

German Institute for Tropical and Subtropical Agriculture (DITSL)

# Social Capital and Community Based Organizations' Functionality in Innovation Processes: Perspectives from three Case Studies in Tanzania

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M.A. Thesis in Development Economics

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Supported in the frame of the GlobE project:

Trans-SEC: Innovating Strategies to safeguard Food Security using Technology and Knowledge  
Transfer: A People-centred Approach

Funded by the Bundesministerium für Bildung und Forschung (BMBF) and Bundesministerium  
für wirtschaftliche Zusammenarbeit und Entwicklung (BMZ)

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Submission date: 14, January 2016 in Göttingen



## Acknowledgements

This work would have not been possible without the financial support of the Bundesministerium für wirtschaftliche Zusammenarbeit und Entwicklung (BMZ) and the Bundesministerium für Bildung und Forschung (BMBF) within the frame of the GlobE project: “Trans-SEC: Innovating Strategies to safeguard Food Security using Technology and Knowledge Transfer: A People-centred Approach.”

I would like to thank all the dedicated members of the Trans-SEC project I have met along the way. The logistical support during the field work provided by Mr. Swai, Mr. Makoko and Mr. Nickson was of great help. Especially, I would like to mention my translators during my work: Amina, Boniface and Devotha. They did not only make possible my contact with farmers, also shared their experiences and worldviews with me. Thanks for making the time in the villages better. Kerstin Schulz, it has been fun and exhausting, getting here would have been much more difficult without our mutual support throughout all this process.

Most importantly, I would like to thank the three groups and farmers that dedicated their time and efforts to give an input to this research. I learnt from them as much as I had done with books and articles throughout my life and I also think we had fun in the process. I hope that the collaboration with Trans-SEC can contribute to transform their lives.

Apl. Prof. Dr. Kaufmann, Jun.-Prof. Dr. M. Wollni and Dr. Pamela Ngwenya guided me wisely throughout the planning and writing process. I believe the outcome of this work would have been much different without their support. I would like to especially thank Dr. Pamela for the long discussions and guidance that helped me to think out of my “economic” box. It has been a thrilling intellectual process that further contributed to my personal development, asante sana.

Personally, I want to thank my friends Jaime, Fran, Belén and Gilbey’s for listening to me always and of course, my family for showing me the importance of persistence in life and unconditional love. I would like to show endless gratitude to my old friend Michu, who made possible that I could fulfill my dream, the same way as he did long time ago. Life is a long journey and great things should come for us.

Lastly, I must remember my friend Jorge Torrens whose tragic death in Somalia shocked me while doing one of the interviews for this research. Your example encouraged me to follow a path in development and your joy and attitude towards life will inspire me forever. Gracias y descansa en paz amigo.

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## List of Abbreviations

African Development Bank	AfDB
Case Study Site	CSS
Chama Cha Mapinduzi	CCM
Collaborative Learning Farmer Group	CL-group
Community Based Organization	CBO
Community Based Trainer	CBT
European Union	EU
Food and Agriculture Organization	FAO
Government of Tanzania	GoT
Gross Domestic Product	GDP
International Work Group for Indigenous Affairs	IWGIA
Monitoring African Food and Agricultural Policies	MAFAP
Mtandao wa Jamii wa Usimamizi wa Misititu Tanzania	MJUMITA
Mtandao wa Vikundi vya Wakulima Tanzania	MVIWATA
National Bureau of Statistics	NBS
Non Governmental Organization	NGO
Participatory Action Research	PAR
Participatory Agricultural Development and Empowerment Project	PADEP
Participatory Rural Appraisal	PRA
Participatory Video	PV
Rapid Rural Appraisal	RRA
Small Industries Development Organisation	SIDO
Southern Agricultural Growth Corridor of Tanzania	SAGCOT
Social Capital Initiative	SCI
sub-Saharan Africa	SSA
Strengths Weaknesses Opportunities and Threats	SWOT
Tanzania Social Action Fund	TASAF
United Nations Development Programme	UNDP
United States Dollars	USD
United States Agency for International Development	USAID



### 1. Introduction

Tanzania has been one of the fastest growing countries in sub-Saharan Africa (SSA) in GDP terms in the last decade, however a majority of its population lives under the poverty line (World Bank, 2015). The Tanzanian economy remains eminently tied to agricultural activities and smallholder agriculture is the dominant mode of production. The sector's productivity shows one of the lowest levels in SSA and it has failed to lift people in rural areas from poverty; malnutrition is still a prevalent phenomenon (MAFAP, 2013). Nonetheless, growth in the sector has adopted a distinguished regional pattern favouring areas more suitable for the production of exportable commodities (Pauw and Thurlow, 2010). Furthermore, the Tanzanian agriculture sector is expected to suffer from the consequences of climate change making production more unreliable (Trans-SEC, 2012).

In this context the Trans-SEC project aims to develop innovations that enhance productivity and improve food security in collaboration with local farmers (Trans-SEC, 2012). The project strategy has been to identify upgrading strategies that would be tested and implemented by farmer groups created ad-hoc (Trans-SEC, 2012). Although their inclusiveness has been questioned (Bernard and Spielman, 2008), Community Based Organizations (CBOs) are thought to be efficient vehicles for the provision and delivery of services or facilitating innovation processes and have become a common tool in rural development projects (World Bank, 2003). CBOs can be useful insofar they facilitate economies of scale, self-monitoring, sustainability and dissemination of innovations. Social capital is a relevant theoretical framework as its presence and further accumulation at the community level has been linked to CBOs (Grootaert and Bastelaer, 2001). Putnam et al. (1993: p. 167) defined social capital as:

*“Features of social organization, such as trust, norms, and networks, that can improve the efficiency of society by facilitating coordinated actions.”*

Therefore, understanding how CBOs articulate with these aspects of the social structure and how they are able to further beget trust or create new networks seems crucial to assess the underlying reasons for group functioning. However, judging the success or failure of groups just in the light of social and internal processes would be reductionist and provide little help for the groups in the researched communities. A broader approach which accounts as well for agro-ecological, market or political related factors could draw a clearer picture of the factors at play (Agrawal, 2001).

In this context, the overall objective of this research is to understand the factors affecting group membership and the functioning of groups. Firstly, from a quantitative perspective, outlining a socioeconomic profile of CBO members in the researched communities. Furthermore, since

autonomous collective action could facilitate the transmission of innovations, it is necessary to shed light on the motivations driving group membership and the structural obstacles for group membership as they are perceived by villagers. Finally, this research looks at factors driving the functioning of CBOs. Thus, this thesis aims to answer the three following questions:

1. What is the socioeconomic profile of group members in the case study sites?
2. What are the main motivations and constraints that villagers face in order to join groups?
3. What are the factors influencing group functioning?

Throughout this research social capital is the core conceptual framework: the main hypothesis is that the presence of social capital can facilitate the presence of CBO's and furthermore facilitate their internal functioning. In order to generate the data and results this research has made use of a combination of quantitative and qualitative methods. However, the main particularity of it is the participatory component of the work carried out with three case study (Collaborative Learning) groups. This research is embedded in a broader transdisciplinary, Participatory Action Research (PAR) joint process in which each of the three collaborative learning farmer groups<sup>1</sup> (CL-groups) identified a problem and developed an innovation plan, later on executing, monitoring and evaluating it. In the stage covered by this thesis, the three groups developed their plan and executed the first activities. By following a participatory approach, this research does not only aim to trigger a reflexive and transformative process between participants (Kemmis and McTaggart, 2005); furthermore, this setting could be more conducive to access and generate knowledge from the groups' direct experience in their locale (Chambers, 1994a). Considering that one of the core objectives of this research is to assess factors affecting group functioning, PAR is considered to be a suitable approach.

Chapter 2 continues with a summary of the relevant literature in the fields of social capital, community based organizations and their role in processes of rural innovation. Furthermore, a review of the literature on PAR, Participatory Rural Appraisal (PRA) and Participatory Video (PV) is provided in order to understand the potentiality and challenges of this research. Chapter 3 contextualizes the area where this research took place and describes the methods and tools that were used to collect the data. Chapter 4 describes the results obtained in this research. Sub-chapter 4.1 provides a quantitative characterization of group membership. 4.2 presents from a qualitative perspective the factors that facilitate or constrain group membership. 4.3, 4.4 and 4.5 discuss the three case studies in depth, providing a profile and history of the three CL-groups, describing aspects of their internal functioning and a categorization of the factors affecting their performance. Chapter 5 discusses and critiques the main findings and relates

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<sup>1</sup> For clarification see section 3.3

them to the literature previously presented. Finally, chapter 6 provides a brief summary and conclusion of the research.

## 2. Literature Review

### Theoretical framework

In the following sections the theoretical underpinnings of this research are discussed based on previous debates in the literature. Firstly, social capital is the frame under which group functioning is analysed. The relation of social capital and groups is twofold; the presence of groups can engender further social capital for its members and outsiders, but at the same time a previous stock of social capital is needed for groups to work. Understanding the concept of social capital and the channels through which it can contribute to social and economic development is critical. Secondly, the recent importance of CBOs in development projects is discussed. Thirdly, the role played by social capital and groups in the quest for innovation is analysed. Finally, the focus is placed on elements that condition the functioning of CBOs.

### *2.1. Social Capital*

The most acknowledged definition of social capital that can be found in the literature was coined by Robert Putnam (1993, p.167) and it refers to the “features of social organization, such as networks of individuals or households, and the associated norms and values that create externalities for the community as a whole” (Grootaert and Bastelaer, 2001). Social capital is a concept which had been extensively discussed in the sociological literature, if not following the same terminology, making use of similar theoretical foundations to the authors that developed the concept in depth during the eighties and early nineties (Portes, 1998). However, it was the decade of the nineties when research around this concept expanded from theory towards applied social sciences. The aim of authors with backgrounds in political sciences, sociology, economics or anthropology (Grootaert and Bastelaer, 2001) was to measure the impacts of social capital on different social dimensions, such as economic development (Woolcock and Narayan, 2000). The emergence of the social capital literature contributed to deepening the understanding of the concept as well as its potential implications in policy making (Grootaert and Bastelaer, 2001), but at the same time it threatened to stretch the concept so as to embody any aspect which could not be measured in monetary terms (Portes, 1998). In order to achieve some sort of academic consensus, several authors supported by the World Bank developed the Social Capital Initiative (SCI), with a special focus on the effects of social capital in economic development. The aim was to refine the conceptual framework, provide empirical evidence and contribute to the development of convincing social capital measures (Grootaert and Bastelaer, 2001). Some of the main conclusions derived from the SCI will be discussed in the next paragraphs.

Woolcock and Narayan (2000) review the different approaches to social capital, which tend to emphasize different aspects of the concept. The *communitarian* view identifies social capital by the presence of local organizations which are intrinsically positive for the local welfare. The *network* view focuses on the different ties (vertical or bridging and horizontal or bonding), that individuals or groups enjoy. This view concludes that different combinations of these ties would yield different economic outcomes. For instance, bonding relations are common among poor people as a defensive mechanism to reduce risks; on the other hand, bridging relations provide new information which can be used by more advantaged individuals. Woolcock (2000) describes this equilibrium suggesting that individual welfare is correlated to the diversity of networks. The *institutional* view emphasizes the role of the formal institutional settings which lay the ground for individuals or groups to act collectively; in short formal institutions facilitate or constrain performance insofar they are consistent in the application of rules. Two divergent views suggest that either social capital flourishes when formal institutions fail to act or it is thanks to the efficiency of these formal institutions that civil society can act. Lastly, the *synergy* view tries to reconcile the network and institutional views emphasizing the importance of institutional frameworks which have to be exploited by civil society through networks involving state and private actors.

Another critical distinction refers to different manifestations of social capital. Uphoff and Wijayaratra (2000) argue that social capital can be recognized in structural or cognitive forms. The former has enjoyed more attention in the literature and refers to more formalized and tangible elements such as roles, rules, procedures, precedents or social networks. Cognitive forms of social capital are intangible and inhabit in the realm of ideas and can be identified with values, beliefs, norms or attitudes. Both elements are intertwined, reinforce each other and are thus often difficult to distinguish.

Portes (1998) advocates for a systematic approach when using the concept of social capital. According to him, there are three inherent dimensions in social capital that should be disentangled in order to simplify its analysis. First, one should identify the owners of social capital (people claiming the benefits). Second, the sources of social capital, namely the owners of the resources that can stream the benefits. Lastly, we find the resources as such. Following this distinction, he analyses the ground for social capital; that is why an individual would be willing to provide resources to another without a market based transaction. In his view, this can be done for instrumental purposes, that is to get a future reward or avoid sanctions, or consummatory, due to the internalization of social norms or the identification with certain groups. Lyon (2000) is more sceptical about the possibility of disentangling sources from the manifestation. This debate is linked to the iterative properties of social capital; the more you use it the more you accumulate (Grootaert and Bastelaer, 2001). Bridging the theoretical propositions of Portes and Uphoff and Wijayaratra, one could draw a thread from the

instrumental roots of social capital and its structural manifestations and the consummatory roots and cognitive forms.

### ***2.1.1. Measurement of Social Capital***

A key issue debated in the social capital literature has been how to translate some of the intangible theoretical aspects of social capital into convincing measures that can be used in research (Woolcock and Narayan, 2000 and Grootaert and Bastelaer, 2001). In order to facilitate measurement, the literature reached some degree of consensus around certain proxy variables that can be utilized in social capital measurement. Questions related to association membership, prevalence of trust and respect for norms, mutual assistance and collective action have been transversal to many social capital studies (Grootaert and Bastelaer, 2001). However, different issues revolve around the use of these variables and their interpretations. Associations can differ in their type of membership, nature of decision making processes, have pernicious goals for the overall society and the type of ties generated between members (Krishna and Shrader, 1999). Common concerns include: Is collective action genuinely voluntary or responds to external forces (Grootaert and Bastelaer, 2001)? Can abstract concepts such as norms be measured (Krishna and Shrader, 1999 and Uphoff and Wijayaratra, 2000)?

The literature agrees that some of these issues can be circumvented by adapting enquiries to local settings, for instance homogenous associations may be more conducive for social capital transmission in complex social settings (i.e. ethnical differences or prevalence sharp economic inequalities). Thus, the formulation of questions and the parameters established to assess the presence of social capital will be tailored for every particular setting (Krishna and Shrader, 1999 and Grootaert and Bastelaer, 2001). Related to the relevance of the local context appears the need to combine qualitative and quantitative methods and multidisciplinary approaches in the measurement of social capital. It is through in-depth case studies that researchers can learn about the relevant aspects that ought to be considered in broader measurement processes that can enable statistical inference (Krishna and Shrader, 1999). Furthermore, qualitative methods could illustrate the transmission channels through which social capital operates (Grootaert and Bastelaer, 2001).

Narayan and Cassidy (2001) propose and test in different settings a questionnaire which integrates seven themes: group characteristics, generalized norms, togetherness, everyday sociability, neighbourhood connections, volunteerism and trust. The questionnaire makes use of Likert scales and coded questions, therefore allowing quantitative analysis at the expense of further insights from the respondent. In the frame of the SCI, Krishna and Shrader (1999) developed the Social Capital Assessment Tool which measures social capital through a sequence of quantitative and qualitative methods. This tool is based on the premise that it is necessary to gain insight from the particulars of the local setting through a community profile. Secondly, a

household survey including questions related to cognitive (values, social norms, behaviour and attitudes) and structural (group structure, decision-making, accountability of leadership and collective action) factors was administered. Finally, an organizational profile accounting for functionality and relations between organizations was elaborated through the use semi-structured interviews and other participatory methods.

### 2.1.2. *Effects of Social Capital*

Collier (1998) analysed social capital from a microeconomic perspective and showed the channels through which it can contribute to economic development. He argues that certain social relations can create positive externalities, such as widespread trust, which in case of lasting for a sufficient period of time can then become capital. Since generating social capital requires a long term investment, benefits are not always certain and there is a possibility to freeride, there could be a tendency to “undersupply” these positive social relations. Furthermore, certain social interactions facilitate the exchange of relevant information about market agents, thus reducing moral hazard. Additionally, knowledge and innovations can flow more easily through networks which may have not occurred otherwise either due to restrictions in intellectual property or public good characteristics. Finally, positive social interactions can reduce the problem of free-riding through sanctions and iterative interactions as well as facilitate collective action. Narayan and Pritchett (1999) add on top of those reasons that the presence of social capital could facilitate the monitoring of government action; enable collective action which enhances the provision of community services; and enable households to pool risks and thus adopting riskier investment strategies.

Grootaert and Bastelaer (2001) review some of the paradigmatic case studies in which social capital is believed to have affected economic performance and development, corroborating Colliers’ arguments with more specific examples. Some of the effects that they identify are the reduction of transaction costs in the Malagasy trading business due social bonds; the importance of trust and social cohesion in effectively implementing agricultural extension projects in Mali; or the provision of water services supported by collective actions in Indonesia.

Krishna (2003) carried a study in 16 different villages of a rural area in Rajasthan analysing their socioeconomic characteristics and patterns of socialization. The objective of this research was to define the appropriate cultural referents that define social capital in the region and assess its impact in different levels of development. The results shows that the interaction of higher levels of social capital and the presence of diligent village representatives constitute the most determinant factors to explain different levels of development in this setting.

In his case study of Ghanaian villages, Lyon (2000) conducted qualitative interviews with tomato growers, traders and input sellers with the aim to analyse the social patterns conditioning market transactions. Variables such as long-term working relationships, customer friendships,

belonging to pre-established networks, third parties or generalized behaviour patterns can facilitate transactions in this setting. His findings showed how these variables can smooth market transactions, often gaining win-win situations for both parties: input suppliers provide credit to producers, often beyond one farming season; trust between producers facilitates collective market actions in periods of scarcity, which are further supported by the presence of stable village chiefs who ensure that local cartels enforce their agreements; well-known traders with a stable residence obtain credits from farmers in the after harvest period; and market access is often allocated according to the criteria of traditional associations which also mediate other disputes and with the government.

Notwithstanding, several authors have identified pernicious effects in different manifestations of social capital. Broadly speaking, Portes (1998) defines four potential pitfalls derived from social capital: exclusion of outsiders; excessive claims on group members; restrictions on individual freedoms; and exerting a negative influence on social norms. Additionally, excessive embeddedness in local networks may isolate individuals from valuable information which could be accessed from external sources (Woolcock and Narayan, 2000). At the macro level, the existence of networks deeply rooted in institutions could lead to cronyism, corruption and dysfunctional bureaucracies (Narayan and Cassidy, 2001). Based on a study in rural Tanzania, Cleaver (2005) argues against the neutrality of social capital and social class. This study shows how poorer individuals within communities may be forced to sacrifice livelihood strategies that would enable them to stock social capital in the long term for short term actions that ensure their survival. Thus, time and monetary resources may be required to access social capital, which would question the notion of social capital as particularly beneficial for the poorest of the poor. Similarly, Grootaert and Bastelaer (2001) refer to research in India in which existing networks based on family or kinship ties prevent the participation of side-lined community members in a project of environmental rehabilitation. Portes and Landolt (2000) review some case studies in different Latin American countries that highlight the limits of social capital. The authors describe how entrepreneurs and workers of the textile sector in an urban centre of Guatemala make use of their networks and shared identity to enhance their economic performance. However, the constraints posed by limited access to other than regional markets blocked any further upgrading of these economic centres into some sort of export hub, showing the limits of horizontal links. In another case study, the authors analyse the Jamaican fruit value chain and argue that in spite of observing some degree of reciprocity between sectorial actors, the limited tradition of collective action and the absence of a trustable legal frame that could back up commercial transactions are major bottlenecks in the development of the sector. These critiques raise awareness on the expectations that some development agencies have placed in social capital as blueprint “solution” in the context of structural adjustment, burdening local



communities with the responsibility of taking over services or functions that should be carried out by states.

The potential utility of social capital as a driving force of development has been highlighted. In contrast, some authors argue that social capital can appear as a negative force that undermines the wider collective in favour of a minority or simply puts an excessive burden on some individuals for the benefit of few. Nonetheless, it is possible to state that social capital factors should be accounted for when analysing development processes, in particular at the community level. However, it is when development agencies have sought to galvanize the conceptual appeal of social capital that controversy regarding its use has been aroused. The promotion of local based groups as a critical element of such development projects and its wider implications will be examined subsequently.

### ***2.2. Community Based Organizations in Rural Development***

Groups described in this research have been labelled in different ways in the development studies literature: Grass Root Organizations (Uphoff, 1993), Local Development Groups (Porter and Lyon, 2006), Community Based Organizations (World Bank Group, 2003) or Membership Based Organizations of the Poor (Chen et al., 2006). These denominations emphasize different aspects but the terminology and the meaning attached provide an umbrella under which farmer groups could be categorized. Uphoff (1993) emphasizes the local dimension as a critical aspect of the Grass Root Organization; in his opinion it is the usual interaction of members in their locale which provides the ground for collective action but his conceptual definition leaves space for a wider type of activities and types of membership. Porter and Lyon (2006) highlight the local component and the transformative power of actions in their locale and for the wellbeing of individuals. Whereas Chen et al. (2006) diminish the local dimension, they prefer to stress the action oriented character of these organizations whose members, most of them poor, work collectively in order to achieve a set of goals previously agreed in the frame of group governance systems and supported partially by the financial contribution of members. The scope of activities carried out by this type of groups is wide: insurance, agricultural production, saving and credit groups, funeral associations, women groups, etc. Often these activities overlap and reinforce each other leading to multipurpose groups. It is this last notion the one providing framework which best encapsulates the different nuances shown by the groups in our CSSs; however not all members can be considered as poor in the community context. Thus the terminology chosen in this research will be that of CBOs.

According to Uphoff (1993) the taking over of governmental and market organizations has displaced collective action as a traditional way to manage local activities. However, he argues about the importance that these groups could have in order to palliate the inefficiencies of states and markets in developing countries in the era of post-structural adjustment policies. When public resources are not sufficient and market action may not be feasible, there could be space for collective action carried by local organizations. Adger (2003) agrees that social capital and collective action are of major importance in the context of natural resource management and climate change adaptive strategies in presence of dysfunctional states. However, Uphoff (1993) argues that it is necessary to build organizational and institutional networks with presence in different spatial layers and intertwined with what he calls collective, state and private sectors in order to lead to superior agricultural outcomes and social indicators.

The World Bank Group (2003) drew a policy framework upon which donors would base interventions in rural settings. This document emphasized the importance of CBOs as platforms for the provision of services, delivery of humanitarian aid or in terms of local advocacy. The World Bank highlighted the usefulness of groups as way to reduce costs in the implementation of development projects and to promote more inclusive interventions in which communities and particularly side-lined minorities could have a say in ongoing decentralization processes. Furthermore, CBOs were regarded as means to enhance the social capital and networks available to the most disadvantaged.

Porter and Lyon (2006) analyse the strategic use of groups by donors and NGO's and offer a more critical perspective on it. The strategic importance attached by the donor community to groups may have caused local NGOs to apply this approach systematically in order to secure support from donors. In their view, the streamlined approach has led to the abuse of groups, disregarding the particularities of different locales. Broadly speaking, according to the authors the potential success of groups depends very much on socio-spatial factors such as culture, geography or livelihood alternatives; (these issues will be revisited in subsequent sections). Additionally, developmental actors could consider groups, as compared to individuals, as an effective way to push pre-established agendas, while still claiming to promote participatory processes in communities. Another critique goes along the lines that the donor community has seized the narrative of traditional collective action and its benefits in order to mask the retreat of public institutions in the era of liberalization (Stringfellow, 1997; Heemskerk and Wennink, 2004; and Porter and Lyon, 2006). Finally, in their analysis of Ethiopian rural producer organizations, Bernard and Spielman (2008) found that poorer individuals were restricted in their access to these groups based on self-assertion or group screening, although they could benefit through spillover effects such as local price spikes. These findings would contradict the idea of inclusiveness of groups to worse-off community members and could exacerbate pre-

existing patterns of local inequality if projects are co-opted by local elites (Porter and Lyon, 2006).

Several studies have analysed the socioeconomic background of members in different types of CBOs. Although results are highly dependent on sociocultural and economic contexts and the specific nature of CBO activity, some patterns emerge that are of interest in this research. Group membership could require a certain socioeconomic position, openness to innovations or energy that could be related to age. In terms of age, the literature shows that older individuals are more likely to be members (Bernard and Spielman, 2008, Fischer and Qaim, 2012 and Meier zu Selhausen, 2015), but it could be that this is the case up to certain level (Asante and Sefa, 2011, Adong et al., 2013). Generally, higher levels of education may reflect a better capacity to carry out complex tasks related to group work (Bernard and Spielman, 2008, Wollni et al., 2010, Fischer and Qaim, 2012, Adong et al., 2013). Similarly having received specific agricultural training can raise awareness on the importance of CBOs (Meier zu Selhausen, 2015). Depending on the social role played by women, such as control of assets or time availability, group membership can be an empowering strategy for women (Wollni et al. 2010 and Adong et al., 2013) or they can be excluded (Bernard and Spielman, 2008). Household size can positively affect group membership as it could liberate resources to pursue an additional livelihood strategy (Bernard and Spielman, 2008). Alternative livelihood activities in the household, such as self-employment in off-farm activities or waged employment, have ambiguous effects on group membership as they could be seen as a burden to group activities (Wollni et al. 2010 and Adong et al., 2013) or mutually reinforcing (Fischer and Qaim, 2012). In terms of household wealth, studies look at certain proxy variables such as landholding, agricultural equipment, livestock or house price. There seems to be a quadratic relation between land size (Bernard and Spielman, 2008 and Fischer and Qaim, 2012) or house price (Bernard and Spielman, 2008) and group membership. Higher endowments of agricultural equipment (Asante and Sefa, 2011 and Fischer and Qaim, 2012) and livestock (Bernard and Spielman, 2008) assets have similarly a positive effect on group membership. Access to information proxied by mobile phone ownership has been identified as conducive for group membership (Fischer and Qaim, 2012), however this may disincentive membership in collective marketing actions (Wollni and Fischer, 2015). Finally, the infrastructure endowment of villages and household access matters as it conditions the incentives for participation but it could have ambiguous effects (Adong et al., 2013) or, as in the case of distance of household to road, bear quadratic relations (Fischer and Qaim, 2012)

The use of groups has become a mainstream practice in rural development to promote greater efficiency in production, dissemination of technologies, resource management or access to credit, among other things (World Bank Group, 2003). This development has occurred in parallel to the emergence of a social capital narrative in the development agenda. This narrative argues that social capital is available to the poor and they can further develop it by establishing CBOs

and eventually secure material gains. In the next sections, the focus of the analysis will be placed on factors affecting group performance and the underlying logic to use groups as platforms for innovations.

### ***2.3. Determinants of CBO's Performance***

Crowley et al. (2005) define the success of these organizations in terms of their ability to achieve their goals, become self-sustainable financially and from a managerial perspective, expand their membership and empower individual members financially and socially. Agrawal (2001) defines performance in broad terms as the longevity of the institutions involved in resource management. This endurance may be derived from some sort of legitimacy derived from successfully controlling the use of resources and distributing them in a just manner. Although groups' success may be related to long term existence, often the groups can be designated as a vehicle to achieve a particular goal, and thus disbandment may not be seen as a sign of failure (Chen et al., 2006). The literature analysing farmer CBO functionality feeds directly from the literature on collective action for resource management (Markelova et al., 2009 and Barham and Chitemi, 2009). Resource management groups at the local level can be considered a type of CBO. In essence both activities entail groups of people pooling and managing resources, pursuing previously agreed objectives and are conditioned by the limitations posed by agro-ecological and institutional settings. Thus, the broader theoretical background outlined in this section draws mainly upon this branch of literature.

Agrawal (2001) reviews the extensive literature on collective action and resource management and categorizes four core thematic factors that explain the performance of these groups: resource systems, group characteristics, institutional arrangements and external environment. In this review factors are categorized following this model, however group characteristics reflect only socioeconomic aspects of the individual members that can be considered ex-ante and can be measurable, whereas institutional arrangements encompass all the aspects that refer to internal group functioning, occur over time and enable group governance; this modification alters some of the categorizations suggested by Agrawal (2001), but create more homogenous clusters of variables according to the purpose of this research.

According to the literature, group characteristics encompass different sub-variables that could be accounted for when analysing performance: group size is a controversial variable but it seems to follow an inverted U pattern (Place et al., 2004, Poteete and Ostrom, 2004); a set of shared cultural norms that can regulate group behaviour, as well as the homogeneity of identities and interests can facilitate collective action (Thorp et al., 2005). Low levels of poverty among members also enables collective action (Barham and Chitemi, 2009), and it is unclear whether the possible shared benefits set by heterogeneity of members' endowments

contributes to success (Bernard and Spielman, 2009) or not (Stockbridge et al., 2003). Finally, a diverse age composition of groups can play a positive role in group functioning (Place et al., 2004).

Institutional arrangements relate to how groups organize themselves. Forsyth's (2006) discussion on group dynamics provides an insight into the fundamental properties across groups. Groups are based on interactions between individuals, but even interactions can be classified according to their nature, for example "task interactions" which relate to patterns of action that can be linked to specific group objectives, Members' relations and overall group behaviour are governed by rules (Lyon, 2003, Thorp et al., 2005) and sanctions (Thorp et al., 2005) and expressed through norms, roles<sup>2</sup> and procedures (Uphoff and Wijayaratna, 2000, Forsyth, 2006). Furthermore, these aspects of group functioning are articulated through decision-making processes and catalyzed by group leadership. These factors add predictability to the group activities and are legitimized by past successful experiences that enhancing the ability of a group to sustain action (Kaganzi et al., 2009). Subsequently, individual benefits as a result of group action create relations of interdependence between members, which can occur at different levels (i.e. hierarchical or sequential).

Groups are embedded in wider social structures (Forsyth, 2006); therefore, the way groups interact with these will further condition their performance (Agrawal, 2001). Elements of the external environment such as relations with external markets (Obare et al., 2006, Coppock and Desta, 2013), support provided by state actors or other organizations (Devaux et al. 2009 and Barham and Chitemi, 2009) and the accessibility to processes of innovation (Devaux et al. 2007), whether technological or not, condition the success of groups. Relating group performance to the networks aspect of social capital theory, access to a wider range of networks contributes to successful group experiences in agricultural innovation, which can be put at the service of production and marketing actions (De Haan, 2001; Adger, 2001; and Devaux et al. 2009). The ability of groups to create links with peer organizations and private and public actors can generate benefits that contribute to the operationalization of group' objectives (Uphoff, 1993; Uphoff and Wijayaratna, 2000; Bebbington and Carroll, 2002).

In the case of resource system characteristics, the sub-variables identified by Agrawal (2001) may not be as relevant for farming groups. However, he stresses the importance of system predictability and well-defined boundaries as critical factors for success. In the case of farming groups this could be assimilated to predictable rainfall patterns, regular access to a water

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<sup>2</sup> Forsyth cites standardized roles emerging in groups: leader, follower, information seeker, information giver, elaborator, procedural technician, encourager, compromiser or harmonizer.

source or soil quality for the former (Barham and Chitemi, 2009), and secure land property rights in the case of the latter.

It would be tempting to explain the complex dynamics of group performance with a catalogue of factors to be examined when analysing particular cases. However, the interplay of different factors in their local context may affect their ideal configuration (Agrawal, 2001; Poteete and Ostrom, 2004). Assuming linear relations between explanatory variables and group performance is an oversimplification of reality; group size is a variable that could illustrate this point. Therefore, it is reasonable to think about curvilinear relations between variables and performance (Poteete and Ostrom, 2004).

Central to all groups is the pursuit of certain objectives which constitute the *raison d'être* of groups; groups can be seen as vehicles to achieve attainments that otherwise would be unreachable for individuals (Forsyth, 2006). Related to this, a methodological issue in the farmer group performance literature refers to the instruments devised to measure performance itself (Place et al., 2004). Firstly, who is to define what is relevant to measure group performance? Several options arise: group members as the interested party are in the best position to determine the elements they value in relation to group activities; direct measurement entails the use of indicators that closely relate to group activities; expert assessment can be a valid method in case impact identification requires certain skills. Other measurement problems arise when benefits adopt intangible forms, for instance the security derived from being in a burial society. Lastly, literature suggests that researchers ought to consider the unit of analysis; groups as entities or individual members.

To sum up, in order to achieve its goals a group should develop mechanisms that enhance relations' predictability, facilitate collective action and its capacity to articulate itself within an institutional and agro-ecological setting. The extent to which these internal mechanisms are developed could depend on the socioeconomic backgrounds of members and the broader social structure. Table 1 integrates and summarizes the relevant variables for this research gathered in the literature. Although the literature is consistent in the use of these categories, during the workshops with the three case study CBOs it was preferred to enquire participants about group functioning following the sustainable livelihood approach proposed by Scoones (1998, p.5).

*“A livelihood comprises the capabilities, assets (including both material and social resources) and activities required for a means of living. A livelihood is sustainable when it can cope with and recover from stresses and shocks, maintain or enhance its capabilities and assets, while not undermining the natural resource base.”*

These assets or capitals are of diverse types: financial, natural, physical, cultural, human,... And their strategic use by individuals, households, villages, etc. Can yield different outcomes such

poverty alleviation, responsible use of natural resources, increased income or enhanced capabilities. This framework seemed easier to understand for participants during the workshops. Secondly, and derived from the former it could facilitate them to act strategically in the future.

Table 1: Factors Affecting Group Functioning in Literature

Aspect	Variable
<b>Group Characteristics</b>	<ul style="list-style-type: none"> <li>– Size (concave) (Place et al. 2004)</li> <li>– Age differences (+) (Place et al. 2004)</li> <li>– Heterogeneity of endowments (+/-) (Bernard and Spielman, 2009) (Stockbridge et al., 2003)</li> <li>– Homogeneity of identities (+) (Stockbridge et al., 2003) (Thorp et al., 2005)</li> <li>– Shared norms (Uphoff and Wijayaratna, 2000) (Thorp et al., 2005)</li> <li>– Low levels of poverty (+) (Agrawal, 2001) (Barham and Chitemi, 2009)</li> </ul>
<b>Institutional Arrangements</b>	<ul style="list-style-type: none"> <li>– Rules are simple and easy to understand (Lyon, 2003)</li> <li>– Ease in enforcement of rules (+) (Thorp et al., 2005)</li> <li>– Graduated sanctions (+) (Thorp et al., 2005)</li> <li>– Accountability (Obare et al., 2006)</li> <li>– Inclusive decision making (Uphoff and Wijayaratna, 2000) (Vorlaufer et al. 2012)</li> <li>– Past successful experiences (Kaganzi et al., 2009)</li> <li>– Appropriate leadership (Uphoff and Wijayaratna, 2000) (Coppock and Desta, 2013)</li> <li>– Interdependence among group members (+) (Agrawal, 2001)</li> </ul>
<b>External environment</b>	<ul style="list-style-type: none"> <li>– Low cost and time for adaptation of technologies (Devaux et al., 2007)</li> <li>– Low but gradual levels of articulation with external markets (Obare et al., 2006) (Coppock and Desta, 2013)</li> <li>– State: local authority, supportive external sanctioning institutions (Devaux et al., 2009)</li> <li>– Access to external support (Barham and Chitemi, 2009)</li> </ul>
<b>Resource System</b>	<ul style="list-style-type: none"> <li>– Predictability (+) (Barham and Chitemi, 2009) (Coppock and Desta, 2013)</li> <li>– Well defined boundaries (+) (Agrawal, 2001)</li> </ul>

#### ***2.4. The Role of Social Capital and CBOs in Agricultural Innovation***

In this section case studies in which groups were used as a platform to adopt innovation strategies or technologies will be highlighted. Innovations can occur as a result of the development of new institutional settings, new activities or simply adopting new practices embedded in traditional activities. The aim of innovation through groups is manifold: “generating, spreading, sharing, utilizing and applying knowledge and information” (Heemskerk and Wennink, p.21, 2004).

Groups are considered to be an efficient vehicle in the promotion of new practices and technologies (De Haan, 2001; Heemskerk and Wennink, 2004; Davis et al., 2004). Firstly, groups facilitate economies of scale, reaching a larger number of people with similar costs. Secondly, groups can take over functions of monitoring and evaluating processes of innovation transfer which otherwise would be carried by outsiders (De Haan, 2001; Heemskerk and Wennink, 2004). Thirdly, involving groups together with other value chain actors can potentially increase the usefulness and sustainability of innovations (Devaux et al., 2009). Finally, groups embody some aspects of social capital that can create conducive environments for dialogue, exchanging of ideas and consensus. In that regard, social capital is a means through which innovation can flow (De Haan, 2001; Heemskerk and Wennink, 2004). De Haan (2001) argues that resources are seized and redistributed in the frame of social relations, a key component of these relations are social networks which can be found in local based groups. These networks are a source of social capital and social control which can be used as a mechanism for distributing information ensuring that it is passed in a way which can be processed by someone who will effectively utilize it. Furthermore, groups should aim to enhance their social capital levels to efficiently catalyse the innovative process through deepening internal relations (bonding), extending group relations with similar organizations (bridging)<sup>3</sup> and partnering with public and private sector (linking) (Heemskerk and Wennink, 2004).

Uphoff and Wijayarathna (2001) illustrate the potential benefits of social capital in the scope of an irrigation project with farming cooperatives in Sri Lanka, in a region with high levels of social conflict along ethnic lines. In the frame of the project, farmers were initially assisted in the formation of small groups which eventually evolved into a network of representatives. Furthermore, the allocation of roles within the community; the establishment of procedures; the use of traditional institutions deeply embedded in the local cultures; and the presence of shared values across different ethnic groups contributed to the formation of the groups. The

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<sup>3</sup> In this research, particular attention will be paid to the bonding dimension of social capital, although aspects of bridging and linking will be touch upon.



allocation of the rights to use water took place and the groups showed an altruistic behaviour which went beyond the traditional tribal lines. The results of the project show efficiency gains and the long-lasting empowerment of the organizations, which after a decade of drought, self-managed a solution.

De Haan (2001) illustrates the use of social capital and networks for the case of a project in Tanzania in which an NGO promoted a group scheme to pass on a new breed of goat, in which participants were interdependent to secure individual and project benefits. She found that group members would favour insiders and established channels for information dissemination were dysfunctional in comparison with informal social networks. Other social capital related aspects affecting the efficiency of the scheme refer to the presence of additional and synergic activities which could encourage members' unity; length of previous group activities; and, stable and predictable relation patterns defined by common cultural heritages.

Devaux et al. (2009) describe the case of Andean potato producers and the creation of stakeholder networks. This intervention illustrates how stakeholder platforms can provide the interactive framework in which value chain actors engage in a process of collective learning and action, which is reinforced by progressive social capital accumulation. This iterative process led to commercial, technological and institutional innovations that enhanced producers' livelihoods.

Adger (2001) describes two case studies in Trinidad and Tobago and Vietnam, where collective action is used as a means to cope with the hazards of climate change. These actions lead to institutional innovations as well the implementation of new actions aiming to cope with weather related risks. He argues that these processes can take place with the support of state actors (synergies) or in spite of their negligence. In the case of Trinidad and Tobago, a set of local stakeholders in coral reef ecosystems engage in a partnership (bridging) and further collaborate with the state in the co-management of the natural resources (linking). In the case of Vietnam, the withdrawal of the state from the public arena motivated civil society to take up traditional forms of collective action, which facilitated in turn the provision of services such as credit.

To summarize, these examples show that social capital can be a critical asset in innovation processes. It is so from different perspectives. Firstly, generalized values, traditional institutions and mutually agreed roles and rules can lay the ground for innovative schemes, for instance in resource management. Secondly, social capital can facilitate the extension and sustainability of innovations. Finally, the ability of actors to extend their ties across and through layers<sup>4</sup> can

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<sup>4</sup> "Layers" as utilized by Uphoff (1993) referring to private and public actors.

favour that innovation processes are supported by policies or accommodating of market dynamics.

### **Methodological literature**

The following sections discuss the theoretical foundations of the methodological traditions that inspired the development of tools that were used in this research. A theoretical analysis about the methodology carried out prior to the implementation of the field work enabled the author to be aware of the potential challenges and impacts in the researched communities. Firstly, the general concept of PAR is discussed. PRA and PV emanate from the same methodological tradition of PAR. These two methods are subsequently discussed.

### ***2.5. Participatory Action Research***

The origins of PAR are traced back to early 20<sup>th</sup> century, but it was during the 1940's when the concept was further articulated by Kurt Lewin in the frame of education research. Following the approach of Neo-Marxist theories applied to community development and the Theology of Liberation the concept was adopted and implemented by activists and researchers working in developing countries such as Paulo Freire and Orlando Fals Borda in Latin America (Kemmis and McTaggart, 2005).

McTaggart (1994) argues that PAR is not a method or a procedure, but rather an orientation to research comprising a wide range of methods (Khanlou and Peter, 2005). Kemmis and McTaggart (2005) define PAR as a social, participatory, emancipatory, critical, reflexive and transformative process. The nature of PAR is that of an iterative and non-sequential process involving "diagnosis, analysis, action and evaluation" (Chesler p. 760, 1991) and entails a mutual enquiry between researchers and participants. It implies learning from experience and generating knowledge that transforms individuals, groups and society (McTaggart, 1994).

Fox (2003) argues that PAR arises from the necessity of finding a balance between theory and practice, making easier for practitioners to make use of scientific knowledge in the form of practical innovations. Particularly in social sciences, empirical evidence is embedded in local contexts and broader historical processes. PAR aims to understand individuals' behaviour, their interaction with others in their contexts, their meanings and their values and the narratives that shape their world' views (Kemmis and McTaggart, 2005). Furthermore, PAR entails a change in social practices against prevalent social structures, within its margins and with their consent (Kemmis and McTaggart, 2005). Chesler (1991) advocates for the use of PAR in work with self-help groups, as he finds certain overlapping aspects such as participation and control of activities, local based organizations, learning, transformative processes or self-awareness. He

argues for a pragmatic approach to research design that accounts for complex realities surrounding groups. From setting the research question, through the design of studies and data collection until the analysis, the researcher should be sensitive to context, participants and the interaction of these with the researcher. Rather than by data collection methods, research should be guided by principles such as trust between participants, accountability, commitment or joint development, which in turn should shape data collections methods. Further principles that guide PAR relate to the knowledge ownership of subjects, the long lasting effects on the critical enquiry capacity of subjects, consensus between participants and inclusiveness (Chataway, 1997 and Kemmis and McTaggart, 2005)

The complexity of dilemmas and situations faced in PAR projects makes difficult that merely theoretical accounts of PAR provide guidance for researchers and diaries or other forms of personal accounting can enlighten future actions (Chataway, 1997). Many times these issues refer to the existence of power structures within communities or among participants. The researcher ought to be sensitive to different agendas and be willing to put aside personal interests for the benefit of the participants. This can only be achieved by establishing genuine relations between facilitators and participants (Smith et al., 2010), but this is often challenging due to the different backgrounds of participants (Chataway, 1997 and Smith et al., 2010) and can only be limited to a conscious balance of power (Chataway, 1997). Researchers cannot be disentangled from the locale and pretending neutrality will not contribute to the realization of the transformation that participants aim for (Fox, 2003 and Kemmis and McTaggart, 2005).

PAR rationale has been applied in wide range of settings unleashing the emergence of similar approaches such as PRA or methods such as PV, which will be explored in the next sections.

### ***2.6. Participatory Rural Appraisal***

PRA is described by Chambers (1994a, 1994b) as a set of different approaches and methods that enable learning about rural life conditions and promote the empowerment of local communities by enhancing their reflexive, analytical and communicative capabilities and further facilitates the planning and execution of actions. From a learning perspective, PRA means learning “by, from and with” rural people (Chambers, 1994b). Furthermore, PRA does not intend to pre-determine or formulate a problem, but rather being a catalyst of a process which will lead to its identification and ultimately its solution (Webber and Ison, 1995).

The emergence of participatory techniques can be framed in the evolution of postmodernism and postcolonial anthropology, which were concerned with the dominance of westernized narratives and totalizing paradigms (Campbell, 2002 and Kesby, 2005). The development of PRA

responded to the concerns in the scientific community about the use of top-down approaches which placed the focus on researchers and subjected local communities to be a mere source of data (Campbell, 2002). One can trace the origin of PRA back to the 1960's when participatory approaches had been used in the frame of post-colonial developmental experiences (Cornwall and Pratt, 2011). Subsequently these practices evolved in a mixture of anthropological methods, field research on farming systems, agro-ecosystem analysis and Rapid Rural Appraisal (RRA) (Chambers, 1994b and Cornwall and Pratt, 2011).

### ***2.6.1. Participatory Rural Appraisal Approach to research***

PRA facilitates the generation of knowledge by rural people, which eventually they own and can be used for planning and acting (Chambers, 1994b). Webber and Ison (1995) claim that PRA has the potential to engender capacity over time, either by long term collaboration or being a mere trigger for a change in the dynamics of local communities.

PRA attempts to find a balance in research processes between scientific epistemologies and traditional and local sources of knowledge. Webber and Ison (1995) argue that the common view claims that scientific knowledge is superior as it is backed by data and empirical methods, however, they continue, traditional and local forms of knowledge are often equally valid but they cannot be codified by mainstream scientific methods, thus foreclosing the ability of the non-scientific audience to contribute to the development of bodies of knowledge. Traditional research approaches see scientists as outsiders who do not have bonds with the systems subject to the research and whose main task is the collection of data. In contrast, PRA places investigator as an active element of the researched system where responsibility acquires additional importance (Webber and Ison, 1995). Pretty (1995) advocates for a transformation in the way social research is conducted, from traditional positivist approaches towards a more inclusive and adaptive way of doing research. Positivism, he continues, has worked well in predictable settings (e.g. laboratories) where factors affecting research processes can be controlled. Research designs and data collection occurs within professional and local frameworks that could affect how problems or research questions are defined and consequently, the obtained results. Thus he argues, these tensions have to be negotiated and this requires some sort of participatory process.

Similarly, Chambers (1994a) argues that the transition towards participatory approaches entails a change of paradigm, or what he calls reversals. Firstly, it means a departure from etic to emic narratives in which local communities tell their own story using their own codes and through modes that belong to their daily lives. Secondly, it means a methodological change in different dimensions. The group gains importance as it could be source of enhanced knowledge. Related to the first point mentioned, visual methods become paramount as they can be easily understood and used by villagers. The last methodological change refers to the prevalence of

comparisons over measurements; comparisons are useful due to their simplicity, their reflexiveness and the possibility of using them in the absence of baseline data. According to experience, villagers have shown different analytical skills: to model, observe, quantify, estimate, compare, rank, score and diagram. These capacities can be exploited if scientists envisage ways to bridge the gap that separates conventional scientific methods and languages from the cognitive structures and codes that are common in rural areas. Thirdly, using of participatory methods creates bonds between researchers and researched. Lastly and closely related to the previous point, it is argued that PRA creates the space for a change in the power relations between researchers and villagers; according to the new paradigm villagers control the process, or as Chambers puts it, PRA implies researchers “handing the stick”, and are ultimately empowered as a result of it. PRA seeks that communities identify and become owners of their own problems and eventually lead the solving process. Webber and Ison (1995) consider two dimensions of community: the geographical and the collective of individuals or groups who share interests. The latter notion concerns PRA. A collaborative process between communities and social scientists can enrich perceptions on the analysed phenomenon as a result of different backgrounds and experiences (Webber and Ison, 1995). In this regard, conveying the right set of methods and creating a conducive climate for a constructive dialogue, which accounts for a diversity of views, are the main challenges faced by facilitators during PRA sessions. Furthermore, the abilities to discern the quality of the information and its validation with diverse methods are of critical importance (Chambers, 1994a and Bailey et al, 1999).

### ***2.6.2. Participatory Rural Appraisal criticism***

Campbell (2002) criticizes the vagueness of the guidelines suggested by Chambers. In his view, methodological issues are clearly overlooked by PRA, which is embedded in a postmodernist trend which tends to reject the objectivity of scientific methods and instead embraces alternative methodologies which often fail to provide transparency and accountability in their procedures. Campbell continues his argument saying that PRA training of facilitators is often dubious and the way to inter-link techniques remains unclear. Furthermore, he criticizes concrete methods pointing to possible shortcomings. In the case of semi-structured interviews, he argues that little is said about sample selection. Furthermore, he criticizes the fact that respondents should receive the same stimuli in order to obtain homogenous and comparable answers. He also points to possible shortcomings in groups discussions, such as peer pressure or dominance of one individual over the rest. Moderators are also subject to his criticism as they can influence the outcome of the procedures. Regarding visual techniques, he questions the basic assumption of widespread visual literacy or being more benevolent, the idea of cultural neutrality when interpreting images. Finally, Campbell criticizes ranking and scoring techniques as in his opinion, if they were to have validity they should be widely tested across the community and usefulness could only be proved if linked to other techniques or if the exercise is

repeated with other groups. According to the author, PRA methodology should improve its transparency and reliability by exhaustively reflecting throughout all the procedural steps and by using triangulation.

Similar critiques have been raised by other authors such as Baxter and Eyles (1999). Bailey et al. (1999), provide a direct answer to Baxter and Eyles. While scientific validity is based on the extent to which a measure is adequate for the assessment of a concept, in the case of qualitative methods it goes beyond that. Circumstances that govern the relations of the actors involved and how conclusions are inferred are valuable in themselves. Furthermore, any learning process or the interpretation of reality cannot be disentangled from previous experiences (Webber and Ison, 1995). Bailey et al. advocate for the use dialectic logic as “This logic explores the relationship between happenings and objects in the material world and their subjective representation in human consciousness” (Bailey et al., 1999, p.171). These social phenomena are present in society and also exist in the consciousness of individuals; furthermore, they constantly interact with each other and evolve over time. These mutations occur over long periods and often escape the perception of contemporaneous generations. Therefore, critical enquiry is an essential task for researchers, thus they must be aware of the implications entailed by the use of different methods in the frame of power relations and the historical and social context. This process and these implications must be thoroughly accounted for in the research.

Regarding the methodological validity of qualitative research, Bailey et al. (1999) argue that it comes from its analytical insight rather than the representativeness of the events. It is a subjective process in which the researcher conveys the information extracted in the field to the realm of theory with a combination of rhetorical and scientific thinking. This process of reflexivity relies heavily on the capabilities of the researcher to be critical with the research process. Finally, the authors propose a grounded theory which aims to constitute a guideline in the process of elaborating theories. It is based on the ideas of transparency and critical inquiry and its basic assumption is that knowledge is relative to different contexts; furthermore, knowledge is subject to evolutionary processes which are influenced by individuals or groups who interact from different power positions. They describe a cyclical process in which by using different research methods the researcher develops a theory which will be subsequently tested with further evidence in the form of primary data or academic literature. An iterative process leads to the emergence of common patterns which can be categorized and assembled to provide an answer to the initial research question. Critical inquiry must be transversal to the whole process and the researcher must account for it. Furthermore, sampling, coding or processes of triangulation are open to the developments of research. Thus research management strategy will be influenced by the preliminary findings obtained by the researcher and furthermore will be subject to a constant self-scrutiny and comparison of different types of

evidence; a process which of course must be well documented to allow facilitate the critical assessment of colleagues.

The second major critique to PRA to be discussed relates to the dynamics of power inherent to the participatory process. The basic argument is that power relations are inherent and underlying community relations, thus participatory approaches will be mere reflections of these relations. Contrary to the generalized view, power is a transversal and decentralized force which is present in and embedded in daily practices; it is not exerted with coerciveness but rather by the rule of habit and self-imposed obedience (Kesby, 2005 citing Cooke and Kothari, 2001). In the context of participatory processes, power relations are revealed in four different dimensions:

1. In a short period of time PRA, or its variations, has become a mantra in development practice and its use is often a requirement imposed by the donor community in order to grant funding. Often, this has led to the dissolution of the concept to vague rhetoric used in project appraisals. The applications of PRA may respond to vested interests, thus practice ends up bearing little resemblance with the original ideal. Becoming a mainstream practice, in many cases PRA has abandoned its transformative potential and has been embedded in a complex network of interests formed by institutions, practitioners and communities (Cornwall and Pratt, 2011). Pretty (1995) identifies seven levels of community participation which reflect different equilibriums between these actors in development projects. Participation evolves from “manipulative participation” to “self-mobilization” according to the degree in which people are represented or participate, the set of incentives offered to enlist participants, how decisions are made, who sets the goals or agency. In a nutshell, participation can be used as a pretext, a tool or a right that people possess.
2. Participation can hide local knowledge rather than reveal it. Firstly, this is due to the prioritization of the group consensus over the individual difference. Secondly, because methods are considered to be culturally neutral when they are reflections of Western mindsets and aim to obtain previously fixed types of knowledge. Thirdly, the neutrality of facilitators is put to the question as it can be argued that they impose what can be known and how. Even by using indigenous forms of expression the generated data is a new expression which is filtered by the experience of the process rather than being a representation of the original knowledge.
3. By accepting participation, individuals tacitly embrace discourses and practices. Outsiders that decline participation for whatever the reason are delegitimized by the mainstream narrative generated as a result of the participatory process.

4. Participatory projects are just dramatization of reality intended for an outsider audience, thus in a way they follow a script which aims the fulfilment of pre-determined project objectives. Furthermore, those who lack the skills to perform are again ignored.

Kesby (2005) argues that although this is a very valid critique and raises issues for concern, it fails to articulate real solutions. Furthermore, he considers that its interpretation of power is extremely pessimistic, although he acknowledges that within emancipatory movements' relations of power act in the same way, there could be lesser forms of domination. He bases his argumentation in participatory projects in Zimbabwean communities ravaged by HIV, which may unleash new power dynamics but at the end contribute to fight the spread of the disease and its associated stigma. Kesby continues analysing the dynamics that contribute to power mutation and its eventual overthrow. In order to be perpetuated power requires being adaptive to circumstances, furthermore critical junctures may be opened as a result of random forces or by the actions carried by agents on a daily basis. Agency requires self-awareness which will be inevitably achieved within the prevalent structures of power. As Kesby puts it "Thus, while agency is framed by power, power, resistance, and transformation can all be produced by situationally conscious human action, not simply by systemic logic or its accidental slippage." (Kesby, 2005 p. 2046) Development interventions into such participatory mechanisms open room for the development of agency within the established power structures; these interventions are not exempted from criticism as they are exogenous and can impose the outsider's agenda with the pretext of revitalizing communities. Furthermore, resistance is entrenched with power, as the former can only exist as a result of the latter. Kesby argues that within the prevalent power structures, participatory actions can help to organize resistance as it could act as a platform for re-thinking roles and changing agency patterns. Furthermore, he disputes that participatory approaches encourage individuals to follow a script to "fit in the play" and he says that all social relations are biased in origin by ubiquitous power relations; moreover, it could be that the participatory "dramatization" can expose the underlying power relations and facilitate the craft of strategic action to fight them. Participation encourages self-awareness, stimulates political processes and action, in short it empowers individuals to undertake the challenge of breaking the status quo. However, empowerment processes are not neutral and can unleash new power dynamics, but this may be necessary to challenge more oppressive forms of power.

Summarizing, PRA has gained acceptance as a research and project tool, however its implementation has sometimes failed to adhere to basic scientific principles that could guarantee its scrutiny, transparency and validity of findings. Furthermore, the complexity of power relations within communities and between these and researchers may lead to biases in the results. This requires an extra effort from researchers in the form of triangulation techniques and thorough procedural accounts.



### 2.7. Participatory Video

In recent years PV has become a popular tool in the frame of community development projects, but also in academic research, accompanying the transition from top down development projects towards more participatory approaches. Furthermore, in a post-colonial context, local activists and academics felt the need to return power to local communities. In this regard, PV offers a tool to bridge between communities' concerns and the world views of academics, policymakers and donors.

The root of PV can be placed in 1970's in the frame of a Canadian project to foster community development in the Fogo Islands. In this preliminary stage, the organizers of the project showed the raw film footage to the villagers and encouraged them to provide feedback on the material. The organizers claimed that this consultative project triggered a process of community empowerment (Harris, 2009). Furthermore, PV has been used in anthropological research since the way communities make use of technology could provide with a good insight of their understanding of visual representations (Kendon, 2003). PV unleashes a process of self-awareness and critical consciousness about one's circumstance, which has been termed "conscientisation" (Harris, 2009 citing Freire, 1984).

Kendon (2003) and Harris (2009) agree on a definition for PV provided by Johansson et al. (1999, 35):

*"We define PV as a scriptless video production process, directed by a group of grassroots people, moving forward in iterative cycles of shooting-reviewing. This process aims at creating video narratives that communicate what those who participate in the process really want to communicate, in a way they think is appropriate."*

PV has been actively used in different types of projects to foster dialogue and to instigate change and empowerment in communities or groups (Harris, 2009). PV has proved useful in processes of public consultation, advocacy, community mobilization and policy dialogue, and to communicate the outcomes of participatory development processes within and between communities or to funding agencies (Kendon, 2003). Viewing PV confronts individuals and groups with their relations within their groups and communities respectively. Thus, it is an awakening tool as participants can potentially assess their needs and benefits derived from group belonging. This awakening lays the foundation for creativity and communication, which in turn have the potential to trigger a process of personal, social or political change (White, 2003, cited in Harris, 2009). Harris (2009) argues that during the project carried out in Fiji participants were involved in all stages, from conveying the topics and message up to the production. As a

result of these activities, participants developed a sense of self-awareness. Following that argument, High et al. (2012) argue that PV does not empower individuals or groups in themselves, but rather provides an avenue for them to think and behave in a different way, which is a necessary condition to sustain a transformative process. On the contrary, Harris (2009) argues that PV has the potential to empower in itself because participants put into use their analytical and communicative skills and furthermore they develop media and technological competencies.

Relating PV to the social capital theory, Harris (2009) argues that it has the potential to re-codify established norms and networks as participants create new venues for dialogue and establish new bonds between and within communities or groups. In her experience, PV benefited from existing social networks, but at the same time their value was enhanced as a result of the project. Trust between researchers and participants and reciprocity between participants and other members of the community were enhanced during the research process. PV projects at the community level can act as a platform for dialogue between different actors while giving voice to otherwise marginalized members (Goodsmith, 2007). High et al. (2012) document the use of PV for different purposes as a tool for community development. In the case of an EU funded project in Hungary which targeted associations in rural areas, PV was used as an evaluation tool. They describe how the scriptwriting workshop triggered a process of self-reflection and debate. In the case of a "PV Embedded" in India, a NGO created permanent structures within several villages with the aim of catalysing community demands and empowering local communities before policy makers, making sure that their concerns were at least heard in a structured manner. Furthermore, the authors claim, PV could have helped to undermine prevalent power structures derived from the caste system as it could bring individuals closer. Ngwenya (2012) argues that during screening, new interpretations or personal encounters can be generated between participants, thus re-shaping intergroup relations. The video-making process and its outcome develop a sense of achievement and pride in participants and enables them to share their common story. Furthermore, PV has the capacity to generate encounters having an impact in distant places and at different times (Harris, 2009 and Ngwenya, 2012). When video materials are watched by people external to the PV process, they can create different feelings, from sympathy to aversion (Ngwenya 2012). Thus, PV offers participants an avenue for self-representation which can reach multiple audiences overcoming physical boundaries and facilitating new connections with the outer world and re-shaping internal power structures.

PV constitutes a feminist and collaborative method which reduces the distance between researchers and researched (Kendon, 2003). According to Berardi and Mistry (2012: p.2) PV challenges the traditional narrative in which "male/white/Western filmmaker or ethnographer representing the "other", focused on provoking change through the use of the film, while at the

same time promoted the involvement and response of the audience". Furthermore, researchers and researched can exchange roles, in front and behind the camera, which may lead to enhanced levels of trustworthiness in the research partnership. Garret (2010) argues that visual technology could be at times less intrusive than written research and even encourages the curiosity of participants. In that regard, PV can be said to destabilize traditional power relations and to some extent undermines notions of academic authority in the frame of research.

In order to facilitate PV, two aspects appear critical according to Ngwenya (2012): 1) the need to be responsive to each participant's needs and wishes, and; 2) the need to foster group consensus and multilateral decision making. These two aspects require an ongoing negotiation between facilitators and participants, and this process further determines the ethics of PV. Inter-personal ethics in the frame of PV are shaped by complex interactions that could be conditioned by differences in racial, gender, dialect, physical mobility, age and occupational characteristics, for example. Similarly, to the argument developed by Kindon, Ngwenya (2012) points out that during the facilitation process of PV, personal encounters cannot be isolated from pre-existing networks of interaction and power that go beyond a specific encounter or even the project as such. Harris (2009) stresses the important role of a facilitator: "The facilitator's role is one of 'enabling others' while maintaining the flexibility to relinquish his or her expert role and 'become co-learners in projects'" (Harris citing White, 2003: 541). The facilitator should display certain characteristics such emotional intelligence, flexibility to adapt to the circumstances and a deep understanding of the socio-cultural characteristics of the researched community. Furthermore, it is critical that the facilitator sets an inclusive environment which accounts for less powerful individuals within the groups.

Berardi and Mistry (2012) point to another aspect that constitutes challenge related to the use of PV. To a great extent, participants are free to steer the production of images in the direction they regard as more substantial or relevant from their own perspectives. Furthermore, along the process of content creation they may be tempted to touch upon a wide range of topics that may go beyond the initial aims of the project or it may simply result in a superficial compilation of themes. Academic research is dependent in many instances on external funding through grants and this requires that objectives are clearly conveyed. The boundaries set in a conventional research project collide with the freedom that is implicit in PV, thus transparent mechanisms to govern this type of conflicts ought to be established ex-ante (Kindon, 2003). Berardi and Mistry advocate for the acceptance of deviations from core objectives of projects and furthermore encourage researchers to adopt a flexible strategy that aims to maximize the opportunities provided by the new scenarios. In order to manage this situation, they call for an iterative process of self-assessment across different stages of PV in which practitioners examine in how far their original expectations have been fulfilled. By doing so, researchers are in the

position to adapt methodological strategies and re-examine their findings under the light of new events.

A final issue that shall be considered here is the ownership of the materials produced in the frame of the project and the right of participants to veto the inclusion of certain of contents if they wish. An example of this is provided by Berardi and Mistry (2012): content which was related to a regional uprising in the 1969 was considered too confidential to be shown and therefore was vetoed. In the project carried out in New Zealand, Kindon (2003) relates the negotiations with local communities and how they materialize their agreement in a formal and binding document that would govern the relations between both parties. Ngwenya (2012) emphasizes that facilitators should be attentive to different sensitivities within the group trying to embrace everybody's concerns. Therefore, a mix of formal and informal mechanisms should ensure that eventually, all the content produced and published counts with the full support of the researched communities, moreover it should be up to them to decide on the way in which the materials will be shared with the outer world.

### 3. Research Design

#### 3.1. Study Area

Tanzania is located in East Africa and is one of the largest countries in SSA in terms of size and population. The estimated population in the census of 2012 was 44.9 million growing from 34.4 million in 2002 (NBS, 2013). The country is subdivided in 30 regions and further subdivisions include districts, divisions, local wards, streets or villages (whether urban or rural) and hamlets (in case of rural areas). It ranks 159 in the Human Development Index elaborated by UNDP with a score of 0.488 (UNDP, 2014).

Although the recent the decade has witnessed an average yearly growth of 6.58%, the poverty headcount in 2012 indicated that 73% of the Tanzanian population lived with less than USD 2 per day, down from 87.87% in 2007 (World Bank, 2015). Furthermore, the prevalence of undernutrition remained at 39% for the overall population in the 2010-2012 period and the country is a net importer of food with a negative balance of USD 566.9M, or a 22.31% of the overall trade deficit in 2011 (FAO, 2015).

Tanzanian economy remains dependent on commodity production (AfDB, 2014) and agricultural production is still the dominant economic activity with a share of 24.5% in the GDP (Bank of Tanzania, 2014). The importance of agriculture gains a different dimension if one considers the population occupied in agricultural related activities: 73.82% in 2014 (FAO, 2015). The relative growth of agriculture is on average lower than the overall growth in the economy and this partially explains why economic growth has barely lifted much of the population out of poverty (Pauw and Thurlow, 2010 and MAFAP, 2013).

Although there is a good resource base for the development of agricultural production in some Tanzanian regions, in general the potential of Tanzanian agriculture remains untapped (MAFAP, 2013). Agricultural productivity is one of the lowest in SSA (MAFAP, 2013). There are multiple causes that explain this problem: reliance on rainfall, land degradation, population growth, poor technology adoption, lack of infrastructure, poor access to markets or sub-capitalized production among others (MAFAP, 2013 and Graef et al., 2014). In the period 2007-2012, food production has grown on average 5.22%, this has been coupled with a rise in agricultural productivity per worker of 2.78%. However, this has been mixed with a declining output per cultivated Ha. Of -1.06% and a declining population involved in agriculture, -0.68% in the period 2009-2014 (FAOSTAT, 2015).

In order to understand the most recent developments in the agricultural sector, it is necessary to take a look back in Tanzanian history and outline the main characteristics that defined the

process of Ujamaa and subsequent liberalization of the economy. After independence was achieved in 1961 Julius Nyerere led the country towards the path of what he defined as African Socialism or Ujamaa. This singular via was based on the idea that socialism is rooted in the core of traditional African societies, in which the social whole prevailed over the individual; wealth was equally distributed and social safety nets could provide in times of scarcity but renouncing to class struggle (Nyerere, 1968). In order to promote the transition towards this model of society, and framed in the construction of a self-reliant socialist nation state (Ibhawoh and Dibua, 2003), Nyerere envisioned a top-down process of villagization. This project aimed to trigger a process of agricultural modernization coupled with the provision of basic social services (Scott, 1998). Given the scattered distribution of the Tanzanian population at that time, the GoT opted to implement a firstly voluntary and afterwards forceful mobilization of the population to newly created villages. In practice this meant the central planning of all agricultural activities. The State was in charge of crop selection, input provision, established production cooperatives (Scott, 1998) or marketing boards that ensured price stability (Skarstein, 2005). Furthermore, villagers were required to work in communal lands which output would be shared with the State (Scott, 1998). Although Ujamaa was able to ameliorate the provision of public services in rural areas (Ibhawoh and Dibua, 2003), it was a complete failure in terms of the sustainable modernization of agriculture production (Scott, 1998) and whether it provided a sense of nationhood to its inhabitants remains questionable (Ibhawoh and Dibua, 2003 and Miguel, 2004).

In 1982, in the midst of a debt crisis and economic recession and with declining levels of agricultural production, Nyerere decided to initiate timid process of economic reform. After this insufficient attempt, Nyerere stepped down and the new cabinet opted for a drastic structural adjustment which would be supported technically and financially by international financial institutions (Skarstein, 2005). Key to this process was the transformation of the agricultural sector, shifting from a state led approach towards a market based approach. From 1985 and in a very short period of time the socialist economic structures were progressively dismantled: input and crop markets were liberalized and subsidies, pan-territorial prices and cooperatives were abolished and land transactions were allowed in private markets (Skarstein, 2005). Overall the public expenditure in agriculture declined drastically and this tendency that has persisted in the last years (MAFAP, 2013).

Currently farmers face an environment in which price fluctuations, limited access to input markets and credit and poor infrastructure leads to sub-optimal production strategies as well as income diversification activities (Skarstein, 2005). However, structural adjustment has affected regions and farmers unequally. Thus, regions with a resource base suitable for the production of certain export crops and cereals, such as wheat, have been able to cope with the stressed posed by market forces (Pauw and Thurlow, 2010). In the case of smallholders, the lack of storage

facilities and access to different types of productive capital (MAFAP, 2013) has condemned them to some sort of subsistence production trap (Skarstein, 2005). Thus, it seems plausible to affirm that the agricultural sector suffers from regional and scale divisions that could affect developmental perspectives.

According to the National Panel Survey 2012-13 (NBS, 2014) 70,5% of Tanzanian households are dedicated in some way to agricultural activities and their landholdings average a size of 2.6 acres and 85% of farmers own plots below 4 hectares. Thus, smallholding is the prevalent setting in rural areas and poverty is greatly affecting these areas, hosting 96% of the total poor in the country according to the measurements by the NBS. Only 3.4% of households doing agriculture have access to irrigation schemes, 35.4% report using fertilizer or 95.7% report the use of hand hoe.

In spite of liberalization, the Government of Tanzania (GoT) remains highly interventionist in the agricultural sector. The FAO (2013) reviews the policies undertaken in the period 2007-2011 and claims that indicative prices persist for certain strategic commodities, local taxation and tariff barriers and export bans. Producers of net imported commodities receive price incentives, while the opposite holds true for producers of net exported commodities. Thus, the analysis concludes that the elimination of these distortions would improve general food security in the country. The report claims that the government has favored the use of input subsidies rather than the provision of general support such as research or extension services. Other interventions with a particular relevance in the researched areas relate to the implementation of projects in sectors such as food security, water or infrastructure by the Tanzania Social Action Fund (TASAF). Finally, in terms of land tenure Tanzania is considered to be one of the countries in the world with more friendly policies for investors with initiatives such as Southern Agricultural Growth Corridor of Tanzania (SAGCOT) (Anseeuw, 2012), which aims to attract agribusiness investors to develop commercial agriculture in key areas of Central Tanzania. However, this is not backed up with transparent land census and multiple property regimes are available, including communal lands (USAID, 2011).

This research focuses in factors that could affect farmers' group performance. Public policies are a critical element to be considered when analyzing the competitive environment of any organization. Firstly, the GoT has emphasized the importance of groups and similar organizations as a vehicle for agricultural development:

*"Farmers' organizations in the form of associations, cooperatives and groups are important vehicles for farmers to lobby for policy changes that may help to improve their bargaining power in the input and output markets. Farmer groups also provide an avenue for cost reduction of various services such as cost effective delivery of loans, inputs, extension services and market*

*information. However, these institutions are weak in managerial skills and are not member based.”*

(Ministry of Agriculture Food Security and Cooperatives, 2013, P. 24)

And furthermore it acknowledges that action is required to strengthen these organizations and their functioning should be regulated and monitored. Therefore, the document concludes that there are five critical areas for policy action:

*“i) Formation of viable and sustainable farmer organizations to strengthen their bargaining power and competitiveness shall be facilitated;*

*ii) The Government in collaboration with other stakeholders shall ensure farmer organization are equipped with organizational, leadership, entrepreneurship knowledge and skills;*

*iii) Group cooperation and rural entrepreneurial skills development particularly to women and youths shall be supported;*

*iv) Mechanisms for ensuring good organizational leadership shall be strengthened; and*

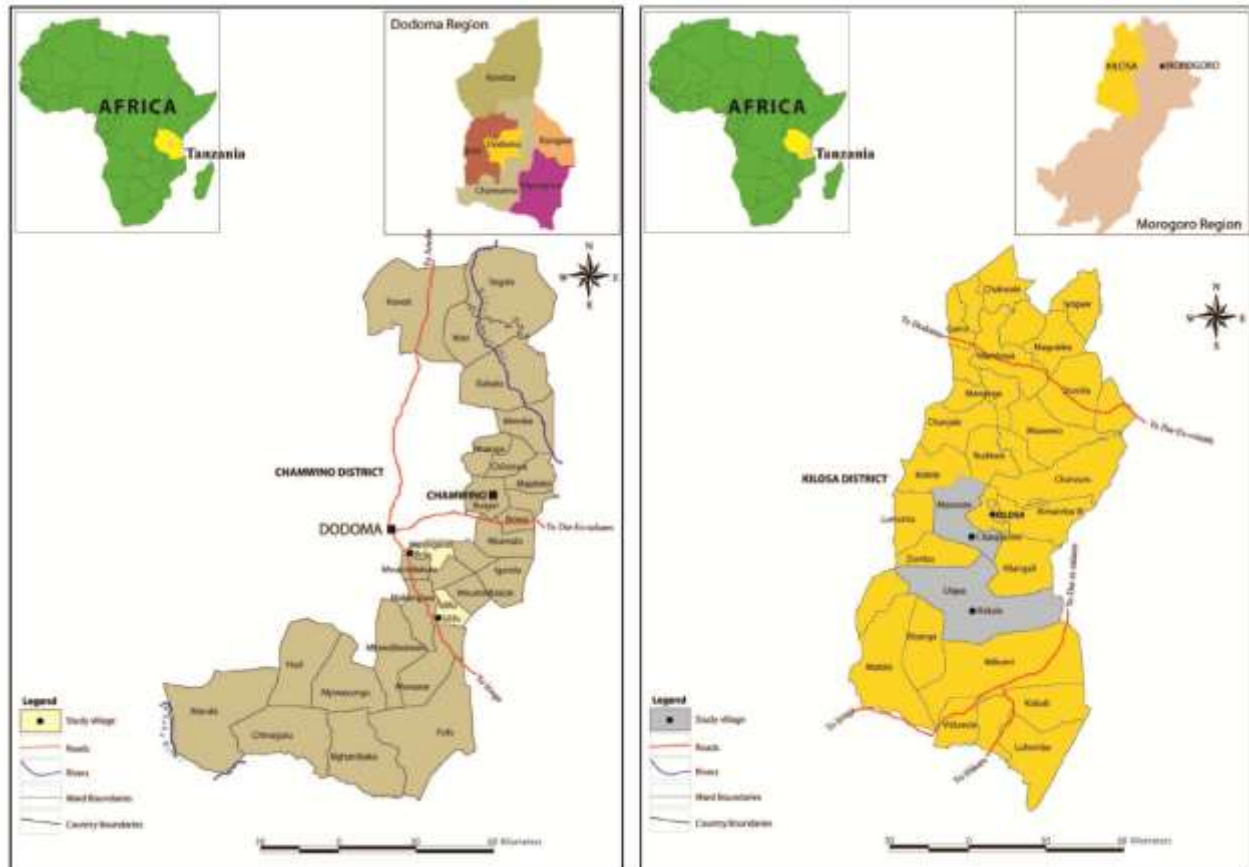
*v) Farmer organizations shall be regulated and supervised.”*

(Ministry of Agriculture Food Security and Cooperatives, 2013, P. 25)

Beyond policy formulation, the GoT implements Participatory Agricultural Development and Empowerment Project (PADEP) which aims to provide grants to farmers’ groups implementing projects that aim to carry out good agricultural practices as well as gain efficiency in the supply of inputs and marketing activities (MAFAP, 2013). Local Government Authorities recognized to the researcher that a sine qua non condition to engage with any group is the formal registration of the entity. To what extent this process is accessible to smallholders and bureaucratic procedures are flexible enough to facilitate group registration has been put to question by group members taking part in this research (See requirements for CBO registration in Annex 1).



Figure 1: Case Study Area Map



### 3.2. Study Area: Case Study Locations

The area selected to implement Trans-SEC project are located in the central province, Dodoma, and the Eastern province, Morogoro. The main criteria used to select these areas refer to the differentiated climate: semi-arid, Dodoma, and semi-humid, Morogoro (Trans-SEC, 2012). This is further reflected in different typologies of their food systems, including food-insecure and food-secure sensitivity<sup>5</sup> (Mwinuka et. al, 2015). Table 2 outlines the main differences between regions, districts and villages.

<sup>5</sup> The underlying logic is that the identified innovative actions could be replicated in different areas across the country with similar characteristics.

Table 2: Characterization of Case Study Areas

	<b>Dodoma</b>	<b>Morogoro</b>
<b>Population 2012</b>	2,083,588	2,218,492
<b>Population growth 2002-2012</b>	2.1	2.4
<b>Population density (people /Km.<sup>2</sup>) 2012</b>	50	31
<b>Land (Km.<sup>2</sup>)</b>	41,311	70,624
<b>Climate</b>	Semi-arid Dry season: April-December Rainy season: January-March	Semi-humid Dry season: June-October Rainy season: November-May
<b>Rainfall</b>	350-500mm	600-800mm
<b>Share in national GDP (2008)</b>	3.05% (16 <sup>th</sup> region)	5.07% (6 <sup>th</sup> region)
<b>Households in agriculture</b>	358,969	298,421
<b>Literacy (2008)</b>	69%	70%
	<b>Chamwino District</b>	<b>Kilosa District</b>
<b>Food systems</b>	Based on sorghum and millet	Based on maize, sorghum, legumes, rice and horticulture
<b>Food security</b>	Sensitive to food insecurity	Food insecure and food secure areas

### 3. RESEARCH DESIGN

<b>Land productivity</b>	Low to medium		Low to high	
<b>Land pressure</b>	Medium and high		High	
<b>Ethnic groups</b>	Mono-ethnic: Gogo (99%)		Multi-ethnic: About 40 tribes	
<b>Households with livestock (2008)</b>	29%		16%	
	<b>Idifu</b>	<b>Ilolo</b>	<b>Ilakala</b>	<b>Changarawe</b>
<b>Market access</b>	Low: Mvumi ca. 25 minutes by motorbike	High: Mvumi ca. 10 minutes by motorbike	Low: Middle way Kilosa-Mikumi ca. 1.5 hours by motorbike	High: Kilosa ca. 10 minutes by motorbike  Accessible by bike
<b>Infrastructure</b>	Isolated road  Daily bus to Dodoma  Secondary school	Road to Dodoma passing village  Secondary school	Road linking Kilosa-Mikumi  Hourly bus  No secondary school	Road linking Kilosa-Mikumi  Hourly bus  Electrical grid  Small market  Secondary school
<b>Village Structure</b>	14 sub-villages	12 sub-villages	6 sub-villages	5 sub-villages

Own elaboration based on: Höhne, 2015; Mwinuka et. al, 2015; NBS, 2014; URT, 2012; and Trans-SEC, 2012.

The regions are comparable insofar as population levels are similar, both have a major urban center, Dodoma and Morogoro and villages are satellites to small townships like Mvumi or Kilosa. Furthermore, agriculture is the dominant economic activity. Morogoro region shows higher levels of development, perhaps partially due to better climatic and soil conditions. In the case of Dodoma region, the main constraint in agricultural production is the scarcity of rain

whereas in Morogoro region, the problem lies in the unreliability of this (Höhne, 2015 and author's own observations). These different climatic and agro-ecological conditions led to a specialization in different staple crops in each region. Overall, economic activity is more dynamic in the Morogoro region; this is reflected for example in the possibility of producing horticultural crops with less demand for artificial irrigation, which could be considered as cash oriented. The existence in the past of agricultural commercial ventures in both CSS villages in Morogoro points to the same direction. Currently the GoT has encouraged the investment in high potential land for commercial agriculture in the frame of SAGCOT; Kilosa district is one of the targeted areas. Another factor that may motivate higher levels of economic activity is the proximity to the main national market, Dar es Salaam, which facilitates trading activities.

Looking at social factors, it is noteworthy that Chamwino district is dominated by the Gogo tribe, whereas Kilosa has received the influx of immigrants as a result of the larger scale of agricultural activities in the area. A distinctive aspect in both districts is the prevalence of livestock keeping as an economic activity. Whereas in Chamwino livestock keeping in the form of ruminants is relatively widespread and part of the Gogo cultural heritage (Höhne, 2015 and Mwinuka et al., 2015), in the case of Kilosa it is a relatively new phenomenon derived from the migration of Masaai people in the area and has led to recent sparks of violence within the community (IWGIA, 2015). An aspect that was striking as a visitor and observer was the prevalence of alcohol (over-consumption) in the villages of Chamwino district. The root of the problem could be in the different nature of agricultural activities and their related workload demand.

#### *Idifu*

Out of the 4 CSS Idifu is the most isolated and subject to harsher conditions. The village is poorly connected to Dodoma and other economic centers in the district. The village is surrounded by a swamp which is flooded during the rainy season and also used for grazing of livestock and rice cultivation. The structure of the households is very scattered (Höhne, 2015). The village has two small commercial spaces with some shops and vegetable stalls, which are also used as a public space for social gatherings. In spite of having healthcare facilities, the vacancy of village doctor was filled in March 2015 with an apprentice. The presence of TASAF project is very significant in the village. During the researcher's stay in Idifu a labour for cash project was implemented in the form of road construction and the poorest families receive conditional cash transfers.

#### *Ilolo*

The village is well connected to the major economic center of the district, Mvumi mission, which can be accessed even on foot. Furthermore, Ilolo is crossed by the road linking Mvumi and Dodoma. The village has grocery shops, butcheries, a bar or tailor shops. The connection of the

village to the electrical grid is already planned. The village center is similarly used as a space for social gatherings. Similarly to Idifu, livestock is abundant.

#### *Ilakala*

Ilakala is surrounded by a river and forest which is protected as a reserve (Höhne, 2015). The village is separated in approximately one and a half hours, or 39Km. From the two economic poles of the area. This negatively affects agricultural input supply as well as marketing activities. The village expanded in the 1970's in light of the establishment of a sisal company. Some of the land is still owned by the sisal company (Höhne, 2015). This event brought workers from all over the country, which made Ilakala a melting pot of ethnic groups. In recent years the migration of pastoralists has been remarkable and often this has led to a conflict over the use of land. There are fewer commercial spaces in this village compared to the others. The village suffers from a deficit in the provision of public services as it doesn't have a secondary school nor healthcare facilities.

#### *Changarawe*

The village has a river as water source and land productivity is high according to villagers. Furthermore, it is located nearby Kilosa, which favours agricultural input supply as well as marketing activities. On the other hand, Changarawe is characterized by the scarcity of land which only in recent years have been allocated to villagers (2 acres each). To make matters worse, the government is close to finalizing a deal in the frame of the SAGCOT initiative which would take this land away from villagers. Overall, economic activity is more vibrant in Changarawe compared to any of the three CSS and the impact of electricity access is remarkable. Off-farm income is more widespread and one can observe different businesses such as local restaurants and bars, beauty salon or shops. To a greater extent than Ilakala, social conflicts related to farmer-livestock keeper disputes have been pervasive in the village in recent years (author's inquiry).

### **3.3. Data collection**

The collection of data took place in the villages of Idifu and Iloilo (Dodoma region) and Ilakala and Changarawe (Morogoro region) from the 17<sup>th</sup> of February to the 13<sup>th</sup> of May of 2015. With the exception of Iloilo<sup>6</sup>, the researcher spent between six to nine sessions of about four hours each with a CBO in each of the villages, these groups will be named in the following as

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<sup>6</sup> The group that had been selected to participate in the project fell apart prior to the arrival of our research team.

collaborative learning farmer groups. The time dedicated to each group varied according to their engagement capacity in terms of time availability or skills. The selection of the three CL-groups (see Groups Profile in 4.3) was based on the assessment of the research team, who interviewed the group leaders of different groups in the villages. The criteria followed to select the groups included gender mix, income levels, suitable size for workshop activities and scope of existing activities.

In addition to these group workshops, the researcher conducted 62 semi-structured interviews with group members, former group members, members of other groups and key informants<sup>7</sup>. Key informants included extension officers, social workers, village leaders or government officials in the CSSs. The sampling criteria established aimed to find a representative balance of age and gender, following a purposive sampling approach. Members of other groups were chosen from a preliminary selection process carried out by a research team several months before the field work. The duration of the interviews was on average 75-90 minutes with each interviewee and in most of the cases took place in the household of the interviewee.

Focus discussion groups with villagers who do not belong to any CBO were conducted. It was decided that this activity would separate men and women; the researcher considered that potentially gender sensitive issues could emerge and as a result of that gender segregated groups could constitute a better platform to elicit information. In all villages besides Ilakala<sup>8</sup>, where two sessions with women were conducted, there was one session for men and one for women. Groups were formed by four villagers that were selected by the extension officer after the researcher provided a set of criteria. The criteria aimed to include different age ranges, income levels or sub-village origins. In spite of providing the instructions well in advance, the researcher noticed ex-post how some of the criteria, especially the different origin of participants, may have been breached. The duration of the sessions ranged between 1,5 and 2,5 hours.

Finally, a total of 14 group members participated in an exercise of participatory photography. Purposive sampling was used aiming a combination of gender, age and educational status. Participants were asked to take photos of objects, places or situations that related to some of the topics of this research that could have a special meaning attached for them. Eventually participants commented on them and follow up questions were asked to elicit further information.

The researcher counted on the support of local translators with relevant academic and professional experience during his stay in the villages. The translation was not simultaneous but

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<sup>7</sup> Number of interviews per participant type is disaggregated in Table 3

<sup>8</sup> This was due to a misunderstanding of the Trans-SEC extension officer in charge of screening the groups.

rather provided the researcher with an overall summary of the interviewee's narration. The purpose of this strategy was to enable the interviewee to elaborate on the answer as much as possible. The translation process was hindered in Dodoma region because Swahili is the lingua franca but villagers regularly speak the tribal language, Gogo, which in some cases impoverished interactions.

The workshop sessions and interviews were recorded in audio with the agreement of participants. A selection of these audios was transcribed from Swahili to English for deeper analysis (see Annex 2). Furthermore, the workshop sessions and the process of filming the participatory videos enabled the researcher to observe the group functioning. These experiences were a valuable source of information which would be used during the semi-structured interviews in order to guide follow up questions.

In total the researcher held 23 workshop sessions with groups, 3 feedback seminar sessions and 9 focus group discussions and conducted 14 participatory photo exercises and 62 semi-structured interviews. Table 3 outlines the tools used and the data elicited from them.

#### ***3.4. Workshop structure***

Group workshops were designed following the principles of PAR (for detailed information about the theoretical underpinnings of PAR see section 2). By following this approach, it was expected that groups could benefit in different ways. First, workshops should catalyse a discussion process among group members which would enrich and define the project plan. Secondly, the participatory spirit of the workshops aimed to enhance the collective and individual understanding of the project which would outlast the presence of the project members. Finally, the groups should produce a video which will remain as an output of the planning work, but also facilitate the engagement of the group with Trans-SEC and other external actors. From the perspective of the research, the PAR tools aimed to bring out information related to the research questions from a group perspective and further grasp an insight from internal group functioning.

Table 3: Methods and tools used in CSS

Activity/CSS	Data elicited	Ilakala	Changarawe	Idifu	Iloilo
<b>Group Workshop</b>	Participatory Timeline <ul style="list-style-type: none"> <li>– Group story</li> <li>– Motivations to join</li> <li>– Performance indicators</li> </ul> Resource Audit <ul style="list-style-type: none"> <li>– Factors affecting functioning</li> </ul> SWOT analysis <ul style="list-style-type: none"> <li>– Factors affecting functioning</li> </ul>	6	8	9	-
<b>Feedback seminar sessions</b>	Evaluation of preliminary results and methodology	1	1	1	0
<b>Focus group discussion with non-group members<sup>9</sup></b>	<ul style="list-style-type: none"> <li>– Livelihood in villages</li> <li>– Social capital</li> <li>– Constraints joining groups</li> </ul>	3 (13)	2 (8)	2 (8)	2 (8)
<b>Participatory Photo</b>	<ul style="list-style-type: none"> <li>– Villages social capital</li> <li>– Group functioning</li> <li>– Benefits membership</li> </ul>	4	5	5	0
<b>Semi-structured interviews<sup>10</sup>:</b>	<ul style="list-style-type: none"> <li>– Livelihood in villages</li> <li>– Social capital</li> <li>– Motivations for membership</li> <li>– Benefits membership</li> <li>– Group functioning</li> <li>– PV evaluation</li> </ul> <ul style="list-style-type: none"> <li>– Group members</li> <li>– Former members</li> <li>– Key informants</li> </ul>	15 (13) (-) (2)	17 (12) (3) (2)	17 (11) (3) (3)	13 (10) (1) (2)

<sup>9</sup> In brackets number of participants.

<sup>10</sup> In brackets number of participants according to category.



The time and length of the workshops was agreed with the groups to facilitate the assistance of all members. With the exception of the first workshop held in Idifu, which was co-facilitated with Dr. Pamela Ngwenya, the researcher acted as facilitator counting on the translation support of Devotha Mchau<sup>11</sup>. The workshops made use of clipboards and markers to support the discussions with visual aids. When needed, written language was substituted by drawings or signs to facilitate the understanding of all participants, this was specially the case for one of the three groups which had lower levels of literacy.



Photo 1: Action plan risk analysis with visual aids, Idifu–Wendo Group

#### **3.5. Tools and methods**

During workshops multiple exercises were conducted with groups; every exercise aimed to elicit particular thematic data, but often themes overlapped through exercises. Chambers (1994a) and Bailey et al. (1999) argue that in order to provide the qualitative research with rigor, using different methods with the same sample is an imperative. In addition to the validity of the research, using different methods sequentially will enrich the conclusions by analysing the roots of social phenomena (Goebel, 1998) and even enhancing the engagement of participants (Chambers, 1994a). As it has been already discussed, the use of visual methods enhances the inclusiveness of the research in the context of rural projects in development countries (Chambers, 1994a and Pretty, 1995), therefore all the conclusions derived from group

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<sup>11</sup> Oftentimes her support went beyond translation and her engagement with participants facilitated the understanding of the activities implemented.

discussions were captured using graphical tools such as posters. Regardless of the methods used, the skills of the facilitator or interviewer are critical to elicit the information and to steer the activities in such a way that potential biases are avoided (Chambers, 1994b). In section 5 a critical reflection on the experiences of the author regarding methodological issues is provided.

#### *Participatory Video Exercises*

In the frame of our collaboration, the groups and the research team agreed that the group would convey a message and communicate it to the donor<sup>12</sup> using PV, aiming to obtain funds to implement their project. For this activity, it was necessary to introduce basic skills in video camera handling to the groups as well as techniques on video planning and making. The structure and organization of the exercises was based on “Making Video Proposals: A guidebook

Photo 2: PV Exercise, Idifu–Wendo Group



for Community Groups” (Ngwenya, 2009) and supplemented by the in situ guidance provided by the author herself. The three workshops conducted with the three groups followed a similar structure and the sequence of exercises was slightly adapted according to the time circumstances. Firstly, participants were introduced the basic functions of camera and were requested to record their fellow group members presenting themselves following a sequence in which all of them had to play both roles. Subsequently,

they were introduced to the use of tripod playing a group game. Once participants were minimally familiar with audio-visual technology, ground rules that would govern group interactions during the workshop, the use of the camera in the local environment or the use of recorded materials by Trans-SEC and the group itself were established. In parallel to the development of activities such as participatory timeline, SWOT or resource audit, the groups were introduced to some video making techniques such as interviewing, different shot types and storyboarding. In order to facilitate the absorption of the new skills, make the process more amusing and reinforce the learnings from the PRA activities, it was decided to place PV exercises among PRA ones, as well as using the latter as the ground for the former. The combination of these activities enabled the groups to convey a consistent message that could communicate

<sup>12</sup> The decision to grant or not the funds to the groups depended on the assessment of DITSL.

their selected action and strategic plan in an attractive audio-visual format. The final video making project was conducted in the last stage and was carried out following a structure previously determined by Trans-SEC research team, but which each group planned and adapted to deliver its message in a customized way. The core elements of the video included a presentation of the problem faced by the group, their solution, an action plan which includes where necessary a marketing strategy, risk assessment and mitigation strategies, and budget. The research team aimed to make activities as participative and inclusive as possible by encouraging participants to adopt different roles<sup>13</sup>.

#### *Participatory timeline*

The purpose of this activity is to reconstruct the major events that occurred in the community and which may influence the present state of affairs in community, group or individual. It was used here an insightful view of the perspectives that members have on the history of their group and participants are stimulated to think over the impact of these events or shocks (Shallwani & Mohammed, 2007). The groups were divided in two sub-groups attending to the preference of the group. In one case the group opted for a gender based division and the two remaining groups divided themselves randomly. Participants were asked to compile the major events that had occurred in the group from its inception to the present moment. Afterwards, each sub-group presented its version and both versions were consolidated in a single one. Questions were asked in order to get a deeper insight of the events from participants.



Photo 3: Participatory Timeline Tool, Idifu–Wendo Group

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<sup>13</sup> They include presenting, audio controlling, camera operator or director.

### *Group Resource Audit*

This tool has been adapted from the original method Resource Evaluation Matrix (Geilfus, 2008). The variation lies in the fact that participants were asked to list elements which the group possesses and additionally those that could require for the implementation of the project and categorize them according to five kinds of capital: financial, physical, natural, human and social (Goodwin, 2003). Then the group discussed their importance and availability in the context of the project. This tool facilitated the groups to ascertain their situation in terms of capital availability as well as to enable future planning. From the perspective of the research, looking at the different capitals available for the groups gave an insight of present and future constraints and prospects faced by the groups.

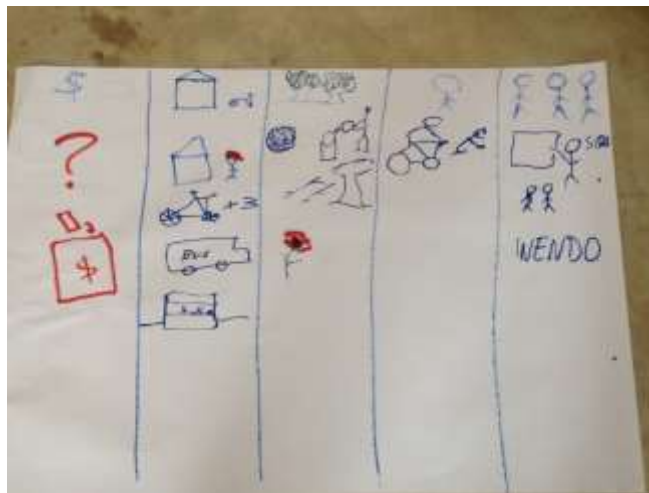


Photo 4: Group Resource Audit with visual aids, Idifu–Wendo Group

### *SWOT analysis*

This exercise aimed to encourage a critical reflection of group members about the group's strategic position in relation to its activities (Horn-Haacke, 2002). Participants were asked to consider internal (Strengths and Weaknesses) and external factors (Opportunities and Threats) that could affect group performance in its different activities. In order to organize this activity, groups were subdivided in two according to their own criteria and each sub-group was allocated a theme (i.e. internal vs. external factors). Eventually the group came together again to discuss the findings. Initially this exercise was carried out considering the project as unit of analysis, however the researcher found some overlap with the "Resource audit" exercise and eventually the analysis switched its focus to general group performance, embodying all group activities.



The following activities were carried out in parallel or after the group workshops were conducted. Information previously elicited in the workshops facilitated the implementation of these other activities by providing guidance in the main topics which were dealt with.

#### *Group functioning assessment*

Group members were asked to define with their own words what was according to them “good group functioning”. After collecting all opinions, a group discussion was held in order to get a deeper view and contrast members’ opinions. Prior to the activity the group conducted a group game, in which participants held hands in a chain and were supposed to form a circle without breaking the chain. It was expected that this game could trigger reflection among participants.

#### *Participatory Photo*

Photography is a tool which has gained momentum in recent years in the field of social research. How people take pictures and their choices can be explanatory of structural aspects in their lives and how they perceive their realities (Worth and Adair, 1975 cited in Gotschi et al., 2009). Photos could be a platform for self-representation which can enrich or even provide a

Photo 5: Game prior to group assessment activity, Changarawe - Upendo Group

more nuanced view about research topics such as social capital and group membership (Gotschi et al., 2009). Furthermore, photos are acknowledged as way in which communities can engage in dialogue

with researchers and external parties, such as policy makers. The use of this technique aimed to complement other methods used in the research by giving the selected participants the opportunity to express in a visual format some of the concepts that emerged in group sessions and interviews. For that purpose, the research team purchased a mobile phone with camera function which participants were given for 24 hours. Each participant was randomly allocated one theme to focus on and the number of pictures taken would be unlimited. Upon completion of the exercise, the participants explained the meaning of pictures and how they related to the topic, which in turn would be the ground for a small discussion of the issue at stake. The selection of participants aimed to balance between different ages and gender. The themes raised were the following:

- Elements that represent benefits or problems derived from group membership.



- Elements that represent the presence (or lack of) trust, altruism or mutual help in the group.
- Elements that represent trust (or lack of), altruism or mutual help in the village.
- Elements that represent good group performance as defined by the group in the sessions

#### *Semi-structured interviews*

This type of interviewing implies that the researcher follows a script of standard questions which are asked in a systematic and sequential order, however it additionally allows some adaptive interaction in which the researcher will try to get a deeper insight from issues that emerge during the standard questionnaire (Berg, 2001). Furthermore, some of the questions were formulated in a narrative way so as to contextualize the experiences related by interviewees and gain different perspectives and understandings of the same events from different participants (Jovchelovitch and Bauer, 2000). The topics discussed in the interview included a perception of life in the village; social aspects; collective action and group presence in the village; group history; personal motivations to join and experiences in the group; views on factors affecting group performance; and perceptions on PV as learning and planning tool. The standard questionnaire can be



accessed in the Annex 3.

Photo 6: Feedback Session, Changarawe - Upendo group

#### *Focus group discussions*

Focus discussion groups are a relatively quick way to access different sets of information from different perspectives. Equally to other group activities, there is the risk that group thinking prevails over singularity (Campbell, 2001). The dialogue is structured following a set of standardized topics which are formulated as open-ended questions and discussed by participants (Berg, 2001). Topics ranged from perception of life in the village; social aspects; collective action and group presence in the village; past group experiences; perceptions of group work and constraints in joining groups. The full questionnaire can be accessed in Annex 3.

#### *Feedback seminar sessions*

These sessions took place at the end of the field work of the researcher and involved the three groups. The principal aim of these sessions was to present and discuss the preliminary results obtained by the researcher during the field work. In addition, this exercise was a practical way

to reinforce some of the lessons derived from group activities and individual interviews which could be put forward to carry future actions (Kaufmann, 2014). By doing this, the author not only fulfilled the principle of bringing the research results back to the community of participants, but it further enriched the research and validity of the results. Furthermore, confronting the groups with preliminary results can potentially bring about new or nuanced interpretations of the research.

#### *Qualitative analysis*

The above mentioned activities with groups or individuals were recorded with the agreement of participants and a selection of them or its fragments were transcribed after fieldwork was conducted (To see list of transcriptions see Annex 2). In addition, notes taken during the activities were transcribed digitally. In order to facilitate the analysis, the software RQDA was used to codify data according to thematic blocks aligned with the different research objectives presented in section 1. Furthermore, these codes were disaggregated in different sub-themes. At this level of disaggregation, it was possible to find patterns for the different CSSs and CL-groups. Finally, the use of quotes from interviews reinforces the argumentations.

#### *Quantitative analysis*

The quantitative analysis on factors influencing group participation follows the classic approach in the literature (Bernard and Spielman, 2008, Wollni et al., 2010, Asante and Sefa, 2011, Fischer and Qaim, 2012, Adong et al., 2013, Meier zu Selhausen, 2015). Fischer and Qaim (2012) develop the group membership model in depth, group membership decision will be based on the perceived utility that a villager derives from the decision, that is if the utility of membership is higher than the utility of non-membership,  $U_i^C > U_i^f$ . This in turn is based on certain household characteristics  $X_i$ . The utility function can be modeled as a vector including the variables  $X_i$  and parameters  $\beta$  to be estimated, whereas there is an unobservable part of the farmer utility which is represented by an error term  $u_i$ , and assumed to be independently and identically distributed with mean zero.

$$U_i = V_i(\beta'X_i) + u_i \quad \text{for } i=1, \dots, n$$

The probability of being a member is determined by  $P(u_i < \beta X_i)$ . Finally, the model is estimated by:

$$P(C_i = 1) = P(u_i < \beta X_i) = \beta X_i + u_i,$$

where  $C_i = 1$  if  $U_i^C > U_i^f$  and  $C_i = 0$  if  $U_i^C < U_i^f$

This binary model can be estimated with a probit model. The parameters are estimated using the method of Maximum Likelihood (Verbeek, 2004).

The data comes from the baseline survey conducted in the CSSSs between January and February of 2014 (Faße et al. 2014)<sup>14</sup>. After cleaning the data, a total of 579 households and 1370 individuals constitute the sample. Individuals under 18 and above 85 have been eliminated from the sample as the experience in the villages says that memberships at those ages is highly unlikely and this could bias the estimations.

Some of the variables included in the model require further explanation:

- *Innovator*: The respondents have to answer the following question: “Consider that there is a new production technology available such as new seeds or fertilizer in Agriculture/Livestock, and it has the potential of improving your livelihood. How would you react to this introduction? The variable is constructed as a Likert variable 1 to 3, in which 1= You will be the first to test new innovations, 2= You will test the innovation after a varying degree of time, and after seeing the experience from others. 3= You will not test the innovation.” A dummy variable was created with value 0 if the respondents answered 2 or 3, representing late adoption patterns, and 1 if the respondent stated to try first.
- *Entr. Risk*: The variable measures the interviewee willingness to invest an amount of money randomly given in a hypothetical business. “Imagine, you can invest this money in a business. It is equally likely that the business goes well or not. If it goes well you can double the amount invested after one year. If it does not go well you will lose half the amount you invested. What fraction of the 1.000.000 would you invest in the business?”. This variable is omitted from the probit analysis as it could be highly correlated with self-employment.
- *Land Owned*: This variable was constructed by computing every plot owned by the household and excluding the homestead. Land owned is preferred over land cultivated because it can help to avoid problems of endogeneity, considering that group members may be in the position to employ more people and cultivate larger amount of land.
- *Log Livestock*: This variable was constructed by computing the mean value of cattle in the whole year and calculating the logarithm of the resulting value (considering the value of assets on the 1<sup>st</sup> of January and 31<sup>st</sup> of December). The total value of livestock is used as a proxy for wealth, regardless of its composition.
- *Log Agr. Equip.*: This value was constructed by aggregating the estimated market values of the agricultural equipment owned by the household and calculating the logarithm of the resulting value.

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<sup>14</sup> I would like to thank Anja Faße, Lured Kissoly, Kathleen Brüssow and Ulrike Grote for organizing and coordinating the household survey as well as the many people involved in the data collection.



- *Dist. Office:* This variable measures the distance in kilometers of the household to the extension officer office.
- *Communication:* This variable measures whether the household owns a mobile phone or a radio, 0=none of them and 1=either of both. In this case, there could be endogenously affected by group membership, as additional income might be used for the purpose of increasing consumption in goods. According to the experience in the village, most group members use group revenues to pay for school fees, invest in their agricultural activities or their business. The perception was that people involved in business or younger members in the community were more likely to have a phone, but this condition was prior to group membership.

## 4. Results

### 4.1. Quantitative characterization of group members

The aim of this section is to get an overview of group presence in the CSS and to describe the socioeconomic characteristics of group members compared to non-members.

First of all, only 78 individuals in the 4 villages belong to any type of CBO; that is only 5.69% of the individuals in the sample. The baseline survey considered different options such as youth, women, farmer or saving and credit groups, cooperatives and processing, buying and selling groups. All these sub-categories were considered as CBO, whereas organizations such as political parties or village committees have been excluded.

However other patterns appear when other sections of the questionnaire that relate to groups or collective action are analysed. For instance, when individuals were asked whether they have participated in any sort of collective agricultural activity in the last months, 154, or 17.26% of interviewees, responded positively. This could hint to more informal practices that involve collective action but are not acknowledged as groups by respondents. In the case of saving and credit, 40 households out of 114 that report borrowing money in instalments have a member participating in a micro-credit group. In any case, it seems that the presence of groups is marginal in the CSSs. However, when asked to express their views about possible participation in such type of groups<sup>15</sup>, 41.5% of respondents are positive about it. This points to an unfulfilled demand for groups which is confirmed and further explained in the qualitative analysis.

In order to assess whether the mean values for different variables differ among members and non-members an unpaired t-test is conducted. Most of the variables are statistically significant and meet the expected patterns. Table 4 summarizes the descriptive statistics for the different variables disaggregating by group members and non-members. In order to assess the likelihood of group membership according to the variables included in the descriptive statistics, a probit regression is conducted. For simplicity, only the sign of the significant coefficients will be interpreted. Table 5 shows the results of the probit model.

Firstly, although the mean value of age isn't significantly different for members and non-members, when age is squared in the probit analysis the results indicate that the older the individual, the more likely they are to participate in groups; however, this is only true until a certain point at which older individuals are less likely to be in groups. Women are more likely to

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<sup>15</sup> They include processing, selling, producing, buying inputs and others to be specified.

be in groups, as it could be seen in all villages and female headed households are more likely to participate in groups than male headed households. Furthermore, these variables are also significant in the probit model confirming that being a woman increases the likelihood of group membership, which is more acute if they are household heads. Household size does not differ significantly from members and non-members, in the CSSs context the scope of group action involved rather small plots, therefore labour availability in the household may not be a filter for group membership. Only in Changarawe, with higher levels of entrepreneurship, the need for external labour to cope with group activities was made explicit. Group members have on average 0.7 years more education; this could be due to the importance of educational attainment in order to be sensitive to the benefits of groups and their functioning, or on the other hand it could reflect that groups are accessible to individuals with a higher socioeconomic status which in turn is associated with higher levels of education. However, education is not significant in the probit model.

Different patterns emerge related to behaviour and livelihood strategies. The proclivity to adopt innovations is higher in members. On the other hand, group members show a higher degree of entrepreneurship. This could be seemingly contradicting if one considers that opting to participate in a group often entails the adoption of an innovation which could be associated with some degree of entrepreneurship. Related to that, group members are on average more prone to be self-employed, which could reflect an inclination for entrepreneurship or socioeconomic requirements to meet the needs of groups. However, this variable is not significant in the probit model when controlling for other socioeconomic variables. Access to credit is substantially higher for group members, but this being one of the goals of many groups this points to a problem of reverse causality; however, this result shows that groups could be an efficient vehicle for the provision of credit to its members. Therefore, this variable is not included in the probit analysis.

In terms of wealth, neither land tenure nor land owned size represent any difference between group members and non-members, which might be partly due to the fact that according to the law land is granted to all Tanzanians. However, when the quadratic relation is tested with the probit model, the results show an inverted U pattern between land owned and group membership, which reflects the need for a socioeconomic status and the costs of opportunity derived from group membership. Group members have on average more valuable assets in the form of cattle, whereas the value of their agricultural equipment is lower on average for members. The probit model indicates that the larger the value of livestock the more likely membership is, whereas values of agricultural equipment has a negative. This last point could reflect that most of the groups do not require heavy investments in agriculture, this could be like this for some reasons: because activities are carried out with low input levels; because

members are not required to contribute with their own equipment or even benefit personally from group equipment; or because group activities do not relate with agriculture directly.

Two interesting results that can be connected with the social capital literature point to the possibility that group members could have previously higher endowments of social capital. First, the distance to the village office of households with a group member is on average 0.5 Km less than for non-members. This result is confirmed by the probit analysis. Many groups are initiated by village authorities or these mediate on behalf of other organizations; this could reflect that proximity to the office grants a better access to flows of information. However, this could just reflect that households living next to the village office have a higher socioeconomic status which in turn grants them access to groups<sup>16</sup>. Finally, group members usually live on households with a phone or a radio, which is confirmed in the probit analysis. This could enable them to keep up with group activities in a better way or be more sensitized to the presence or importance of groups. Based on the field work, the first possibility seems unlikely as many groups are formed by neighbours that see each other almost on a daily basis. The latter could be the case as many interviewees related to the radio as a way to be informed about agricultural activities. On the other hand, the significant difference could point to an overall higher socioeconomic status.

Finally, the marginal effects column in Table 5 can be interpreted as increase or decrease in the likelihood of being a group member if a unit change is produced in one of the independent variables (or a discrete change in case it is a dummy variable) and the others were held constant in the mean. To illustrate the previous point, in the case of gender, being a woman increase the probability of being a group member by 2.9%. In the case of, distance to village extension officer office, an increase in one unit will decrease the probability of being a member by 0.68%.

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<sup>16</sup> This could be ruled out by analyzing the correlation between distance to the office and a proxy for wealth, in this case type of toilet is used as from the experience in the villages households with high socioeconomic status have at least an improved latrine, the relation is non-significant and this hypothesis can be initially ruled out.

Table 4: Descriptive Statistics

	Unit	Non-Members			Group Members			Total			T-Test / Chi Square
		N	Mean	sd	N	mean	sd	N	mean	sd	
Age	Years	1295	39.6	16.9	78	40.5	12.00	1373	39.7	16.7	n.s.
HH size	People in HH	1295	5.3	2.6	78	4.9	2.1	1373	5.3	2.6	n.s.
Gender	1=Male 2=Female	1295	1.5	0.5	78	1.7	0.5	1373	1.5	0.5	***
Female HH Head <sup>+</sup>	0=No 1=Yes	1295	0.069	0.253	78	0.218	0.415	1373	0.077	0.267	***
Years School	Years	1086	6.0	3.0	73	6.8	2.9	1159	6.1	3.0	***
Innovator	0=No or later 1=First try	1295	0.73	0.45	78	0.83	0.37	1373	0.73	0.44	**
Entr. Risk	Fraction 1M invested business	1293	590.1	331.3	78	651.8	229.8	1371	593.6	326.7	*
Land Owned	Hectares	1295	2.45	2.22	78	2.40	1.34	1373	2.45	2.18	n.s.
Tenure	0=No property 1=Property	1295	0.978	0.148	78	0.987	0.113	1373	0.978	0.146	n.s.
Log Livestock	Log Value Livestock (Jan + Dec)/2	1295	2.98	2.52	78	3.45	2.34	1373	3.01	2.51	*
Log Agr. Equip.	Log Estimated value	1295	8.71	2.45	78	8.33	3.31	1373	8.69	2.511	*
Access Credit <sup>+</sup>	0=No 1=Yes	1295	0.164	0.371	78	0.538	0.502	1373	0.186	0.389	***
Self Empl <sup>+</sup>	0=No 1=Yes	1295	0.134	0.341	78	0.269	0.4464	1373	0.142	0.349	***
Dist Office	Kms	1201	1.6	1.6	75	1.1	1.3	1276	1.6	1.6	***
Communication <sup>+</sup>	0=No 1=Yes	1295	0.626	0.484	78	0.897	0.305	1373	0.6417	0.480	***

\* Denotes significance at the 10% level.

\*\* Denotes significance at the 5% level.

\*\*\* Denotes significance at the 1% level.

+ The mean expresses %

Table 5: Probit Regression

Number of obs = 1078 LR chi2(14) = 91.24 Prob > chi2 = 0.0000 Pseudo R2 = 0.1743				
<b>Probit regression Group Membership</b>				
	<b>Member Coef.</b>	<b>Std. Err.</b>	<b>Level of significance</b>	<b>Marginal Effect</b>
Age	0.0968333	0.0018845	***	.0063673
Age sq.	-0.0010856	0.0000219	***	-.0000714
HH Size	-0.0408586	0.001957	n.s.	-.0026867
Gender	0.4419301	0.0106984	***	.0290593
Female HH Head	0.6317892	0.0367733	***	.0687759
Years School	0.0303047	0.0017666	n.s.	.0019927
Innovator	0.0623713	0.0106545	n.s.	.0039839
Land Owned	0.3159249	0.0093302	**	.0207738
Land Owned sq.	-0.0429862	0.0012325	**	-.0028266
Log Agr. Equip.	-0.0584606	0.0016645	**	-.0038441
Log Livestock	0.0498574	0.0019675	*	.0032784
Self-empl.	0.1510337	0.0146587	n.s.	.0109945
Dist. Office	-0.1038214	0.003559	*	-.0068268
Communication	0.8666976	0.0107967	***	.0458921
Constant	-4.886261	0.0018845	***	

\* Denotes significance at the 10% level.

\*\* Denotes significance at the 5% level.

\*\*\* Denotes significance at the 1% level.

#### ***4.2. Presence of groups, constraints and motivations to join CBOs***

In this section, the underlying factors that explain emergence of groups are outlined. Furthermore, the reasons that cause villagers to refrain from joining groups or dropping from them and their expectations before joining groups will be discussed. The data used to elaborate these results has been elicited from focus discussion groups of non-group members, semi-structured interviews with former group members, key informants and members of the project CCS' groups. Table 6 summarizes the main findings related to group participation in the CSS which will be detailed in 4.2.2. and 4.2.3.:

Table 6: Factors affecting decision of group membership

	<b>Constraints</b>	<b>Motivations</b>
<b>Livelihood</b>	<ul style="list-style-type: none"> <li>– Time: Excessive time requirements of group activities.</li> <li>– Expensive contribution: Unaffordable fees.</li> <li>– Risk aversion: Excessive risk posed by group activities and requirements.</li> </ul>	<ul style="list-style-type: none"> <li>– New activities and income generation: Knowledge on new activities and derived income.</li> <li>– Training and exchange of ideas: Access to trainings and new agricultural skills.</li> <li>– Capital or enhanced savings: Access to credit or improved capacity to save.</li> <li>– Safety net: Access to social payments or support in case of misfortune.</li> </ul>
<b>Social</b>	<ul style="list-style-type: none"> <li>– Past experiences or rumors: Perceptions derived from previous group experience or community opinions.</li> <li>– Lack of trust on other community members.</li> <li>– Awareness in groups: Lack of education on group benefits and functioning.</li> <li>– Lack of external support: Insufficient support from external organization.</li> </ul>	<ul style="list-style-type: none"> <li>– External partner engagement: Access to support provided by external organizations.</li> <li>– Traditional systems of mutual help: Social payments or exchange of labour.</li> <li>– Social entrepreneurship: Presence of individuals with capacity to mobilize.</li> </ul>

Source: Focus discussion groups of non-group members, semi-structured interviews with former group members, key informants and members of the project CCS' groups.

#### **4.2.1. Presence of CBOs in the CSS**

A report by MVIWATA (2014) auditing the presence of groups provides a quantitative insight into the relevance of these organizations in the CSSs. The data presented in Table 7 shows a clear gender bias favouring the presence of women in groups. Furthermore, the report shows

that in the villages in Chamwino 57% of groups were established spontaneously, whereas in the Kilosa villages only 45% of the groups emerged spontaneously. Finally, most of the groups have been established with an economic reason such as credit and saving or income generating activities (beekeeping or livestock).

Table 7: Group presence in CSS

Region	District	Village	Number of identified groups	Membership			Average Size
				Male	Female	Total	
Dodoma	Chamwino	Idifu	15	72	228	300	20
		Ilolo	11	91	224	315	29
		<b>Sub-Total</b>		<b>164</b>	<b>451</b>	<b>615</b>	
Morogoro	Kilosa	Changarawe	9	22	169	191	21
		Ilakala	20	157	296	453	23
		<b>Sub-Total</b>		<b>179</b>	<b>465</b>	<b>644</b>	
<b>Overall</b>			<b>55</b>	<b>343</b>	<b>916</b>	<b>1259</b>	<b>23</b>

Source: Adapted from MVIWATA (2014)

The overall presence of groups in the different CSSs is uneven and the creation of groups responds to different patterns which enable an understanding of the underlying factors behind group creation. According to the testimonials collected there are no sine qua non conditions for the formation of groups, however certain factors weigh more than others and undoubtedly the assistance of external organizations is the most critical factor that can be transversally identified across villages.

*“All these groups were formed when The Extension Officer organized people, and then people were given some instructions and they formed a group. (...) Yes, instructions, a work plan and result indicators. Then the group can be formed. You can’t start a group when you don’t have all that; how will that work?”*

(Woman in focus group discussion non-members of farming groups, Ilakala, 08.04.2015)



Another issue that catalyzes group action is the presence of traditional schemes of mutual help between neighbours. Most of the interviewees report high levels of mutual support in case of sickness, borrowing of food or small amounts of cash from neighbours, semi-formal schemes of insurance in case of funeral or other celebrations. Furthermore, when it comes to farming activities in all villages, most of interviewees declared being aware of or participating in schemes of rotating labour, which are organized based on the expectation of reciprocity and the provision of food or local alcohol by the hosts. In spite of being perceived by villagers as positive since they can reduce the time invested in agricultural activities, there seems to be a consensus suggesting that this practice is in decline in favour of monetary based labour relations.

*“We help each other by contributing to someone who gets a serious problem like in sickness and other small problems in their social lives. We borrow each other’s money and give food freely, water and some manual labour when it is needed. In farming, if you have money people will work for you, previously the people just worked for food or alcohol but nowadays it’s tricky, people want money.”*

(Wendo Chairwoman Idifu, 17.03.2015)

Other types of collective action are common in the villages and these are often promoted by the government or the local authorities. Some examples are the communal works carried in the frame of TASAF project such road construction or the maintenance of public spaces such schools or water wells. Moreover, the Tanzanian experience with socialism has left a footprint on the collective consciousness on group work.

*“Within the socialism idea, people were motivated to stay together and help each other (...) The big thing in socialism was to be gathered together, as before that, people were living a very scattered life. Hence when people gathered together, hospitals, schools and other social services were established. (...) The problem was because it was village things, there was no high commitment to care for the assets, like cars, shops and food.”*

(Former village Chairman Idifu, 19.03.2015)

Groups are also associated with religious communities. Thus, it is common to find religious choirs supporting their activities, such as buying uniforms or travelling to other villages, through income generating activities such as livestock keeping or horticultural plantations. Religion offers a common identity for members, which reduces the frictions associated with group work. Other social traits that were identified as catalysts for group work are gender, socioeconomic background or political affiliations.

*“I am Choir teacher, teaching songs in the choir in the church. So this group has made me really occupied... very occupied. Sometimes I’m needed any time; that’s*

*why I said being in many groups may hinder your performance. So I decided to be with Tuamiho and the Choir group. (...) We have a choir farm; we have contributions to finance for our choir... (...) This choir group has a constitution, but we primarily follow the church's regulations and laws, because we are known in the whole parish..."*

(Man, Tuamiho member Ilakala, 08.04.2015)

*"You know women are different: they always consider their children back home. Like me, I can't take money, spend it out there and forget about my children."*

(Woman, group member in Ilolo, 04.05.2015)

When particular cases at the village level are analysed it is possible to identify other driving forces to group formation. Furthermore, different stages for the implantation of groups as an alternative livelihood strategy can be identified.

Changarawe has many groups operating in the village which specially involve women. According to the testimonials gathered, the tradition of groups in the village date back several years with the appearance of a group called Tupendani, which enjoyed the external support of an NGO in its initial stages. The success of the experience provided a positive example which motivated other villagers to initiate other groups. Moreover, personal experiences of villagers in other settings reinforce the positive perception about groups and therefore increase the likelihood of their formation.

*"I have lived in Dar es Salaam. I have seen lots of youth groups down there. Young people face a lot of challenges but they can face them together in unity. When young people in the same area live in harmony, it's easy to form groups and therefore they can share and help one another."*

(Man, Upendo member Changarawe, 28.04.2015)

Most of groups present in Changarawe involve some mutual help in cases of financial distress such as celebrations or funerals and many entail other small activities that gain income to members. In some cases, these groups also have saving and credit schemes.

*"For example, a family member dies. And you know there's no preparation for a death in the family, it comes at any time whether good or bad time. So we decided that, as women here we will find a way to assist each whenever one of us is in trouble. And we agreed that if one of us has a demised family member we contribute five thousand each. Get it anywhere, borrow even, if may be, but we must help our friend in need. So in the group of 8 that we started, we give 40*

*thousand to our fellow member. We know we won't cover for everything but something small to help her out."*

(Woman, Secretary Group in Changarawe, 17.04.2015)

Ilakala represents the opposite example. Most groups have been developed in the frame of the intervention of a NGO. There are fourteen groups dedicated to saving and credit, some of them were directly established by Care International. The NGO tried to ensure sustainability in the village by training a group member that would assist other groups that could be inspired by the success of the previously established groups. A similar approach was used by MJUMITA, who established a pilot group in Ilakala -Tuamiho- and trained two group members to become Community Based Trainers (CBTs). Their task was to form and instruct further groups in the village. The aim of these groups is to promote alternative livelihood activities such as horticulture, beekeeping or credit that can reduce the pressure on forests.

In Ilolo the situation is somehow intermediate to the two previous scenarios. The presence in the community of a young man with a diploma in social work is a critical factor explaining the massive development of groups in the villages. This person together with other villagers founded some years ago a saving and credit group, which developed other income generating activities and grew its membership up to seventy members. This experience has inspired other villagers to form their own groups<sup>17</sup> whose endeavours have been supported by the action of this social worker, who acts as a liaison between local groups and external organizations that can facilitate support.

In Idifu the presence of groups is more limited and the existing ones are oftentimes associated with the activities of the same social worker. His work brought external partners to the village that were used as a platform for the formation of groups, further he trained a group member in order to act as a local trainer for groups that would eventually be formed. The CBT provides counseling about group dynamics and management and links groups with the activist.

The government prioritizes groups as a strategy for service delivery:

*"Many farmers would like to raise their production, but for the government to assist them they should be in groups. They should create some kind of cooperative. The office is there for registration, the help is there."*

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<sup>17</sup> Such an example is provided by a former member of a group which was initially selected to collaborate with Trans-SEC, (UPENDO), but due to internal problems before project implementation collapsed. However, the remaining members were offered the opportunity to participate in a training that could boost the group in the future.

(Ward Officer for Idifu, 20.03.2015)

Furthermore, this strategy has been embraced by local NGOs:

*“All of these activities, if you speak of the village saving and lending, beekeeping or agriculture, we used the groups. I know that there are a lot of different packages according to the scenario, but mostly we opted for groups.”*

(NGO official in Kilosa District, Man, 19.04.2015)

To recapitulate, the experience in the CSS show that formal groups are a relatively new phenomenon in these areas but their use is widespread as a project tool by many organizations involved there. Furthermore, social conventions in these areas are conducive for collective action. Past or current experiences act as role models that encourage villagers to participate or form their own groups. Finally, the presence of active individuals with high levels of education, social skills or acumen is needed in order to sustain the development of groups regardless of project presence.

#### **4.2.2. Constraints to join groups**

Most of the individuals that participated in the focus group discussions favoured participating in groups in case the opportunity arose, although the potential appeal of the idea differed in terms of whether the group could be supported by an external partner or not. Constraints to join groups can be categorized into social or livelihood related. Firstly, how individuals perceive the behaviour of their peers in the community and how other agents may engage in the village can shape individual preferences towards groups. Secondly, the way individuals strategically aim to maximize their personal and family welfare may render group participation incompatible with personal situations

#### ***Social factors***

Consistently with the findings outlined in the previous section, individuals regard groups that lack external support as a riskier venture. There could be different reasons to understand this. First, many non-group members show lack of knowledge about the internal functioning of groups, but in most of the cases non-members perceive group work as a complex enterprise that exceeds the capacity of villagers if there is not some sort of capacity building carried out by an external partner.

*“My people work together they just need enough knowledge or skills about the groups. Because someone not well educated can cause problems, which are not necessarily his fault.”*

(Former village Chairman Idifu, 19.03.2015)

Second, it was acknowledged by several group members that former group members dropped out from the group after being disappointed with the external involvement in their groups:

*“People thought that group will be a group that they can get free donations from donors, but when they saw the trunk for contributing the money they started to decline. One thing that attracted them was always that they were receiving twelve thousand Shillings per person per day of training. So they thought there could be free money in the group too, but it was not the reality.”*

(Woman, CBT and group member in Idifu, 21.03.2015)

The importance of monetary expectations is stressed by an NGO official in the Kilosa district and the Ward Officer in Idifu:

*“One of the main problems of these farmers is that they may be organized, but the issue whenever a cooperative comes and wants to be provided with certain knowledge the farmers want to be paid, that is a big problem, because you are demanding education for your own good and you are demanding to be paid. It should be the opposite way; you should be paying. Why are you demanding to be paid for something that is benefiting you?”*

(Ward Officer for Idifu, 20.03.2015)

This problematic reflects that some members may expect quick gains from membership in exchange for little of their efforts. Thirdly, this dependence on external support could denote some sort of social paralysis or reluctance to deal with new challenges. High levels of alcohol consumption are prevalent, especially in the Chamwino villages and particularly in Idifu, and could explain the difficulties for social action:

*“The youth are not ready to work hard especially when you convince them. They say yes but on implementation they are dormant. I even wanted to establish a school here so that he can teach them how to read and write, but no one came.”*

(Man, Wendo Secretary Idifu, 17.03.2015)

*“For Gogos, pombe is an important part of their personal lives, so you expect to have a lot of problems, because sometimes they even tend to drink in the morning instead of participating in their socioeconomic activities; people are in the pombe shop drinking. So, you expect a person drinking in the morning to do what? To fight definitively. For the Gogo tribe pombe is integrated in their daily lives and that harms the socioeconomic status, a lot. Do you expect that a woman starting to drink early in the morning will take care of the children? You can see around; you*

*can be a witness. Children are roaming around because nobody cares if they go to school.”*

(Ward Officer for Idifu, 20.03.2015)

Lastly, as one member of a saving and credit group put it, external support is seen as needed to boost the capital of the potential group:

*“First of all, in those groups there is equipment needed for field work. Here we only have hand hoe at home. Without a group you can’t even be sure of the pesticides, but in the group you are told what to do differently according to the type of agriculture and plants in the field. They also have cans for water irrigation, many things really; seeds too. So you can’t start a group without knowing where to get all those things. And that’s the training we need here. (...) There was a group here; someone around here came and organized some people and encouraged people to join. Farming group. People agreed but they wanted first to see the people from outside who would supervise the group. Until today, nothing has been done.”*

(Woman in focus group discussion non-members of farming groups, Ilakala, 08.04.2015)

Some villagers are wary of depending on other group members to carry out activities, as people tend to be late and this time could be used elsewhere. In a similar vein, villagers are also concerned about different levels of commitment in the group. Missing attendance of group activities or lack of effort in their implementation creates suspicion among villagers.

Trust of fellow group members is also a potential problem. Villagers are concerned about pooling resources with other individuals. They recognize that groups are vulnerable to the fates of individuals; thus bad luck in business or sickness can impose a ballast on group performance. Furthermore, villagers are wary of how others may handle their individual lives. Group members may incur in risky activities, misuse their money or simply leave the village all of a sudden. This is a common perception among women regarding men:

*“Some take a big loan that they cannot repay, they don’t even take it home to wives. Sometimes they even leave the home for some days (...) Some start a new family, but others will drink up until the money finishes.”*

(Woman group member in Ilolo, 04.05.2015)

Moreover, when individuals have access to group resources this could provide incentives for them to act in an unfaithful way. Often this type of wrongdoing is specifically associated with poor leaders, as they stand in a position that facilitates abuse of power, either because of having easier access to group resources or because the group lacks transparent procedures to handle group matters.

*“Their challenges are in bad leadership, those who are not honest and who steal the money of groups. (...)*

– *Is it often that group leaders run away with the group money?*

*Yes, very often, if they report here, we solve it and the group continues but if they don't, the group will just die quickly.”*

(Village Chairman of Ilolo, 16.03.2015)

Surprisingly as it may seem, during the research it emerged several times that group members preferred not report this type of wrongdoings to village authorities, which led to the disappearance of groups. This could be due prevailing social structures of power that outweigh the possibilities offered by the legal framework:

*“We are here in the village, reporting someone and taking him to court, his family will suffer, so, people will also start harassing us that we are bad people doing that. Also you may find that the person's situation is difficult, so putting that kind of person in prison will not be received well in the village... also considering that he is an elderly... we just agreed to let him get away with it.”*

(Man, Former group member in Changarawe, 29.04.2015)

Another relevant factor that emerged in all villages relates to gossiping. Rumors in villages about groups spread quite easily and two of the three groups studied acknowledge external talk as a potentially destabilizing factor for group functioning. Non-members of groups recalled events in which members of groups behaved in unfaithful ways towards the group.

To what extent these testimonials are based on real events or they respond to biased accounts of potentially similar events is difficult to ascertain. In one of the focus group discussions in Ilakala, participants narrated a situation in which a group member had harvested tomatoes from the group plot without giving notice to the group. In a session with Tuamiho group, members stressed that this false rumour had been spread about their group. In Changarawe, the member of another group in the village enquired with the author about the possibility of the Trans-SEC project to engage with her group and afterwards insinuated that Upendo group had been formed exclusively after villagers knew that the project was coming there. In any case, it is plausible to argue that group success may create jealousies that further incite rumours which shape general perceptions about group work.

#### ***Livelihood factors***

Participating in CBOs requires individuals to contribute with their own resources for the development of group activities. This is often not possible for poorer individuals whom are

income constrained, which additionally may force them to sell their labour or look for time consuming ways to generate further income. Furthermore, scarce or volatile rainfall makes that villagers are bounded to do their own farming activities in a very limited time frame which prevents them to engage in groups.

*“Wendo group; the problem was contributions, I could no longer afford it. I was not able to contribute so I told them that I can’t go on with the group. My group is mainly based in the mountains where I collect soil for pottery...(…) Last year I had a hunger problem, there was no food and I had to go to Mvumi to find food working as casual labourer in other people’s farm.”*

(Woman, former Wendo member in Idifu, 08.03.2015)

Generally speaking, most of the poorest individuals would be willing to participate in groups that they perceive as potentially beneficial, but regular fees are an insuperable barrier. Since groups are often formed on the basis of peer screening, poor community members may be neglected the opportunity to participate:

*“If someone doesn’t have a farm then he or she cannot join a garden group because they want someone who has a farm, also the savings and credit because it needs people to have assets and who can contribute, therefore if you can’t contribute then you automatically don’t fit in joining these groups.”*

(Village Chairman of Ilolo, 16.03.2015)

However, for wealthier villagers group activities may impose higher opportunity costs on their individual activities. This problematic may be more acute in the case of men whose activities often require their absence from the household as the case of this middle-aged man dedicated to the trading business in Idifu:

*“I’m not a group member because I move a lot but my wife took my position.”*

(Man, former group member in Idifu, 20.03.2015)

Most of groups involve some sort of saving and credit scheme. Getting fees on time is challenging and often the group should be flexible to adapt to members’ circumstances. Furthermore, the previously mentioned factors could affect the ability of borrowers to pay back loans which further creates unrest among villagers. If default occurs most of groups envisage in their constitution the possibility to seize members’ assets as collateral. Nevertheless, it seems that this process is not always as straight forward and delays are common, which is seen as a hindrance.



*“The leadership says that it’s the money committee that’s making follow ups on the repayments, but on the day before yesterday, the committee said that they have failed to get those couldn’t pay. And I asked them that, if you, the committee says you can’t do your job, what do you want us to do? And they responded that that’s all we have to tell you, we have failed we have to find another way to apprehend those who failed to pay the loans from last year and we still have those of this year. They responded that we should take them to the police.”*

(Woman, group member in Ilolo, 06.05.2015)

On the other hand, more risk averse individuals perceive the use of basic livelihood assets as collateral as too risky. Villagers are wary of the fact that people belonging to groups have lost their houses due to these procedures.

#### **4.2.3. Motivations to join groups**

The motivations for participating in groups often are closely linked to the way the group was initially formed and its core activity. For instance, an externally formed group for the purpose of technology dissemination or innovation will drive individuals with a strong interest for acquiring new knowledge. On the other hand, self-formed groups provide the ground for subtler justifications such as income generation or access to safety nets. Similarly to the constraints in joining groups, a distinction between social and livelihood related factors is made.

##### **Social factors**

The choice to participate in groups may be based in the social conditionings faced by individuals and how they are able to use the opportunities offered by social structure. Group members perceive groups as a platform to engage with external partners that would be out of reach in an individual manner. These extended ties are profitable in themselves, but most importantly they may derive other benefits such as trainings or access to agricultural inputs which will be discussed in the following.

*“The government cannot put money in our pockets you know. But if we decide to do something as a group, even to ask for assistance from a government or anyone will be easy as we’ll have something to do, one can come and confirm and help us. But first they’ll need to see what we’re doing before they decide to assist us.”*

(Woman, Treasurer of group in Changarawe, 28.04.2015)

Several group members in the different villages stressed their willingness to promote social change through groups. In the context of depressed environments groups are seen as an alternative to mobilize resources for the benefit of the community. This argumentation was generally used by individuals with a more complex socioeconomic background with migration or

entrepreneurial experiences, which may show that these experiences can enhance leadership skills.

*“I thought by formulating a group, it can help group members to improve their lives, to get out poverty and even be able to pay school fees. Good formulation can bring good food security, enough for the families.”*

(Man, Wendo Secretary in Idifu, 17.03.2015)



Photo 7: Community Assistance in Ilakala, Participatory Photo. Source: PP Tuamiho member

Individuals may decide to create or join groups in order to formalize social practices of mutual help. This could be the case of social payments during ceremonies, burials or sickness in the household or rotating labour schemes. The former include in-kind or monetary contributions in case one of the mentioned events occurs and the former refers to voluntary agreements in which villagers contribute to the farming activities of neighbours on a reciprocal basis and also receiving food or alcoholic drinks on exchange. In the four villages this type of practices is very common. Social mechanisms of mutual help are conducive to the formation of groups as they often imply certain levels of organization and collective action. Therefore, these informal practices can be formalised in the form of groups. Information sharing was mentioned as one of the main

forms of mutual help in the community by one of the group members. Photo 7 shows a villager cultivating peppers, the interviewee related that he provided advice on how to avoid excessive water accumulation. Similarly, he commented that he exchanged views on pesticide use with another villager cultivating cabbage. His own experience in the CL-group was benefiting other community members.

### ***Livelihood factors***

For group members, groups are used as a vehicle to boost their livelihoods in different ways. Accessing capital was often mentioned in the case that the group has arranged a financial scheme. This capital is used as a way to smooth consumption or to invest in personal businesses or farming activities.

*“You may be in a business, you may reach a point where your capital dries up and you still need some money, so when you are in a group you can just go and talk to elders they lend you some money and later you return it. That’s why I say being in a group is very important, especially if you are in business.”*

(Man, Upendo member Changarawe, 23.04.2015)

However, it might be the case that groups are not an ideal way to save and get credit but rather a second best option in a constrained financial setting.

*“It’s like this: banks are very far and therefore people dislike to travel from here to town just to put the money in the bank. Hence, they prefer putting or saving money into the savings and credit groups instead.”*

(Woman, group member in Ilolo, 15.03.2015)

Another important reason is to access protection in case of misfortune in the household. In the absence of formal insurance mechanisms, groups offer members a potential way to deal with adverse shocks.

*“You know; the fact that in the group you get to have people to help you when you’re in need. For instance, if you are sick, you report to the group they lend you some money for hospital then later you return.”*

(Woman, Upendo member Changarawe, 20.04.2015)

Groups are also seen as a platform to expand livelihood activities which otherwise would be out of the reach of individuals due to technical or capital constraints. These activities often times generate extra revenue for group members that can support other activities. Furthermore, when it is possible, members replicate group activities in their individual lives. In a similar vein and also related to the access to external partners, group members see groups as a useful way for learning, specifically about good agricultural practices. Furthermore, other members acknowledge that groups can be a platform to exchange ideas regardless of the presence of external partners.

### **4.3. Group profiles**

The general characteristics of the selected groups as well as their members are summarized in this section. The results are based on the baseline survey carried out with group members, the semi-structured interviews with individual members, the activities carried out in the group workshops and the author’s own observations throughout the stay in each CSS. Furthermore, the group stories are described based on the participatory timeline carried out in the frame of group workshops as well individual accounts of group members. Table 8 outlines the main characteristics of the groups at the time of engaging with Trans-SEC project.

As it can be inferred from the table, there is almost no parameter in which the groups have similar characteristics. The groups present substantially different structures and offer a rich contrast that can yield interesting comparisons. In terms of group size, the three groups can be labeled as small by the groups' literature standard<sup>18</sup>. However, in the tranche of small groups the three are in different ranges of size. It can be inferred that Wendo group has a significant lower socioeconomic status which is reflected in the fact that they score the lowest in parameters such as education, self-reported income or highest in household size or age<sup>19</sup>. Furthermore, the average farm size of Wendo member is relatively low considering that the land ownership pressure in the village is not as high as in the other CSSs. In the case of Upendo group, the group scores highest in most of socioeconomic parameters with the exception of average farm size, which reflects the special status of land tenure in Changarawe<sup>20</sup>. Tuamiho group presents an intermediate case study as compared to the other groups. Finally, the individuals of the three groups grow similar crops to those grown in their respective villages.

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<sup>18</sup> Although according to the observations of the researcher groups in the CSS rarely exceed the 30 members.

<sup>19</sup> Later on it will be argued why higher age may become a hindrance in group performance. At the individual level Höhne (2014) has argued that elders are often disadvantaged in the context of the CSSs.

<sup>20</sup> Explained in 3.2

Table 8: Group socioeconomic profile

	<b>Tuamiho</b>	<b>Upendo</b>	<b>Wendo</b>
<b>Region</b>	Morogoro	Morogoro	Dodoma
<b>Village</b>	Ilakala	Changarawe	Idifu
<b>Formation</b>	Project based	Self-initiated	Sensitization
<b>Active since</b>	June 2013	November 2013	March 2014
<b>Registration<sup>21</sup></b>	No	No	No
<b>Board</b>	Chairperson, secretary, treasurer and CBTs	Chairperson, secretary, treasurer	Chairperson, secretary, treasurer
<b>Activities</b>	Tomato, onion and cabbage production	African eggplant and hot pepper production, saving and credit and insurance	Papaya production and saving and credit
<b>Main rules/ Enforcement</b>	Attendance, fees, punctuality, phones-off and respect - Moderate	Attendance, fees, punctuality, phones-off and respect - Moderate	Attendance, fees, punctuality and respect - Low
<b>Funding</b>	External support, member fees and activities	Member fees and activities	Member fees
<b>Membership</b>	17 members	25 members	12 members
<b>Age structure</b>	Middle aged	Young	Old and few young
<b>Average age</b>	44,1	33,8	57,9
<b>Income</b>	Middle	Middle-High	Low-Middle
<b>Self-reported income<sup>22</sup></b>	2,53	3,5	2,09
<b>Average household size</b>	5,06	4,47	5,63
<b>Average years education</b>	6,56	7,32	4,5
<b>Illiterate members</b>	1	0	3
<b>Average farm size (Acres)</b>	5,3	3,52	3,96
<b>Main livelihood activities</b>	Maize, sesame and tomato.	Maize, rice, sesame and vegetables. Off-farm business.	Sorghum and nuts.
<b>Innovation strategy selected</b>	Irrigation pump	Bike rental business	Soap business

Source: CL-group baseline survey carried out by author and PRA workshop activities.

<sup>21</sup> Previous to Trans-SEC

<sup>22</sup> Group members reported their incomes using a Likert scale from 1 to 5 based on drawings depicting a poor (1) and a rich (5) household according to the description facilitated in a previous participatory exercise.

#### **4.3.1. Tuamiho (Ilakala)**

The group was formed in June 2013 after a sensitization meeting conducted by MJUMITA in collaboration with the extension officer and the sub-village leader in which villagers were assembled and asked to join in a group aiming the implementation of horticultural activities. MJUMITA is a network of community based groups which relies on donor funds and aims to improve community forest management, build capacity among members and advocate for community rights as well as influencing decision making processes in forest resource management. Thus, the group is project based and since the start it counted with the support of a nationwide established organization which materialized in trainings in horticultural techniques and group management and access to agricultural inputs such as seeds. Upon formation the group was also assisted by a pastoralist who offered his cattle to plough the field.

The group was formed initially by 20 members, 10 men and 10 women. Four members dropped along the way allegedly due to a lack of commitment or time and the group expanded with one new member who can be considered as wealthy in the community and owns an irrigation pump. All group members live in the same sub-village and have a relation of neighbours and furthermore several group members have a kin relation. The age of most of members range from 35 to 50, but there are some few older members and younger members who happen to be the sons of other members. The group is meeting once per week to conduct farming activities which often involve the separation of activities along gender lines, for example men are in charge of manipulating the irrigation pump when this is rented or women prepare food or fetch water. The group leader is the oldest member of the group, his leadership is generally respected by group members, but decision-making is done on a voting basis. The group also counts with two CBTs that received special training on horticultural production from MJUMITA and are expected to form and teach other groups around the village. In addition, several group members have a migrant background, which is relatively common in the village as it used to host the activities of a sisal company, or were involved in different business such as trading or transport.

The group has been involved in the production of tomatoes since its formation and it expanded its activities to grow onions and cabbages. The land used is rented and is located nearby a water source which enabled manual irrigation. Since its formation, Tuamiho has harvested twice albeit with little success due to different factors, although the group could distribute profits among group members and set funds aside as group reserves. In this period, group members claim that the support provided by MJUMITA was limited to the initial stages and it was the internal strength of the group which prevented it to fall apart. The main rules relate to attendance to group activities. If a member misses three times could be expelled. If the member fails to attend and does not give notice, there is a fine of TZS 2,000. If the person is late without giving notice has to pay TZS 500. Decisions are made after a group discussion and are voted and approved on a majority basis.

The innovation strategy selected by the group involved different actions being the acquisition of an irrigation pump the most important, but also complemented with training on the use of the machinery and horticultural techniques, purchasing of seeds and fertilizer and the rental of a new plot to grow green pepper which needed to be complemented with the members own funds. Furthermore, and as a result of the training provided by MVIWATA <sup>23</sup> in the frame of the Tuamiho's collaboration with Trans-SEC, the group decided to start a saving and credit scheme which would be nurtured with a weekly contribution of TZS 2,000 by every member. The strategies selected are consistent with previous group activities, they aim to deepen the capital stock of the group as well as alleviate the workload faced by members and reduce its dependence on rainfall. In the future, the group was considering to process tomatoes to gain some value. From a marketing perspective, there were discussions about the convenience of renting a vehicle and take the produce to a marketplace and avoid the intermediation of traders.

### **4.3.2. Upendo (Changarawe)**

The group in its current format was established in November 2013, however many of the members were already together in the frame of the CCM (Ruling party in Tanzania) youth organization. The scope of the activities back then is not completely clear, but some group members mentioned sensitization campaigns among young members of the community and the construction of a road memorial with the party banner. The group was established with the broad goal of improving members' livelihood.

The group was initially formed by 15 members and has expanded to the current number of 25. Most of the members live in the same sub-village or develop their daily activities around this area which is located nearby the main road that links Changarawe with the main towns in this area. Furthermore, few members are relatives or live in the same compound. Most of group members are aged between 30 and 40 years and the remaining members are in their twenties. The only exception is the group counselor who is a retired teacher and gets involved only in a timely manner with the group. The leader and treasurer of the group are middle aged women who live in a different sub-village but have grown a reputation as businesswomen and members of different groups in the village. Other group members are involved in different businesses in the village such as trading or shops and others are involved in the village committee. In addition, some members have a migrant background.

In order to start its activities, the group raised some capital among members which was used to rent a one-acre plot, which eventually was expanded to 1.5 acres, located near the main road and a river. Since the formation, the group was involved in the production of African eggplant

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<sup>23</sup> It is an association of farmer groups with presence in the whole country dedicated to provide support services to its members and advocate for policies that support these groups.

and later on started producing hot pepper. The nature of these crops enables the group to harvest on a regular basis and they have established different cycles of production so that they can keep the business rotation. Other group activities include the disbursement of loans and informal insurance scheme which are nurtured with group' profits or members' fees. When a new member joins the group has to pay an entrance fee of TZS 10,000. On a continuous basis members contribute with a weekly fee of TZS 2,000 that increases the credit scheme funds and a monthly fee of TZS 1,000 that is used for group expenditures. There are no specific procedures for the disbursement of loans and group members are expected to repay within the established period with no interests. Group activities not always require the involvement of all members: shifts are established and members are allowed to delegate these activities in other people if they are busy elsewhere. Sanctions are applied in case a member misses group activities in which case they pay TZS 1,000 or when they use abusive words, the phone rings or they are late in which case they pay TZS 500. Furthermore, a member would be expelled in case of missing three activities without notice. In case group conflicts escalate the group uses a counsellor to solve the arguments, he is also involved in decision-making processes.

As a result of the workshops held with Trans-SEC and after assessing different options, Upendo opted for developing a bike rental business and to receive training in horticultural practices. The choice for a completely new activity for the group was mainly based on the experience of the group leader with a similar business. Additionally, the group had the belief that apart from the initial investment, this type of business would ensure a constant flow of cash with little variable costs. From the group experience the demand for bikes is high as many people need to use them on a regular basis for their farming activities. The generated income could support other group activities and further support individual livelihoods with the distribution of profits and loans.

The business plan implied that a member would travel to Dar es Salaam to acquire the bikes and also spare materials to repair the bikes. The group found a space next to the main road and surrounded by the main businesses in the village which would act as local. The business management required that the group employed a shop manager and security to guard the bikes. The group had devised different renting modalities, for hours or days, and prices and planned to advertise the new business using the word of mouth and little posters in the village.

#### **4.3.3. Wendo (Idifu)**

The group was started after a sensitization meeting on the importance of groups conducted by the government program TASAF. After hearing about the importance of groups and receiving instructions on group functioning, few members commanded by the secretary recruited more members among their neighbours in a process that lasted for approximately a month. The goal of the group was to boost members' livelihood by accessing loans.



The group is currently formed by 12 members. The group suffered three dropouts mainly due to impossibility to contribute to the group and two young men joined the group at the end of 2014. The group is formed by people older than sixty and only three members are in their early thirties. They all live in the same sub-village and their houses are located nearby each other. Furthermore, most of them worship in the same church and few of them are relatives. The chairwoman and the secretary had experiences living and working in Dar es Salaam and then returned to Idifu. The two youngest men have also emigrated and worked in other regions of the country. In contrast to the other groups, there is a significant presence of members with no formal education.

The group started with a loan scheme which was based on individual contributions which was established in TZS 1,000 per week. Members could access loans up to TZS 40,000 which they would repay with a 10% interest in the established period, usually one month. Furthermore, other group member should act as a witness to provide some kind of collateral to the group, but not all members recognized this as a rule. At the end of 2014, the group decided to plant papaya in a field that was donated for that purpose by two members of the group who are married. The preparation and the manual irrigation of the field was done by all group members and the group was meeting weekly. If a member does not attend activities three times without giving notice would be expelled from the group. Other sanctions apply to punctuality or fines for not attending meetings, but according to members their application has been non-existent or no needed. Decisions are made by voting and the majority wins and in case of a serious problem the leaders would call for a special meeting to discuss the matters.

Wendo opted for the development of soap business as an innovation plan. The group secretary was the promoter of this idea which he got to know from other group in the area. The strategy aimed to diversify income generation from agriculture which very often is harmed by unreliable rainfall and also based on the expectation that soap is a commodity with a relatively stable demand in the village due to its importance in daily activities.

The first step in project implementation was conducting training on soap making techniques and business management and travelling to Dodoma to acquire fundamental equipment for soap production that the group was missing. Furthermore, the group aimed to register and open a bank account. Once the group had the knowledge and produced its first soap batch with the support of SIDO<sup>24</sup> it would start the commercialization of soap. The group planned to promote the soap by using posters and organizing an event. Furthermore, the distribution of the product would be done through neighbours, local shops, and market or in other villages. The expected

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<sup>24</sup> Small Industries Development Organization aims to promote entrepreneurship in Tanzania. The organization provided assistance in material supply, production knowledge and basic marketing strategies.

price was to be similar to the prevailing price in the local market to ensure the competitiveness of the product.

#### **4.4. Group functioning**

In this section, aspects of group work, individual contributions and results that are more relevant for group members are described. Interviewees defined their major contributions or costs associated to group participation. Functioning was defined in terms of processes, this is how individuals perceive successful group work during implementation, and in terms of specific and individual outcomes which are derived from group activities. The data used to elaborate these results has been elicited from group workshops, semi-structured interviews with current and former group members and observation made in the frame of group workshops and activity implementation. The results are mainly disaggregated at the group level. Table 9 summarizes the main findings of this section:

##### **4.4.1. Contribution**

Group members define their contribution to the group in terms of their personal resources devoted to group activities. The most obvious aspect of this contribution is the monetary one. For Upendo and Wendo groups, this financial contribution is an essential component of group activities as they have an ongoing saving and credit scheme. For Tuamiho, this activity was only in its initial stages and fewer members reflected on financial resources as their main contribution to the group.

Table 9: Group functioning indicators

<b>Individual Contributions</b>	<b>Group Dynamics</b>	<b>Individual Outcomes</b>
Time	Procedural:	Agricultural skills
Money	<ul style="list-style-type: none"> <li>– Cooperation</li> <li>– Regular participation</li> </ul> Personal interrelations: <ul style="list-style-type: none"> <li>– Love for each other</li> <li>– Common goal</li> <li>– Respect and listening</li> <li>– Lack of conflict</li> </ul>	Income generation
Ideas	Outcomes: <ul style="list-style-type: none"> <li>– External partner engagement</li> <li>– New activities</li> <li>– Capital raising</li> </ul>	Access to capital
Rule obedience / enforcement		Safety nets Individual empowerment Social recognition

Source: Focus discussion groups with CL-groups and of semi-structured interviews with group members.

Time and labour are perceived as fundamental costs associated with group work. For group members most of this time is dedicated in farming activities, which besides rare occasions (in which they were organized in shifts) were mandatory for all members. Upendo group provided members with the opportunity to pay for labour to replace members in their absence. In the case of leaders, they further acknowledge other administrative work as a personal contribution. Some of them perceived that their responsibilities were derived from their special skills or their reputation among fellow group members.

*“People are inspired by me, as I always did good work and mobilized, and of course, I’m a good role model of the village because by then I had a nice Papaya farm and everyone was really inspired by that. Also, I have an improved cooking stove which I had from the training with Trans-Sec. So actually, I have a lot of new skills.”*

(Man, Wendo Secretary Idifu, 17.03.2015)

Finally, other interviewees perceived their contribution in terms of their obedience to rules and orders received from leaders.

### **4.4.2. Group dynamics indicators**

This section outlines the most important aspects of group dynamics defined by group members. Furthermore, it focuses on three fundamental aspects of group functioning that have been identified by the literature on social capital and group functioning: rule and sanction enforcement, leadership and mutual help, which were explicitly addressed in the semi-structured interviews. Table 10 summarizes the main elements of group dynamics which members of the different groups identified as most important for group functioning during group workshops. Factors identified by group members can be categorized as procedural, which refer to how activities are implemented; personal interrelations, which refer to how members’ relations are shaped; and outcome, which refer to tangible results derived from group work.

Participants of different groups defined in very similar terms what were the elements of group work most valued. All groups referred to unity, cooperation or sharing a common goal as critical aspect of group functioning. Discussing these ideas with the groups nuanced notions of unity emerged. First, it could be understood as carrying activities together, such as for example attending farming activities and meetings when needed. Secondly, in a more abstract way agreeing on a group objective and pursuing it, regardless of this implying being together physically. The Upendo group illustrates this interpretation as they do not require that members attend farming activities, but instead they can fulfill their commitments by sending someone on their behalf.

Table 10: Group dynamics indicators

<b>Tuamiho (Ilakala)</b>	<b>Upendo (Changarawe)</b>	<b>Wendo (Idifu)</b>
<b><i>Procedural</i></b>		
<ul style="list-style-type: none"> <li>– Cooperation</li> <li>– Attendance to meetings</li> <li>– Punctuality</li> </ul>	<ul style="list-style-type: none"> <li>– Cooperation</li> <li>– Respect for constitution or uniform behaviour</li> </ul>	<ul style="list-style-type: none"> <li>– Working united</li> </ul>
<b><i>Personal interrelations</i></b>		
<ul style="list-style-type: none"> <li>– Love for each other</li> <li>– Respect to leaders and discipline</li> </ul>	<ul style="list-style-type: none"> <li>– Love for each other</li> <li>– Respect</li> <li>– Sharing the same goal</li> <li>– Listening to each other</li> <li>– Unity</li> <li>– Faithfulness</li> </ul>	<ul style="list-style-type: none"> <li>– Love for each other</li> <li>– Absence of conflicts</li> <li>– Sharing a common goal</li> <li>– Listening to each other</li> </ul>
<b><i>Outcome</i></b>		
<ul style="list-style-type: none"> <li>– Engaging with external partners</li> <li>– Access to trainings</li> </ul>	<ul style="list-style-type: none"> <li>– Access to trainings</li> <li>– Raising capital</li> </ul>	<ul style="list-style-type: none"> <li>– Access to trainings</li> <li>– Access to donor funds</li> <li>– Engaging in new activities</li> </ul>

Source: Focus discussion groups with CL-groups and of semi-structured interviews with group members.

Other aspect that was transversal to all groups was love between members. At first it was difficult to understand the meaning of love in the context of group functioning. However, this was explained by participants providing interesting insights. All group members agreed that they value the support of other members when facing a personal difficulty, which reinforces the idea of togetherness. This support may be in kind or simply mean in the form of moral comfort. Additionally, Tuamiho group explained the idea of love as the enjoyment derived from being and working together. Thus groups may also fulfil a social role which goes beyond the instrumental purposes of improving material aspects of members' livelihood.

Behavioural issues and respect for rules emerged to a different extent in all groups. Respect and the ability to listen respectfully others' opinions are also common for all groups. Thus, members value their capacity to express themselves and communicate their own ideas. Faithful behaviour repaying loans and obeying the constitution to ensure common behaviour were stressed by Upendo. Similarly, Tuamiho pointed to the importance of punctuality and discipline in obeying leadership. For Wendo group the behavioural component of group work was rather based on the respect and love that group members feel for each other; no emphasis was made in particular rules or disciplinary issues. This could not have been inferred only from this group

activity. However, lax rule enforcement was confirmed in individual semi-structured interviews with leaders and members as well as in the feedback session:

*“Yes, we have our regulations but the group is still very young hence we are trying to show more humanity and caring, for motivating our group members. (...) Because we don’t have lots of activities now”*

(Wendo Chairwoman, Idifu, 17.03.2015)

Finally, tangible aspects of group functionality also emerged in the discussions. For all groups being able to access trainings was seen as symptomatic of good group work. Furthermore, Wendo perceives access to external funds as an indicator of successful group functioning. Tuamiho is a project based group and it is well aware of potential benefits which may go beyond the obvious benefits like trainings or funds, and for them engaging with external partners was beneficial per se. Group members argued that working with external partners can broaden members’ view, enhance group dynamics as it demands spending time together or provide access to new activities. Upendo group stressed the importance of raising group capital as members can profit from accessing loans or their benefit share. Wendo group pointed out that starting new activities as a group was a sign of good group functioning.

#### ***Rule enforcement and sanctions***

Tuamiho group claimed a moderate fulfillment of rules and enforcement of sanctions. The most important rules refer attending group activities and punctuality. Farming activities were divided, being gender the basic criteria for this division. It was acknowledged that few members had to pay a sanction after missing an activity without providing notice. Other members complained about the limited enforcement of rules and how this might be affecting the ability to speak up and other claimed that rules were only in paper.

*“If we had and followed the constitution like in other groups, we would have been in order. For example, if someone makes a mistake must be fined, or that everyone should contribute while in discussion or like in the other group where we pray before starting our meetings, if it’s your day and you don’t pray you should be fined. There are no strict measures to enforce the laws and principles. (...) We have the rules but are not followed.”*

(Woman, Tuamiho member Ilakala, 11.04.2015)

After conducting several group sessions and being together during the implementation of Tuamiho’s activities, it was possible to observe almost total attendance. Furthermore, in contrast to the other groups, problems of punctuality were very limited.

Regarding the application of sanctions, leaders themselves acknowledge that they were cautious to overwhelm members with sanctions as they were aware of how personal difficulties could affect involvement with the group. Rather, leaders would prefer to address problems publicly with all group members and discuss possible solutions, something which was confirmed by a regular member.

For Upendo group the situation is similar to Tuamiho in terms of rule and sanction enforcement. Main rules apply to attendance, punctuality and respect during meetings. Moreover, the financial scheme requires regular contribution of group members.

It was openly acknowledged by several members that rules were broken with frequency, however sanctions were equally imposed, although not always. Interpreting rules requires sympathy and understanding from leaders as they believe that being too strict might be counterproductive. Furthermore, the group adapts to the capacity of members to pay the fines or members lend each other money.

*“Sometimes when it’s due to contributions some member would ask their member friends to pay for them if they don’t have at that time, and they pay each other later.”*

(Woman, Upendo Treasurer Changarawe, 28.04.2015)

Several group members recognized that during meetings confronted opinions could escalate to verbal conflicts and group members could even utter serious words to each other. Other members said that small jokes which are misunderstood or even small issues like distributing sodas during the workshops could create minor discussions. During the collaboration with the group, it could be seen how meetings could turn very loud at times.

*“Sometimes they’re in a meeting and somebody making noise, you may say: “don’t make noise”, and they keep making noise, and you say: “you are going to pay fine”, he continues talking and at the end says that “yeah, I have already said what I wanted to said, have your TZS 500 for the fine”, so nobody can do anything.”*

(Upendo Chairwoman Changarawe, 19.04.2015)

According to the chairwoman this freedom to talk may not affect group atmosphere. During the stay of the research team in the village, there was an ongoing conflict between the group and two members whom were absent during the activities. The group requested privacy to solve the issue, but they hinted to a discussion relating politics. However, the group had designated a respected man in the community to solve such type problems.

*“We sat for a meeting and called one of the elders as our counselor, and a few members from the discipline committee and we discussed it; they apologized and it was settled”*

(Upendo Chairwoman Changarawe, 19.04.2015)

In Wendo group there was a consensus regarding the fact that rules were obeyed. Attendance to farming activities, and eventually soap production, was acknowledged as one of the strengths of the group. However, during the stay of the research team it could be observed that some members were absent during many workshop sessions or there were problems to keep punctuality. This was confirmed by the secretary whom expressed his disappointment about this situation. Members also acknowledge some problems to collect the weekly group fees.

Thus, small infractions are committed, but none of the members could recall a time when a member received a sanction. Instead of that the group prefers a flexible and tolerant approach to deal with these situations.

*“In our first constitution not the current, it said that if there was any misunderstanding, people would have to sit in a proper meeting, whereby everything would be spoken in that meeting and settled. It’s a way that will control the misunderstandings and eliminate conflicts.”*

*“The constitution says to be tolerant, that was our big thing in our group.”*

(Man, Wendo Secretary Idifu, 17.03.2015)

Although the chairwoman was well aware of the importance of rules and sanctions;

*“It will create worries hence the group will be more active as people will worry to be punished with fines.”*

(Wendo Chairwoman Idifu, 17.03.2015)

In the last visit to the village and when the action plan implementation was ongoing for one month, a member had been missing for several weeks with funds belonging to the group. Several group members turned to the research group asking for advice in how to deal with this situation. Furthermore, in spite of receiving specific training, the group had failed to keep records of transactions, as some members found it very complicated due to their low levels of literacy. Additionally, another member stated that the contribution to the saving and credit scheme were very irregular, which was later confirmed in a group session. Another member complained about the unequal contribution in the fulfillment of marketing duties in the frame of the soap production project.

*“I will go even if he doesn’t go. I will prepare myself well and go; if I give I know I also get some money I buy lotion and I look good; I’ll continue going. If you don’t go out, how do you expect to get anything? Those who don’t want to attend let them, but I will. Whatever you have, you have to take it out for people to see.”*

(Woman, Wendo member Idifu, 08.05.2015)

#### **Leadership**

The types of leadership observed in the three groups varied in subtle ways, but in the three groups leaders enjoyed support. In Tuamiho group the leaders were praised by their capacity to discuss aspects of group functioning, which were eventually voted. However, some members have questioned the ability of leaders to enforce the rules.

*“The leaders we have elected are afraid. Because we have the constitution, or bylaws; be it turn off the phone, attend all farm activities, if you don’t attend a day TZS 500 or if you don’t attend the farm at all TZS 2,000. The thing is, we prepared the bylaws together but people come late in the meetings, nothing is done, to the extent we had to voice our concern that if they don’t attend our meeting without prior notice and are not fined, we’ll also do the same. Or sometimes the chairman doesn’t list down the late comers instead just randomly call them at the end of the meeting; in a way that other members will name the late comers.”*

(Woman, Tuamiho member and CBT Ilakala, 12.04.2015)

Furthermore, their position as respected elders in the community facilitated the resolution of conflicts with other members of the community.

*“The good thing is that our leaders are of age so they have that capacity to face any group’s challenge. (...) One time we had a situation where we found cattle feeding in our farm when we had tomatoes in the farm. We let the leaders deal with the situation (...) So after the discussion, the pastoralists paid about TZS 270,000 as compensation. They paid without any hesitation or be taken to the village office. Because our leaders said that if the pastoralists won’t pay we’ll have to contact village leaders, so they can deal with this problem officially, but these pastoralists were very cooperative and paid the damages.”*

(Man, Tuamiho member and CBT Ilakala, 11.04.2015)

In the particular case of the chairman his leadership wasn’t based on his skills or being the wealthiest member of the group, however he was a person with a long experience in the community. During the group activities it could be observed that he set a benchmark for other members. However, as a result of the collaboration with MJUMITA, other members enjoyed



privileged position within the group which gave them a strong voice when technical details were discussed. To illustrate this point, when the group had to purchase the irrigation pump the group preferred to appoint other members to travel to Kilosa and Kilombero to represent the group.

Inclusiveness in decision making was not seen as a problem by most of interviewees as they are discussed and voted. However, a middle-aged woman with no education complained that she suspected that due to her lower educational attainment her opinions were ignored and she felt discouraged to speak up her opinion. A younger woman with an important role in the group as a liaison with the NGO that formed the group and other local based groups argued in a similar way that some group members do not express their opinions and limit themselves to agree with everything.

*“Sometimes they say you don’t know how to speak, so you just keep it to yourself. Something might compel you to say something, but their reaction alone will stop you. (...) I remember one day, I wished to speak about transport fee to and from Kilosa, because people were only discussing about the machine but were not discussing anything about the fare. I asked about it but they stamped me down. Someone told me to keep it to myself, that I had nothing to say, so I kept quiet... (...) I feel like it’s because I’m not educated, because I haven’t gone to school like others.”*

(Woman, Tuamiho member, Ilakala, 11.04.2015)

In Upendo group leaders had a relevant position or were among wealthy members of the community due to business activities. This status granted them with the legitimacy to provide guidance to the group. For instance, the strategy selected by the group followed the business model carried out by the chairwoman. However, the group is formed by several members in a similar age and with experience as business owners, this may blur hierarchical lines. As previously mentioned, in order to solve group conflicts the group has resorted to a retired professor that moved in the last years. He is also involved in a business in the village and has been involved in local politics. When Upendo had to decide if the group would get involved with Trans-SEC he was a strong voice in the discussions and he only appeared again in the feedback session. Although his involvement may be limited in group activities, his overall influence on the group seems to be critical, and he adds a factor of stability within the group.

The legitimacy of leadership in Wendo group can be explained as a combination of several factors. First of all, chairwoman and secretary can be considered as wealthier than most of the other members. Furthermore, they both have been involved in different initiatives at the village level. The chairwoman is member of the village committee for the government project TASAF and the secretary participated in a forestry project some years before. Both have been living



Photo 8: Group members work in the private tobacco business of one of them. Source: PP Tuamiho member

and working in Dar es Salaam for some years and it seems plausible to state that this gave them a broader perspective and adaptive capacities, this could be contrasted during group workshops and implementation of activities. To illustrate this point, when the group was divided in two and both of them were in the same subgroup other members complained that this would affect the outcome of the activity.

At the time this strong leadership was seen as positive and trusted by group members. First of all, it was the initiative of the secretary to form the group and assemble the people. Furthermore, he suggested the ideas of papaya farming and soap production. Therefore, his footprint is remarkable and persuasively he has made his views prevail, nevertheless decisions are voted by all members.

*“We have voting for the suggested idea and the majority wins.”*

(Wendo Chairwoman Idifu, 17.03.2015)

#### ***Mutual Help***

Group dynamics are partially influenced by the extent in which group members depend on each other. Interdependencies can be created when the group delivers results to its members or when members face individual problems and the group facilitates coping with the situation.

Tuamiho group has not established any official mechanism to assist its members in times of personal stress. However, some group members have argued that when they need some help they resort to fellow group members for the provision of such help. This is often the case for agricultural activities. One member mentioned that he received inputs for farming tobacco from other member. In Photo 7, obtained from the participatory photo activity two members of the group can be seen working together in the processing of tobacco leaves in the house of one of them. He provided local beer and several group members showed up for help. Finally, the group leader spoke of the non-written rule of contributing to pay hospital fees in case of one member being admitted.

In Upendo group, systems of mutual help are institutionalized. According to the account of members, the group was started after a burial with the purpose of providing assistance to members in case of misfortune. Assistance can be provided in kind and financially, which might be in the form of loans or donations depending on the nature of the event. According to the group advisor, in case of such an emergency it is established that the group meets and decides

how to provide relief. Some examples include the provision of labour in small groups, payments for burials or ceremonies, provision of food in ceremonies and monetary or labour support in case of sickness in the household. Finally, the group provides access to loans free of interests to its members.

In Wendo group the systems of mutual help are not institutionalized as a common practice, perhaps due to the short life of the group. Members acknowledge burials as a situation in which the group would provide help to fellow group members. This was the case when the son of one of the group members died and the group contributed with cash.

*"I remember there was one of the group who experienced a problem hereby her child died and all group members contributed to her. That showed me that the Wendo group really portrays love and unity."*

(Man, Wendo Secretary Idifu, 17.03.2015)

Apart from that, several members recognized bilateral exchanges of help between individuals. This includes lending small amounts of money for the payment of school fees or provision of food. Another member explained that he had agreed with another to assist each other during field preparations. Similarly, the group secretary said that the group helped a former member with a fragile health in the land preparation of his field.

#### **4.4.3. Individual outcome indicators**

How individuals perceive the benefits derived from group membership clearly depends on the activities and trajectories of each group. Furthermore, there is a subjective component that relates to individual preferences. In this case there are substantial differences among groups. In Tuamiho group, members have experienced benefits mainly through learning new agricultural skills. In many cases, they have applied their new knowledge in their individual farms which has gained them more income.

*"After being in the group I was able to put up my own tomato plot where I can sell some and use some myself. Also now I have the knowledge on how to take care of tomato plants while in the farm and harvest good yields. That's why last year I had only a small plot but harvested lots of tomatoes... I got enough but on average in terms of money I could say about TZS 800,000."*

(Man, Tuamiho member Ilakala, 8.04.2015)

After selling the group harvest the group distributed benefits which enabled members to support their households' livelihoods in different ways. A group member stated that with the revenue obtained she could start keeping chickens, although most of them died due to a

disease. Another group member said that with the revenue she could afford to pay the school fees for her daughter and send her to secondary school in the village nearby.

*“What we did was that, after selling we set aside a certain amount for the group and the rest of the money we divided among members thus supported us in the family. I paid for my kid’s school... the school is Ukwiva Secondary, located in Wapora.”*

(Woman, Tuamiho Secretary Ilakala, 17.04.2015)

In the case of Upendo group benefits are shown in multiple ways, which reflects the complexity of group activities. The majority of interviewees remarked that they have expanded their knowledge through group participation. New knowledge may relate to agricultural practices in horticultural crops, which up until that point was exchanged among members. Furthermore, members also exchange ideas about their individual businesses.

In the early stages of the group collaboration with Trans-SEC project, the group received training in group management. This gave members an insight in aspects such as budgeting which many group members could later apply on their own businesses. Similarly to learning, group membership is a venue for personal development. Personal development acquires a more intangible dimension; it implies a change in the individual’s mindset or a sense of empowerment. This may occur as a result of personal interactions with other group members, group benefits or as a result of exposing individuals to new realities.



Photo 9: Upendo member in her business. Capital is available through the group to be invested in private business. Source: PP Upendo member

*“Honestly the group has changed me in many ways. First, there was a place I had never visited, but because of the group I went there for seminar. Secondly; there were offices I didn’t know and never entered but because of issues of the group I was able to go to many offices.”*

(Man, Upendo Secretary Changarawe, 22.04.2015)

*“Since we started the group, things have changed, like personally, at the beginning my husband was very hard on me about the group, that we were wasting our time with things that have no profit. But diligently I have been telling him about our activities, and he sees and now he’s convinced to the extent he wants to start a group just like ours.”*

(Woman, Treasurer Upendo Changarawe, 28.04.2015)

The financial scheme established by the group provides access to capital in times of financial stress, this was the case of a group member that received a loan to pay for medical fees and other that used it to pay for school fees. Other group members value the access to loans to increase personal consumption, such as a member who refurbished his house with new furniture, or to invest in their own businesses.

Upendo group provides a safety net to its members. This was the case of a group member that received a monetary contribution when she gave birth or a member receiving group support in the form of farm labour when her husband was hospitalized. The constant harvesting of African eggplant and hot pepper provides members with a flow of revenue that supports other individual activities.

In the case of Wendo group, the benefits so far have been more limited for group members. The group had a saving and credit scheme that disbursed loans to some group members. The testimonials collected show that the use of these loans may be for investment purposes or to smooth consumption. A member stated that the purpose of taking a loan was to pay school fees, the villagers' contribution to build the new school or to buy soap. Other member said that she had taken a loan to buy food. On the other hand, group leaders claimed to have used their loans to invest in the preparation of a paddy field, the case of the secretary, or to do house renovation in the case of the chairwoman.

*"I had a loan to rebuild my house's wall because I had lots of tarmac in my food storage room."*

(Wendo Chairwoman Idifu, 17.03.2015)

Members also acknowledge that they have benefitted from group membership since Wendo collaborated with Trans-SEC project. Furthermore, the group also is a vehicle to exchange ideas about farming.

*"Profit is to see you and that you are with us today, that shows that our group is working well. (...) I can now do farming easily through loan, we exchange ideas."*

(Wendo Chairwoman Idifu, 17.03.2015)

Another member acknowledged that membership has forced him to save by being forced to contribute to the group on a regular basis. Additionally, as a result of the implementation of the soap production business he has learnt how to deal with customers. This last aspect resembles the idea of personal development expressed by some Upendo members.

#### ***4.5. Factors influencing group functioning***

Factors perceived as relevant for group functioning as perceived by group members are described in this section. The data for elaborating the results of this section are drawn from group workshop activities such as SWOT analysis, participatory group resource audit and action risk analysis. The focus of these activities was placed on the strategic action that groups were planning, however the groups were also asked to consider their past activities as these potentially reinforce each other. Moreover, the results are drawn from answers derived from individual semi-structured interviews carried out with group members, former members and key informants. Transcripts emphasize the importance of human and social capital factors as this was mainly the focus of interviews. Finally, the authors own observations during activity implementation were also considered. The results were subjected to group assessment during the feedback sessions held with the three groups. The results are disaggregated by group and presented according to the five capitals (financial, physical, natural, human and social) framework presented by Scoones (1998) and each factor is labeled as negative or positive and external and internal to the group, following the SWOT analysis logic<sup>25</sup>. Tables 11, 12 and 13 at the end of this section summarize the main findings (Pages 100, 101 and 102).

Analysing group functioning with a case study approach enables a deeper insight into how different factors affect groups. This makes conclusions highly contextual, but at the same time enables a detailed analysis of the interplay of factors. In this regard, the explanatory power of a singular variable is much inferior as compared to the potentiality of connecting them (Agrawal, 2001). Thus, it is possible to speak about critical junctures in the environment that ease or block the development potential of a CBO, but it will depend on the internal capacity of a CBO to seize opportunities or cope with challenges. A better understanding of this idea can be grasped with an example for each group, which serves as an introduction to the results.

##### ***4.5.1. Tuamiho (Ilakaka)***

In the case of Tuamiho, the group was formed as the result of the intervention of MJUMITA which provided the group with basic training in horticultural practices, group management and inputs such as seeds. Furthermore, two group members were trained as CBT's. When the group started to work with Trans-SEC, that was no longer under the responsibility of MJUMITA, but since the group kept in contact with the NGO through the CBT's, when they deemed that their help could be useful in the implementation of their action plan, they encouraged Trans-SEC to create a broader coalition of interests. Furthermore, this action brought them directly in touch

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<sup>25</sup> Categorization proposed by Agrawal (2001) in Annex 4.

with a private extension officer based in Kilosa. This was possible due to the availability of this external support, but also due to the capacity of members to sustain these ties and engage in meaningful ways with external partners (Devaux et al. 2009).

#### ***Financial capital***

Tuamiho group has been relatively successful generating revenue for its members. In its previous harvests, the group had some problems with pests and the commercialization of products. Some members acknowledged a problem in the sales of the last harvest due to poor prices and in the computation of individual earnings. The group perceived as an external threat the limited options to market their produce which is reflected in the power exerted by traders setting the prices and required quality of tomatoes. In spite of that, the members could enjoy a meagre income from the group activities. There is a relatively low income inequality among members which enables the group to keep up with a uniform and regular contribution by its members when needed. However, up until the group engaged with Trans-SEC project, it did not have a saving and credit scheme which implied that individual contributions were not so regular. It remains to be seen how the new situation can affect the functioning of the group. Lastly, the group is renting the plot from a neighbour, which adds some uncertainty to the planning of activities, nevertheless members are confident about the mid-term validity of the agreement.

#### ***Physical capital***

The group owns basic farming inputs, such as forks and hand hoes and at times could rent an irrigation pump (from individual members) and an ox-plough. Thus, they complained that their farming was labour and time intensive. The group aimed for more capital intensive practices, such as using chemicals and tractors, however the availability of these inputs in the village is very limited and their costs exceed the group capacity. The lack of inputs such as pesticides is blamed by the group for its past problems harvesting.

*“For the group to grow it require members’ efforts. And since our group was still backward as many things we did was by hand, especially irrigation. That’s why at the beginning we had a small farm, for instance in that other side we had only an acre but it was really difficult during irrigation because of small local buckets that we had. At some instances women were very tired leaving only men to continue with the work.”*

(Man, Tuamiho Member Ilakala, 08.04.2015)

Ilakala is separated by 39Kms from the economic hubs of the area, Kilosa and Mikumi. The village is situated in the middle way of these two towns, which can be accessed via a public bus passing approximately every hour and taking one-and-a-half to two hours to reach it.

destination. Group members complained about the unreliability of this transport and ruled out its use to carry the group production because this could be damaged. In this regard, the group perceives this lack of transport as a limitation in their marketing strategies and adds on the problem of trader power. Finally, there are fewer off-farm income opportunities as compared to Changarawe, income depends heavily on agriculture and in general the local economy is less dynamic. Ilakala is not a real alternative outlet for the marketing of the group' produce, and only small amounts can be sold in the local shops and the weekly market.

#### ***Natural capital***

The land used by the group is located nearby water source which enabled the group to irrigate manually with a moderate effort, and additionally they were satisfied with soil quality which yielded in spite of limited use of chemicals. In the hypothetical case that the landlord decided to terminate the tenure agreement, the group was hopeful to find land with similar characteristics due to the overall availability in the village. Finally, a critical factor for performance was the volatility of climate conditions. Whereas in a previous season the group harvest suffered from drought, the present season was characterized by excessive rainfall.

#### ***Human capital***

Tuamiho group was started in the frame of a reforestation project and enjoyed the support of an NGO in its early stages. The group was provided training among other things in horticultural techniques. Furthermore, two group members had the opportunity to take part in a capacitation seminar to become CBTs for other groups.

*“The idea of training was that we, CBTs were to assist the Extension Officer in farmer’s facilitation here in the village, in a way that, some places instead of going himself.”*

(Woman, Tuamiho Member and CBT Ilakala, 12.04.2015)

The group perceives that due to these experiences in different trainings they have proved their capacity to absorb and implement new knowledge. This was confirmed in the frame of the group workshops which were conducted particularly smoothly. Some members back up their aptitudes with their individual trajectories conducting business, exerting political responsibilities or working in the formal sector in different locations. This enriched background enhances the overall performance as a whole, by improving its organization or enabling the group to seize opportunities in critical junctures. An example of the latter was produced when a group member with a business background and knowledge in agriculture represented the group in the purchasing of the irrigation pump. After some bargaining he preferred to delay the procurement and do it in other town where he was convinced that a better deal was possible. On the other hand, as it was reflected on section 4.4.2, some members with lower educational attainment



perceive that they have a secondary role in the group, thus being somehow alienated from group activities. The group leadership has been discussed in section 4.4.2 and remains unclear whether the impact of leaders on overall group functioning is positive or not. Lastly, the group has a large pool of young and middle-aged workers which facilitates the physical work of farming.

#### ***Social capital***

There is a great consensus about the underlying motivation for group membership, which is the desire for learning about horticultural practices. This was the binding force to come together in the group. Still after more than one-year functioning, the group was regarded as a collective vehicle for learning. For many group members the extent to which the group remains united will define its ability to deliver results which could be facilitated by the age and size structure of the group:

*“The good thing is that our leaders are of age so they have that capacity to face any group’s challenge. Also many of the members are grownups, no young people; so, yes we have issues but nothing serious enough to break the group”*

(Woman, Tuamiho Secretary Ilakala, 17.04.2015)

The group praises itself for its ability to plan and implement collective work, for that matter it has been able to develop an effective system to organize farm work, ensuring high levels of attendance to activities conducted on a regular basis and dividing tasks in a way that is acceptable to members. Contrary to that positive aspect, after harvesting and during the marketing the group failed to implement its own bookkeeping system which undermined the transparency of group activities.

In terms of rule enforcement, some members perceive that a flexible implementation of rules and sanctions may be adaptive to individual situations, however on the other hand others perceive that this may be constraining the ability of some members to actively participate in group discussions.

*“If you agree on something then all members should adhere to that for example if it’s agreed to turn off the cell phones during the meetings, all members should do that. And if one member fails to adhere to this principle, leaders should be able to fine the member so he can be an example to others and stop that behavior from appearing again. For example, with the issue in our group; it’s a principle for every group that ideas from all members must be respected. So when someone stands to speak his mind, he should not be disrespected. He should be given a chance to speak his mind and then you answer him politely.”*

(Woman, Tuamiho Member and CBT Ilakala, 12.04.2015)

Several group members participate in other groups in the village, although this may put their limited resources in conflict, their different experiences in group work can potentially reinforce each other. Lastly, the group has been able to maintain contact with the organization that sponsored it in the first place. As a result of this collaboration two of its members have founded and assisted other groups in the village. Furthermore, through the mediation of the group this research team was linked to MJUMITA and a broader coalition of interests was formed around the group. This shows that the group is able to sustain its links to external partners.

From an external point of view, the group stands a chance to benefit from the overall presence of organizations in the village. In addition to the presence of MJUMITA, Care International was present in the village forming saving and credit groups, leaving a trainer in charge of advising the existing groups of which some Tuamiho members are part of. The presence of external support is more remarkable than in the other villages. At the community level, group members raised their concerns about how some community members might be spreading rumours about the group or manipulating members to reconsider their involvement in the group. This last point is illustrated by a member who was lending his individual irrigation pump to the group and was advised not to by an outsider. The origin of this problematic might be in the jealousies arose by the external support received from the group. Finally, the group itself has suffered from the ongoing conflict between livestock keepers and farmers which is undergoing in Ilakala: once the group farm was destroyed by cattle, although there was a friendly resolution via mediation of the group leader which involved a compensation for the group.

#### **4.5.2. Upendo (Changarawe)**

Upendo provides an insight of the importance that development of group norms, procedures and a flexible implementation of rules can have in group cohesion and functioning (Thorp et al., 2005). This group was self-established by young community members based on relations of neighbourhood and political affiliations with the aim to support individuals' livelihoods. The example of the member that suffered a personal misfortune and received group help in the form of free labour illustrates how this type of informal mechanisms, which are facilitated by tradition but also by members' personal closeness, can help to absorb shocks that otherwise could threaten the entire stability of the group. Similarly, as the secretary acknowledged, the group is flexible in collecting payments or contributions from members that are facing difficult situations at the personal level, and repayment deadlines or contributions can be postponed. Additionally, the legitimate figure of a community elder helps the group to cope with internal disagreements that can be caused by different views or external rumours. These types of, initially informal, mechanisms were crafted by the group on the basis of internal consensus and have gained legitimacy before members, as they have proved as valid ways to deal with internal

problems over time. These examples are paradigmatic on how social capital is implicit in group action and facilitates it. Contrary to Barham and Chitemi (2009), the presence of altruism, social norms or trust in the frame of group work enables the group to cope with shocks, ensuring the continuity of group activities, which in turn are generating income or credit for its members.

#### ***Financial capital***

It was acknowledged that there are different income levels within the group and for many group members the flow of income is more irregular than for others. In the group there are several members that own off-farm business which provides them with a constant flow of cash, although the business cycle is clearly conditioned by the agricultural season (Höhne, 2015). This inequality poses a problem insofar as some individuals are unable to meet weekly payments and this delays the group.

*“Contrary to me, I can make some pancakes for selling while saving my money for group contributions, others don’t have that capacity, unless he goes for manual labor where he can get something for his family and for the group, but it’s always difficult.”*

(Woman, Treasurer Upendo Changarawe, 28.04.2015)

The group is producing and harvesting African eggplant and hot chilies on a constant basis, which yields a benefit for members or nurtures the group capital stock. In that regard, the group has sustained for some time a saving and credit scheme which has provided individual members with access to capital for their individual projects. One member commented that the group ensures that the group has agreed to ensure that in times of peak demand all members can access capital. Finally, the land used by the group is rented to a neighbour and the group is pessimistic about the possibility to keep it.

From an external point of view, the group is vulnerable to the vagaries of the commodity market. The group stated that they depend on brokers from Dar es Salaam to sell their produce and they have limited alternative options. Furthermore, the group complained about the low prices obtained for their output.

#### ***Physical capital***

The internal stock of physical capital for agricultural production is relatively low. The group owns no irrigation pump or tractor. Furthermore, the group claimed that chemicals’ prices were not affordable. Related to the action plan implementation, the group lacked most of the capital required to start the bike rental business such as spare parts or a shop were to fix the business. However, once the grant could be disbursed they assessed that it would be relatively easy to find them.

From an external point of view, the village is well located nearby a major town, Kilosa, and its connectivity is good in terms of infrastructure and multiple transport options. This gives the group a relative easy access to farming inputs. Furthermore, being connected to an economic hub boosts the local economy and provides more options for income derived from off-farm and trading activities. In general, this provides a local outlet for individual production and creates a market for the bike rental business, as it is common to travel to Kilosa by bike. Finally, the inside the village there is the possibility to lease agricultural equipment, the group remarked on the availability of tractors.

#### ***Natural capital***

From an internal perspective, the current plot location constitutes a strength for the group. The plot is located nearby a water source and soil is of good quality according to the group members. Moreover, the plot is located on the side of the main road and close to the place where most members live, which individual movements and harvest transport, thus reducing transaction costs for individuals and group respectively.

From an external perspective, the group is exposed to the whims of climate. Rainfall is not scarce, and actually the last season was abundant, however its volatility together with abnormal high temperatures are making farming more difficult for the group. The plot farmed by the group may be taken over by an agribusiness company and in general the availability of land in the village is very limited. Some years ago the Government distributed two acres of land among people older than 18 years old, and since then it has been very difficult for young people to access land. The group was concerned that they would be forced to move in a plot of inferior quality.

#### ***Human capital***

The group is outstanding for its young age and large membership. Undoubtedly this gives the group a great manpower which can be used in farming activities. So much so that it is rare the case when all members need to be present to take care of the plot and shifts are established to regulate workload. On the other hand, members complained that their knowledge to treat pests and diseases or applying fertilizer was insufficient. In terms of the strategic action implementation and other commercial activities, members were confident that the experience of many members in business management (as it has been mentioned before, the chairwoman owns a bike rental business herself) and community activities was an asset for the group.

*“I was like an intermediary to the youth of this village. So it was easy for me to organize young people in this village and tell them about this. That as young people here, we can join together and fight poverty as many are not educated so there’s no prospect of employment especially in the village. I was the first one, I*

*didn't hear or saw somewhere they have done this, no. I decided to organize young people here, even started the project, up until Trans-SEC came looking for us."*

(Woman, Treasurer Upendo Changarawe, 28.04.2015)

External to the group, members valued the presence of a large and healthy pool of labourers in the village. According to them, this could be a source of demand for the bike as workers may need it to work. Considering that some members employ people to attend on their behalf to the farming activities this may be considered as an advantage. Related to the action plan implementation, the group valued positively the presence of specialized technicians that could be eventually hired to repair the bikes. Finally, the group is vulnerable to individual circumstances, members showed their concerns about how individual problems in businesses or in the household can disrupt their ability to contribute to the group.

#### **Social capital**

Members perceive themselves as similar and even feel love for each other. These perceptions are based on relations of neighbourhood, family or political affiliations. This is a strength that contributed to the formation of the group and its long term viability. Furthermore, this enhances the trust and capacity to work together.

*"We had created the unity atmosphere here from a while. You know, I was once a youth chairman of CCM here in Changarawe. So in building the Party, that's when the idea came and we started Upendo. We were together as Party members but we decided to join as youth, differently and form a group. So we started this group. (...) Strengthening came from meetings that we have as it's then that you know about people. In the UVCCM we are around 46 people. I wrote a letter to be allowed to start a group that will be free for all people to join without being prejudiced because of what party they're from, and the group will be free from any politics."*

(Man, Upendo member Changarawe, 28.04.2015)

*"We are always together and we trust each other. Whenever we go for work we go together, and people in this area they see us that Upendo members are there and are working together. So in a way, they differentiate us with other groups which do no longer exist today."*

(Treasurer Upendo Changarawe, 28.04.2015)

Contrary to what has been said before, the age structure and the number of members may be a liability for the group when group dynamics are considered. Although politics brought the group

together, some members showed their concern about how different views can trigger small conflicts within the group which have the potential to harm performance.

*“We allow people from different parties in order to remove that element of politics, because if we do that we would be quarreling every day.”*

(Man, Upendo member Changarawe, 28.04.2015)

However, the group has designated a specific procedure to deal with these issues through the mediation of a respected elder. This type of arrangements is referred as informal as they are not foreseen in the constitutions that this groups normally use as guidelines<sup>26</sup>.

*“You may find people quarreling in the group sometimes even cursing each other, to the extent I decided that even though I like Upendo, I had to leave the group. (...) It was about political parties; one was on this party another on another party. This one wanted this candidate and that one wants that other candidate. (...) We decided to have him so that when we have issues that needs grey haired head we can go to him.”*

(Upendo Chairwoman Changarawe, 19.04.2015)

Related to that aspect, leaders as well as members praised the flexibility in the implementation of rules, sanctions and deadlines for repayments as they are adapted to individual circumstances and make possible that these and group membership can coexist. Other positive aspect is that systems of mutual help are institutionalized in the group which provides a safety net to deal with idiosyncratic livelihood shocks. Members belong to different organizations, this is more acute in the case of group leaders, a group member has complained that this often poses a challenge for the group as they are time constrained to fulfil their duties as group members. From a positive side, multiple membership may enhance the capacity to handle group affairs. Finally, members' capacities do not only apply to business management, in addition some group members are involved in the village council and have a strong involvement in the ruling party CCM. This gives them a notorious status within the village and the capacity to interact with political and social agents present in the village. As it was acknowledged by a group member this privileged position may bring the group closer to sources of relevant information, such as availability of financial schemes.

*“What happened is, one of the local leaders advised us about forming a group, that we may even get some funds and donor support. So, together with him we formed the group.”*

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<sup>26</sup> In case the group has been formed or worked with an NGO, the constitution might be a template for groups like this.

(Man, Upendo member Changarawe, 28.04.2015)

From an external perspective, the group is threatened by the imminent takeover of land by an agribusiness company. This will not only affect the competitive position of the group in relation to land, but it will also affect individual livelihoods seriously, whether this has positive or negative implications on the long run is to be seen. The group also stated that the community is often source of conflict to the group because rumours are spread about political affiliations within the group.

*“There was a problem that was about to happen; like the one about that sister concerning soda, it was dealt with and finished. (...) then words started to move around that the two people involved in that problem; who in fact didn’t come to a meeting for two weeks, some people from outside the group came to the group and said that the two were saying bad things about the group. The chairperson and the secretary shared the issues with all other members; we decided that we should keep quiet about the whole thing, to see if it’ll continue. After staying quiet the lies stopped and we came to realize that the whole thing was a lie spread around so we can get away with the two.”*

(Man, Upendo member Changarawe, 28.04.2015)

The group explained that discussions occur as a result of rumours and political differences. On the other hand, they consider that the community could have a positive influence guarding the assets of the bike rental business. Political frays at the village level have a destabilizing potential for the group, especially in a year of campaign like this one. As it has been mentioned before, the group is in a good position to access external support and some members have acknowledged that the group needs to become more formalized to gain this support, for instance by opening a bank account.

*“Another reason is the fact that we were able to register our group within the village office up to the district level we’re recognized. That alone makes us different.”*

(Woman, Upendo Treasurer Changarawe, 28.04.2015)

*“We have not received it yet because of the process to get the money. They don’t give cash, we have to prepare a proposal and we must have a group account.”*

(Man, Upendo member Changarawe, 28.04.2015)

Finally, all farmers in the village have emphasized that there is a great problem<sup>27</sup> with the division of land for grazing and agriculture, and some group members have suffered losses as a result of it.

### **4.5.3. Wendo (Idifu)**

Wendo illustrates how some variables can have ambiguous effects on group functioning. On the one hand, there is a common notion of positive leadership; if Wendo leaders are compared to leaders in other groups, they are remarkable for high educational attainments and multiple professional and social experiences. On the other hand, most of members are old and/or with a low educational attainment. Leadership was capable of mobilizing the group and providing direction to start new activities. Previously and during the presence of Trans-SEC, the group showed high levels of cohesion and trust, and rules were never enforced. The functioning of the group was guaranteed by a notion of togetherness, positive leadership and simple activities. Guided by their leaders, the group decided to pursue a soap business as an action plan. The complexity of these activities and the rendering of all members accountable turned out to be challenging according to the prevalent governance structures of the group and the general capacities of members. The group instinctively designated the leaders to represent the group in the numerous trips to Dodoma that were required or with the task of bookkeeping. Soon additional costs associated to transport and cumbersome administrative processes emerged, raising alarms with members. Additionally, the lack of benefits combined with a deficient registration of transactions, raised suspicion among members. Leadership and high levels of trust, which initially could have been seen as assets, turned to be an incentive for other members to get out of sensitive matters of group management, thus undermining the accountability of the group. It is more likely that the magnitude of the project exceeded the capacity of leaders alone to implement it, rather than thinking that they acted in bad faith. But this example shows how different group stages require a different interplay of factors to make the group succeed. The more complex activities become inequality in members' capabilities are more likely to undermine inclusiveness and transparency, hence rules and norms become more important.

### ***Financial capital***

The group is ballasted by the individual capacity of members to contribute financially to the group, many of the group members can be considered as low income in the village context. In the last visit to the village, some members expressed their concerns about the lack of contributions in recent weeks to the group saving and credit scheme. In spite of that, the group

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<sup>27</sup> This problem was present in all villages but in the case of Changarawe was overemphasized during interviews and workshops.



was able to provide small amounts of credit to some of its members. This proves that the group has the capacity to mobilize and organize members around the idea of bounded responsibility and mutual trust. The limited capacity to save can eventually jeopardize the sustainability of the project as it might require the use of reserves from the group. In terms of the group own capacity to generate resources for its own members, its record was poor until the strategic action of soap production was implemented. The papaya plantation was still in its early stages, however in the last visit the expectations for harvesting were very pessimistic. Finally, the group through one of its members owns the land used for the cultivation, which reflects the availability of this resource in the village.

The group had recently opened a bank account which provides it with the opportunity to save with low fees. The group complained that the price of the oil used to produce the soap had risen recently.

#### ***Physical capital***

The group choice for implementing a soap production project as strategic action was backed by the certain capital endowments that individuals could put at the service of the group. That was the case of bikes as vehicles for marketing activities, a space for production or small tools for the production of soap. However, when considering the supply of materials, the group mobility is constrained by its lack of any motor vehicle that could give it autonomy and flexibility. Regarding its agricultural activities, the group has a poor endowment of farming inputs which is illustrated by the use of local papaya seeds instead of commercial ones. Eventually this seeds turned out to be male and the will bear no fruit for the group this season. This event reflects a problem of access and affordability.

From an external perspective, Idifu is a quite isolated village. The access to the village is limited to a daily bus going to Dodoma through a very poor road connection. As mentioned before, this is affecting the access to farming supplies, but also to keep a regular stock of raw materials needed for soap production. From a village perspective, this isolation is harming the perspective of off-farm activities and local demand. Nevertheless, there are a few shops in the village and surroundings that the group can use for the commercialization of its products and the village authorities open a public space for trading business that can be rented out.

#### ***Natural capital***

There is a great consensus in the fact that rainfall levels are conditioning life in Idifu. Limited rainfall can potentially harm papaya production, but most importantly will affect members' ability to contribute to the group.

*“Poor rainfall as we depend on it for farming, also poor contributions from the group members. (...) We sat together and we agreed soap making and Papaya*

*farming, a few people suggested Sunflowers but the challenge comes that if the rain is poor then we can't cultivate. With soap making everyone agreed to do it because it's business."*

(Man, Wendo Secretary Idifu, 17.03.2015)

Some group members complained that the plot choice had not been the most suitable for papaya production, in fact the group had to solve problems of soil moisture following the extension officer advice. On the other hand, in spite of these problems, the group has plenty of land available in the village, and even some members have idle land as they cannot afford to cultivate it on an individual basis. In relation to the soap project, the village environment provides the opportunity to use raw materials that can enrich the quality of the soap if proper techniques are applied, such as baobab, or to enhance productivity of production i.e. by using locally produced sunflower oil.

#### ***Human capital***

The age of group members poses a problem for the implementation of energy intense activities, this is clearly the case of a soap business. Marketing activities vividly illustrate this point, the group had foreseen the transport of batches of soap to other villages and they had planned the few younger members of the group to do it. However, energy is not only required at the physical level, undertaking a venture like a soap business requires a whole new mindset for members, involving new activities and responsibilities, this could be more challenging for older members. In addition to that, these new activities and responsibilities demand certain skills that often are linked to certain educational status, like keeping records of individual transactions or managing group accounts. Some group members, in particular the leaders and one young member, have been exposed to environments that require and foster the development of alternative skills, such as project committees at the village level or urban jobs in the formal economy. On the other hand, some other members have no formal education at all. Although the group perceived leadership as positive, this asymmetry was already noticed by the group and if not appropriately handled poses a systemic risk for the group if accountancy between leaders and regular members is undermined. In spite of having different capacities, none of the group members has experience running a business and the group skills producing soap are limited to the training provided by one organization in the frame of the support provided to the group by Trans-SEC. Two examples illustrate these points. First, in the last visit the group was struggling to set a price that would cover production costs as they had stopped keeping records for raw materials transactions. Second, the group had not yet found the exact point for drying the soap to ensure an optimum texture. Other aspect to be considered is the knowledge in agriculture, as mentioned before the papaya seeds used were male ones and the group

expected to revert the gender of the trees by planting maize next to them<sup>28</sup>. The extension officer, suspected that previous problems with the growing of trees were due to insufficient irrigation.

The group was shown vulnerable to the personal situations of its members and their households. In the last visit, the village was undergoing a severe drought and villagers ought to look for alternative sources of income. A group member had not been seen for few weeks and had not yet returned the money from his marketing activities. A member of the research team found him around the village and he claimed that he had been spending long periods of time in the hills nearby the village trying to collect honey. Similarly, the group acknowledged that due to the difficulties posed by the drought the contribution to the saving and credit scheme had been drained.

#### ***Social capital***

An important factor to explain the trajectory of the group according to members was the unity, love and trust portrayed by the group. Some of the reasons expressed related to their neighbourhood and friendship relation, facing common challenges or being together in church and following the same religious norms.

*“In our group we love each other, we don’t quarrel, if we say something we agree together. That’s our good character.”*

(Woman, Wendo member Idifu, 08.05.2015)

It is due to a combination of good leadership and social commonalities the group has shown dynamism to mobilize membership and implement activities without the help of any external partner until the time in which the group engaged with Trans-SEC project. Thus, the group believed in its own strength as a cohesive force to move forward. On the other hand, as it has been outlined in section 4.4.2 the enforcement of rules has been so far very weak and the group had so far failed to develop procedures that enhance transparency (Thapa, 2016), such a bookkeeping system that works for members regardless their educational attainment.

From a community perspective, the socioeconomic environment is not very conducive for innovation. As it was reflected in section 3.2, the consumption of alcohol is a burden for social development. It is difficult to ascertain the implications of this phenomena in individual members of the group, however some members hinted to this possibility trying to explain the disappearance of a group member previously mentioned. Be it as it may be, it is clear that the embeddedness of alcohol consumption in Gogo life might act as a hindrance for social change processes. In addition to this structural problem, the drought suffered by the village is affecting

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<sup>28</sup> According to a conversation with the extension officer this is a widespread belief but its effectiveness is dubious.

households and during the last visit to the village, the Government was collecting household data to organize the distribution of food relief in the village. In this context few economic activities can thrive. The group said that they received complaints from customers when they tried to reduce the size of soap bars and they expected a small margin to raise the price. Finally, the group was struggling to finalize its registration<sup>29</sup>, this made the group incur in extra expenses as they had to travel in several occasions for that matter. This view was backed up by the local administrator:

*“They need to have a certificate “to be known as”, because if they want to apply for a loan, who are you coming? Where are they from? Who is going to bail them? Or somebody who will stand as another part for them. So they need those kind of documents and these documents are not produced for free. So they have to pay. The fees for them to probably go and take some photos, the process... The whole process, you know, most of our offices, they don’t have that much resources... How can I put it? You come, you do this and come tomorrow, it is not a process that you will think is a one stop shop, you do that in one day and you go... No you have to use transport, people would have to stay in town,...*

– *Transactions costs...*

*Aha, transaction costs. And also the process demands for a lot of time, going back and forth, so it is like... agh! They cannot do that... But groups are around. A lot of them.”*

(Ward Officer for Idifu, 20.03.2015)

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<sup>29</sup> See Annex 1 to know more about group registration process

Table 11: Factors influencing functioning of Tuamiho group<sup>30</sup>

	<b>Financial</b>	<b>Physical</b>	<b>Natural</b>	<b>Human</b>	<b>Social</b>
<b>Internal</b>	Periodic income generation (+)  Moderate income inequality (+)  Land tenure (-)	Farming inputs (-)  Transport (-)	Current land: Water source & soil (+)	Agricultural skills (+)  Age & Size: Manpower (+)  Leadership (+/-)  Individual capacities (+/-)  Training capacity (+)	Shared goal (+)  Age & Size: Conflict (+)  Collective action (+)  Networking ability (+)  Multiple group memberships (+/-)  Group management (-)  Rule enforcement (+/-)
<b>External</b>	Low market prices (-)	Distance economic hub (-)  Local market (-)	Land availability (+)  Rain volatility (-)		External support (+)  Gossiping (-)  Livestock conflict (-)

<sup>30</sup> (+) Denotes a positive influence, (-) negative influence and (+/-) ambiguous effects on group functioning.

Table 12: Factors influencing functioning of Upendo group

	<b>Financial</b>	<b>Physical</b>	<b>Natural</b>	<b>Human</b>	<b>Social</b>
<b>Internal</b>	Considerable income inequality (-)  Irregular income members (-)  Regular income generation group (+)  Financial scheme (+)  Land tenure (-)	Farming inputs (-)  Bike business capital (+/-)	Current land location (+)	Age & Size Manpower (+)  Individual capacities (+)  Agricultural skills (-)	Shared social traits (+)  Unity/Trust (+)  Age & Size – Conflict (-)  Rule interpretation – enforcement (+)  Mutual help (+)  Multiple memberships (+/-)  Social network (+)
<b>External</b>	Low market prices (-)  Broker power (-)	Access to inputs locally (+)  Short distance input market (+)  Local market (+)	Land availability (-)  Rain volatility (-)  High temperatures (-)	Available labour (+)  Individual situations (+/-)	Land grabbing (-)  Community (+/-)  Political disputes (-)  External support (+)  Livestock conflict (-)

Table 13: Factors influencing functioning of Wendo group

	<b>Financial</b>	<b>Physical</b>	<b>Natural</b>	<b>Human</b>	<b>Social</b>
<b>Internal</b>	Low income (-)  Limited savings (-)  Financial scheme (+)  No income generation (-)  Land tenure (+)	Soap making equipment (+/-)  Farming inputs (-)	Rainfall (-)  Land quality (-)  Land availability (+)	Size & Age – Manpower (-)  Unequal Capacities (+/-)  Leadership (+/-)  Agricultural skills (-)	Shared social traits (+)  Collective action (+)  Rule enforcement (-)  Group management (-)  Unity (+)
<b>External</b>	Price soap inputs (-)  Access banking (+)	Distance economic hub (-)  Transport (-)  Local market (+/-)	Soap resources (+)	Individual livelihoods (-)	Depressed environment (-)  Administrative barriers (-)

## 5. Discussion

### *5.1. Discussion of approach and methods*

The following section discusses from a reflective perspective the implementation of the planned methods in the frame of PAR. First, the participative nature of the research is questioned. Additionally, methodological challenges, research impact on the groups, interactions between participants and researcher, and outcomes are discussed.

This research should be framed as one of the stages of a broader process in which Trans-SEC has engaged with the three CL-groups. Previous to this stage, there was the problem identification and planning of a feasible action plan by the groups (Schulz, forthcoming). This research has involved the initial execution of the action plan in parallel to the assessment of factors affecting group functioning. Subsequent stages involved the participatory monitoring (Thapa, forthcoming) and evaluation of the strategic actions carried out by the groups. Having this in perspective is critical in order to understand the true participatory nature of the research project conducted together with the groups. In the first place, one can question the participatory nature of the project by saying that it was supply driven, or just offered to the groups. However, one can infer that the mere existence of the group showed their willingness to act jointly in order to sustain or transform their livelihoods in their locale. Thus, the research fulfilled one of the critical conditions of PAR which require participants to determine the transformation that they want to undergo (McTaggart, 1994). It has been argued that PAR should account for participants' views to determine the goals of the research (Chataway, 1997, Kidd and Kral, 2005), or even adapt the research question according to the development of the PAR process (Chesler, 1991 and Fox, 2003). The research question itself, assessing factors affecting the functionality of CBOs, was formulated ex-ante without prior consultation with the groups. Nonetheless, there was a transparent handling of this issue as the groups were informed of the particular goals of the author, which were found to be relevant by the groups.

In the last stages of the field work, groups had the opportunity to receive the preliminary results from the author in feedback seminars, thus ensuring that participants would "own" the research outcome (Kemmis and McTaggart, 2005). Processing the results by finding patterns and connections was the main contribution of the researcher, but all the information had been generated "by, from and with" (Chambers, 1994b) the groups. This realization was clear after receiving a very positive feedback and congratulations from the groups. Another claim of PAR is



that the new generated knowledge is not only owned by the participants<sup>31</sup>, but the process and outcomes will enhance the participants' capacity to transform their realities in the short and medium term (Kemmis and McTaggart, 2005). The research conducted with the groups could achieve that in two ways. In the short term, the groups generated a great volume of information which was processed and structured so that it could facilitate their decision making and activity implementation. In the medium term, the tools used such as "SWOT" analysis or "Resource audits" are planning tools that the groups could use in order to act strategically in the future<sup>32</sup>. Due to the short term involvement of the researcher, it is impossible to assess the "empowerment" that may have occurred. Only an evaluation in the medium and long run can ascertain if the PAR was successful in this regard.

During group workshops different challenges emerged that can be said to contravene the basic principle of PAR, namely inclusive participation<sup>33</sup>. Even though meeting times were agreed with the groups almost on a daily basis, some participants repeatedly arrived later. This could reflect different levels of interest, but when asked about this issue the majority of participants complained that their individual workload was often times overlapping with the daily group workshops that kept them busy for four or five hours at times. Furthermore, in Idifu the government-led TASAF project was taking place in parallel to the workshop conducted with Wendo. Having to work on the construction of a road from 7 o'clock in the morning until midday was a burden that participants could hardly overcome. Unfortunately, it was possible to see how at times, some participants had problems to keep themselves awake. Considering the tight schedule of the research, it was difficult to deal with this situation in a fair manner. Undoubtedly, this undermined the inclusiveness of the activities for certain members. In Idifu, another aspect that was not conducive for participation was the language barrier between the Swahili translator and the native Gogo speaking participants. Different levels of mastery in Swahili certainly affected the willingness of some group members to participate in the activities. This issue is particularly relevant as higher mastery of Swahili reflects higher educational attainment; thus even though all members were equally encouraged to participate and it was made clear that there were no right or wrong opinions, some members participated significantly less in group activities. Similarly, as the testimonial of a Tuamiho member confirmed, participants with lower levels of education may feel less compelled to participate as a result of the constraints imposed by group dynamics. Although participants could contribute verbally or

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<sup>31</sup> More accurately it could be said that the knowledge is co-owned by the established joint venture of researcher and participants.

<sup>32</sup> Or at least it seems so from an academic perspective, whether participants really found useful these tools in their local context is difficult to ascertain. The asymmetric relations derived from different backgrounds will be later discussed.

<sup>33</sup> An account of how these issues were addressed from the facilitator perspective is provided in the following paragraph.

by drawings, illiterate group members tend to internalize a disadvantage respect of the others (see 4.4.2 – Rules enforcement and sanctions).

This point illustrates the presence of an internal structure of power within the group (Kesby, 2005) which unfortunately, in the frame of this action research was only identified, but in no case overthrown.

Ensuring that the participatory and inclusive nature of the workshop was respected was the main challenge faced in the role of facilitator. Being a young and inexperienced European in rural Tanzania and having the responsibility<sup>34</sup> to carry out a development project and obtaining relevant research results generated some anxieties that could be reflected at times in the performance of this role. Firstly, it was necessary to negotiate the ongoing dilemma between inclusiveness and efficiency, with the addition of very limited time resources. In order to make the workshops move faster it was tempting to resort to the opinion of participants that more vividly participated regularly. In order to ease this bias, semi-structured interviews were carried out with participants that were less participative in the workshops.

Another critical aspect was to walk the thin line between personal involvement and objectivity (Kidd and Kral, 2005), this could even bias the results of the research. At times the groups asked for personal opinions or there was a moral imperative to point to some issues, which required these ideas to be made explicit. Although developing certain feeling of group belongingness is unavoidable and possibly necessary, certain principles should be followed in order ensure the validity of findings. In this case, a spirit of co-learning (White, 2003) with no direct intervention was followed. For that matter questions were asked trying to steer group reflection but in no case the facilitator stated an idea directly.

Chataway (1997) argued that in the context of PRA it was impossible to reverse power relations whenever the researcher comes from a “dominant society”, but rather address these imbalances in an open manner with participants. In this context, it can be argued that representing a European donor and having a higher educational status placed the facilitator in the “dominant society”. Since the first session, it was agreed that the workshops would be a space for open discussion in which all participants would respect each other; the space would be arranged in an inclusive manner<sup>35</sup>; it was stressed several times that all opinions and views were valid; or the meetings were fixed at the convenience of participants. Furthermore, a cultural exchange was produced, as both parts showed a genuine interest to get to know from

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<sup>34</sup> Albeit well supported from the distance and by the local staff.

<sup>35</sup> For example, the disposition of the seats favoured circles or squares over the research team facing the group. Nevertheless, being the group guests the research team was enjoying more comfortable seats (i.e. plastic chairs compared to wood benches)

the others' reality. However, it is possible to argue that the "total" hierarchy reversal never took place as the times and tools used during the workshop put the research team above the group in the hierarchy of the process, which was aggravated that by the fact that the research team had indirect control over the funds that the groups were applying for. A moment which could symbolize a partial reversal in the group-facilitator relation is the feedback session in which the preliminary results were presented to the groups. To their surprise their views were reflected in the ideas that were presented, the explanation was that as a facilitator the task was to ask, listen, write down and put all the ideas together; the groups were the genuine authors of the research. Doing that together was a bonding experience that helped to overthrow some of the previously existing barriers that separated groups and facilitator.

The use of PV as project planning tool was a key factor in explaining some of the bonding that occurred between the research team and the groups. The amount of time spent together made of this an intensive, albeit exhausting, experience but some members reflected positively on it saying that contributed to increase the "love" that group members feel for each other. Similarly to Harris (2009), this collective experience gave the groups a sense of achievement and created long-lasting memories that contribute to develop group unity and identity, but also to cast them towards the community. Various members from different groups reflected that one of the most positive aspects of the PV process was the good image that this portraying of the group to outsiders. Furthermore, they thought this could help them to expand their membership or to raise awareness in their locale about the importance of CBOs. At least two of the three groups organized some kind of public viewing so that outsiders could watch the video.

The concept of video recording was, if not alien, distant to say the least to most of the participants. Most of the participants reflected very positively on the fact that they learned new skills that they could have never mastered otherwise. Some participants suggested that they could use these skills for private purposes as income generating activities. It was mostly younger members whom were more proactive in the use of the equipment, oftentimes adopting dominant roles that from the observer perspective seemed unusual for them. Similarly, it was observed that for two of the groups there was a gender difference in how the roles were divided. Men tended to take over the equipment, whereas women were more involved in presenting. Furthermore, men tended to overlook the process of whether their sub-group<sup>36</sup> was involved in that particular activity or not, whereas women adopted a more passive attitude. Even though a more equalitarian division of tasks was subtly promoted, respecting the groups' will often implied to keep the status-quo. In the case of Upendo group, they claimed that this decision was based on the natural talents of members. Tuamiho didn't acknowledge any

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<sup>36</sup> Often activities were sub-divided in smaller sub-groups to speed up the work.

difference, but drawing an analogy in how farming tasks are separated along gender lines<sup>37</sup> is tempting.

Giving the groups the opportunity to create their own audiovisual material in which their strategic action plan was conveyed was an act of “handing the stick” (Chambers, 1994a). Although, the structure of the message was given to the groups, the content was the result of their own work and the verbal and visual codes were chosen by them. This could be seen as a limit to the expressivity of the groups (Berardi and Mistry, 2012), but all the groups reflected positively on how it helped them to communicate with the donor: presenting their realities and projects, and ultimately gaining them the funds to implement the latter. Furthermore, all the groups acknowledge that having a DVD showing the group activities can help them to engage with other external partners in the future for their own benefit.

This research places its focus on how social capital can contribute to innovation processes in the frame of CBO action. In that regard is worth discussing how PV as a project tool can contribute to those aims. The previous paragraphs discuss how the PV process could have contributed to increase the stock of social capital of the three CL-groups. Firstly, enhancing their capacity to act together by creating a collective narrative and deepening members’ bonds. Secondly, enhancing the groups’ capacity to interact in their locale and further engage with external actors. These arguments are inconclusive facts, but they are hypothesis worth further research.

### ***5.2. Discussion of results***

#### ***5.2.1. Appraisal of CBO in the CSS***

The Trans-SEC project is an example of a development intervention in which groups have been created to become a vehicle for the provision of services, in this case the dissemination of innovations aimed to enhance food security. Although this research is framed in the same project, the approach used in it was different insofar that the cooperation was established with already existing groups and they determined the action to be carried out. In the following, the success of groups, their inclusiveness and the social implications of their presence in the CSSs will be discussed. Knowing who can access CBOs and why they are demanded can be insightful in order to understand how CBOs can be used in development projects, but as well, being aware of their limitations as a tool for poverty reduction.

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<sup>37</sup> To irrigate men are in charge of handling the equipment and women contribute with food.

The first question to be asked is to what extent CBOs are providing or facilitating the provision of services such as credit and insurance, agricultural extension and inputs or the spread of income generating activities. The results of the research show that group members have profited from group membership and have secured access to these services probably in better conditions than through other available channels. In the case of financial services, formal channels such as traditional banking or insurance companies are yet not available in the CSSs. Some interviewees expressed that formal microfinance schemes impose too stringent conditions and traditional lenders in the villages charge abusive interest rates (Höhne, 2015), therefore saving and borrowing is preferred through groups. When it comes to the provision of agricultural extension, in all CSS the presence of one or two extension officers appears to be insufficient to villagers, and even the officers themselves complained about the situation. The extension officer in Idifu even claimed that he was requested to pay for the fuel used in the field visits. In a context of limited resources is understanding that the GoT strategy includes the creation of pilot CBOs for the dissemination of good agricultural practices. These schemes expect that the pilot members spread the good practices subsequently to other members of the community (De Haan, 2001); to what extent this is achieved it was difficult to ascertain in the frame of this research.

Many non-members claimed that they would like to participate in such initiatives; however, they expected the extension officer to take the lead and organize the groups. Even if there are attempts to organize farmers in groups, it seems that public extension is insufficient to cover the latent demand. This research has not only shown how group members have generated income through group activities, but additionally many group members have decided to apply these same activities in their individual farms. The results from the CSS confirm that CBOs can be an effective and more efficient vehicle to provide community services.

The World Bank (2003) claimed that CBOs could be a platform to empower and give voice to poor individuals. On the contrary, there have been critiques about the inclusiveness of CBOs (Thorp et al. 2005 and Bernard and Spielman, 2008). The quantitative analysis of this research shows that group members are more likely to accumulate more assets and be more educated than non-members. Most importantly, higher surfaces of land cultivated make individuals more likely to be part of a CBO, although only to a certain threshold when more land cultivated could increase the opportunity cost of membership. The qualitative analysis showed that for the poorest members of communities being part of a CBO is simply not an option. The example of a former member of Wendo group shows that when health problems occur in a household this will limit the capacity of a member to generate the needed income to participate in group activities or simply provide his time in the form of labour. Similarly, the case of a member of Wendo and his mother (also former member) show that in case of facing livelihood constraints an individual will be forced to sell labour or look for other resources to generate further income

which pose a time burden that render group incompatible. Thus, adverse situations may force villagers out of the community social life and further deepen their marginalization (Clever, 2005).

Middle-aged individuals are more likely to participate in groups than young and older villagers. Additionally, women are more likely to participate in these groups, and often they do so if they are household heads, it is plausible to speak about a gender bias in group membership and even a group member in Changarawe argued that “women are better at social issues”. What is not clear from this research is whether this is a mutually agreed strategy in the household or if it is a venue for emancipation. However, the perception that could be grasped from different interviews was in line with the latter argument.

The analysis shows that for many individuals, groups are a vehicle to secure capital for their off-farm activities. Furthermore, it hints to the possibility that group members are more prone to be self-employed and are less risk averse towards investment. Joining a group is in itself an act of personal entrepreneurship as it implies starting a new activity, so this type of mindset could be a condition favouring membership.

In short, CBOs are not really inclusive for certain community members with a lower socioeconomic status. The results show that group membership may be related to households which can be considered as “well established” in the community. Group members enjoy a better position in terms of their agricultural and parallel economic activities, as well in other social aspects, however they may not necessarily be in the upper social tier of the community.

In such short time, it is difficult to discuss to what extent groups constitute a platform to empower sidelined individuals or give them a voice. However, the close contact with the three CL-groups provides an insight, as limited as it may be. Influence in group affairs can be determined by gender (Gotschi et al. 2008). In the case of Tuamiho group, some women mentioned that at times they found it difficult to participate in group discussions and furthermore one of them pointed out that being uneducated limited the willingness of fellow group members to listen to her opinions. When the group needed to purchase the irrigation pump in Kilosa two representatives (male and female) of the group were sent together with the author and the official of MJUMITA and a private extension officer. The woman was subtly sidelined in the process, which was perceived in small details such her walking behind the three men while they were talking or her limited contribution in the discussions in which she was addressed in limited occasions. In the case of Upendo, there is no evidence of any type of discrimination along gender lines; actually women had a critical role in the group. However, it appeared that wealthier members, regardless of gender, were leading the group, while the perception was that the rest and especially younger members had a peripheral role. In Wendo group, the interviewees assured that internal discussion takes place and the silent mood from

some members during the workshops was a consequence of a language barrier. However, it is also true that during the workshops the same members, usually old women with lower educational attainment, were isolating themselves from the activities and letting others do, even though they could carry out those activities in their native language. While this is not conclusive of any internal aspect of group functioning, it shows how certain type of activities in the frame of development projects can potentially alienate certain members of the community, rather than empower them or enhancing their capacity for advocacy. The perception was that roles and patterns of social behavior at village level shaped by gender, wealth or education were replicated at the group level as well.

There are different aspects that are worth discussing from a social perspective. First, when groups are externally induced this is often done through the village authorities. Mansuri and Rao (2003) argue that uncritical promotion of community based development may reproduce existing networks of power, thus aggravating internal inequality in communities. The quantitative analysis shows that group members are more likely to live in the surroundings of the village office. This could show that they are in a better position to secure relevant information due to their personal closeness to government officers or simply when officers assemble people they prefer people they know or can monitor on their own convenience (Agrawal and Gupta, 2005). An alternative explanation could relate to the issue of political patronage in the villages and the use of groups to secure political favours, as it was raised by the NGO officer. Although little is known about the causes behind this phenomenon, the creation of Tuamiho is an example of how this process could work. In the first place, the NGO approached the village authorities (i.e. extension officer) communicating the idea to create a new group and asking them to spread the word in the community. Secondly, the village authorities request sub-village heads to mobilize people that could be motivated to participate in the group. At this point one can make the hypothesis that personal relations play an important role in how the information is disseminated<sup>38</sup>. This result could be supportive of the idea of unequal access to social networks within communities (Agrawal and Gupta, 2005 and Cleaver, 2005). Another aspect of concern is the “abuse” of social capital. As it has been discussed the idea of working with CBOs is based in the belief that communities can make use of the social capital that communities have accumulated over years to improve their development. The advantages of CBOs when they work have been already outlined, but it would be naïve to expect that this will be always the case. In the case of credit groups, many examples emerged during the research in which groups collapsed due to the negligence of members or simply because they were unable to meet payments. The localised context of these groups and the destabilizing role of defaults or episodes of dishonesty can strain social relations and undermine the stock of social capital.

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<sup>38</sup> In the case of Tuamiho family relations are common in the group.

Lastly, a mention of the positive impact of group existence at the community level. For the villagers group action is one of the best ways to engage and sustain links with outsiders as it makes them visible and reachable. Additionally, communities as a whole can benefit from these ties as positive externalities are generated, for example in the case of Ilakala and the forest resources management project supported by MJUMITA. Finally, it could be that group membership and engagement with external organizations fosters the development of individual capacity among key group members, which can in turn benefit the community as they may be more likely to engage in governance or advocacy (Uphoff and Wijayaratra, 2000).

### **5.2.2. Group Functioning**

There are transversal and key factors for all groups regardless of their locale. According to Agrawal (2001) these can be categorized as group characteristics, institutional arrangements, the external environment and the resource system (see Table 1, p. 15). The propositions suggested by the literature have been to a great extent confirmed by this research.

From an external point of view, group success will be determined by its capacity to sell their produce and make substantial profit out of it, this can be determined by transactions costs in the market and the ability of the group to internalize them (Stockbridge et al, 2003; Obare et al., 2006; Coppock and Desta, 2013). The CSSs suffer a problem of market access and they are subject to unfavourable market dynamics. However, two of the CL-groups were already selling their produce and they were a vehicle to access new activities and sell in new markets, with some members already replicating these activities individually. Access and knowledge on how to use technologies or techniques condition output levels and the ability to cope with pervasive pests, the three groups suffered from insufficient access to inputs either to cope with pests or to adopt the right cultivation techniques. In this case, group members and the extension officers advocated for the use of chemical inputs, however they may not always be available or affordable, being preferable to opt for other options within the set offered by Integrated Pest Management techniques. Therefore, introducing and jointly developing innovations that match group capacities would better serve these groups (Devaux et al., 2007). Climate, or using Agrawal terms “resource system predictability” is equally a critical factor to the outcome of group activities (Obare et al., 2006; Barham and Chitemi, 2009; Coppock and Desta, 2013), but moreover it will condition individual capacities of members to contribute to the group fees for example, which is critical for group functioning.

A great focus of this research was placed in the internal factors of groups: characteristics and institutional arrangements. From the perspective of members’ characteristics it is necessary to



acknowledge that the nature of activities could condition the ideal mix of activities. In terms of age, this research shows that age differences can contribute to group functioning (Place et al., 2004) by establishing hierarchical lines, a comparison can be drawn using the examples of Tuamiho and Upendo. The role played by group size is inconclusive in this research, on the one hand bigger groups have a bigger pool of labour and resources, but on the other group dynamics tend to be more problematic. As suggested by Upendo and Tuamiho group members, differentials in income levels and poverty (Agrawal, 2001; Barham and Chitemi, 2009) can be problematic as this may slow down group activities and in the case of Wendo this caused dropouts of members. Close relations or social commonalities (Stockbridge et al., 2003; Thorp et al., 2005) were conducive to foster unity and establish trust among group members and this facilitates the embrace of certain social norms, such as those inspired by a political movement in Upendo or religion in Upendo (Uphoff and Wijayarathna, 2000) (Thorp et al., 2005). From the perspective of institutional arrangements, rules and sanctions have been highlighted in the literature as key elements for group functionality (Lyon, 2003; Thorp et al., 2005), this research confirms that from the members' perspective this is equally important, and further they emphasize that their enforcement needs to be adaptive to individual situations. Among other things, leadership should be attentive to these situations, provide guidance and additionally be inclusive in decision making and group management (Coppock and Desta, 2013). The case of Wendo group illustrates how a well-intentioned leadership can fail to gain support or create distrust among group members if the process is not transparent to all members. Agrawal (2001) mentions the importance of member interdependencies for positive group functioning. The three groups show in one way or another that systems of mutual help are a useful strategy so that group members can cope with idiosyncratic shocks faced, which in turn can enhance group stability.

According to the results generated by the joint research with the groups, a model for group functioning is proposed (Figure 2 is a schematic representation of the model). This proposition focuses on group institutional arrangements, social factors and interpersonal relations. In the first place, the group is formed. This can occur spontaneously, in which case members will find it easier to mobilize themselves if some common traits are present (which in this research emerged as gender, politics, livelihood style, religion or neighbourhood). Alternatively, a group could emerge as a result of an external intervention (i.e. NGO providing initial support). In this case the members will be mobilized around the support of the external partner, but this can filter potential members according to some of the traits previously mentioned (in the CSSs these appeared to be gender or neighbourhood). Groups are formed with a purpose (i.e. providing credit, generating income or promoting innovation), this common purpose can be an inertia that facilitates the implementation of activities until other aspects of group dynamics are validated (Kaganzi et al., 2009). The results obtained by the group will be conditioned by external and internal factors or the characteristics that have been presented above. The nature

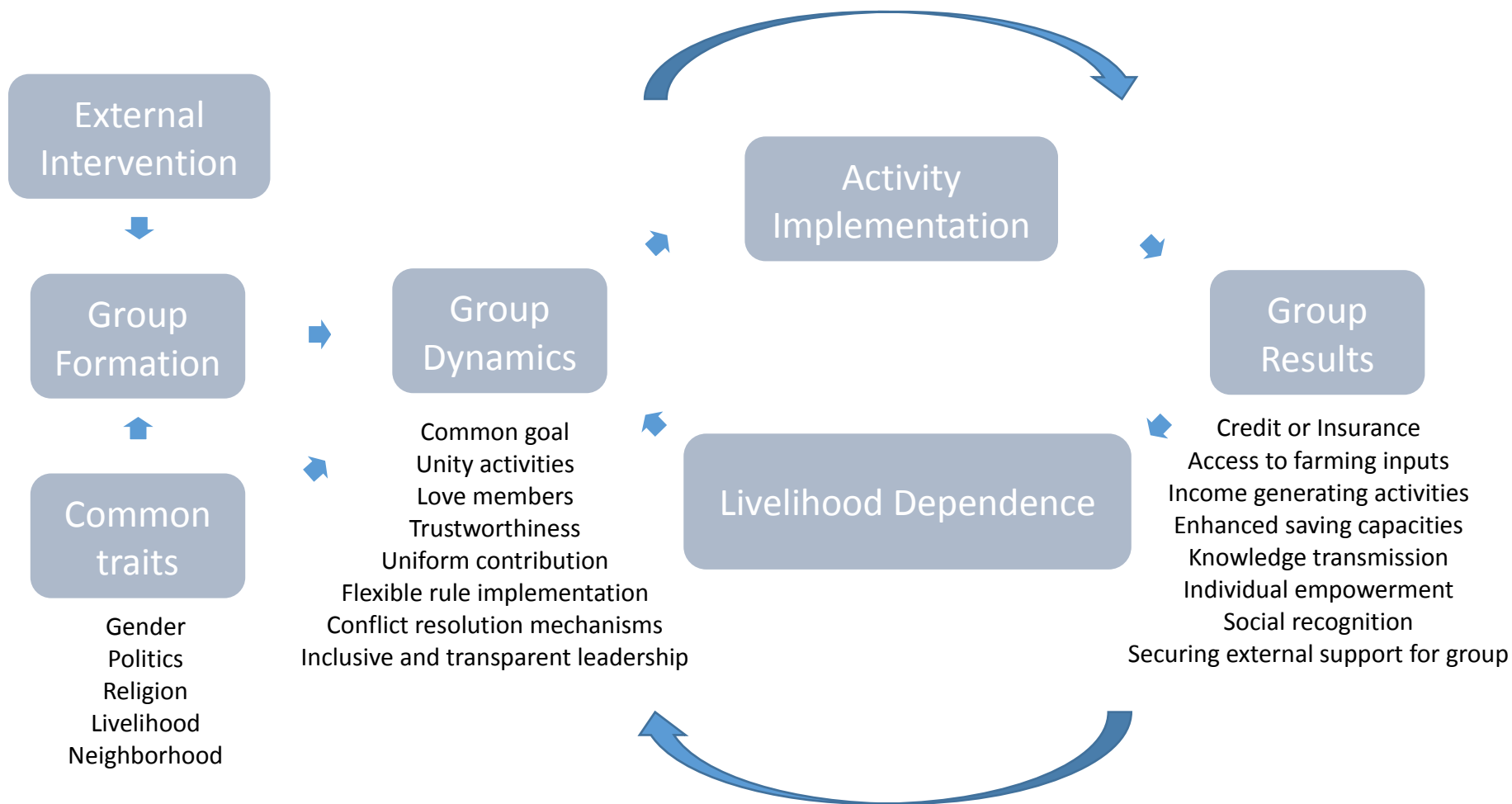
of results obtained will be directly linked to the initial group purpose, but other intangible aspects can emerge such as social recognition, individual empowerment or the capacity to sustain relations with external parties. In turn, the achievement of these results will enhance the interdependence between individuals and the group (Forsyth, 2006), improving individual livelihoods. Ultimately, positive results legitimate roles, rules and norms and also enhance the cohesiveness of the group (ibid) as reflected by group members in ideas such as mutual love, unity or trustworthiness. This iterative process increases the stock of social capital for the group, which will facilitate subsequent collective action (Putman, 1995). Nonetheless, it is key to make a remark when group sustainability is analysed. Even if high levels of social capital are available to the group, and it increases with its use (Grootaert and Bastelaer, 2001), if individual members or the group are heavily exposed to negative external factors this renders the group vulnerable: threatening its own existence and eventually wiping out a great chunk of the social capital accumulated. This is clearly exemplified by a group based in Iloilo which its existence after several years of functioning is threatened by a chain of defaults caused by adverse weather conditions in the village among others:

*“I haven’t seen anyone coming to reduce the loan amount or clear it all, no one. Because the interest rate is troubling them, some are fined penalties, together with what is going on this year, I really don’t know... (...) We have failed we have to find another way to apprehend those who failed to pay the loans from last year and we still have those of this year. They responded that we should take them to the police. I said, ok, let’s say you capture them, but do you consider these people as members? What if you don’t add penalties in the late payment, allow them to pay the original reimbursement in installments because the situation this year is not looking good.”*

(Woman, group member in Iloilo, 06.05.2015)

Nevertheless, even if groups are disbanded, many former members reflected positively on some aspects of their experience and expressed their willingness to engage in future collective actions. This could be interpreted as social capital derived from group action outlasting the existence of groups.

Figure 2: Proposed model of group functioning



## 6. Conclusion

This study has attempted to shed light on the underlying factors that explain the presence of CBOs in the CSSs, identifying the constraints and drivers that villagers face when joining these groups and drawing a socioeconomic profile of group members. Furthermore, through a collaborative and participatory research approach with three CL-groups, factors affecting group functioning have been identified.

The quantitative analysis reveals that there are certain social patterns that could explain group membership. On the one hand, group membership could be seen as a strategy followed by wealthier individuals. This is reflected in the fact that group members are more likely to cultivate larger areas of land (albeit only up to a certain size); own on average more assets; have entrepreneurial activities; or have more education. On the other hand, women are more likely to be group members and this is especially the case if they are household heads. Finally, proximity to village offices is a key factor increasing likelihood of membership which could hint to the importance of information networks to gaining access to relevant information about group formation.

Semi-structured interviews and focus group discussions with group members and non-members show a more nuanced picture of what the barriers to access groups and the drivers of participation may be. In this study, these factors have been categorized as social or livelihood variables. In general, there seems to be a low level of awareness on the potential benefits of group membership as well as the associated challenges. Therefore, external support is seen as critical. Furthermore, villagers are risk averse when it comes to pooling their resources with others, as trust is not generalized and negative experiences undermine positive perceptions about groups. Associated with this point, non-members perceive certain requirements of group membership, such as collateral provision, as too risky and they prefer to refrain from participation. More importantly, non-members may lack the material and time resources to be involved in group action. On the other hand, group action is perceived as an efficient way to engage with different organizations in order to promote social change. Furthermore, in all the CSSs, traditional schemes of mutual help and collective action are conducive to more formal arrangements such as groups. Lastly, group members believe that participation can provide them with access to credit, new knowledge or help them to generate further income.

The PAR process carried out jointly with three CL-groups gave an insight into factors affecting group functioning in the frame of an innovation process. A combination of PRA tools and more conventional qualitative methods enabled the research partnership to generate a wide range of information. Firstly, aspects of internal group functioning that members valued were revealed.

Unity, love for each other, respect of rules or access to external support were paramount. Secondly, transversal factors affecting the outcomes of group work were identified. Market dynamics, climate, access to agricultural technology, members' capacities, income generating capacity and group institutional arrangements emerged as critical factors throughout the CSSs. Most importantly, it is necessary to take into account that these factors do not stand on their own but interact with each other and idiosyncratic factors to each group, which may exacerbate their effects and change over time.

Institutional arrangements, in the form of roles, rules or procedures seem to be an important mechanism that groups possess to defend themselves from harsh environments. However, they will be more likely to emerge in the presence of certain social commonalities that facilitate collective action. These mechanisms may be developed on an iterative basis and their stability is subjected to the vagaries of the external environment or individual livelihoods. The legitimate acceptance of institutional arrangements builds internal resilience to cope with destabilizing episodes such as health problems or interpersonal conflicts. It is in this way that CBOs can be thought to generate the social capital that ultimately can increase the functionality of groups implementing innovation strategies.

Lastly, the PAR process implemented together with the groups can potentially alter their ongoing dynamics. Although at this stage it is difficult to speak of individual empowerment or opening venues for the expression of sidelined individuals, group members reflected positively on the impact that the process could have on the group as a whole. In particular, the PV activities may have contributed to creating a collective narrative that can be projected towards the community, and further be used to galvanize external support or action in the future.

It is important to remark that this study represents a snapshot in the evolution of the three CL-groups, which are involved in a process of ongoing learning and self-transformation. Thus the validity of these findings requires the additional perspective that only time provides. However, these results constitute a benchmark that the groups themselves can use to act strategically, thus enhancing their capacity to articulate themselves in an unfavourable environment. From a scientific perspective, these results can be materialized to understand the complex dynamics faced by Community Based Organizations in contexts akin to Central Tanzania and the role that social capital can play in the frame of rural development interventions.

## Summary

This research has taken place in the frame of Trans-SEC project: “Innovating Strategies to safeguard Food Security using Technology and Knowledge Transfer: A People-centred Approach”. In a broader sense this research has attempted to shed light in the role played by CBOs in the development of rural communities in Tanzania. First, it has assessed the socioeconomic profile of CBO members and their motivations and limitations for membership. Secondly, it has analysed the factors conditioning the functionality of three CL-groups in the frame of an innovation. For that matter, the five capitals framework proposed by Scoones (1998) has been utilized, with a special focus on Social Capital factors. Thus, this thesis aims to answer the three following questions:

1. What is the socioeconomic profile of group members in the case study sites?
2. What are the main motivations and constraints that villagers face in order to join groups?
3. What are the factors influencing group functioning?

The field research was conducted from February 2015 to May 2015 in two villages in the Chamwino district, in Dodoma region, and two villages in the Kilosa district, in Morogoro region. A participatory action research process was carried out together with three CL-groups in order to assess group functionality. This was supplemented with semi-structured interviews with former group members, members and key experts. In addition to the previously mentioned methods, focus group discussions with non-members provided data on motivations and constraints for group membership. In order to define the socioeconomic profile of CBO members and the determinants for group membership, household survey data available from the Trans-SEC project was processed using descriptive statistics and a probit model.

Results show that women are more likely to participate in CBOs. Furthermore, they not inclusive for villagers with a lower socioeconomic status, i.e. less land or livestock. This is confirmed by quantitative and qualitative analysis. Proximity to extension officer office is another determinant for membership. Villagers participate in CBOs because they expect secure benefits such as credit, additional income or knowledge, especially through external support. On the other hand, livelihood constraints, such as time or income; social factors, such as lack of trust; and lack of awareness are seen as main barriers for membership. Finally, CBOs are vulnerable to a wide range of factors interacting with each other (financial, physical, natural, human and social), however internal aspects of group governance such as rules, norms or roles can help to cushion these effects. These aspects of group governance are likely to emerge if group members identify themselves around certain social commonalities. In that regard, social capital proves to be a valid theoretical framework in order to assess the factors conditioning functionality of CBOs in the frame of innovation processes.

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## Annex

### Annex 1: Requirements to register a Community Based Organization in Tanzania:

- Letter of introduction from Village Executive Officer
- Registration fee (40.000 TZS)
- List of members and basic information (Name, age, gender, contact and signature)
- Constitution (4 printed copies)
- Minutes of meeting in which constitution was approved and list of attendants
- CV of leaders and 4 passport pictures

### Annex 2: Summary of transcribed audios

Audio Clip	Date	Length
Idifu, Chairwoman Wendo, Full	17.03.2015	1:29:38
Idifu, Secretary Wendo, Full	17.03.2015	1:54:58
Idifu, Ward Officer, Full	20.03.2015	45:14
Idifu, Former Village Chair, Full	19.03.2015	1:23:41
Idifu, Group Performance exercise, Full	6.03.2015	21:35
Idifu, Former member, Full	20.03.2015	1:15:46
Idifu, group Chairwoman & CBT, Full	21.03.2015	1:23:13
Idifu, Wendo member Woman, fragment	08.05.2015	27:05
Idifu, Former Wendo member, fragment 1	08.03.2015	1:01
Idifu, Former Wendo member, fragment 2	08.03.2015	1:06
Idifu, Former Wendo member, fragment 3	08.03.2015	2:03
Ilolo, Village Chair, Full	16.03.2015	31:32
Ilolo, Misani member, Woman Full	15.03.2015	1:20:07
Ilolo, Misani member, Woman, fragment 1	06.05.2015	1:51
Ilolo, Misani member, Woman, fragment 2	06.05.2015	16:23
Ilolo, Misani member, Woman, fragment 1	04.05.2015	1:06

Ilolo, Misani member, Woman, fragment 2	04.05.2015	6:50
Ilolo, Misani member, Man Full	14.03.2015	1:36:31
Ilakala, Tuamiho member, Man, fragment	08.04.2015	10:59
Ilakala, Focus Group Discussion, Non-Members Women, fragment	08.04.2015	11:47
Ilakala, Tuamiho member & CBT, Man, fragment 1	11.04.2015	4:30
Ilakala, Tuamiho member & CBT, Man, fragment 2	11.04.2015	3:36
Ilakala, Tuamiho member & CBT, Man, fragment 3	11.04.2015	1:34
Ilakala, Tuamiho member, Woman, fragment 1	11.04.2015	10:35
Ilakala, Tuamiho member, Woman, fragment 2	11.04.2015	3:01
Ilakala, Tuamiho member & CBT, Woman, fragment 1	12.04.2015	21:42
Ilakala, Tuamiho Secretary, Woman, fragment	14.04.2015	2:23
Kilosa, NGO Officer, Man, full	19.04.2015	53:15
Changarawe, Group member Secretary, Woman, fragment 1	17.04.2015	4:20
Changarawe, Upendo Chairwoman, fragment 1	19.04.2015	5:36
Changarawe, Upendo Chairwoman, fragment 2	19.04.2015	6:53
Changarawe, Upendo Secretary, Man, fragment	22.04.2015	1:13
Changarawe, Upendo Member, Woman, fragment	20.04.2015	0:54
Changarawe, Upendo Member, Man, fragment	23.04.2015	5:32
Changarawe, Upendo Member, Man, fragment 1	28.04.2015	12:15
Changarawe, Upendo Member, Man, fragment 2	28.04.2015	2:45
Changarawe, Upendo Member, Man, fragment 3	28.04.2015	4:10
Changarawe, Upendo Member, Man, fragment 4	28.04.2015	2:29
Changarawe, Upendo Treasurer, Woman, fragment 1	28.04.2015	17:36

Changarawe, Upendo Treasurer, Woman, fragment 2	28.04.2015	4:17
Changarawe, Upendo Treasurer, Woman, fragment 3	28.04.2015	3:35
Changarawe, Upendo Treasurer, Woman, fragment 4	28.04.2015	5:46
Changarawe, Former group member, Man, fragment 1	29.04.2015	5:23
Changarawe, Former group member, Man, fragment 2	29.04.2015	3:37
Changarawe, Former group member, Man, fragment 3	29.04.2015	

### Annex 3: Questionnaires

#### *Individual interviews with group members*

##### Questionnaire:

- Introduction to interviewee
  - Tell me a remarkable story about yourself.
  - Describe how you feel about life in X.
  - Explain about the last time you felt you received assistance from the Government or any other external party.
- General social capital
  - Explain how people help each other in the village.
  - Explain the last time you experienced a conflict at the community level.
  - Explain about other groups you belong to.
- Motivation to join group
  - Explain all you can remember from the time the group was formed / you joined.
  - What was your relation to other group members?
  - What was your motivation to join the group?
  - Explain something that makes you similar to other members and something that makes you unique.
- Group performance and individual benefits
  - Prior to Trans-SEC, what were the main group activities? How were they organized? What were the rules that governed the group? How often were you meeting?
  - What is your contribution as group member?
  - Tell about the last time you realized being a group member was beneficial for you.
  - Tell me about the last time you were disappointed with the group.
  - Tell me about the last time there was a conflict in the group.
  - Recall the last time you felt you could not express your opinion or this was ignored in a matter related to the group.



- Imagine you were given the opportunity to change anything that relates to how the group is working, what would that be and why?
- Compare yourself nowadays to yourself when you joined the group, what has changed?
- Social capital group specific
  - Explain about the last time sanctions were imposed on a group member.
  - Tell your opinion about group leadership (Challenges faced as leader in case of being one).
  - Tell me about how group members help each other besides group activities (Follow up question in trust).
  - Explanatory question regarding group performance activity in group workshop (specific to each group).
- Reflections on PV
  - Can you tell me about your personal experience with PV?
  - How has PV changed your situation within the group? And for the group as a whole?

*Individual interviews with former group members*

Questionnaire:

- Introduction to interviewee
  - Tell me about the main events in your life
  - Describe me how you feel about life in X
  - Explain me about the last time you felt you received assistance from the Government or any other external party
- General social capital
  - Explain me how do people help each other in the village
  - Explain the last time you experienced a conflict at the community level
  - Explain me about other groups you belong to
- Motivation to join group
  - Explain me all you can remember from the time the group was formed / you joined.
  - What was your relation to other group members?
  - What was your motivation to join the group?
  - Explain me something that made you similar to other members and something that made you unique.
- Group performance and individual benefits
  - How did you contribute to the group?
  - Tell me about the benefits that you experienced as a member
  - What made you disappointed with the group functioning?

- Recall a time where there was a conflict within the group
- If you could have changed something, what would it have been?
- Social capital group specific
  - Explain me about the last time sanctions were imposed on a group member
  - Tell me your opinion about group leadership (Challenges faced as leader in case of being one)
  - Tell me about how group members helped each other besides group activities (Follow up question in trust).
- Reasons to abandon the group
  - Explain me about the time you decided to abandon the group.
  - Compare yourself now to the time you were a member.

*Focus group discussion with non-members of farmer groups*

Organization:

Separate men and women in groups of 4. Session duration: 1,5 – 2 hours. Participants recruited through extension officer.

Criteria for recruitment:

- Age ranges: 20-30, 30-40, 40-50 and +50
- Sub-villages: Ideally representative of village structure
- Income distribution: at least one poor, middle and wealthy farmer

Questionnaire:

- Introduction to interviewees
  - Describe me how you feel about life in X
  - Explain me about the last time you felt you received assistance from the Government or any other external party
- General levels of social capital in village
  - Explain me how do people help each other in the village
  - Explain the last time you experienced a conflict at the community level
  - What are the ways in which people come to do activities together?
  - What is the role of the government and other external parties in the village life?
- Associations
  - Member of any village association? What are the personal benefits associated to your participation? What is your contribution?
- Perception on farmer groups

- Have you ever participated in a farmer group? How did you benefit and contributed?
- Why did you quit?
- Have you been offered participating in a farmer group? What made you decline?
- Imagine a neighbour would approach you with the idea of forming a group, what would be your reaction?

*Individual interview with key informants*

Questionnaire:

- Introduction to interviewee
  - Tell me a remarkable story about yourself
  
- Village history / evolution
  - What have been the main events in X in your lifetime
  - Has life changed substantially?
  
- General levels of social capital
  - Explain me how do people help each other in the village
  - Explain the last time you experienced a conflict at the community level
  - What are the ways in which people come to do activities together?
  - What is the role of the government and other external parties in the village life?
  
- Perception on farmer groups
  - Tell me about farmer groups. Is a common practice? How do they come together? Are they successful in general terms?
  - Tell me about how groups are receiving help from external partners.

#### Annex 4: Factors affecting group functioning (Agrawal Categorization)

**Table 14: Factors affecting group functioning Tuamiho (Agrawal Categorization)**

Aspect	Variable
<b>Group Characteristics</b>	Moderate income inequality (+) Farming inputs (-) Transport (-) Agricultural skills (+) Size & Age: Manpower & Conflict (+) Individual capacities (+) Multiple group membership (+/-) Leadership (+/-)
<b>Institutional Arrangements</b>	Periodic income generation (+) Land tenure (-) Shared goal (+) Collective action (+) Rule enforcement (+/-) Networking ability (+) Management (-)
<b>External environment</b>	Low market prices (-) Distance economic hub (-) Local market (-) External support availability (+) Gossiping (-) Livestock-Farmer conflict (-)
<b>Resource System</b>	Access to water and soil quality (+) Land availability (+) Rain volatility (-)

**Table 15: Factors affecting group functioning Upendo (Agrawal Categorization)**

Aspect	Variable
<b>Group Characteristics</b>	Considerable income inequality (-) Agricultural skills (-) Size & Age - manpower (+) Farming inputs (-) Bike business capital (+/-) Individual capacities (+) Size & Age conflict (-) Shared social traits (+) Individual livelihoods (-) Shared norms on mutual help (+) Multiple group membership (+/-)
<b>Institutional Arrangements</b>	Financial scheme (+) Land tenure (-) Regular income generation (+) Unity & Trust (+) Rule interpretation – enforcement (+) Mutual help (+) Networking ability (+)
<b>External environment</b>	Low market prices (-) Broker power (-) Inputs available locally (+) Distance economic hub (+) Local market (+) Government land policy (-) External support (+) Political disputes (-) Gossiping (-) Community monitoring (+) Livestock-Farmer conflict (-) Available labour (+)
<b>Resource System</b>	Access to water and soil quality (+) Land availability (-) Rain volatility (-) High temperatures (-)

**Table 16: Factors affecting group functioning Wendo (Agrawal Categorization)**

<b>Aspect</b>	<b>Variable</b>
<b>Group Characteristics</b>	Low income (-) Limited capacity to save (-) Agricultural skills (-) Farming inputs (-) Size & Age - manpower (-) Unequal capacities (+/-) Leadership (+/-) Shared social traits (+) Soap making capital (+/-) Shared norms on mutual help (+)
<b>Institutional Arrangements</b>	Financial scheme (+) Land tenure (+) No income generation (-) Access to banking (+) Collective action (+) Unity (+) Management (-) Rule enforcement (-)
<b>External environment</b>	Price soap inputs (-) Unreliable transport (-) Distance economic hub (-) Local market (+/-) Administrative procedures (-) External support (+) Community (-)
<b>Resource System</b>	Land quality (-) Land availability (+) Rain volatility (-) Soap raw materials available (+)

## Statutory Declaration

I herewith declare that I composed my thesis independently without having used any other sources or means than stated therein.

**Date:**

**Signature:**