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THE ROLE OF COLLECTIVE ACTION AND FARMER
GROUPS IN RURAL LIVELIHOODS IN KENYA

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Abstract

The purpose of this thesis was to outline and analyze functions, impacts and challenges of collective action among farmer groups in rural Kenya. The thesis was guided by questions related to how and why farmers cooperate, what the outcomes of collective action on the individual and community level with regard to social and human capital are, and what challenges these farmer groups face. To fulfill the purpose of the study, the methodology was structured drawing on phenomenology and case study-design. Data was collected through individual interviews, group interviews, observations and additional documents. The fieldwork took place in areas of Eastern Province and Nyanza Province in Kenya during four weeks in November and December 2011. The main findings include the notion that social reasons are more prominent than direct economic motives for farmers to engage in collective action, while at the group level economic reasons are more pronounced. Social and human capital is important outcomes of farmer groups, but they are also prerequisites for collective action. Bonding social capital is strong among all groups, whereas bridging and linking are weak or moderate. Challenges with regard to lack of qualified leadership, financial constraints and gender aspects are faced by the groups.

Keywords: Collective action, farmer groups, social capital, human capital, Kenya.

Contents

Abstract..... ii

Acknowledgement v

Abbreviations..... vi

1 INTRODUCTION..... 1

 1.1 Purpose and research questions 2

 1.2 Demarcations 3

 1.3 Disposition..... 4

2 BACKGROUND AND RESEARCH CONTEXT 4

3 LITERATURE REVIEW 6

4 METHODOLOGY 8

 4.1 Research strategy 8

 4.2 Sampling, data collection and analysis 9

 4.2.1 Sampling 9

 4.2.2 Data collection 11

 4.2.3 Transcribing interviews 12

 4.2.4 Data analysis 13

 4.3 Qualitative and ethical considerations 13

5 THEORETICAL FRAMEWORK 15

 5.1 Collective action 15

 5.2 Social capital..... 17

 5.3 Human capital..... 19

 5.4 Analytical framework 21

6 SMALL-SCALE FARMERS’ ENGAGEMENT IN GROUPS..... 22

 6.1 The farmers and group features 22

 6.2 Group activities..... 24

 6.3 Internal drivers of collective action 25

7 COLLECTIVE ACTION AND THE LINKS TO SOCIAL AND HUMAN CAPITAL..... 28

 7.1 Social capital..... 28

 7.1.1 Bonding..... 28

 7.1.2 Bridging 30

 7.1.3 Linking 31

7.2 Human capital.....	34
8 FARMER GROUPS AND THEIR CHALLENGES	36
9 CONCLUSION	38
REFERENCES	41
APPENDICES.....	48
Appendix 1. Interview guide – individual farmers.....	48
Appendix 2. Interview guide - key informants.....	49
Appendix 3. Interview guide – farmer groups.....	50
Appendix 4. List of interviews	51

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Abbreviations

ACDI/VOCA	Agricultural Cooperative Development International/Volunteers in Overseas Cooperative Assistance
IFAD	International Fund for Agricultural Development
KES	Kenyan Shilling
MGR	Merry Go Round
MoA	Ministry of Agriculture
NGO	Non-Governmental Organization
SHG	Self-Help Groups
USD	United States Dollar

1 INTRODUCTION

Poverty is widespread in Kenya as 46 percent of the population lives on less than one USD per day. 79 percent of the people live in rural areas and are reliant on agriculture for most of their income. There are huge disparities between rural and urban areas and rural dwellers are less likely to have access to basic services. Furthermore, income in agriculture is lower than in other sectors resulting in a high incidence of rural poverty (European Commission and the Republic of Kenya, 2007:12). Since agriculture is the means of livelihood for most people in Kenya, sustained agricultural growth is important to reduce poverty.

Evidence shows that development in agriculture is twice as efficient at reducing rural poverty as growth in the industrial sector (IFAD, 2011:2). There has been renewed focus on small-scale agriculture as an engine for growth and poverty reduction and its significance has been widely recognized both by development agents and governments. This has led to the perception that smallholder producers are important and must be central to any agricultural development strategy (Barham & Chitemi, 2008:1). However, scholars challenging this approach have emerged. They advocate for a strategy that is less centered on agriculture and instead focus on people's mobility out of agriculture in order to reduce rural poverty (Ellis, 2005; Rigg, 2006).

At the same time, the interest and attention on farmer organizations has grown over the last decade (Wennink et al., 2007; World Bank, 2007). By organizing themselves in groups engaging in collective action, small-scale farmers cannot only profit from economies of scale and improved bargaining positions, but also benefit socially from solidarity among the group members, especially in times of distress (World Bank, 2007). Collective action, where people act together for a common interest, has been important for poverty reduction and food security in many parts of the world. It enhances agricultural production, contributes to empowerment, and strengthens rural livelihoods (Bosc et al., 2002:19-22). At the community level, farmer groups represent potential building blocks for larger farmer organizations. Involving these groups and making use of their capacity is important in order to achieve sustainable rural development. Hence, through the empowerment of local farmer groups, the capacity to build larger farmer organizations can be developed and thereby increase their potential to make their voices heard and influence the external environment (Heemskerk & Wennink, 2004:17).

Social capital, comprising aspects of trusts and norms within social networks, is a facilitating factor of collective action within community groups and it is an important aspect in strategies of poverty reduction (Narayan & Pritchett, 2000:290). Communities with good social networks and associations are in a better position to tackle poverty and minimize vulnerability (Narayan, 1997).

This thesis will mainly use collective action and social capital theory, but also the concept of human capital, to analyze small-scale farmers' engagement in farmer groups in Kenya and discuss its outcomes on rural livelihoods. Approaching poverty as lack of access to political, economic and social resources, as done by Karlsson (2000), this thesis builds on the assumption that people can improve their capacity by developing their own resources such as income, savings, knowledge and skills.

1.1 Purpose and research questions

Approximately 85 percent of the rural population in Kenya are small-scale farmers with small land holdings (Omiti et al., 2008). Many smallholders live on the edge of subsistence where poverty is a constant threat and vulnerability to external shocks is high. Farmers lack access to skills, capital, inputs, markets and institutions which allow them to improve their livelihoods. However, the engagement in groups is common among small-scale farmers in Kenya.

In the last two decades there has been a resurgence of interest in community-driven development among governments and donors, where community groups are in charge and the focus is on self-help, local organizational capacity, and initiatives from the locals. Efforts have been directed towards groups and households. Community-driven development must include participation as well as the ability of people to work together, trust each other, and organize to solve problems, mobilize resources, resolve conflicts and network with others in order to achieve common goals and be successful (Narayan & Pritchett, 2000:284-285).

With that in mind, the purpose of this research is to outline and analyze functions, impacts and challenges of collective action among farmer groups in rural Kenya. It seeks to understand how and why farmers choose to cooperate and what the effects are in rural livelihoods and the community, as well as improvements needed. The working hypothesis is that farmer groups make a difference in the lives of farmers and increases their access to

productive resources, thus contributing to positive livelihood changes. Three research questions guide the thesis:

- How and why do small-scale producers in Kenya engage in farmer groups and collective action?
- What are the outcomes and impacts of collective action on the individual and community level with regard to social and human capital?
- What challenges do these groups have?

This thesis analyzes cases of collective action in Eastern and Nyanza Provinces in Kenya in order to contribute to the existing research and literature on the topic. It aims to enhance the knowledge about farmers and their engagement in farmer groups in relation to social and human capital. This approach is partly demand-driven, based on a demonstrated need among farmers to organize and cooperate. There are indications in the literature of the positive effects of collective action on poverty reduction. However, few studies explore the linkages with social and human capital in farmer groups in Kenya. This thesis is designed to combine approaches of phenomenology and case studies using interviews as the main method of data collection.

1.2 Demarcations

The thesis focuses mainly on the local context and the farmers' perceptions of collective action and livelihoods. Organizations are not functioning in a vacuum, but they exist within a particular set of institutional, societal, and environmental constraints and norms (North, 1990). Thus it is important to be aware that external factors and the institutional environment influence rural livelihoods and farmer groups, but they are not explicitly elaborated on in this thesis. As a result of discussions in the field and due to the limited scope of the thesis, the focus is primarily on social and human capital, while only making references to financial and physical capital as outcomes of collective action. Lastly, only members of groups have been interviewed, therefore the impact on non-members cannot be assessed.

1.3 Disposition

The thesis opens with an introductory chapter on the background of the topic and the research context followed by one comprising a literature review in order to situate this research in the current debate. The following chapter describes the methodology. The thesis then proceeds with a theoretical framework on collective action and social capital before the empirical material is analyzed and discussed in the three subsequent chapters. It ends with a final section on the main conclusions.

2 BACKGROUND AND RESEARCH CONTEXT

Agriculture is the backbone of Kenya's economy and one of the main driving forces of economic and social development. Smallholder agriculture makes up approximately 75 percent of the total agricultural output (IFAD, 2011:1). The Kenyan agricultural sector is relatively advanced, but it is still predominantly small-scale with an average farm size of 0.5-7.5 acres. Agriculture is rain-fed and poorly mechanized without supporting institutions and infrastructure. The use of modern inputs such as hybrid seeds, fertilizers, and machinery by small-scale farmers is relatively low and so there is potential for improvement. The major food crops are maize, beans, rice, and wheat, while the main commercial crops include tea, coffee, and horticultural products (Government of Kenya, 2010:9-10).

Large and complex farmer associations and cooperatives in Kenya have contributed to the emergence of a rather well-developed commercialized agricultural sector. However, attempts to create well-functioning institutions and policies benefiting individual and private sector growth have been weak. Producer and community-based organizations are increasingly providing social and agricultural services and thereby the private sector plays an important role in linking commercial farmers with markets, while small-scale farmers must also be assisted through cooperation in community-based organizations (Kariuki & Place, 2005:3).

Cooperation among farmers is not a new phenomenon in Kenya. Between the 17th and 19th centuries almost all social, political, and economic life was localized and there were no integrated economies or centralized political structures. Most people who farmed were subsistence farmers, exchanging goods with others to satisfy their basic needs. However, this implied that farmers had to acquire land, live in one place, and cooperate with others in order

to sustain their livelihoods. This cooperation occurred mainly within groups of close relatives living together in one place. Members of the lineage cooperated in everyday life, but to reproduce and survive they also had to create linkages with other lineages. Relations to people outside the group were important not only for reproduction, but also for exchanging goods and creating alliances. These extended networks could also be called upon in times of hardship (Spear, 1981:72-76).

Kenya has had a solid network of local self-help initiatives relative to other African countries (Kanyinga, 1995:72). There is a long tradition of Self-Help Groups (SHGs) and organizations, referred to as the Harambee¹ movement, which has been of major importance in social and political life. The attitudes towards this kind of organization were overall positive even though a few critical voices were raised. The term self-help became popular in the early 1950s, but at that time it was more or less a new word for communal labor where the local people, unpaid and organized by the chiefs, were forced to build schools, dams, and water catchments. Hence, the traditional self-help movement was different from the modern systems built on voluntarism, participation and local decision-making (Hill, 1991).

Institutions for collective action have been critical in the social and economic development in rural Kenya. The majority of households in central Kenya are engaged in some form of collective action (Kariuki & Place, 2005). In 2005 there were 185,722 SHGs and 135,294 women's groups in Kenya (Nokia Research Centre, n.d.:15). The groups undertake a wide variety of activities, often with an income generating aspect. People consider groups to be important to achieve social and economic objectives and through networks built on trust, farmers can share resources as well as labor. However, governments must support local institutions in order to enhance and strengthen collective action. Through capacity building for smaller groups, they can empower themselves and mobilize resources to invest in income-generating activities (Kariuki & Place, 2005). In addition, Kanyinga (1995:100) emphasizes that voluntary development and collective action in Kenya is influenced by local economic factors. In times of recession, an increase in SHG activities have taken place as households pool their resources to reduce and mitigate the impacts of falling real incomes from agriculture and employment. This supports the idea that collective action is important not only for social and economic development, but also for reducing vulnerability.

¹ Harambee means: "let's pull together" or "community cooperation". Hill (1991) gives a thorough presentation of the movement.

3 LITERATURE REVIEW

This chapter gives a brief review of previous studies on collective action and farmer groups in order to position the thesis within current research and introduce the most relevant studies. Literature on collective action, farmer groups, and social capital can be found from the 1980s and onwards. It reinforces the view that farmer groups are generating benefits to small-scale farmers. For example, Schneider (1988) states that for groups in Rwanda the objectives are not only related to production and economic targets, but also to social improvements. The socio-economic changes occurring within the community where the groups are active bear promise of diversified and sustainable rural development. Improvements have also been realized in food availability, housing, and income. Schneider's study shows that learning and innovation is best channeled through groups of farmers and it is therefore important to give support in terms of training and technological innovations.

Moreover, Wambura et al. (2005) explain that groups have a potential to play an important role for poverty reduction based on conclusions drawn from research on small farmer groups in Tanzania. Groups ought to be formed and managed by farmers themselves and self-help initiatives are an important tool in transforming rural development in a country. Likewise, Hellin et al. (2007) discuss that farmer organizations can be a vehicle for improving rural livelihoods and reducing poverty in Meso-America. They argue that the formation of farmer organizations has a significant impact with regard to procurement of seeds and fertilizers as well as access to credit. In addition, their study confirms that farmer organizations in the maize sector are mostly associated to access of seeds, fertilizers, and extension services and less to marketing. In their case though, farmers rarely self-organize, but rather form groups through support by external agents.

This observation raises the issue of viability of farmer groups. The question whether groups formed by external actors are as viable as those established from the members' own initiative is dubious. In recent years, donors and Non-Governmental Organizations (NGOs) providing services to small-scale farmers have realized that it is more efficient to work with farmers who are organized into groups. Therefore, development programmes have been outlined so that formation of farmer groups has been a prerequisite for collaboration. However, projects aiming at improving cooperation among farmers do not necessarily lead to viable farmer groups (Stringfellow et al., 1997). In their study on associations in Africa, McCormick et al.

(2003:8) found that most women's groups, rotating savings and credit groups, as well as welfare societies have been formed from the members' own initiative, but end up receiving support from external actors.

When groups are formed by farmers there is most certainly an initial degree of social capital among the members. Many studies have shown that community social capital such as trust, norms, and networks is a prerequisite for successful collective action. Adhikari (2008) argues that many of the previous studies have applied a framework of social capital that does not acknowledge the complex features of the concept and overemphasizes bonding social capital within collective action. However, several of these studies are primarily focusing on natural resource management. Thus there is a need to look at those farmer groups that are more focused on self-help and economic activities. Narayan and Pritchett (1999) argue that associational life augments incomes, hence it is capital, and it is social in the sense that it relates to a social phenomenon and produces spillover effects among households. For example, in villages with higher social capital, the households are more likely to use fertilizers, agrochemical inputs, or improved seeds. The level of social capital is also positively related to the use of financial credit for agricultural improvements.

In addition, formation of human capital is important for farmers participating in collective action. A study in Botswana shows that the main reason for farmers to engage in group activities was access to knowledge, which was shared among farmers during regular group meetings (Heinrich, 1993). Furthermore, Wambura et al. (2005:13) found that in a study of farmer groups', 60 percent of the members who had been given training on and applied various technologies in their homes such as record keeping and improved farming practice, trained fellow villagers and farmers outside the group. Thus, successful technologies not only continued to be used, but they also spread among others as the groups addressed the needs of the farmers.

While the literature on collective action and social capital is broad, the majority of the previous studies within this area have examined specific issues related to the farmer groups. Few have looked more closely at the relations between farmer groups, social capital, and human capital. This thesis will attempt to analyze these concepts in a Kenyan context and also give an account at the individual level as well as the group level in terms of reasons for collective action and its challenges.

4 METHODOLOGY

4.1 Research strategy

Social phenomena are generated through social interaction and are constantly undergoing change. Additionally, social actors are constructing their own reality (Bryman, 2008:19). Collective action is a social phenomenon fashioned to a great extent by its participants. For the purpose of this thesis it is important to acknowledge that reality is constructed, interpreted, and represented by the views of the participants of the study. The research strategy involves an interpretivist stance, as outlined by Mikkelsen (2005), in that it seeks to describe collective action and its functions, but also to understand the phenomenon and its outcomes and impacts.

Considering the epistemological and ontological positions as well as the objective of my research, I use mainly qualitative research methods in understanding collective action. Creswell's (1998:15) definition of qualitative research² has guided me in designing my study in a qualitative framework since I intend to understand a social issue by using inquiry processes and endeavor to create a holistic picture of collective action. Furthermore, there is a need to qualitatively investigate collective action and farmer groups in Kenya. Qualitative research is often linked to inductive approaches where the findings are used to generate theory (Scheyvens & Storey, 2003:57). However, due to the scope of this thesis, difficulties to generalize inferences and embrace the process of generating theory arise. The research involves not only inductive processes, but also deductive elements as theory, data generation, and data analysis are developed simultaneously. Generalization is not the main objective of this study, but rather to create a better understanding of the phenomenon collective action. However, the study strives towards generating results that are applicable to other cases.

The research questions and the scope of this work have motivated me to use methods from two different kinds of studies. One is the phenomenological study in which the experiences of several persons of a phenomenon are explored (Creswell, 1998:51-55). I have inquired about experiences of collective action among individual farmers and groups to create an understanding of the phenomenon and its outcomes. However, in contrast to the philosophical and psychological approaches presented in the literature, my focus takes a more practical view of the subjects' experiences of collective. Since in-depth knowledge is better obtained

² Qualitative research is an inquiry process of understanding based on distinct methodological traditions of inquiry that explore a social or human problem. The researcher builds a complex, holistic picture, analyzes words, reports detailed views of informants, and conducts the study in a natural setting (Creswell, 1998:15).

through the study of several examples of the same phenomenon I use several cases focusing on their common denominator collective action. Therefore, the design of the study also has characteristics of a case study (Creswell, 1998:62; Silverman, 2005:126).

4.2 Sampling, data collection and analysis

4.2.1 Sampling

I applied a purposive or theoretical sampling method (Silverman, 2005:129). The first step in the sampling process was to contact organizations and companies working in the field who could facilitate my access to farmer groups. As a result I chose to work with one private non-profit organization (ACDI-VOCA) and one trading company (Smart Logistics Solution Ltd.) who accompanied me into the field. Consequently there is a bias in the sample as all groups are either linked to the company or the organization, a step necessary in order to get access to these groups. On the other hand this reduced the urban bias as I was able to reach groups situated further away from tarmacked roads. Furthermore, the sampling process was guided by time restriction, resources, and accessibility; there was dependency on gate keepers to contact and organize meetings with the groups as well as logistics for the collection of field data. Within a case study there is a possibility to use purposeful sampling to select cases that can give different perceptions of the subject (Creswell, 1998:62). For the interviews with individual farmers I have strived towards a balance of gender and a range of different ages.

The sample consists of 10 farmer groups and 16 individual members of these groups. The sites for the groups were selected in assistance with gate keepers from ACDI-VOCA and Smart Logistics as they facilitated my access to these groups. The districts covered are Makueni, Embu, Kitui and Mbeere in Eastern Province and Kisii in Nyanza Province.



Figure 1. Map of Kenya

Source: <http://www.nationsonline.org> [Accessed: 2012-05-07]

4.2.2 Data collection

Different methods of data collection were used, thus enabling methodological triangulation as data collected from the different sources can be compared and points of intersection may be identified (Silverman, 2005:121). The main data set consists of primary data from interviews and observations, whereas the other sources are complimentary, consequently reducing the risk of not analyzing data in-depth. The data collection took place during four weeks mainly in November and December, 2011.

Individual interviews

Interviews are the key method of data collection. This choice relates to the assumption that through listening to people and analyzing their responses it is possible to investigate aspects of their social reality (Mason, 2002a:225). I conducted semi-structured interviews with 16 individual farmers using an interview guide (Appendix 1) with a number of open-ended questions, which ensured that I captured the issues I intended to cover. The interview guide was not strictly followed, but follow-up questions were asked and there was also time for discussion initiated by the interviewee. This was one of the main advantages of using semi-structured interviews. Another advantage was the possibility to ask leading questions which, if used appropriately, can enhance the reliability of answers and allow for direct interpretation (Kvale, 1996:158). Since I did not have enough resources to carry out pilot interviews, the guides were slightly modified while carrying out the research. This was primarily to clarify questions to ensure that the main themes were captured in all interviews. The changes had no bearing on the actual outcome of the information but rather strengthened the possibility of the respondent to clearly state their answer and perception.

Besides the interviews with farmers and the groups, I conducted three formal interviews (Appendix 2) with key informants from different organizations. I also met with one district agricultural officer and I had informal discussions with my gate keepers and field officers linked to different organizations in the field.

Group interviews

The same method was used for the group interviews as for the individual interviews, but the questions focused more on how the groups collaborate and the ambitions and challenges they face (Appendix 3). Between 10 and 30 members were present during the group interviews, however in most cases only a few, often men, discussed the questions. During the group

discussions I sometimes experienced that the groups did not answer the actual question, but provided an answer on something else. Even if this was somewhat frustrating, it also helped me to understand how the respondents perceive their reality and what is important to them. Hence, my choice of a qualitative method was useful (Mason, 2002a:231).

Observations

Through a detailed field diary all fieldwork and observations, from training sessions, groups meetings, and home visits, were documented. This stimulated daily reflections of the collected data. These field notes are used both as data and for the analysis, as proposed by Dewalt and Dewalt (2002:162).

Documents

Although the main source of data is drawn from interviews, additional reports and other secondary material on the groups are important. These include, among others, member lists, certificates, contracts, and reports. Most of the information from these documents has been used for triangulation of data collected from interviews and observations (Scheyvens & Storey, 2003:42).

4.2.3 Transcribing interviews

All interviews were recorded with a simple voice recorder after receiving the consent of the informants. Although there were some drawbacks, for example background noises, the recordings were of great assistance for me as a single interviewer since I could focus less on taking detailed notes and instead concentrate on the interview. I attempted to transcribe the interviews shortly after the interview took place. This helped me to start analyzing the data as I was collecting it. However, there are some concerns of transcribing interviews that must be taken into consideration, for example that transcribed material can never be truly objective. Transcripts are interpretative constructions of the interviews and so they cannot be regarded as a true description of reality (Kvale, 1996:165-166). Considering the aim of this thesis, it may not be necessary to capture all aspects in the interviews, nevertheless they are transcribed with as much details as possible.

4.2.4 Data analysis

The process of analyzing the data started in the field where I began to outline the main themes occurring in the data. However, the principal work of analysis was done after leaving the field. First, I made an interpretative reading of the data broadly describing what I can infer from it (Mason, 2002b:149). Secondly, the transcribed interviews were organized into tables in order to facilitate the interpretation.

I used two different approaches to my empirical data. The first method comprised an overview of the transcriptions where notes were made on the main themes that occurred, so-called open coding. I then constructed three different categories; social capital, human capital, and financial and material benefits and analyzed the relations between them. Also, I sub-categorized the social capital: bonding, bridging, and linking. The second approach used included the set-up of a matrix, displaying the three research questions linked to answers and observations from the data. These have later been used to describe the sample and expose any causal relations (Mikkelsen, 2005:182). The interpretations and findings of the data have subsequently been discussed in light of the theoretical perspectives in order to generate answers to the research questions.

4.3 Qualitative and ethical considerations

Assessing the quality of qualitative research is not a straightforward process. During the field research I have been constantly reflecting upon the reliability and validity of my research. I have chosen to evaluate the reliability and validity in an alternative way using the concepts of trustworthiness, embracing the four criteria of credibility, transferability, dependability, and confirmability, as well as authenticity (Bryman, 2008:377-380). During the research process, regular discussions with gate keepers enabled me to verify the findings from interviews in order to increase the credibility. In addition, triangulation of methods for data collection is applied by using interviews, observations, documents, and field notes. The analysis of qualitative data will aim at generating a thorough description of the studied phenomenon as observed while in the field and all records will be kept accessible in order to increase the transferability and dependability of the research. Being aware of the difficulty of escaping subjectivity, I strive towards presenting a nuanced and objective account of the findings from the field. This is used as a method to increase the confirmability of the study.

Since the purpose of the research is to analyze collective action and the role of farmer organizations in improving small-scale farmers' livelihoods and the indirect objective is to produce a result which can be used to improve the livelihoods of farmers, the criteria of authenticity is essential for the research (Bryman, 2008:379-380). For instance, I have attempted to ensure that different perspectives of members within the researched communities are represented.

Kvale (1996:145) discusses different quality criteria for an interview. In order to increase the quality of the data collected through interviews, I chose to apply different methods when constructing the interview guide as well as during and after the interview. I aimed at keeping the questions short, concise, and simple in order to make the respondent influence the conversation. During the interview I tried to follow up and clarify issues as they arose to ensure that I had understood correctly. I was also reflecting upon and interpreting the answers from my respondent during the interview. The interviews are my main source of data thus I take a critical approach to the material. First, all interviews were conducted in connection to a training or a group meeting. In most cases, the gate keeper or somebody else related to the organization was also interpreting as all respondents did not speak English. This might have influenced the interviewees and their answers. However, I also carried out some interviews by myself in English, but this also had drawbacks as some respondents had difficulties understanding and answering the questions. In addition, the fact that I came as an outsider, I believe, also influenced the answers, as some respondents became very eager to explain what they needed in terms of financial or material support.

Lastly, another important limitation to the group interviews was that almost only men talked. Although women were present during the group interviews, it was very difficult to involve them. However, for the individual interviews I interviewed as many women as men in order to comprehend their perspective. An ethical issue concerning research is that the respondents are participating on a voluntary basis. Prior to the interviews, I presented myself and explained the purpose of my research. I also got the permission from the respondents to use a voice recorder. Quotes used in the thesis are not ascribed to specific farmers so as to keep their anonymity. I have been continuously reflecting upon the power relation between me and the interviewees (Scheyvens & Storey, 2003:149). One way of diminishing this relation has been through participating in training and activities that have been ongoing during my visits.

5 THEORETICAL FRAMEWORK

After having described the methodological process, this section continues to outline the theoretical foundation of the thesis. The chapter begins in a broad theoretical discussion on collective action. It subsequently proceeds to elaborate on the concept of social capital as a prerequisite and outcome of collective action. To complement the social capital discussion, a section on human capital is included before the analytical framework is defined.

5.1 Collective action

Most of the existing literature on collective action focuses on natural resource management, common-pool resources and the dilemmas of collective action. It originates from game theory and the prisoner's dilemma where defection is the rational choice for any individual, hence a stable equilibrium. But this theory underestimates voluntary cooperation which has shown to be much more frequent than what is predicted by the prisoner's dilemma and other game theories (Putnam, 1993:166). For the purpose of this thesis features of the theory of collective action will be used as a framework for the analysis of primary data on farmer groups in Kenya. The theory of collective action provides a useful basis for studying organized groups.

Several definitions of collective action are suggested in the literature, a common denominator being that they include concepts such as the involvement of a group of people, shared interests within the group, joint action to reach a common goal and that action should be voluntary. For the purpose of this thesis two different definitions of collective action will be guiding: "*coordinated behavior of groups toward a common interest or purpose*" (Vermillion, 2001:184) and "*action taken by a group (either directly or on its behalf through an organization) in pursuit of members' perceived shared interests*" (Scott & Marshall, 2009). These two definitions clarify that the focus is on established groups working collectively to attain a shared goal or interest. Collective action can exist even though organized groups are lacking, but farmer groups might be seen as a more formal expression of collective action (Hellin et al., 2007).

However, consensus within groups does not inevitably lead to collective action, but it is a permissive factor (Reisman, 1990:143). Most social movements have a specific interest as a common denominator, but it is only when the participants recognize their common interests that collective action will actually develop (Tarrow, 1994:5). Organizations or groups of

people are formed to fulfill the interests of the members; their common purpose. If an individual action can serve the interest of the individual as well as, or better than, collective action, there would be no reason for the group to exist. In those cases where people have a common interest or objective, organizations can play an important role in furthering this common interest as well as serving personal concerns (Olson, 1965:6-7).

Traditional economic theory builds on the assumption of the individual striving towards maximizing his own well-being while at the same time contributing to the welfare of the whole community. Olson's (1965) idea that no person having his best interest in mind would contribute to the common or group interests³ has been known as the "zero contribution thesis" (Ostrom, 2000a). While this idea questioned the old notion that people would take part in collective action when members benefited jointly, it has been relentlessly challenged and contradicted by several empirical studies and observations from daily life where people for example vote and pay taxes. The ideas of Olson are referred to as the first-generation collective action theories, whereas later views challenging those ideas are known as second-generation collective action theories (Ostrom & Ahn, 2003:xiv). While the first generation of collective action theories assume that all people are selfish and act to ensure their own best interest, the second generation theories argue that there are different types of individuals and many people are non-selfish most of the time (Ostrom & Ahn, 2003). Ostrom (2000a) maintains that the old belief in which individuals collaborate to achieve common interests does have validity to some extent, however, the gap between Olson's theoretical thesis and the opposing findings from real life is substantial and needs to be bridged.

Olson (1965:58) argues that, if there is a common, collective interest in a group, a small group will most likely reach the common goal while large groups will have more difficulty cooperating to achieve the common interest. Theoretical and empirical evidence show that smaller groups are more efficient than groups with a large number of members. Evolution of voluntary cooperation is more easily attained in small, local units (North, 1990). Other scholars (Hardin, 1982; Marwell & Oliver, 1993) however, depict a more nuanced relationship between collective action and group size, arguing that it is not straightforward and some even show research results where group size is positively related to the level of collective action. Ostrom (1999) acknowledges the problematic theoretical issue concerning

³ This idea is presented in *The Logic of Collective Action* first published in 1965.

group size and proposes that the best working hypothesis is that medium-sized groups may more often be successful compared to very small or large groups.

In addition to the size of groups, Agrawal (2001) discusses a number of conditions related to the group characteristics which facilitates collective action. Shared norms, clearly defined boundaries, past successful experience, appropriate leadership as well as homogeneity in interests may also influence collective action. The interests within the groups are closely related to the incentives for individuals to join a group. Economic incentives are common, but in cases where there is no economic reason for an individual to contribute to the group, there might be social incentives that are just as important. Social incentives are more important in small groups, but can have significance in large ones if the group is a federation of small groups (Olson, 1965:62-63). Lin (2001) proposes that to defend and maintain resources (minimizing the loss) is a superior motive for action than to gain and expand resources (maximizing the gain). These two motives are not inverse functions of each other, but two different functions and hence, actions can be a result of both.

5.2 Social capital

The above theories of collective action have an important function in the framing of the concept referred to as social capital. Putnam (1993) argues that social capital can be a solution to collective problems and a prerequisite for voluntary and spontaneous cooperation in a community. He concludes that in a community with a large stock of social capital, voluntary cooperation will develop much easier than in a society with low levels of social capital. Social capital also plays an important role in aspects of sustainable rural livelihoods. It is an important complement to the concepts of natural, physical, financial and human capital. None of these forms of capital alone are sufficient for development, but they are all essential (Ostrom, 2000b).

Social capital is a multifaceted concept that has been continuously developing throughout the years and several definitions of the concept exist in the literature. Putnam (1993:167) defines social capital as “*features of social organizations, such as trust, norms and networks that can improve the efficiency of society by facilitating coordinated actions*”. While this definition focuses on internal relations within a collectivity, a second definition used by Woolcock (1998:153) embraces both internal and external ties: “*the information, trust and norms of*

reciprocity inhering in one's social networks". Though using different perspectives and levels within their definitions, both include the concept of relationship.

There are not only several definitions of social capital, but also different ways of classifying it. Broadly it can have two interpretations; the first relates to the stock of trust within a group facilitating provision of public goods, while the second focuses on the individual benefits generated to a person or business through social capital as an asset (Gabre-Madhin, 2001). More explicitly social capital can be separated into three forms; trustworthiness, networks, and formal and informal institutions. These three various forms of social capital enhance trust among individuals and can thereby contribute to successful collective action. Trust is then perceived as an outcome rather than a form of social capital and it becomes the core link between social capital and collective action (Ostrom and Ahn, 2003:xiv).

The broad use of social capital has come to turn it into a concept that is widely applied to everything by all people. It then loses its usefulness, as it no longer refers to anything specific. Woolcock (2001:8-10) attempts to synthesize different approaches and definitions of social capital and argues that social capital should be defined as what it is and not what it does. He recognizes the multidimensionality of the concept by discussing bridging, bonding, and linking social capital. Likewise, social capital can be found at the micro-level as horizontal networks of individuals and households, the meso-level including both horizontal and vertical networks, and the macro-level (Heemskerk & Wennink, 2004:18).

Bonding social capital describes how people connect to others who are like them such as family members, lineage, friends or neighbors, or people with similar objectives. Collective action requires a certain minimum amount of bonding social capital to function. Bridging social capital concerns the relations between people who are not homogeneous in a demographic sense, hence people outside the group. It describes the capacity of groups to link to others. The networking process between farmer groups starts at the community level, but can expand to higher levels. It can contribute to overcoming traditional barriers between villages and make farmers listen to each other (Heemskerk & Wennink, 2004:41, 90). Linking social capital refers to linkages with those with financial or political power or to agencies such as NGOs and other organizations. One of the key features of linking social capital is the capability to benefit from formal institutions in terms of resources, ideas, and information (World Bank, 2000). Bonding and bridging social capital are horizontal dimensions of social

capital while linking is vertical (Woolcock, 2001:10). Building on the above definitions, bonding social capital is in this thesis regarded as ties within the group; bridging social capital is relations to other groups, the wider community and non-members of the group; while linking social capital is thought of as a group's connections to formal organizations or governmental ministries.

Using these three concepts, social capital becomes multidimensional and enhances the framework in the analysis of the empirical material to understand the outcomes of collective action in farmer groups. Furthermore, social capital is a useful tool to understand aspects of poverty since individual social capital can be the most critical asset in times of hardship for those living on the margins of existence (Woolcock, 2001:20). In addition, there is evidence showing that if these kinds of social capital are present, the economic and social well-being of local people improves (Pretty, 2003:11).

The theoretical benefits from social capital are several. One of the main benefits is that social capital makes it easier for the actor to acquire timely, quality, and relevant information. Also, social norms and beliefs give people an incentive to comply with rules and local customs (Adler & Kwon, 2002:29-30). Membership in an association or a group is an important means of building social capital. By linking people to others, social capital contributes to building relations to new or existing institutions, either directly or indirectly. This access to benefits via social capital is particularly important in those cases where public institutions are weak or lacking. Rotating credit schemes, for example, have emerged where people cannot easily access the formal banking system. But, even where there are functioning and appropriate institutions in place, people chose to join groups to acquire similar benefits. This might be explained by a "social logic" that encourages people to join groups that they recognize can help them with present and future needs (McCormick et al., 2003:4).

5.3 Human capital

Summarizing the discussion above it becomes clear that social capital develops in relationships between people. However, to supplement this theoretical perspective the concept of human capital will be elaborated on briefly. Unlike social capital, human capital exists in individuals. It can develop as a result of social capital, but its formation is within the individual itself.

In the sustainable rural livelihood framework human capital is defined as “*the skills, knowledge, ability to labor and good health and physical capability important for the successful pursuit of different livelihood strategies*” (Scoones, 1998:8). Human capital formation is a basic objective of development and important as an end in itself, but it can also be a prerequisite for other aspects of development and can contribute to people’s ability to escape poverty (Todaro & Smith, 2006:363-365). However the term human capital has often been used by economists measuring and analyzing investments in health and education and their impact on economic growth.

Schultz (1961) and Becker (1962) introduced the concept of human capital in the neo-classical economics by arguing that the efficiency of the productive factors in a society depended on the health, education, and training of the workers. Human capital is the acquired knowledge and skills brought to an activity by an individual. It can be contrasted to social capital referring to the shared knowledge, understandings, norms, and rules brought to an activity by groups of individuals (Ostrom, 2000b:175). Human capital can be perceived as the value added to a laborer when the he or she acquires knowledge, skills, and other assets useful to the employer or business in the production and exchange process (Lin, 2001:9). Human capital can also be described as the outcome created by changes in individuals, generating new skills and capabilities that make the person able to act in different ways from before (Coleman, 1988:100).

The theory of human capital challenges the classical, Marxian capital theory in that anybody can acquire human capital, as opposed to only the capitalists. This implies that, according to the human capital theory, laborers become potential capitalists. Human capital concerns a process associated with the laborer and he or she can be seen as an investor. Moreover, the laborer is motivated to invest in human capital as it can result in increased wages (Lin, 2001:11-12).

Human capital has been identified as a crucial element for the emergence of cooperatives (Henriksen, 1999; O’Rourke, 2002). It has also been recognized as an important factor in explaining regional differences in agricultural association (Beltrán-Tapia, 2011). From a theoretical perspective the relationship between human and social capital is important. Social capital can contribute to the production of human capital, but at the same time human capital produces social capital. However, the question of which one is more important or initiating is

debatable and no consensus has been found (Lin, 2001:97). For the purpose of this thesis, human and social capital are primarily kept separate in relation to collective action, but there are instances where they interconnect.

5.4 Analytical framework

Based on the literature review and the theoretical discussions above, an analytical framework has been developed. It is depicted as a model in Figure 1.

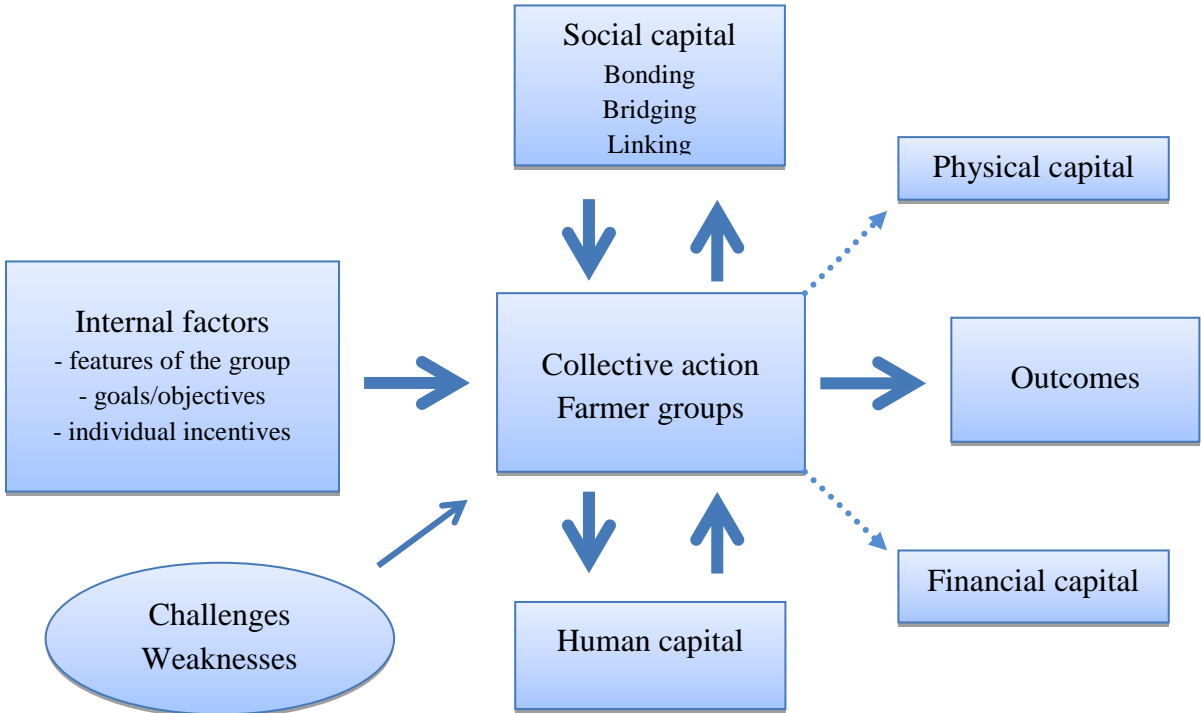


Figure 2. Analytical model of collective action

The framework is centered on collective action as manifested in farmer groups, including the activities undertaken by the members of the groups. The internal factors influencing collective action refers to the driving forces of the groups and they are essential to describe and explain the farmer groups. Social and human capital, the main concepts in the analysis, can be both outcomes and prerequisites for collective action, as represented by the arrows in both directions. In the model, physical and financial capital are included to show awareness of their presence, however they are not analyzed in depth. The outcome-box signifies the results that collective action has on individual farmers and the communities. The weaknesses and challenges faced by the groups are also shown as having an impact on the collective action.

6 SMALL-SCALE FARMERS' ENGAGEMENT IN GROUPS

“When you work together as a group you gain more than when you work individually.”

Farmer, 32 years, man (individual interview)

This chapter refers to the first research question. In order to provide the reader with a broad picture of the sample this section begins with an outline of the characteristics of the individual farmers and the groups. It then continues by discussing how these small-scale farmers engage in collective action. The question of why farmers act collectively will be analyzed in terms of the groups' objectives and from an individual standpoint. This will be a foundation for the discussions in the following two chapters where the benefits and challenges with collective action are further explored.

6.1 The farmers and group features

The farmers are between 28 and 73 years old and the size of their household varies from 3-10 members. While some farmers have 0.5 acres under cultivation others have up to 10 acres. The respondents have been members in their respective groups between 2-27 years. The sample includes different categories of group members: chairpersons, secretaries, treasurers and regular members. 9 respondents are engaged in other forms of collective action outside their respective group, 5 are only engaged in one group and 2 did not give an answer. All groups grow crops for domestic consumption and the market. Even though the main income for all respondents is agriculture, more than half of them have additional sources of income within their household including pensions, small business, and casual labor.

Farmer groups in Kenya vary in size, level of interaction and cooperation as well as type of activities. The sample groups consist mainly of small farmer groups, but a few larger groups and one umbrella associations are also included. The groups are comprised of neighbors or members in the community. Within the larger groups, smaller groups have been formed within using a cluster method. Two of the groups within this study are women's groups and eight are mixed. A tendency is that there are more women than men in the groups. This corresponds to the claim of one of the key informants that women tend to form groups more easily than men.

Table 1. Selected indicators for the farmer groups

Group	Year of foundation	Members (w/m)	Elections since formation	Registration fee (KES) ⁴	Monthly fee (KES)	Meetings per month
Kavete Women Group – Misambani	2005	21 (21/0)	-	-	-	4
Kanjara SHG	2006	24	-	-	-	-
Kanthanu Star Women Group	2010	36 (36/0)	-	-	-	4
Emaus SHG	2002	25 (14/11)	10	50	-	2
Trans Nyariva Association – umbrella association	2009	800	1	1000/group	-	0,25
Ikaasu Fruits and Sorghum SHG	2008	300 (180/120)	2	50	100	1
Ituka Cassava Village Group	2011	150 (145/5)	1	20	80	4
Woodlands SHG	2010	32 (22/10)	1	50	50	1
Kikome Horticultural SHG	2006	11 households	2	300	-	1
Muamba wa Yikiuuku SHG	1984	300 households	9	1000	40	1

As can be seen in Table 1, most groups have been established during the last 10 years which means that they are modern groups. The majority of the groups in the sample have started as SHGs at the members' own initiative or in certain cases influenced by external actors, however, the groups have not been formed by an organization for a specific project. This result is supported by the findings of Kariuki and Place (2005:41) who in their study of households in the highlands of central Kenya find that most households are engaged in group activities which were started by the members themselves. However, many of these have developed and expanded their collective action into new forms and activities. One key informant confirms that farmer groups are established, grow, are displaced, and change over time; some groups even transform into enterprises.

The size of the groups is measured in two different ways depending on the structure of the group; by individual members or by number of households. As is shown in Table 1, the groups differ in size from 21-800 individual members and between 11-300 households. The

⁴ 1 USD = 83 KES (Kenyan Shilling) Source: <http://themoneyconverter.com/usd/KES.aspx> [Accessed: 2012-05-10]

opinion about the size of the group varies, but most groups are open for new members. Only one group reports that they have a maximum number of members that they accept since they do not believe they can efficiently administrate more members. Also, one of the key informants argues that larger groups are more difficult to manage and this is supported in the literature on farmer organizations.⁵ But there are alternatives. One group member argues that if the group becomes too big it will be split into two groups so that more farmers can join. Another group has formed sub-groups to solve the problem of becoming too large. Hence, there are different ways of handling the issue of group size.

The groups have established structures for membership such as registration fees, monthly fees and membership lists where all members are registered (Table 1). There is a board or a committee governing the group and they hold annual general meetings where they elect a committee every one to three years. Between 50 and 100 percent of the members attend these meetings. The groups also have a written constitution, by-laws, rules, and regulations of various kinds. Stockbridge et al. (2003:26) argue that these documents are important for the cohesion of the groups.

6.2 Group activities

All groups meet regularly, between one and four times per month, and this is also an important factor for the internal cohesion of the group. One central function of the farmer groups is the microfinance schemes implemented either within the whole group or, in the cases of larger groups, in different sub-groups. There are two kinds of schemes; first the Merry Go Round (MGR) where all members in the group contribute with a small amount once a week and the total is then given to one member in the group and second, table banking, where members are saving together and the members are able to get a small loan from the common account.

Groups also farm together for educational purposes, mainly on a small common plot or a plot owned by one of the members, but the members have their own farms where they implement what they learn in the groups. This finding can be compared to the literature on communal property-rights in which many studies state that such systems do not exist in isolation, but in conjunction with individual ownership (Ostrom, 2003:255). There is often both a collective

⁵ See for example Stockbridge et al. (2003)

and individual aspect to many activities. Several groups are performing agroforestry and have common tree nurseries. One of the interviewees emphasizes for example how she would not have been able to buy the seedlings without the group, but with their tree nursery she now has access, can plant them individually, and get an additional income. Some groups also procure inputs together to be able to reduce the costs.

Other activities performed by the groups include study visits to other farmer groups, organizing training and using demo plots, engaging in horticulture, procuring water tanks to the members, rearing of chicken, goats and cows, fish keeping, and management of bee hives. Several groups buy livestock and let one or a few members rear them on behalf of the group. They then share the brood with other farmers in the group. An additional activity is collective labor where the members of the groups help each other with various tasks such as terracing. In these activities farmers contribute with money, labor or knowledge in different ways. Collective action in the farmer groups would not occur without inputs and contribution from the members.

6.3 Internal drivers of collective action

There must be consensus of the main objective within the group in order for the members to cooperate. From the group interviews the objectives have been divided into overall objectives that are long-term and more specific goals in the short-term (Table 2). The initial objectives of the groups vary. Even though it is possible to discern a number of common matters, the primary objectives are related to economic and social matters. The most common overall aim among the groups is to reduce poverty through food security and improved living standards of the members and the community. In addition, three groups mentioned supporting each other as their main objective. Collective farming and marketing, increasing sustainable food production, as well as buying a plot and building storage facilities are presented as goals. For the majority of the groups, the initial objectives are unchanged, while some have reconsidered their aims and made slight adjustments.

Table 2. Objectives, goals and activities of the farmer groups

Overall objectives					
Reduce poverty through food security and raised living standards			Support and help each other		
Specific goals					
Improve production	Collective marketing	Buy a common plot		Build storage facilities	
Activities					
MGR/table banking	Agroforestry	Collective farming	Rear livestock	Training	Social activities

The umbrella association is more focused on business and economic activities while the small groups within emphasize welfare issues. Even though most groups are social associations, it is hard to make a clear distinction between them and the business-related groups. Many of the social groups are planning or already engage in income-generating projects. This corresponds to the finding of McCormick et al. (2003:8) which also shows that pure business-oriented organizations often address welfare issues as well.

To be a member in a group, participate in the activities, and contribute with resources in-kind implies a cost to the individual. Still, many farmers are members in one or several groups. The reasons for small-scale farmers to join a farmer group are many, but one distinct motive encompasses them all; the desire to accomplish activities that are not possible or efficient to perform individually. Several respondents explain that activities which can be performed more efficiently by joint action are done within the group while other activities are rather accomplished individually. In addition, there is a strong social motive to join groups such as the importance of working together, supporting each other, and creating social unity. The finding that non-financial reasons are important when individual farmers decide to join a farmer group is supported by organization theory, which considers more than financial motivations and often focuses on non-financial needs. According to Stockbridge et al. (2003:8) the importance of belonging to a community is an important incentive for farmers to participate in farmer organizations. Furthermore, in their study of social capital in rural Tanzania, Narayan and Pritchett (1999) found that more purely economic associations such as cooperatives and rotating credit groups are less important to people than groups with a more social focus.

But there are also economic motives even though they are less pronounced. Some respondents indicate that they are engaged in collective action in order to increase their income through accessing a market or likewise. Collective marketing and MGR are the most common reasons with regard to this. Two of the respondents gave improved market access as a reason for joining, both of them were women. However, they also mentioned education and knowledge as important factors. This can be compared to the result of Kariuki and Place (2005:28) who state that the decision to join a farmer group is influenced by different factors for women and men. For women, the welfare of the household and food security are the main reasons to join while for men market access and social insurance coping mechanisms are more important. However, there are no such differences in my data as both men and women emphasize the importance of knowledge.

The diffusion of knowledge and ideas is important for small-scale farmers' engagement in collective action. The individual farmer joins a group to learn more through training and other group members and to share thoughts in order to improve his or her living standard. One farmer explains that, *"When you are a single you can't do better...but if you are in a group you can do better. Maybe what you know another person knows better than you, so when you come together you exchange ideas"* (Farmer, 49 years, woman). Learning from others is an important aspect to why farmers choose to act collectively through a group, besides being able to receive formal training. The dichotomy between the individual and the group is a recurrent theme, not only with regard to why someone engages in collective action, but also concerning the real benefits that farmers enjoy. Adding to the knowledge spreading, the sharing of financial resources is equally taking place, as demonstrated in the rotating credits schemes. Other reasons to join a group are to enhance farming, learn farming as a business, and thus increase production. Extension services and training are given by the Ministry of Agriculture (MoA) and NGOs to groups, even groups that are not yet registered. Hence, the farmers are aware that if they want to acquire training they must be organized. ACIDI-VOCA and Smart Logistics do for example not approach individual farmers and neither does the government.

The main findings so far show that the farmer groups have more or less similar organizational structures with committees and recognition through official registration, which enables them to open bank accounts and receive extension services. The groups are guided by rather long-term objectives with short-term goals. Farmers are motivated to participate in collective action by social and economic factors and emphasize the importance of the unity within the group.

7 COLLECTIVE ACTION AND THE LINKS TO SOCIAL AND HUMAN CAPITAL

“When at times I am working on my own I don’t get the skills, but now I can get the skills and knowledge from others in the group.”

Farmer, 54 years, man (individual interview)

Building on the previous chapter, this section analyzes and discusses the outcomes of collective action, on the individual and community level. Thus it attempts to answer the second research question. The outcomes and benefits accrued from collective action are explored using two main categories of capital: social and human.

7.1 Social capital

In this first part of the chapter the empirical material is analyzed using social capital theory. Common to all groups is the manifestation and development of social capital within them as well as external social capital formation. The empirical material is explored using the three types of social capital discussed in the theoretical framework: bonding, bridging, and linking.

7.1.1 Bonding

Bonding social capital denotes how people connect to other members in the groups. In most cases the members of the groups in this study are neighbors and know each other well and they face more or less the same challenges with regard to farming and livelihoods. A number of groups have existed for several years and have accumulated a stock of bonding social capital within the group. Regular meetings where the farmers meet and discuss group issues and individual matters are important for the members. Stockbridge et al. (2003:26) argue that meetings also improve the solidarity and cohesion within the group. This can be an explanatory factor to why members attend meetings and consider them important.

The social capital is perceived by the farmers as a safety net and an assurance; an individual will be able to count on assistance in times of need. The importance of this unity within the group is emphasized by many individuals as well as by groups. Social capital resides in the networks individuals and groups have, and can be transformed into productive capital when

used. One farmer explains how she borrows the oxen of her neighbor to work her land, providing an example of how farmers use and access social capital. Relations to others create opportunities to exchange resources for private use, an exchange based on trust. Hence, social capital is resources connected to other actors (Lin, 2001:134). The abovementioned examples show that people do want to cooperate and are not acting egoistically as anticipated by the first generation theories of collective action.

Another example challenging this logic of collective action is the rotating credit schemes that the groups have, combining sociability with small-scale capital formation. In the MGR members continue to contribute to a shared pot of money also after having received their share and in the table banking projects people do repay their loans. Strong norms in combination with networks of reciprocal engagement reduce the uncertainty and risk of defaulting, creating an enabling environment for this type of collective action. It shows how collective action problems can be overcome through social capital. Another factor influencing the performance of these schemes might be that in small, personalized communities in rural areas, rejection from the group is much more pertinent than in large urban societies which are more impersonal. In addition, these kinds of rotating credit schemes are commonly working in juxtaposition with other forms of cooperation as they build upon the same stock of social capital (Putnam, 1993:167-169).

Trust is one of the main components and outcomes of social capital. For the farmer groups to function efficiently and be sustainable, trust among the members is an important element. The groups and individual respondents claim that there is trust within the groups. No individual would contribute financially unless they knew that they would receive the money another time, hence, this kind of activity would not function without a high degree of trustworthiness among the participants (Coleman, 1988:103). Access to loans and small grants through table banking and MGR is an opportunity for the farmers to increase their financial and physical capital and become more efficient through investing in livestock, inputs, etc. and later on profit from these investments. Another important aspect that appears from the interviews is that women, who are able to borrow or receive money, can use it for their priorities such as utensils for the household. One of the farmers explained how she is less dependent on her husband for such things now that she is a member of a group. This shows that female participation in organizations and objective of the groups can contribute to the empowerment of women. This is supported by Kariuki and Place (2005:31) who argue that institutions like

collective action are important for women's empowerment as they can increase their access to income and other necessities.

Social norms of trust and reciprocity are present in other efforts of the groups as well. Several farmers explained that the membership in the group is a security. One farmer discussed how members from his group came to assist when his wife was giving birth. Coleman (1988:103) depicts this form of social capital, referred to as obligations and expectations, as credit slips: if one does something for another person, he or she expects a favor returned eventually. There are cases where the members help each other to work the land. Small groups rotate to ensure that all members' farms are visited. Such a scheme would not be functioning unless people could trust the others to continue to participate in the work even after he or she has received assistance. This corresponds to Putnam (1993:177) who argues that voluntary cooperation depends on social capital. He contends that given an adequate stock of social capital, which can be accumulated over the years, an equilibrium where voluntary cooperation is the norm is possible in contrast to the non-cooperative equilibrium.

7.1.2 Bridging

Bridging social capital is defined as the relations between people who are not homogeneous in a demographic sense, hence people outside the own group. In this case, it is reflected in the group's interaction with other farmer groups but also with non-members in the community. Through bridging social capital groups can enhance dialogue, create possibilities to organize field days and facilitates the sharing of ideas and information hence creating a multiplier effect (Heemskerk & Wennink, 2004:21).

Bridging social capital is produced among the groups. Several of them organize study tours and exposure visits to meet with other groups in order to exchange ideas and discuss experiences. These are appreciated by the participating farmers and are requested by those who have not yet joined such an event. It is an opportunity for farmers to become aware of what happens outside the immediate surrounding area in which they live and to learn more and share ideas. In addition, study visits contribute to networking among groups. In places where villages are connected with diverse sets of strong social networks, innovations or good ideas can disseminate very easily and rapidly, however, in areas where the bridging capital is weak, technology and new ideas take much longer to spread (Woolcock & Sweetser, 2002).

To focus on groups or collective action in the agricultural innovation system has shown to be effective in enhancing the empowerment of farmers.

Spillover effects to non-members are regarded as one attribute of bridging social capital. They are a direct result of different activities or actions taken by the groups and can be beneficial to others in several aspects. The discussion of whether farmer groups are excluding non-members, creating gaps between the ones who are members of a group and the ones who are not, is multifaceted. One spillover effect is exemplified by one of the groups operating a machine which non-members are allowed to use for a fee. Another example is related to the allocation of demo-plots as some groups with a common plot have placed them strategically where neighbors and other community members, who are not part of the group, can see and learn from it. Thus, the successes and failures shared within the group are communicated to non-members. However, while the membership of farmer groups brings education and information to some, being outside might imply a certain restriction of access to benefits. No non-members have been interviewed in the sample, but some respondents brought up this issue, which suggests that it is seen as a disadvantage of not being member of a group as you miss out on educational opportunities and sharing of information with others.

On the other hand, the presence of the groups encourages the situation in the community. Some groups are involved in peace building in their area and subsequently interact with other groups. One group expressed the objective of recruiting new members in order to expand, thus they want to increase their network and connectedness. The same group explains how there is much more activity in the community after their establishment; the market is growing, the access to transport has improved, and neighboring counties see them as a role model for innovation. In this way, communities can be strengthened through the activities of a farmer group and non-members can benefit from their activities.

7.1.3 Linking

Linking social capital was earlier described as the relation to those people in power, financially or politically. Here, the concept is widened and includes linkages to civil organizations, ministries, private actors and other institutions.

Tiffen et al. (1994:280) argue that Kenya's history of SHGs has made people and communities realize that their efforts are important in improving the livelihoods in rural areas and that the government cannot do everything. This spirit still exists in the interviewed groups. The farmers are determined to work for a better future and the groups are seen as important platforms. However, farmer groups can become more efficient through support from external actors, for example, training in leadership, management, or business development. Organizations supporting the farmer groups can extend the groups' network and link them to other organizations and private actors to assist them in accessing loans, receiving training, access seeds, or bargaining. For example, in their contracts, Smart Logistics tries not to pay their farmers in cash, but rather encourages them to open bank accounts. They also urge the groups to register with the Kenyan Ministry of Gender, Children and Social Development. In this way, farmer groups have their own agenda and undertake their activities, but they are supported by and have links to organizations and the private sector.

The majority of groups are registered with the Ministry. In the application form, groups are required to give information on the group name, number of members, elections, management committee, group project objectives, current activities, funding, etc. In addition, they must submit minutes of the meeting seeking registration, list of members, the group's by-laws, and rules. The group also needs to pay a registration fee. While this is an obstacle to some groups, the benefits seem to outweigh the costs. Hence, the groups that are not yet registered are in the process of registering. The possibility of registration is an enabling institutional environment in several ways. Not only can organizations find the groups for collaboration through the Ministry, but the groups are also eligible to open bank accounts and can receive support from the district office. In addition, the groups become formal and it brings a sense of unity and empowerment to the members. The importance of local institutions is supported by other studies showing that local institutions supportive of collective action can improve and empower the livelihoods of poor people (Bruns & Bruns, 2004; Kariuki & Place, 2005).

Linking social capital not associated with government institutions is important for farmer groups. All groups included in the research have linkages to NGOs or a private business. In addition, collective action is necessary for linking social capital since the MoA and the development organizations solely work with groups and not individual farmers. However, to avoid becoming dependent on external actors it is important that groups have a membership-driven agenda where the government or organizations only play a facilitative and not an

interventionist role (Stockbridge et al., 2003:31). Among the interviewed groups, all had their own agenda and support received is part of their activities. However, in some cases the groups were very keen on receiving more financial support to be able to undertake additional activities. Farmer groups are a possible way of accessing or improving productive assets. Those groups that have been able to receive a grant from an organization, for example a machine to produce animal feed, report that it has been beneficial to the members. This has been supported by Tiffen et al. (1994), who found that grants of tools to SHGs have been advantageous to the poorer members of communities. However, it should be noted that any grant also involves costs for the group, for example reparation costs. Another example of how linking social capital and collective action can increase productivity is through training. It is more efficient to give training to groups or group leaders than to individual farmers. Some groups have learned how to better rear their dairy cows, thus obtaining more milk which they can sell to increase incomes. The linking social capital is then a way to access human capital.

There are differences in social capital among the groups. In order to illustrate these differences between bonding, bridging, and linking social capital, an attempt to evaluate the groups has been made in Table 3. “Strong” implies that the group shows several examples of this particular kind of social capital, “moderate” means only a few cases, while “weak” refers to when a group gives none or very few examples. It is evident that most groups have strong bonding social capital, while bridging is often weak or moderate. Linking social capital varies, but since I accessed the groups through organizations, there is at least a minimum level of linking social capital among the groups as they are partly supported by these organizations.

Table 3. Bonding, bridging, and linking social capital of the groups

Group	Bonding	Bridging	Linking
Kavete Women Group – Misambani	Strong	Weak	Moderate
Kanjara SHG	Moderate	Weak	Moderate
Kanthanu Star Women Group	Strong	Weak	Moderate
Emaus SHG	Strong	Moderate	Strong
Trans Nyariva Association – umbrella association	Strong	Moderate	Strong
Ikaasu Fruits and Sorghum SHG	Strong	Moderate	Moderate
Ituka Cassava Village Group	Strong	Weak	Moderate
Woodlands SHG	Strong	Moderate	Moderate
Kikome Horticultural SHG	Moderate	Moderate	Moderate
Muamba wa Yikiuuku SHG	Strong	Weak/Moderate	Strong

7.2 Human capital

One of the main outcomes of collective action and the farmer groups is the increase of human capital within the groups as well as for individual members. Human capital is created through training given by external actors, from within the group as members exchange ideas and share their knowledge, and as a result of improved health. As will be shown in this section, the formation of human capital results in positive livelihood outcomes for the farmers.

The flow of information through the group is an important function of the farmer groups. Farmers discuss new technologies, information on activities, challenges, market information, and problems within their group. Coleman (1988:104) argues that acquisition of information is costly; hence, one efficient way of obtaining information that facilitates action is by using social relations. The groups have all generated knowledge and disseminated it within as well as outside the group. This observation correlates to the findings in the study of Rees et al. (2000) which argue that existing SHGs are potential entry points for knowledge generation and dissemination. In addition, Mavedzenge et al. (1999:11) state that groups are efficient channels of communication among farmers and that working in groups facilitates the exchange of information and ideas. This notion is also prominent in my discussions with the farmers. Knowledge, ideas, skills, technology, and information are spread in and between the responding groups and it is one of the most important reasons for why farmers participate in collective action. The sharing of knowledge and information between farmers takes place in different ways such as field visits, study tours, demonstrations for neighbors, sharing of seed or planting materials, and training of other farmers. If one farmer has tried a new method with good results, or has applied a less successful technique, then other group members want to do the same, or avoid it, to uplift themselves, thus human capital is developed.

The accumulation of human capital in terms of knowledge and skills leads to empowerment. By learning how to keep records, several of the interviewees testify how they can manage their farms better, resulting in increased production. One farmer described how he execute better control through administering records; prior to joining the group he did not know whether there would be a profit or not, but now he can calculate the expected profit. In addition, he discussed how he earlier could not influence the inputs obtained for the farm, while today he is able to demand the exact needs and what is appropriate from the store. The ability to calculate costs and revenues and operate the farm in a more professional way adds value to the work of the farmers and increases efficiency. This correlates to Bartlett's (2004)

model of empowerment, in which the ability of people to make strategic choices in life is regarded as an end and a positive outcome. It shows that a change in means of a farmer (capabilities and opportunities) creates potential for changes in the processes of his life (decisions and actions), which in turn can influence the ends (control of livelihood assets). In this example the skills and knowledge accrued by the farmer from the group influences his decision of what inputs to buy and thereby increases the control of his farm.

Many farmers also emphasize the importance of the group as a way of acquiring improved agricultural production methods. This has brought about new ways of planting, harvesting, and post-harvest management and as a result, several farmers report increased yields. This is supported by Ariga and Jayne (2011) who show that the organization of farmers into groups has facilitated access to extension services and credit, which have contributed to the increased use of fertilizers, hence improved yields of maize in Kenya.

It is not only the individual farmers who increase their stock of human capital. Increased production has led to raised income that enables farmers to educate their children as they can pay school fees and uniforms or in certain cases pay fees with maize and beans. This is one of the main changes that farmers can see when comparing the situation before and after joining the group. The education of children builds up the human capital stock for the future, given that the youth stay or come back to the rural areas. Increased yields and incomes, in combination with the knowledge acquired through the groups, have also led to improved diets. Some farmers have started growing mangoes and pawpaw, which they also consume within the household. Other groups have provided each member with a water-tank so that they can access clean water. This results in improved health among group members and their households, which also adds on to the stock of human capital.

This chapter concludes that the farmer groups show evidence of all three kinds of social capital: bonding, bridging, and linking. Bonding is rather well-developed while linking and especially bridging can be further developed. In addition, human capital is created within the farmer groups. The formation of social and human capital brings positive livelihood outcomes to the farmers and their communities.

8 FARMER GROUPS AND THEIR CHALLENGES

“We don’t have the proper skills in management and leadership, but we are progressing well and if we can improve that would improve us.”

Trans Nyariva Association

After analyzing the outcomes of collective action, this chapter discusses the weaknesses and challenges perceived by the groups in order to give a more nuanced picture and create an understanding of the challenges that these groups cope with.

A main weakness for many of the groups relates to issues in management and leadership. Good leadership is a prerequisite for farmer groups to function efficiently (Stockbridge et al., 2003:26). Many leaders and committee members are not trained and do not have enough or adequate knowledge on how to manage a group. Groups elect leaders, who might not be properly qualified for the position, because there are no alternatives. Thus, more and adequate training is needed as members of the groups trust the leaders, such as the chairperson and other committee members, to take the best decisions for the groups. Several respondents believe that the leadership of their groups ought to be improved and there is also a degree of self-criticism among several committee leaders arguing that they could do much better if they received more training on leadership and management. This is not a new challenge though, as Hill (1991:301) found that a major improvement that could be done to increase the effectiveness of SHGs in Kitui was to provide training on leadership for the leaders, especially in finance and accounting.

It is not only the leaders who need more training. One of the challenges for the farmer groups is illiteracy and the lack of applied numeracy. In one of the groups the same person was both chairperson and secretary because no one else was literate, thus the group was not very efficient. As some respondents recognize, members who are illiterate are more vulnerable to middlemen exploiting the situation. Bager (1980:85) argues that, in the case of cooperatives, passive and uninformed members are a burden to the group as they can influence decisions even though they are not well-informed in the issue.

Another challenge for the groups derives from financial constraints limiting their operations in different ways. For example, certain groups mention that when they get new ideas or are provided with technology, they cannot implement them due to the lack of financial means. To buy or rent a store or to invest in a machine is costly and the capital of the groups is not enough. Hence, there is a gap between what the farmer groups aspire to do and what they actually achieve and this is perceived as a challenge.

Several groups maintain that they are not supported by the local government even though they are registered and those which are supported mainly receive assistance in terms of seeds, training, and relief food. Bruns (1993) concluded that when farmers have the resources the government must support them with a framework in order for them to collaborate and assist each other. Thus, since the groups in Kenya have the will and resources to cooperate, it would be beneficial for them to be supported more efficiently by the local government. Heemskerck and Wennink (2004:96) argue that local development initiatives can create an enabling environment for farmer groups that can in turn result in the development of social capital both horizontally and vertically.

Stringfellow et al. (1997) discuss the trade-off between size of the group and cohesion. The larger a group, the larger the economies of scale for processing and marketing, but the less group cohesion and vice versa. In the sample of groups, only one is a very large group, however, it consists of many smaller groups. Hence, a solution to the trade-off can be to form umbrella organizations that can contribute to scale-economies while developing cohesion within the smaller member groups. But, there are also groups that have decided upon a maximum number of members, or to divide the group, for efficient management. The group size can be large or small depending on the external environment and the aspiration of the members, however, even though there are alternative ways of handling the group size, a too large group can be a challenge. On the contrary, one group had the opposite problem as members were dropping out.

Unrelated to the group size is the challenge that women have responsibility for the household and the children and their time to participate in group activities is limited. Likewise, the men often undertake casual labor or have other endeavors constraining them from contributing fully to the group. Several groups assert that the workload in the farm is unevenly distributed between men and women, with women doing most of the work. Several women describe how

their engagement in the group takes time and how they have to leave the work and their children at home to attend meetings or other group activities. By some women it is seen as a disadvantage that the group takes time from them, especially if the meetings are during a time when they are very busy.

On the individual level the opportunity time spent in meetings is one of the main disadvantages reported by the farmers. Some of the groups meet once per week thus members have to leave their farm quite often. Coulter (2007:17) refers to this as a “hidden cost” of cooperating with others. He argues that the lower the hidden costs, the greater the will to act collectively. Moreover, the greater the value added for the farmers of collective versus individual action, the more they will wish to cooperate together. Most farmers do attend the group meetings unless they have a reason not to do so. In most cases, farmers who cannot participate in the meeting need to report this; if they fail a fee is issued. Thus, the hidden costs are often less than the perceived benefits from participating in group meetings.

9 CONCLUSION

The objective of this study was to increase the understanding of why small-scale farmers in rural Kenya choose to engage in farmer groups, the outcomes and impacts collective action produces and the challenges these groups have. It is an important and interesting phenomenon to investigate in a time when development organizations increasingly choose to work with local community groups. Acknowledging that social and human capital are both prerequisites and an outcomes of collective action and the complexity of the linkages between them, this thesis has focused mainly on these two types of capital as an outcome.

Farmers engage in collective action in a variety of ways, depending on their needs and the local resources available. Social reasons to farmer’s participation in group activities are more prominent than economic motives, but the groups’ own objectives are to some extent more articulated as economic. The first generation collective action theory is refuted as this research shows that many people are non-selfish and want to cooperate with others to achieve common interests. Thus, the thesis conforms to the second-generation theory of collective action, implying that voluntary cooperation is possible.

Social capital is important for collective action, both as a prerequisite and an outcome. Three types of social capital, i.e. bonding, bridging, and linking, have been distinguished among the groups. Bonding social capital is the strongest in the groups. It is demonstrated through the participation in activities, which require trust and social norms, and reflected in the way that individual farmers discuss their membership in the groups. Bridging social capital, for example groups connecting to each other, is less perceptible. This thesis shows that there is a need to strengthen the bridging social capital among these groups. Linking social capital varies between the groups where some have rather strong links while others have weak. It also needs to be augmented to improve the ability to create linkages to formal institutions, the private sector, and organizations. The discussion suggests that a combination of all three kinds of social capital is important for farmer groups and their collective action. However, each group needs to identify what type of social capital they need to improve in order to diversify. As a supplement to social capital, this thesis also discusses the formation of human capital. It shows that accumulation of human capital through training and exchanging ideas is an important aspect for the members of these groups and it results in positive livelihood outcomes for the farmers.

The weaknesses and challenges for the groups vary. The leadership and management is a main weakness since people do not have enough knowledge and skills. In addition, illiteracy among the members is a challenge. Financial constraints are an additional obstacle for the groups to achieve their objectives. Also, the gender aspect needs to be addressed as the work load and power relations are uneven between women and men. There are challenges with regard to knowledge and lack of education, but the farmers show a desire to learn and adopt new technologies to improve farming, and for this, the groups are essential. It is also important to build the capacity of these groups, not merely an issue related to agriculture, but more so of organizational capacity.

In the theoretical framework I argued that theories of collective action are applicable to farmer groups. Farmers do have self-interest in joining a group, but there are also several other motives that drive organizational structures. Even though the main objective of the groups concerns economic issues, there is a much broader social aspect which must also be taken into consideration. As this research has shown, it is important to understand the underlying perceptions of why farmers regard engagement in farmer groups as important for their livelihoods. The social and human capital perspectives are as important as economic

factors and this must be regarded when working with farmer groups. There is a need for supporting organizations providing services to farmer groups to have an open dialogue with the groups on their needs and wishes as the farmer groups need assistance to realize their opportunities.

The phenomenon of collective action in farmer groups has been explored at a local level. It has been shown that the groups have a positive impact on farmers who participate and that to a certain extent there are spillover effects to non-members. However, one question that has emerged through this thesis and requires further research is whether success at the local level leads to social and economic development at the national level? As has been suggested, it is possible for small farmer groups to join and form larger farmer organizations by using their bridging social capital. Thus, small groups are potential building blocks for larger farmer organizations but since the linking social capital is still rather weak for many of these local groups, they need to be supported. To make a real change, reduce poverty, and contribute to agricultural development, these groups must be further linked to organizations, the private sector, and governmental institutions. Furthermore, even though social and human capital are built through these groups, providing a necessary condition for agricultural development and rural poverty reduction, other conditions such as efficient markets and improvements in infrastructure are also required. More research on social capital in terms of bridging, bonding, and linking among farmer groups in Kenya, the influences by the external environment as well as how non-members are affected by these groups is certainly needed.

The primary level cooperation in these groups is important as it can strengthen the organizational skills among the community members and in the long-term enable them to organize into larger farmer organizations or cooperatives. Meanwhile these small farmer groups create social capital, which is indirectly contributing to reduced vulnerability, increased incomes, and better livelihoods. This thesis suggests that social capital is both a prerequisite for and a result of collective action. Even though it is not possible to determine any causal relationship from the data, it is clear that the main outcomes from collective action in terms of farmer groups are positive and benefit the individual farmers as well as the communities. However, there are challenges and problems in farmer groups which need to be recognized and collective action is not always be the best option for all problems. But still, farmer groups make a difference for those involved, and thus, in terms of social and human capital, unity is power.

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APPENDICES

Appendix 1. Interview guide – individual farmers

Name:

Age:

Number of family members:

Sources of income:

Years in the farmer group:

Position in the group:

Farming

- What is your total land area under cultivation?
- What crops do you grow?
- What are your main challenges with regard to farming (inputs, credit, postharvest, marketing)?
- Through which channel do you sell your produce?
- How often do you have to buy food that you also produce?
- If you could invest in three things to your farm, what would it be?

Membership in the farmer group

- Why did you join the farmer group?
- Please describe your livelihood situation prior to joining the group. How would you describe your situation today?
- How do you contribute to the group?
- What are the main benefits for you from your membership in the farmer group?
- Are you participating in any collective action outside the group?
- Do you feel that you can influence your group? How?
- How would you describe the leadership of your group?
- Have you received training? If yes, from who and on what? How did it benefit you?
- What do you consider to be the most important/least important function of your farmer organization?
- What other activities or functions would you like the group to undertake?
- Do you see any disadvantage of your membership in the group?

Appendix 2. Interview guide - key informants

- How many farmer groups are you cooperating with?
- What is the average size of the groups?
- What are their main objectives?
- How do the farmer groups operate?
- What are their main functions?
- What is their internal structure?
- How is their management functioning?
- What are the challenges they face?
- How is the division between men and women?
- How does your organization work with farmer groups?
- How can they profit from working with your company/organization?
- How do your company benefit from working with farmer groups? What are the advantages and disadvantages?
- What are the main challenges faced by your company/organization in working with farmer groups? How do you work to overcome these?
- Are you involved in any capacity development with the farmer groups?
- What enabling and constraining external factors can you see to farmer groups?
- What do you see as the drivers of the farmer groups?
- Can you describe the institutional environment you are facing when working with farmer groups?
- What would you say is important for farmer groups to be efficient?
- What is important for their sustainability?
- How are they funded?

Appendix 3. Interview guide – farmer groups

Name of the group:

- When was the group founded?
- How many members do you have (women/men)?
- How many elections have you had since the formation of the group?
- How many members have attended the general meetings (on average)?
- Do you have an annual subscription fee? If yes, how much?
- What is the total capital of the group?
- What was the main objective of the group when it was founded? What is the main objective today?
- Where do you want to be with the group in five years from now?
- What are the activities undertaken by your group?
- Would you like to expand the group functions into other activities?
- Please describe the structure, governance and leadership of your organization.
- How many percent of the members are respecting the by-laws?
- How often does the whole group meet and what is discussed during these meetings?
- How do you distribute the benefits?
- Can you see specific challenges for men and women? How are these addressed?
- Are your organization supported by local government? How?
- What are your linkages to partner agencies? Are you working with the private sector?
- What do you consider as the main strengths of your group?
- What are the main weaknesses?
- What opportunities do you see as a group?
- What are the main external threats?

Appendix 4. List of interviews

Farmer	Age	Sex	Position in the group	Date of interview
F1	55	Woman	Member	2011-11-15
F2	65	Man	Chairperson	2011-11-15
F3	49	Woman	Member	2011-11-17
F4	32	Man	Member	2011-11-23
F5	45	Woman	Member	2011-11-23
F6	49	Woman	Secretary for table banking project	2011-11-24
F7	70	Man	Chairperson of project group	2011-11-24
F8	37	Woman	Treasurer	2011-11-25
F9	54	Man	Member	2011-11-25
F10	48	Man	Committee member	2011-11-25
F11	42	Man	Chairperson	2011-12-01
F12	28	Woman	Member	2011-12-02
F13	36	Woman	Secretary	2011-12-02
F14	55	Man	Member	2011-12-02
F15	58	Man	Member	2011-12-02
F16	43	Woman	Member	2011-12-01

Group	Province	District	Accessed through	Date of interview
Kavete Women's Group	Eastern	Kitui	ACDI-VOCA	2011-11-15
Kanjara SHG	Eastern	Mbeere	ACDI-VOCA	2011-11-16
Kanthanu Start Women's Group	Eastern	Embu	ACDI-VOCA	2011-11-17
Emaus SHG	Nyanza	Kisii	ACDI-VOCA	2011-11-23
Trans Nyariva Association	Nyanza	Kisii	ACDI-VOCA	2011-11-25
Ikaasu Fruits and Sorghum SHG	Eastern	Makueni	Smart Logistics	2011-12-01
Ituka Cassava Village Group	Eastern	Makueni	Smart Logistics	2011-12-01
Woodlands SHG	Eastern	Makueni	Smart Logistics	2011-12-01
Kikome Horticultural SHG	Eastern	Makueni	Smart Logistics	2011-12-02
Muambawa wa Yikiuuku SHG	Eastern	Makueni	Smart Logistics	2011-12-02

Key informant	Position	Organization	Date of interview
K1	Gender & Youth Development Associate	ACDI-VOCA	2011-09-12
K2	Managing Director	Smart Logistics Solution Ltd.	2011-09-16
K3	District Officer	Kathonzwani District Agricultural Office	2011-12-01