyije
<i>...value added products of course fetch more prices, so they would earn more if the add more value to their products than selling it raw. So that line would help farmers better, if such structures would be put in place to help them.</i>	Little value addition	Financial disadvantages	Andrew Wamimbi
<i>Yes you find that the price after the added value is much much higher. But that's why I am saying that any company who wants to grow must add value. But it is not easy to add value in Uganda.</i>	Difficult to add value	Financial disadvantages	James Kanyije

**Table 5: Risk and uncertainty: a lack of communication and enforcement mechanisms**

Sample interview quote	1 <sup>st</sup> order concept	2 <sup>nd</sup> order theme	Interviewee
<i>If you're a farmer, it is so difficult to get what is going to happen. Simply because last year you ran out of tomatoes by March, doesn't mean you should plan to have tomatoes by March, because this year 5000 people might be planning the same thing. And so you say ok, last year if I had tomatoes by the end of March I would have really made a lot of money. But so many other people are thinking like that.</i>	Lack of communication / information	Risk and uncertainty	James Ssemwanga
<i>There is a lack of knowledge regarding which crop is most profitable.</i>	Lack of communication / information	Risk and uncertainty	Denis Okello
<i>Access to information is one of the biggest challenges. If you don't know it is hard to adapt.</i>	Lack of information	Risk and uncertainty	Arthur Wasikura
<i>Every export company either has a factory or rents out factories to process their coffee or uses their buyers' factories. Which creates a clear channel, clear relations. Quality issues are directly communicated to the leader of the farmer groups. So it is pretty straightforward, very clear. But those who fall outside of this arrangement, who choose not to be part of this structure in the value chain, those get their information from random sources. They also communicate through random sources, what they used yesterday will be different than what they will use today. They are not organized; they are rebels who prefer to be independent. I mean it is an honest approach; I am not condemning it, just describing it.</i>	Lack of communication / information	Risk and uncertainty	James Ssemwanga
<i>A lot of our business is informal business. So you find a lot of products and producers that do not follow the formal supply chain and nobody tracks it. Nobody knows what is happening.</i>	Lack of information	Risk and uncertainty	Sarah Mubiru
<i>It's a big problem in Uganda and the rest of Africa. You come in and say hey, now it is this crop and blabla and I want to buy from you this amount. Then everybody grows but they didn't buy. It happened with bananas a few years back. Everybody grows and harvested it and now the</i>	Lack of legal protection mechanisms	Risk and uncertainty	Apollo Segawa

A project mainly financed by:

Implemented by:

AGRI-QUEST RESEARCH PAPER SERIES – No. 1: Institutional Voids and the Consequences for Food Security

<i>companies that supposed to buy it say: 'haha no no no'. Now first of all they can't use anything, they can't do anything else with this product. That is the whole thing I am saying about this market. They have no help from anyone else. So you, it is to use your power and say now I'll give you half the rates I have told you. The poor farmer don't have postharvest handlings, can't hold, can't store [...] Somehow, I don't know how it's get done but there is need for trust to make contracts for this crop this crop this price, you get to deliver at this price.</i>			
<i>...on the local market, if you try to differentiate the market and go for the high-end sort of people, this is the supermarket; they have terrible behavior, because they have so much power. The terms of payment are not good. They'll pay after 90 days and they'll pay you when they chose too. You are really in a bad way. So you are forced to go back to what we call a support market, where you sell for lower prices again.</i>	Lack of legal protection mechanisms	Risk and uncertainty	James Ssemwanga
<i>So if you have chosen to take you stuff to Kampala market, that's it, it is local market. Anyone wanted to take produce to go to Kenya, Congo what have you, they don't come here, they go there where you came from [directly to the farmers]. So once you have made that decision, that's it, you are subject to the forces here. And that is really limiting. They can choke you, because you really have little leeway.</i>	Risk of little leeway	Risk and uncertainty	James Ssemwanga
<i>We find that the costs of these input, because it is a bit high, there is a lot of adulteration of the inputs. For example fertilizers will not be sold to you at the standard measure of 50 kg because you may not be able to buy 50kg. So they mix it with something else. And the farmer has no way to prove it.</i>	Lack of legal protection mechanisms	Risk and uncertainty	Arthur Wasikura

**Table 6: Food insecurity due to regional export**

Sample interview quote	1 <sup>st</sup> order concept	2 <sup>nd</sup> order theme	Interviewee
<i>We need an enabling food security policy by the government to ensure that people at all times access the food, that it is evenly distributed. That's what is lacking.[...] You find us selling a lot to southern Sudan, Kenya, we are selling to Rwanda, Congo." So the problem is not the food. We have no enabling policy that guides and regulates.</i>	Lack of food security policy	Food insecurity	George Davidson Wanakina
<i>It does affect food security, but a lot of that is through informal trade. And also because people say if the government had a way of regulating how much goes out, you know, because then they have to make sure the population is fed before a lot of the food goes out of the country.</i>	Lack of food export policy	Food insecurity	Sarah Mubiru
<i>The export to Southern Sudan has an impact on pricing and food security in Uganda [...] Because sometimes our people go hungry because they sell a lot of food to Southern Sudan.</i>	Short-term vision; selling too much	Food insecurity	James Kanyije
<i>Farmers produce adequate maize, but at the end of the day they don't have just because we are ever having the trucks. Though we are still in the East African Community, but we have different countries. [...] Trucks from Kenya can enter, those other countries can enter, and at the end of it all the maize produced ends up feeding the outside countries and the Ugandans are left with almost nothing. The problem with food insecurity of course comes in.</i>	Short-term vision; selling too much	Food insecurity	Andrew Wamimbi
<i>The maize produced in this area is of high value, but most of it goes to Kenya [...] Many products are processed in Kenya. And another aspect is South-Sudan. South-Sudan is a big market for this area. 80% of the food in South-Sudan comes from Uganda, especially fruits and vegetables.</i>	Regional export	Food insecurity	Arthur Wasikura
<i>It does, if we are not prepared. When the demand comes in too quickly before we can step up the production, we are bound to sell off everything because we want the money. It will lead to increased prices of food, it happened before because of local export. They sell as much as possible which led to an increase of prices. It is more a case of awareness. They have to find balance.</i>	Short-term vision; selling too much	Food insecurity	Arthur Wasikura
<i>Most exporting food production goes neighboring countries like Congo, Kenya and Rwanda. And the country we export the most to is South Sudan because they don't have any food. There food comes for 80% out of Uganda. And to export the products we just put everything immediately on trucks and send it there.</i>	Regional export	Food insecurity	Seguya Yassin
<i>Especially when they see that. big money. I will cite an example of the maize. Because our neighbors here the Kenyans, they have specialist markets, and when they come here with lots of... they go even up to the extent of the gardens, the farm. They say let's help him harvesting, let's help you even in the drying. Because they come with these big vehicles. Let's help even in weighing. They pay you all that money that you want</i>	Short term vision; selling too much	Food insecurity	George Shiondo

A project mainly financed by:

Implemented by:

AGRI-QUEST RESEARCH PAPER SERIES – No. 1: Institutional Voids and the Consequences for Food Security

<i>and the farmer is not foreseeing the consequences of tomorrow.</i>			
<i>Trucks from Kenya can enter, those other countries can enter, and at the end of it all the maize produced ends up feeding the outside countries and the Ugandans are left with almost nothing.</i>	Short term vision; selling too much	Food insecurity	Andrew Wamimb i
<i>...basic food is mainly like the maize, millet and things like that, those ones are affected seasonally and mainly through informal trade like sometimes when there is a shortage in Kenya and a lot of maize goes to Kenya and then there is less maize here so it becomes expensive so even now it affects the poor households because then they have to buy maize at a high price [...] It does affect food security.</i>	High food prices due to regional export	Food insecurity	Sarah Mubiru
<i>The prices are very low during harvest time, and as time goes on, because of the scarcity in supply, the shortage in supply the prices keep increasing and finally they're under crisis of food.</i>	High food prices due to regional export	Food insecurity	Andrew Wamimb i
<i>...that is why there are adjustment of, instead of eating three meals a day or four, because of what you are overseeing with that money you limit yourself to one meal, or two. That is why you see these imbalances.</i>	High food prices due to regional export	Food insecurity	George Shiondo
<i>I buy fish rarely now because it is costly, I'd rather buy beef you know. I buy fish once in a while because it is costly. [...] So that is one example that I can give. Fruit over time is also kind of taking on the same trend. Because fruit maybe a cluster of desert banana's that someone used to buy for 2000 Ugandan shillings is now going for about \$1,5 or something like that you know.</i>	High food prices due to export	Food insecurity	Sarah Mubiru
<i>Well, I think that is not because of the lack of food, that we don't have enough food. It is more towards the capacity of the resources for the people to buy food. Because there is plenty of food I am telling you, but due to a whole lot of reasons, people don't have the resources to buy it. So it's not that the food is not there. It's like the people don't have the money to buy the food.</i>	Affordability of food	Food insecurity	Arthur Wasikur a
<i>You see it is just a matter of networking. For example, if you go to the Mbale market here, you can get a lot of potatoes, a lot of many things to eat, matooke. You go somewhere in the next city, because they don't know what is happening here, they don't know.</i>	Distribution issue	Food insecurity	
<i>But the distribution is a problem, so it is a distribution issue. So food security in Uganda is not so much a quantity issue, it is a distribution issue. There is no mechanism to cause food to be moved from here to here [south to north]. And simply because there is hunger here is not sufficient, unless it of course it was a state controlled economy, but just the existence of hunger here is not enough to trigger movement from here to there [south to north] by a private operator.</i>	Distribution issue	Food insecurity	James Ssemwa nga
<i>And it is because the infrastructure broke down, because we had one single rail-track that had two branches [draws a map] and this part is left out. Everybody elsewhere is not part of this railway system. So the only way to take food anywhere else than along this is by truck and now because this is broken [pointing at rail-track on map] actually you can only mode food around by truck. You can't move food around by train.</i>	Distribution issue	Food insecurity	James Ssemwa nga
<i>If you try to look at the food security, people going hungry, the problem we have in Uganda is not that we don't have enough food. We have food, but it is not evenly distributed. There are issues with the distribution; there are issues with the accessibility.</i>	Distribution issue	Food insecurity	George Davidso n Wanakin a
<i>There is no mechanism to cause food to be moved from here to here [south to north]. And simply because there is hunger here is not sufficient, unless it of course it was a state controlled economy, but just the existence of hunger here is not enough to trigger movement from here to there [south to north] by a private operator.</i>	Distribution issue	Food insecurity	James Ssemwa nga

**Table 7: Financial improvements through associations**

Sample interview quote	1 <sup>st</sup> order concept	2 <sup>nd</sup> order theme	Intervie wee
<i>When they bulk and collectively market, they will be able to fix suitable and favorable prices for themselves. They should determine it when they act collectively.</i>	Improving bargaining power	Financial improvements	George Davidso n Wanakin a
<i>And some of them at least have accepted to join groups, cooperatives, working together as a group, maybe soliciting for the capital required for investment jointly, and they even have a bargaining power while selling off their produce.</i>	Improving bargaining power	Financial improvements	Andrew Wamimb i
<i>We are an intermediate, we facilitate this process of negotiating...</i>	Improving	Financial	Deus

A project mainly financed by:

Implemented by:

AGRI-QUEST RESEARCH PAPER SERIES – No. 1: Institutional Voids and the Consequences for Food Security

	bargaining power	improvements	Nuwaga ba
<i>And what we are foreseeing, out of that collective marketing it is exposing us to specialist markets. Because individually you can be manipulated by middlemen, but now with the element of collective marketing we shall be able to be identified and people even from The Netherlands they can see us.</i>	International visibility	Financial improvements	George Shiondo
<i>When I was in the Netherlands in the other week, I saw there was a niche for me for people that need my coffee in the Netherlands, in Amsterdam. NUCAFE sees who want to buy the coffee and what the customers want. In the Netherlands and the Scandinavian countries they like specialty coffees, and they are willing to pay more for specialty coffees.</i>	International visibility	Financial improvements	Deus Nuwaga ba
<i>They are getting used to the idea of working together, it will be just a question of time before they start to negotiate that space. They will start to become visible, now somebody can come and say: 'Okay, I don't have to work with this exporter I will do it myself.' They will now talk to the other farmers directly, so this is a dynamic situation.</i>	International visibility	Financial improvements	James Ssemwanga
<i>Exactly, for instance, this container is going to Italy. Each kilo they pay about \$0,10 to NUCAFE, then we help to get to the buyers and these buyers are receiving samples. Once they like the coffee, we connect the buyer to the farmer. This helps in getting a sustainable production and income.</i>	International visibility	Financial improvements	Deus Nuwaga ba
<i>We work with the bank to the extent that they can provide money in advance to the farmers, as a loan. This is pre-financing.</i>	Improved access to credit	Financial improvements	Deus Nuwaga ba
<i>Saccos, we call them Saccos (Savings and Credit Co-operative organizations in Uganda). They are usually small farmers' groups where they pull their resources together and share those resources. But commercial, like going to banks, is less common. So small associations which help with micro-financing are most popular.</i>	Improved access to credit	Financial improvements	Michael Kijambu
<i>...they put together the capital and they work together. They even have savings in the group, save some money for any eventualities, or maybe those costs involved in buying pesticides required for good production.</i>	Financing through co-operative	Financial improvements	Andrew Wamimbi
<i>Now that is where we facilitate these associations and cooperatives to have bankable business plans, because the memorandum of understanding with the local bank is about to be able to advance money to these smallholder farms which have a good bankable business plan and a good cash flow.</i>	Improved access to credit	Financial improvements	Deus Nuwaga ba
<i>[about investments] Well the only way you can get it is via these associations.</i>	Improved access to credit	Financial improvements	Julius Yoswa Zake
<i>So the third aspect is with farmer organizations, and we also have an innovative model called the farmer ownership model. This one encourages the farmer to own their crop, value add and export or trade locally. Thereby enhancing, enhancing the income of these farmers. For instance, if a farmer may sell coffee, and he is still in the chamber of 20 cents, but if he let it ripen and dries it properly, he gets possibly 40 cents. But if we providing him an opportunity to actually how the coffee is graded, that income can grow to as high as 2 dollars. And if you give him an opportunity and lead him to a German, Italian or even a local coffeeshop, that can grow up to 4 dollars. So you can see how that kind of model can really impact the income of farmers. So we call it the farmer ownership model and its a model we really pushing hard and also coffee organization called Nucafe. We are pushing harder that model and it basically helps very good.</i>	Farmer-ownership model	Financial improvements	Apollo Segawa
<i>Our long-term vision is to have the farmers taking charge of the whole value chain. From production all through processing and marketing, so that in between here, even those who are not directly involved in the farming can do business in the value chain. They can supply inputs; they can process, package and sell.</i>	Farmer-ownership model	Financial improvements	George Davidson Wanakina
<i>...we have facilitated the smallholder farmers to really own their coffee along the value chain. So that they are able to participate in those higher-level nodes and levels of the VC. Right from the nursery up to the end.</i>	Farmer-ownership model	Financial improvements	Deus Nuwaga ba
<i>No it is initially only for coffee alone, and that's how we built the farmer-ownership model, using coffee as an example. But, we are trying to find the best practices for other commodities. Because the farmers are not growing coffee alone. They are doing intercropping, but they also have other things.</i>	Farmer-ownership model	Financial improvements	
<i>So NUCAFE is really encouraging this farmer-ownership model. Farmers can come and they register at the association, they can export, they can get whatever they want to get.</i>	Farmer-ownership model	Financial improvements	Julius Yoswa Zake
<i>What is happening to the middle people, or what we can call middlemen,</i>	Farmer-	Financial	Julius

A project mainly financed by:

Implemented by:



<i>is that they get a lot of money but the farmers themselves get very very little. So this process now, of thinking about how farmers can get more money, this farmer-ownership model is one of them.</i>	ownership model	improvements	Yoswa Zake
--	-----------------	--------------	------------

**Table 8: Affordable services through associations**

Sample interview quote	1 <sup>st</sup> order concept	2 <sup>nd</sup> order theme	Interviewee
<i>And, again through these kind of arrangement, the farmer-ownership model, we have used and empowered the farmers to be able to have common and shared facilities that the farmers can use to add value.</i>	Facilities through association	Affordable services	Deus Nuwaga ba
<i>This allows the farmers to use the processing facility at negotiated prices, and pay the user fees for the facility, and process your own coffee. The farmers do not have to money to build a factory at the individual level. But at the level of NUCAFE, as an organization, we negotiate with the factory owners and processors to have this processing facility. Now the farmers can use this facility at a negotiated price, they only have to pay the user fee when they are brought together by us. We are an intermediate.</i>	Facilities through association	Affordable services	Deus Nuwaga ba
<i>...so we have an ambient store where farmers can keep their Irish [potato] for some time, either for ware of seed.</i>	Facilities through association	Affordable services	George Shiondo
<i>The Association is helping us in several ways [...] they help us by providing pruning devices. But we still have challenges in post-harvest management. We need for example better equipment to improve the drying of the beans. We also don't have big spray-systems that can reach the entire field.</i>	Facilities through association	Affordable services	Mutwaili Galugali
<i>We also have a center, different drying centers in the villages, where a lot of farmers can use the same centers for a small fee to dry.</i>	Facilities through association	Affordable services	Apollo Segawa
<i>Each of these cooperatives has a bulking center and some have more than one. Almost all of them have coolers. They have coolers that can take up to 3000 to 5000 liters of milk.</i>	Facilities through association	Affordable services	Sarah Mubiru
<i>Last year we introduced storage. Before they sold it fresh immediately after harvesting. Storage is good so they can sell it when the prices are better.</i>	Facilities through association	Affordable services	Arthur Wasikura
<i>Farmers need to know they can meet processors, traders, other partners in the service sectors, financial services, banking. But now when we bring them, they are finding themselves mixing with almost everybody.</i>	Linking farmers to partners	Affordable services	George Davidson Wanakina
<i>Sometimes we also link them with the other institutes. We also do business development trainings, mainly to the farmers.</i>	Linking farmers with partners	Affordable services	Arthur Wasikura
<i>Largely, with this kind of organization we get them linked to different partners and also engaged like with the government.</i>	Linking farmers to partners	Affordable services	Deus Nuwaga ba
<i>It can play a good role in that making sure farmers buy from a known reliable source. For example, if they have to deal with input dealers the cooperative knows the ones who are really reliable and we have a list of those input dealers, which are confirmed by the ministry of agriculture. I'm sure cooperatives follow that list to not get any fake inputs because for the unions it is important for increasing the coffee production as well. So they are trying to be sure to not get involved with fake seeds.</i>	Linking farmers to partners	Affordable services	Nathan Mabonga
<i>So when you getting this market sector platforms, they are trying to eradicate those elements and link stakeholders directly. The buyer is within the system and they are sitting in the same meeting, the producer is in the same meeting, the consumer is in the same.</i>	Linking farmers to partners	Affordable services	Fred Tabalamule
<i>Communication and sharing. We operationalize these value chains through platforms. For every value chain we have a platform. Periodically we convene the different stakeholders along the value chain. We have a meeting, which can be after every three months, it can be after every six months, it can be after every year, But we have periodic meetings where stakeholder in the value chain convene and look at the performance of the value chain from the beginning up to the end. Every time they meet of course they come up with issues, which are affecting and constraining improved productivity in the value chain in different stages. They identify these constraints, they identify who should do what, when. So when they reconvene they try to look at the performance, to what extent have the bottlenecks been addressed?</i>	Communication through associations	Affordable services	George Davidson Wanakina
<i>Well, first of all, when you make associations. It is very easy to</i>	Communication	Affordable	Julius

A project mainly financed by:

Implemented by:

AGRI-QUEST RESEARCH PAPER SERIES – No. 1: Institutional Voids and the Consequences for Food Security

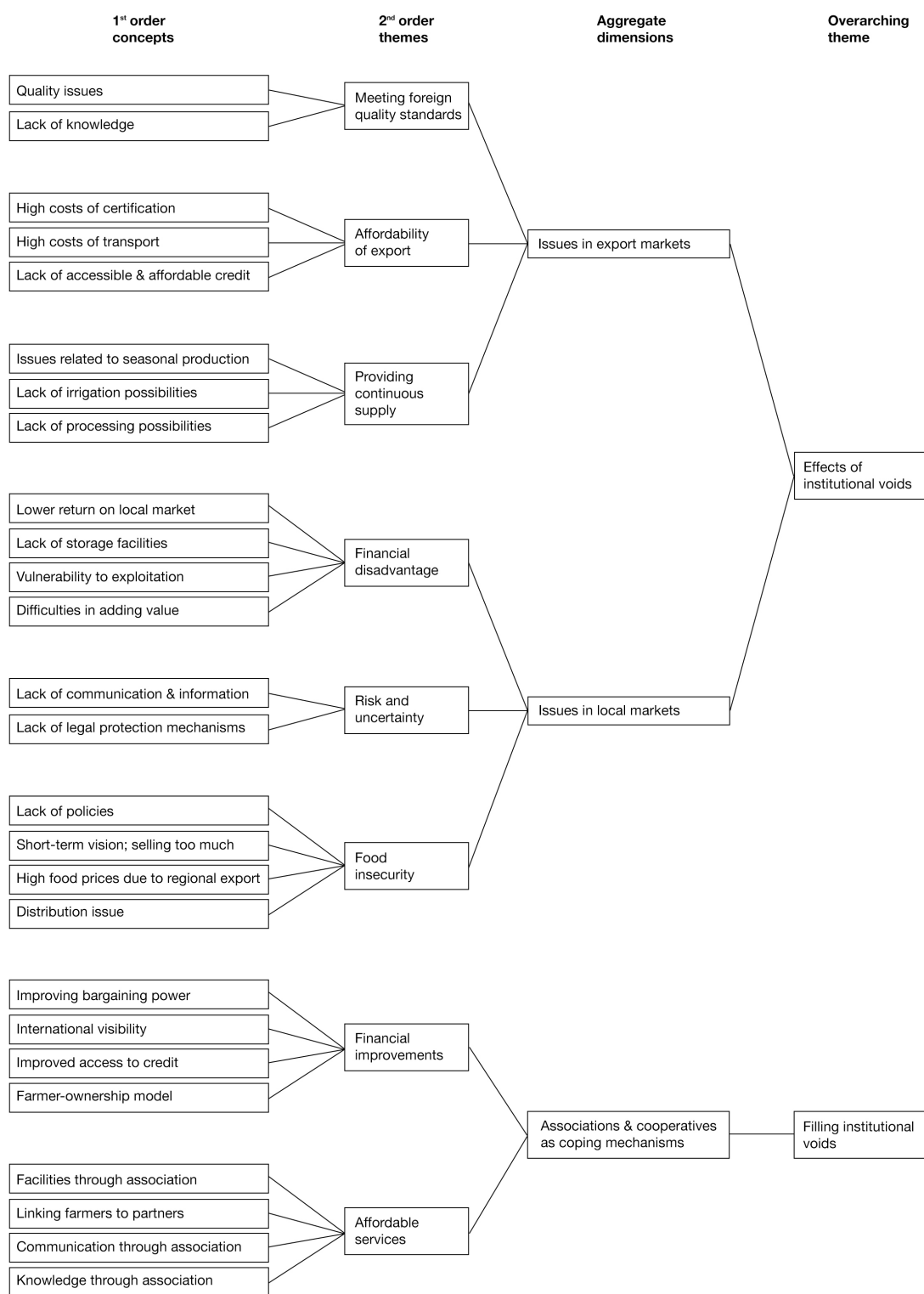
<i>communicate, because they assemble all the farmers for export. So within themselves, mutually you can say: 'use this and this technique.'</i>	tion through associations	services	Yoswa Zake
<i>Quality issues are directly communicated to the leader of the farmer groups.</i>	Communication through associations	Affordable services	James Ssemwanga
<i>So as part of what we have been trying to do to lay out maybe is maybe also introduce technologies, drying technologies. Simple drying technologies So the farmer doesn't have to rely just on the sun to dry the coffee. Also technologies like wet processing, when you wet process you haven't much dry period.</i>	Knowledge through association	Affordable services	Apollo Segawa
<i>What we do is that we from time to time build awareness about what they should do. This is for instance about drainage, land-management practices especially when it comes to soil- and fertilizer use.</i>	Knowledge through associations	Affordable services	Deus Nuwagaba
<i>First of all there has been an intervention for sustainable land management, whereby we control the loss of the nutrients and then apply good management practices to see that the increase is much. Because originally we get in 100 kg bag of seed we good get something like 5 bags of profit, which is not sufficient enough to stand the household. But now with good harvest practices we harvest 1000, 10 bags, 1000 kg of profit.</i>	Knowledge through associations	Affordable services	George Shiondo
<i>But when farmers of course conventionally used to look at themselves as farmers and they think that their problems are entirely farming, but there are problems apart from seed, and other inputs, you are looking at prices, you are looking at the market, you are looking at other inputs [...] so we are opening them up to look at it from that broader perspective.</i>	Knowledge through associations	Affordable services	George Davidson Wanakina
<i>What is important is to make the farmers aware that the food security in their household is very important and it should be guarded. But they also need money. So we prepare and support them to produce what is enough for their food security and also produce that surplus that they can sell and get money whether locally or internationally to facilitate and finance other needs.</i>	Knowledge through associations	Affordable services	George Davidson Wanakina
<i>Nucafe has number of trainings, number of activities up in the countryside. So when we open the challenge we basically go and talk to these farmer groups and talk to the farmers. We say look farmers, we have this and this, maybe you can apply, maybe it's good for you. So we reach out to them through our networks.</i>	Knowledge through association	Affordable services	Apollo Segawa
<i>And we also give back concerning technical expertise. We hire technical experts and try and help them produce at their farms.</i>	Knowledge through associations	Affordable services	Michael Kijambu
<i>...we have the farmers training and education, this is number one to build capacity. It helps the farmers to really know the requirements of the certifications that they are going to participate in.</i>	Knowledge through associations	Affordable services	Deus Nuwagaba
<i>We have also trained the farmers, which we then call business managers, at each of the associations or cooperatives. They take care of all the other farmers we cannot reach. Because these cooperatives and associations belong to them as farmers. So we do empower them to train each other, and to ensure that they are able to themselves as leaders of these cooperatives...</i>	Knowledge through associations	Affordable services	Deus Nuwagaba
<i>They lack the knowledge. We have to spread it. Because really as I said, imagine average yield is about 600 kg. So that means that this small farmer is not really efficient. So what we are saying is that we can get an average of 2, 3 or 4 times. These small farmers are not aware. We have to increase awareness, knowledge.</i>	Knowledge through associations	Affordable services	Julius Yoswa Zake
<i>So this farmer is getting learned that the more ethical the better money they get for their crop, their products, the higher income they get. So it really when it comes to money, they listen quickly and it works quite well.</i>	Knowledge through associations	Affordable services	Apollo Segawa
<i>Yeah for instance, Nucafe is encouraging farmers to engage into agro foresting practices, grow some tree species, intercropping that with coffee because they provide the shade.</i>	Knowledge through associations	Affordable services	Apollo Segawa
<i>Yes, so that is what we are learning about right now (meaning the coffee meeting), mulching, using fertilizer, soil and water conservation, shaded trees. It all plays a part in increasing production.</i>	Knowledge through associations	Affordable services	Nathan Mabonga
<i>The type of support I get is mostly information about how to control coffee, weed and coffee tastes. I also receive training in agricultural practices, for example coffee spacing, control of weeds and harvesting. But the greatest challenge is the control of coffee weed and insects that attack the trenches of coffee.</i>	Knowledge through associations	Affordable services	Mutwalibi Galugali

A project mainly financed by:

Implemented by:



**Figure 1: Data structure – Effects of institutional voids and dealing with them**





## APPENDICES

### Appendix 1: Overview of interviews

#### Interviews held by author

Date	Interviewee	Job title/Profession	Duration
28-03-16	James Ssemwanga	Managing director at Ssemwanga Centre	0:56:02
28-03-16	Seguya Yassin	Coffee trader	1:23:35
29-03-16	Julius Yoswa Zake	Farmer / Professor & researcher at Makerere University / Private consultant	1:19:12
30-03-16	Sarah Mubiru	Senior Dairy and Livestock Advisor at SNV Netherlands Development Organization	0:11:03
30-03-16	Michael Kijjambu	Technical Manager at 1000 cups	0:32:19
30-03-16	Deus Nuwagaba	Entrepreneurship Services Manager at NUCAFE	1:09:23
31-03-16	Arthur Wasukira	Researcher Officer / Program Leader at NARO-Buginyanya ZARDI	0:42:24
31-03-16	George Shionda, George Idipio	Potato farmer, District Production & Marketing Officer at Mbale District Local Government	0:38:06
31-03-16	Andrew Wamimbi	Assistant Agriculture Officer at Mbale District Local Government	0:17:42
01-04-16	Denis Okello	Head Teacher at Bukedi Agriculture School	0:08:20
01-04-16	Frederik Kawanga	Coffee farmer	0:24:05
02-04-16	Mutwalibi Galugali	Coffee farmer	0:15:05
04-04-16	Charles Nsubuga	Managing Director at Sesaco	1:01:27
05-04-16	Apollo Segawa	Managing Director at CURAD	1:10:32
05-04-16	James Kanyije	CEO at KK Foods	1:00:18

#### Interviews held by colleagues

Date	Interviewee	Job title/Profession	Duration
28-03-16	James Ssemwanga	Managing director at Ssemwanga Centre	0:42:43
30-03-16	Sarah Mubiru	Senior Dairy and Livestock Advisor at SNV Netherlands Development Organization	0:13:17
30-03-16	Sarah Mubiru	Senior Dairy and Livestock Advisor at SNV Netherlands Development Organization	0:17:26
30-03-16	Sarah Mubiru	Senior Dairy and Livestock Advisor at SNV Netherlands Development Organization	0:16:00
31-03-16	Nathan Mabonga	Farmer	0:34:49
31-03-16	Fred Tabalamule	Sustainable Land Specialist at Ministry of Agriculture / Project ATAAS	0:34:01
01-04-16	Moses Makaka	Director at Bugiri Marketing Center Association	0:05:34

### Appendix 2: Moments of Additional Data Gathering

#### Moments of additional data gathering

Date	Event	Additional information
25-03-16	Visit to Kamwokya Market Kampala	Local market
29-03-16	Meeting Mr Hans Peter van der Woude	Deputy Head of Mission at the Dutch Embassy Kampala
01-04-16	Company visit Bugisu Co-operative	Coffee cooperative
01-04-16	House visit Mulongo Tehoram Lumbe	Farmer / retired headmaster secondary school
02-04-16	Informal conversation Agnes Mangobi	Certified provider of coffee seedlings

### Appendix 3: Interview Scheme

Introduction questions:

- What food product does your company/do you produce?
- What is your function within the company (unless farmer)?

Main questions:

- What are/ would be reasons to sell your products to the local market in Uganda?
- What are/could be problems you encounter when targeting the Ugandan local market?
- What are the reasons for You/your Company (not) to produce for export?
- Can you tell me about internal factors playing a role in the decision to export or not to export?

A project mainly financed by:

Implemented by:

(Specify what you mean by internal during the interview: factors directly related to and under control of the company, while external forces are those for instance at the level of government, competition, and over which the company has no direct control)

- How would you describe the external forces that influence the decision to export or not to export?
- What do you think causes possible difficulties/barriers to export?
- How do you perceive the status of hunger and food security in Uganda? (Progressing/stagnating etc., why?)
- What is the effect of the hunger rates in Uganda on the decision to export or not? (Does that influence the decision at all)
- What do you think is your role as a food producer/farmer in attaining the goal to end hunger and improve food security?
- How did your company/Your policy on export evolve over time? (Changes in value, cyclical, depending on internal or external factors?)
- What is your strategy for the future concerning the export/local market decision?

A project mainly financed by:



Implemented by:

