Master Thesis (45 ECTS)

Facilitating Collective Action for Common Marketing

The influence of external actors' support and leadership on collective action of small-scale pineapple producers in Ghana trying to access European export markets

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Dua kor nye kwae.
"A tree does not make a forest."

Dua kor gye mframa a ebu.
"If a single tree is left alone to the wind it will fall."

(Akan sayings)

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Abstract

The study is based on the widely accepted assumption in scientific literature that *functioning collective* action of small-scale producers enhances their ability to access markets (Markelova et al. 2009, Hellin et al. 2009). Further, even stronger cooperation and more proactive market behaviour (*robust collective action*) are needed, if small-scale producers intent to reach high value markets (cf Väth 2008). Scholars of collective action theory have provided already a comprehensive set of factors which they consider to explain the occurrence of collective action. However, the theory almost neglected the influence of external actors trying to stimulate collective action. It also misses a comprehensive understanding of leadership and its effect on collective efforts. Thus, the purpose of this study is to gain further insights into the impact of external support and leadership on collective marketing activities to contribute to the further development of collective action theory. The research is based on a qualitative comparative case study research on six small-scale pineapple producer groups in Ghana which have been supported to attain a 'group certification' of the food safety and quality standard GLOBALG.A.P. in order to gain access to European markets. I opted for an explorative approach which is less concerned with the testing of causal relations; instead with the causal mechanism connecting the dependent and independent variables in focus.

The empirical results of this study showed a mainly positive effect of external support and leadership on the occurrence of functioning collective action. First, external support has a stimulating effect on the collective action of producer groups. Especially, the advice on internal organization and management issues has a positive effect initiating collective efforts. Moreover, I found that technical support had an indirectly positive effect on the occurrence of collective action as it helped to enhance the economic potential of the groups which in turn encouraged a closer cooperation. Material or monetary contributions by contrast had beneficial as well as hampering effects on functioning collective action. Besides these findings, it was however not possible to find evidence that external support also contributes to the development of robust collective action. However, the causal relation between leadership and robust collective action showed to be distinct. Especially the skills and the initiative of leaders had a strong impact on the robustness of leadership. Further, the leader's ability to motivate the other members proved to be important for the initiation of the group as well as sustenance during economically difficult situations. Less important are however the controlling functions of the leadership figure. In addition to the variables of external support and leadership, the collected field data strongly suggest that the current economic incentives, former market success, the small size of the group, its external reputation, the general level if education and resources as well as the design of the standard had a contributing effect to the development of robust collective action of the groups.

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Abbreviations

AEA	Agricultural extension agent
AgSSIP	Agricultural Services Sub-Sector Investment Project
CB	Certification Body
EMQAP	Export marketing and quality awareness project
FAGE	Federation of Associations of Ghanaian Exporters
FAO	Food and Agriculture Organisation of the United Nation
FBO	Farmer Based Organisation
FFV	Fresh Fruits and Vegetables
GAP	Good Agricultural Practices
GCC	Global commodity chain'
gtz/giz	Gesellschaft für Technische Zusammenarbeit/ Deutsche Gesellschaft für international Zusammenarbeit
GVC	Global value chain
MiDA	Millennium Development Authority
MIR	Market Intelligence Report
MOAP	Market Oriented Agricultural Programme
MoFA	Ministry for Food and Agriculture, Ghana
MoFA/HEII	Horticultural Export Industry Initiative of MoFA
QMS	Quality Management System
SPEG	Sea-freight Pineapple Exporters of Ghana
SSC	Sustainable supply chains
TIPCEE	Trade and Investment Programme for Competitive Export Economy
WAD	Wad African Fruits Limited
WAFF	West Africa Fair Fruit

1. Introduction

In the 1980 Ghana started to export pineapples to the European market. From the beginning smallholders contributed considerably to the rapidly growing business (Danielou & Ravry 2005). This changed at the turn of the millennium when the pineapple industry in Ghana almost collapsed due to the remarkable success of the new pineapple variety 'MD2' from Costa Rica. The new specie ousted the 'Smooth Cayenne' on the global market - a pineapple variety which was widely grown in Ghana (Fold & Gough 2008). About the same time, the food and quality standard GLOBALG.A.P. gained wide importance for exporters targeting the European market (Danielou & Ravry 2005). The pineapple export sector in Ghana recovers only very slowly from these new trends on the global market. Mainly large scale farmers gradually manage to adapt to the new requirements, whereas small-scale farmers still struggle with the new challenges (Takane 2004). Consequently, one of the priorities of governmental agencies, aid donors and NGOs is to bring smallholders back to the market. One approach is the formation and support of farmer groups. Producer groups are believed to reduce transaction costs, ease expenses for necessary investments and initiate common learning process, which might help to operate on high value markets (cf Thorb et al. 2005, Stockbridge 2003). However, the formation of farmer groups from 'the outside' proves to be a difficult task.

Scholars provide scientific evidence that cooperative market behaviour has the potential to overcome some of the current challenges which farmers face especially in developing countries (see for example Baron 1978, Markelova et al 2009, Hellin et al. 2009, Stringfellow et al. 1997). One theoretical approach which is concerned with the voluntary endeavour of individuals collectively striving to achieve common goals is collective action theory. However, the success of collective activities are endangered by so-called collective action problems which occur when individuals have the possibility to free-ride on the efforts of the group. Institutional arrangements can overcome those situations. Institutions are "prescriptions that humans use to organize all forms of repetitive and structured interactions" (Ostrom 2005: 3). Also the interactions within producer organisations follow predefined formal and informal rules which are highly relevant for the success of their internal cooperation. The theoretical roots of collective action theory originate in 'New Institutionalism'; thus the theory also takes an institutional perspective to explain under what circumstances collective action problems can be overcome.

Scholars of the theory have analysed variation in collective action and identified conditions under which groups might successfully join forces for a common goal. The theory has been applied to very different empirical settings of joint activities of individuals, but recently, gained strong attention and has been substantially advanced in the field of natural research management. For the sustainable management of natural resources (common pool resources) scholars have recognized a range of factors which explain functioning collective action which can partly be transferred to the situation of common marketing efforts. These comprise amongst others: clearly defined boundaries of the resource system as well as the group, collective choice arrangements, the size of the community, adequate leadership, monitoring, a graduated sanctioning system, a procedure for conflict resolution and recognition of rights to self-organize (cf Wade 1988, Baland & Platteau 1996, Ostrom 1990). In total Agrawal (2001) identified about 25 factors from the literature which he classified into four categories, namely the characteristics of the group, the characteristics of the resource system, the

institutional arrangements as well as the external environment. Appreciating the comprehensive effort of scholars to explain variation in collective action, Agrawal (2001: 1650f) criticizes that:

> *"Studies of the commons are relatively negligent in examining how aspects of the resource system, some aspects of membership, and the external social, physical and institutional environment affect institutional durability and long-term management at the local level."*

To put it in other words, Agrawal (2001) questions the strong focus of the collective action research on the group characteristics and notices the lack of attention on/to external factors. This study accepts this critique and contributes to the research on external factors influencing collective efforts. It is of course far beyond the extent of the research to gain further insights on the influence of all so far widely neglected external influences. Therefore, I will limit my research to one external factor, namely the impact of external actors trying to stimulate collective action. Can collective action be facilitated from the outside? The literature does not provide a clear answer to this question. On the one hand, one of Ostrom's (1990) design principles states that communities need the freedom to self-organize which should not be undermined by governmental intervention. On the other hand, external forces could initiate collective action (Markelova et al. 2009), provide necessary information and incentives for cooperation (Baland & Platteau) as well as support the enforcement of the group rules (Agrawal 2001). Within this research I evaluate the impact of projects implemented by donor agencies, governmental agencies, NGOs and market parties trying to form producer groups for common marketing activities in order to access high value export markets. This study generates fresh empirical data which offers new insights into the impact of external actors on collective action and therefore contribute to the development of collective action theory.

The analysis will take another factor into focus: Leadership. Appropriate leadership is considered crucial for the functioning of a group (Bianco & Bates 1990, Baland & Platteau, Thorb et al. 2005, Anand 2002, Kaganzi et al. 2009, Markelova et al. 2009, Vedeld 2002). Also in collective action theory, adequate leadership has been named as a central enabling condition for collective action. This, Baland & Platteau (1996:114) formulate as a result of their game theoretical analysis that:

> *"Leadership (…) can also mean the ability to mobilize a sufficient number of people for enterprises requiring coordinated efforts. If such leadership is not present in these situations, collective action may not occur even though every agent would actually like to co-operate with the others."*

Leadership is indeed not part of the external environment, but may – as stated above – take a similar function as external intervention. It can stimulate cooperation from the inside (Thorb et al. 2005, Bianco & Bates 1990). Thus, leadership might initiate cooperation among the members by defining a common goal and communicating potential benefits of cooperation. Moreover, Thorb et al. (2005) ascribe leaders the role of 'power and control' within groups by enforcing the internal rules. Finally, leaders might steer the operation of the group by proposing new initiatives and ideas for the group development. This function is strongly connected to his or her skills (Markelova et al. 2009). However, as scholars agree on the importance of leadership, there is only limited knowledge of how exactly leadership contributes to collective action (Laerhoven 2010). This study will contribute to a better understanding of the causal mechanisms connecting leadership and the occurrence of collective action by providing new empirical insights into this relation.

Departing from the two described knowledge gaps in collective action theory, the overall research question reads as follows:

In what ways do external support and leadership have an impact on robust collective action of Ghanaian pineapple producers targeting the European export market?

Linking these theoretical considerations back to the practical problem described above, this study also contributes to a better understanding of how groups for collective marketing efforts work and how collective efforts can be facilitated. Collective action theory has hardly been applied to this setting. The empirical findings of the study will result in policy recommendations for the practical efforts to integrate smallholders into the high value markets.

The paper is structured as follows. After this short introduction to the purpose of and central question of this research (chapter 1), the paper starts with a review of different theoretical approaches and concepts which have been concerned with the market access of small-scale producers (chapter 2). The review helps to gain a better understanding of the problem at hand and identify potential solution approaches. On this basis, I justify my choice for an institutional approach for this study and introduce collective action theory as well as its benefits for the purpose of this study. Moreover, the working propositions are formulated. Chapter 3 presents the conceptual framework. I present the methodology for this research, the operationalization of the independent and dependent variables and the methods for data collection in chapter 4. This is followed by a critical review of the applied methodology as well as practical challenges in the data collection process. Chapter 5 introduces the historical development of the pineapple industry in Ghana, which provides the necessary background information to understand the recent situation of small-scale producers in the pineapple industry. In addition, I describe the project concept and involved actors aiming at the certification of smallholders as well as their integration into the export market. Finally, the empirical results for each case study will be presented (chapter 6) followed by a separate (chapter 7) and a comparative analysis (Chapter 8). In chapter 9, I discuss the findings of this research in light of its limitations. I conclude this study in chapter 10 with recommendations for practical efforts improving the market access of small-scale producers, which are derived from the theoretical finding so the research.

2. Theoretical background

The following literature review gives an overview about existing theoretical concepts and schools of thoughts which are concerned with the integration of small-scale producers into markets. This review helps to get a better understanding of the problem, identify knowledge gabs and decide on the most suitable approach for this research. A lot of studies draw on the Global Value Chain Approach, which is discussed in the first section. The theoretical concept serves as a tool to analyse the development of the global economy and explains its recent structure of the global trade of certain commodities on the basis of underlying power relations. The review of the Global Value Chain approach helps to gain further insights into the current challenges smallholders face. Second, I briefly introduce a newly evolving research field which deals with the emergence and governance of 'sustainable supply chain systems'. Third, I discuss the practical experiences captured in project reports and empirical studies on the formation of farmer groups. The fourth section will pay attention to the theory of collective action and its potential contribution to answer the research question of this study. Finally, I present the Institutional Analysis and Development framework (IAD), which helps to identify and structure the relevant variables. Based on these theoretical considerations I design the conceptual framework supporting the analysis.

2.1 The Global Value Chain Approach

The 'Global Value Chain' (GVC) or 'Global Commodity Chain' (GCC) Concept was introduced by Gereffi in 1994 as an approach to analyse the structure and organization of the global economy. It "addresses the issue of who controls global trade and industry, and how agents locked into lower-value segments of trade and industry can break out of this situation" (Gibbon 2001:246). Thus, the approach also helps to understand the current situation of smallholders especially in developing countries. A GVC or GCC is defined as a vertical integration of individual firms interlinked with the production and exchange activities of other value chain parties (Kaplinsky & Morris 2000). Based on his analysis Gereffi (1994, 1999) distinguishes two different types of value chains[1]. In his earlier work (1994) he came to the conclusion that value chains are mainly 'buyer-driven' or 'producer driven'. This distinction indicates the point of control structuring these chains. Whereas 'producer-driven' chains are predominately found for capital and technology intensive products (examples are the automobile or IT industry), 'buyer-driven' chains are characterized by a labour intensive production, where marketing and design of the produce play an important role (for example the garment industry and trade with fresh fruits and vegetables). Both types of chains have different barriers of entry. To take a controlling position in a 'buyer-driven' chain, buyers needs capital and proprietary know-how. In 'buyer-driven' chains the entry barriers are usually to the buyer position capital to invest in market information, product development, supply chain management systems, and advertising (Gibbon 2001).

This theoretical approach serves as a starting point for many studies explaining the driving forces and changing nature of global patterns of food production and trade as well as the impacts for developing countries and its small scale producers (cf. Dolan & Humphrey 2004, Gibbon & Ponte 2005). Following the trains of thoughts of the Value Chain Concept, the potential exclusion of

[1] Gereffi et al. (2005) later specify five different kinds of markets which show different levels of in integration. These also effect the level of control one 'side' of the chain can gain over the other chain members.

smallholders has to be put into the context of the overall restructuring of the global food trade. In an often cited study of Dolan & Humphrey (2004) review the history of the global trade of fresh fruits and vegetables between Africa and the United Kingdom and notice a fundamental shift in marketing within the last 20 years. Whereas fresh fruits and vegetables predominantly have been traded on wholesale markets in the 60s till the 80s, today a few large retailers source their products by means of closely coordinated supply chains[2]. The new marketing channels create new opportunities but also entry barriers for producers and exporters in developing countries. Producers who are able to upgrade or differentiate their business and attain a preferred supplier status profit from this development.

Standards are one way of coordinating these value chains. They "define the terms of membership of a chain and impose rules and conditions for participation." (Chemnitz 2007: 2). According to Dolan & Humphrey (2004) the increasing entry barriers in terms of cost for compliance as well as higher transaction cost for other chain partners like exporters lead to the centralization of the vegetable export business in Africa in the hands of a few large firms. Also considering the fact that small-scale producers are always more vulnerable to institutional changes, these developments cause the drop out of many small-scale producers from high value export markets (Gibbon & Ponte 2005).

Graffham et al. (2007) provides empirical evidence to these theoretical considerations. The authors analysed the effect of the introduction of the private food quality and safety standard GLOBALG.A.P. on the Kenyan horticultural sector. Nowadays, this standard finds support by approximately 85% of the European retailers. Based on their often cited large scale quantitative study, they come to the conclusion that after the introduction of GLOBALG.A.P. many exporters of horticulture products significantly reduced cooperation with small-scale farmers. Between 2000 and 2003, 60% of smallholders had to end business relationships with exporting companies. According to the large survey, the high non-recurrent and recurrent costs for the accreditation and compliance with the certification are a serious constraint for smallholders to access export markets.

Ouma (2010) draws a more differentiated picture of the situation in Kenya. His field work shows that although a considerable number of smallholders officially terminated the business relations, they nevertheless continued to sell their products to exporters in informal arrangements, especially in times of high market demand. Moreover, the decline in export activities of smallholders cannot solely be explained by the introduction of the certification. General global market trends and developments have to be considered. Graffham & MacGregor (2009) for example conclude from their research in Zambia that other factors such as the increase of cost for air transportation and currency fluctuation have contributed as well. In addition, overall changes in demand in European markets as well as the structure of supply chains have to be taken into consideration. Nevertheless, the majority of studies show that compliance with quality, social and environmental standards poses a challenge to smallholders, who are often not able to deal with on their own efforts (Graffham et al. 2007, Graffham & Cooper 2009, Okello et al. 2009, Gibbon & Ponte 2005, Daviron & Ponte 2005).

From the theoretical perspective of the GVC approach, the above described trends on the world market may create new entry barriers for smallholders. The export trade in many developing countries is increasingly centralized in the hands of some large scale companies which supply their

[2] For details about see Dolan & Humphrey 2004: 11ff

produce often through importers to the European market. To enter the relatively closed supply chains small-scale farmers have to undertake initiatives to 'upscale' or 'upgrade' their own production. Thus 'upgrading' refers to different strategies which for example enable producers to meet the required qualities and quantity of their produce requested by the buyer, differentiate the production or offer their products in a further processed stadium. Scholars advocating for the 'global commodity' or 'value chain' approach have been blamed to offer a too pessimistic view on efforts to improve the position of developing countries - and especially small producers - within the global economy. This may be founded in the origin of the approach, which arose from the 'political economy' and more specific the mindset of the dependency theory. Thus, Cramer (1999: 1248) claims that studies based on the theoretical perspective of 'global commodity chain approach'

> *"identify economic structure and behavior in OECD countries (``the core'') as determining the limits and possibilities of economic activity and change in developing countries (``the periphery''). In this case, it is especially the links between retail-driven markets in the major industrial countries and the large multinational firms that supply them that explains and constrains economic prospects, including the scope for processing primary commodities, within low-income countries."*

Gibbon (2001) defends against this view, in pointing to the fact that the value chain approach takes a much more differentiated standpoint. Retrieving from the simplistic picture of a North-South division supported by theorists of the dependency theory, the concept is based on four dimensions for the analysis of GVCs: the input-output structure of the chain, the geographical distribution of the actors, the internal governance arrangements as well as the surrounding institutional framework which drives the structure of the chain (cf Gereffi 1999). According to Gibbon (2001) this comprehensive approach leaves no room for ideological convictions. Instead, the careful and comprehensive analysis of value chains helps to detect the power relations within the chains which is necessary to understand the opportunities and contraints for upgrading which go in hand with the global integration of firms (ibid).

2.2 Research on sustainable supply chains

A new emerging research field ties on the general thoughts of the value chain approach, but developed another focus. Observing that entrepreneurs in value chains increasingly take over public responsibilities (Ras et al. 2007, Vermeulen & Seuring 2009), this research field is concerned with the emergence, development, governance and effectiveness of 'sustainable supply chains' (SSC) enhancing the environmental and social performance within the chain operations. One example of such a 'sustainable chain' is the fair trade movement, which tried to directly link smallholders to European consumers, circumventing conventional trade channels (ibid). A central question, which touches the core concern of this new field of research, has been formulated by Vermeulen (2010):

> "To what extent and under what conditions is business-to-business cooperation in world-wide 'sustainable supply chain governance systems', together with civil society and governments, effective in improving environmental and social conditions of productions operations in developing countries?"

To answer this question, he proposes to widen the strong focus of the inquiry on the actors within the supply chains. Instead, Vermeulen (2010) proposes a three level approach for analysis merging empirical research on the company level, the level of the entire global value chain as well as the level of global dynamics. The new framework for analysis shall help the research field to move from a more normative to an empirical descriptive approach. The research field is also concerned with the perspective of the producer side and their motivations, opportunities and constraints to comply with

the environmental and social standards with are often introduced by the lead firm (cf Albertsmeiner et al.2009, Müller et al. 2009). Albertsmeiner et al. (2009) found for example that producers fear the administrative burden, which is related to the compliance with sustainability criteria. A better understanding of the producers' perspective helps to develop solutions for their integration into supply chains. The research on sustainable supply chains however is mainly concerned with sustainability issues directly related to the production process as well as the actors already involved in the chain. It provides however little theoretical insights how smallholders can be integrated into supply chains.

2.3. Practical experience and empirical evidence –

For the mainly 'buyer-driven' commodity chains in the fresh fruits and vegetable (FFV) chains, to which the production and trade of pineapple belongs to, an often chosen strategy to 'upgrade' is to enhance the capacity of smallholders to meet the requirements of European supermarkets in terms of quality and quantity. One way to achieve the access to markets and the compliance with these requirements is the formation of producer and marketing groups to overcome the mentioned transaction, cost benefit from economies of scale and introduce a common learning process.

Several studies have been conducted researching on the success factors of donor interventions supporting smallholders to comply with the GLOBALG.A.P requirements and attain access to export markets. Without denying the challenges of these programmes, Mithöfer (2009) comes to the conclusion that external support has a very positive effect on the likelihood of farmer groups to attain certification and access export markets. External intervention in the form of supervision, training and provision of information as well as financial resources often focuses on the enhancement of managerial, financial and technical capacities. It leads to better information about market developments and the requirements of the standard, better agricultural and management practices, improved access to input materials as well as improved field hygiene. Moreover, Ouma (2009) endorses that carefully considered donor support can pave the way for smallholder certification. However, he points to the importance of a more comprehensive approach, which does not treat the integration of farmers into export markets as a bare 'technical process', but pays attention to the wider challenges arising from the institutional context, the market situation as well as small-scale production. Donor agencies have to strengthen the market linkages of the group and develop strategies to avoid dependencies on external support. Braham & Chitemi (2009) conducted a quantitative analysis of a governmental-led programme aiming at the improvement of smallholders' market performance and their food security. They found that the two implementing organizations, which focussed on strengthening producer groups and their market linkages, had diverging success rates. They come to the conclusion that these different success rates could not so much be ascribed to the different approaches of the organisations, but mainly to the varying levels of endowments as well as group attributes.

Humphrey (2008) points to similar obstacles in supporting smallholders for market access derived from the findings of his study which critically evaluates donor support in Kenya. He challenges external interventions by donor agencies mainly in two points of their approach. Firstly, the author questions the strategy of many aid donors, which see the certification of smallholders as a means for poverty alleviation (see also Markelova et al. 2009). According to Humphrey (2008) this approach overlooks the limits of economic feasibility of smallholder integration. Secondly, he points out that

certification should not be a goal in itself. Instead, external support has to take into account that successful certification and long-term access to export markets are dependent on the establishment of a complex quality management process. The focus of the support must therefore aim at enabling smallholders to adapt their production systems and agree their own organisational arrangements to access export markets.

Besides these empirical studies, development agencies themselves have identified success factors and pitfalls in supporting smallholders to attain the GLOBALG.A.P group certification and market access. Based on their project experiences, the gtz (Deutsche Gesellschaft für Technische Zusammenarbeit[3]) has identified the following success factors (based on Ouma 2007, Will 2010):

- Farmer groups have to be strong and cohesive and require sufficient human and financial resources as well as be committed to a commercial farming approach.
- Groups need to develop stable business linkage to exporters who is committed to work with smallholders.
- Accessible markets must be lucrative for smallholders in terms of expected margins, risks and development
- A "Stable environment" (concerning policies, legal environment protecting the interests of smallholders, infrastructure) enables farmer groups to uphold a constant production and selling of their products as well as gain a stable revenue
- More simplified standard and certification procedure
- Access to cheap support services (certification, training, supervision)
- Access to finance

As will be shown in the following section, lots of the lessons learned from the empirical studies and the donor interventions can be framed with the theory of collective action.

2.4 New institutionalism – Collective Action Theory

Reviewing the lessons learned from the GVC concept, helped to understand the current situation of smallholders in developing countries but had only limited answers to the question can be overcome exclusion. Research on SSC showed that these described chain structures are not a status quo. Instead, GVC have been transformed towards more sustainable operations. Sometimes the active integration of smallholders has been a part of efforts of entrepreneurs which is the case for the fair trade movement. However, these perspectives ascribe a powerless opposition to the individual producer and neglect the potential of primary producers to organize themselves and 'upgrade' their production for the purpose of (re)gaining access to GVC. An answer to the discussed constraints for smallholders may come from theoretical approaches of new institutionalism; to be more precise from collective action theory. Contrary to the GVC approach and research on SSC which are more concerned with the overall chain characteristics and therefore take a more structuralist viewpoint, collective action theory provides a more action-oriented perspective. Without denying that the more integrated perspective of the GVC and SSCG approach are also important to tackle the exclusion of

[3] Since the 1st January 2011 the Deutscher Entwicklungsdienst gGmbH (DED) (German Development Service), the Deutsche Gesellschaft für Technische Zusammenarbeit GmbH (GTZ) (German Technical Cooperation) and Inwent – Capacity Building International, Germany merged to one organization named Deutsche Gesellschaft für Internationale Zusammenarbeit (GIZ).

smallholders, this study will focus on the producer level and shed light on the possibilities of individual farmers to organize themselves for common marketing.

Numerous papers have been written about the advantages of forming producer groups for market success (cf. Baron 1978, Stockbridge 2003, Thorb et al. 2005, Hellin et al. 2009, Stringfellow et al. 1997). Thorb et al. (2005) & IFAD (2001) for example are concerned with the contribution of groups to poverty reduction. Thorb et al (2005) name two major benefits of group formation for the poor. First groups can have an empowering effect on its members. Thus, in the context of common marketing, group formation can help to increase the negotiation power of individual farmers in dealing with other market parties. Second, groups have the potential to increase the income of its members. One main advantage of producer groups is the reduction of transaction cost which also finds considerable recognition in scientific literature (cf. Stockbridge et al. 2003). Transaction costs comprise "the costs of obtaining information about parties to a contract and the goods and services being exchanged, and the cost of negotiating, monitoring and enforcing agreements" (Stockbridge et al. 2003:6). Individual smallholders face a disadvantage in terms of transaction costs. They have their origin in the limited access to information and services such as transport, financial assets (Asfaw et al. 2009) as well of skills and knowledge about management and agricultural practices and the requirements of European consumers (Graffham et al. 2009). Joint efforts of farmers might help to overcome these entry barriers to markets. Despite the arising transaction costs relating to for example internal organization, monitoring, enforcement and negotiating, these are often lower than cost accompanying other institutional arrangements (Stockbridge et al. 2003).

Hellin et al. (2009), Narrod et al. (2007), Markelova et al. (2009), Stockbridge et al. (2003), Thorb et al. (2005) and Kaganzi et al (2009) are studies concerned with market access of smallholders draw explicitly on the theory of collective action. Collective action is defined as "set of actions and initiatives undertaken voluntarily in cooperation by a group of individuals to pursuit shared interest" (Gruére et al. 2009: 39). Kaganzi et al. (2009) for state that "(...) gaining access to export markets requires farmers to adopt new marketing skills and strategies. In the case of smallholders, collective action is needed to meet basic marketing requirements for minimum quantities, quality and frequency of supply, which they could not achieve as individuals." The authors found that collective action activities can support small-scale farmers to diminish the mentioned barriers of entry into markets. The cooperation of farmers might as well help to compensate for the disenabling environment as for example the lack of business services and other infrastructure, which is reality in many rural markets. Moreover, collective action helps to take advantage of the economies of scale and solve coordination problems (Stockbridge et al. 2003).

As demonstrated, there is wide agreement amongst scholars that collective action of producers can have a positive effect on their access to markets. But under what conditions do individual producers organize? This question is addressed by collective action theory, which origins go back to the study of the political scientist Olson (1965). He challenged the widely spread idea in social science that groups of individuals with common interests almost naturally join forces to reach a common goal. Instead, he found that individuals might have strong incentives to free-ride on the group's efforts to provide a public good. Collective action problems can be overcome by means of institutional arrangements. The contribution of individuals to this public good is dependent on personal incentives or coercion. This theory was taken up by many other scholars (cf. Olson 1965, Wade 1988, Ostrom 1990, Baland

& Platteau 1996) who tried to identify the conditions under which the social dilemma of 'free riding' can be overcome.

2.4.1 Success factors for collective action

The theory of collective action has been applied to analyse groups with all kinds of purposes[4], but lately found remarkable recognition for analysing groups for the propose of common marketing (cf. Narrod et al 2009, Hellin et al. 2009 Kruijssen et al 2009, Devaux et al. 2009, Gruére et al. 2009, Kaganzi et al. 2009, Berdegué 2001, Narrod et al. 2007). On example is the study Markelova et al. (2009: 2) which tries to identify the factors leading to the formation of groups for market access. The authors mainly draw form the lessons learned in collective action for the management of natural resources. Scholars concerned with collective action institutions for natural resource management have identified a set of factors which explain under which conditions functional collective action occurs (cf Wade 1988, Baland & Platteau 1996, Ostrom 1990, for an overview see Agrawal 2001). The authors have mainly focused on the attributes of the groups as well as their institutional arrangements to understand the occurrence of collective action. In her study, Markelova et al (2009) admit that market access provides indeed a different setting for collective action which might challenge the direct transfer of the results to the new scene of collective marketing. Nevertheless, some findings also can be conveyed to efforts of common marketing. They categorize the success factors into four major categories. First, the successful group formation for common marketing is determined by the characteristics of the group. Second, the institutional arrangements which govern the cooperation of the members are found important. The external environment, defining the context in which a group is operating, is identified as the third category. As collective action for natural resource management pays attention to the characteristics of the resource, Markelova et al. (2009) propose to include the types of products and markets into the analysis.

To start with the group characteristics, Markelova et al. (2009) names six factors which they consider to have a positive influence on group formation: the size of the group, its defined boundaries, shared norms and social capital, interdependence among the group members, heterogeneity of endowments as well as appropriate leadership. These factors are mainly in line with findings of collective action for common pool resources (cf. Ostrom 1990, Wade 1988, Baland & Platteau 1996, Agrawal 2001).

Besides the characteristics of the community, the **institutional arrangements** enable or constrain collective action in the management of natural resources as well as for common marketing efforts. According to Ostrom (2005) the members of a group should have the **opportunity to craft their own rules**. This increases the probability that the respective rules will be understood and tailored to the local conditions. Another important design principle identified by Ostrom (2005) is the establishment of **collective choice arrangements,** which all members of the group can make use of to take part in decisions and influence rule making. Moreover, many researchers agree that simple and comprehensible rules as well as a simple **monitoring, graduated sanctioning system and conflict resolution mechanisms** enhance the likelihood of compliance (ibid 2005, Markelova et al. 2009).

[44] For example Olson (1965) was mainly concerned with interests groups such as trade unions or pressure groups, whereas Wade (1988), Ostrom (1990), Baland & Platteau (1996) use the theory of collective action to analyse groups for the management of Common pool resources.

Many scholars of collective have a strong focus on the attributes of the group and often neglect the **external environment** or hardly touch upon this issue (cf. Ostrom, 1990, Wade 1988). However, influences outside of the community also have a major impact on the ability of groups to self-organize (Agrawal 2001). Thus, the context, in which a farmer group is operating, has to be part of the analysis. Markelova et al. (2009) proposes to define the external environment on the basis of the **overall economic and political situation**.

The characteristics of resources, which are identified as an important factor in the literature on collective action in resource management, have to be reconsidered for the purpose of this research. Instead, Markelova et al. (2009) stresses the importance of the **characteristics of the respective produce and market**. The market and product finally decide on the incentives for collective action. The cooperation between the farmers can also raise transaction costs, which have to be weighed against the expected benefits. Collective action in common marketing proved to be most beneficial for high value products (perishable or processed products which are more complicated to store and transport) compared to undifferentiated products such as staple foods or other bulky goods (Hellin et al. 2009, Kaganzi et al. 2009). Moreover, joint efforts to reach export markets do pay off compared to collective action to supply local or regional markets. However, higher value produce as well as more demanding markets also carry higher risks for the famers (Markelova 2009 et al).

2.4.2. Robust collective action

The purpose of this research is to explore the effect of external support, strong market ties and leadership on the occurrence of robust collective action of Ghanaian pineapple farmers for common marketing purposes targeting European export markets. I already discussed why I consider collective action as a precondition for farmer groups to access markets. In section 2.3, I presented scientific evidence that collective market behaviour of farmers helps to overcome entry barriers to export markets as it has the potential to decrease transaction costs. Moreover, smallholders benefit from economies of scale. However, I still owe a definition of 'robust collective action'.

Scholars propose different approaches to define the success of farmer organisations. Stockbridge (2003) proposes to measure the success of a farmer organisation on the basis of its ability to fulfil its purpose and objectives as well as its expansion, survival and sustainability. However, from the perspective of collective action theory, these variables have to be treated with caution. Attaining its objective is also dependent on a lot of other factors which might not be linked to the action of the groups' individuals. It is also not possible to make a final judgement on the robustness or durability of an organisation referring to the time of its existence. Collective action organisations might have only a timely limited purpose and fulfil their duty after a certain time. Moreover, the pure existence of an organisation does not say much about its functioning. Agrawal (2001) analysed numerous studies on collective action for sustainable governance of resources and criticises that most studies do not provide a clear conceptualisation of successful collective action. "Most [studies] have an implicit sense of successful institutions as those that last over time, constrain users to safeguard the resources, and produce fair outcomes." He opted for the term 'durability' of collective action institutions which shall capture these notions.

The access to European high value export markets requires the ability of a farmer organisation to fulfil the quality, quantity and safety requirements of buyers as well as identify and adapt to changing market trends and developments. Therewith, the success of a farmer group will be defined according

to its capacity to proactively deal with these challenges. These abilities are well captured in the concept of robustness. The term has been first coined in engineering, where it has been defined as "the maintenance of some desired system characteristics despite fluctuations in the behaviour of its component parts or its environment" (Carlson & Doyle 2002). To put it in other words, it describes a system which is able to sustain certain vital functions despite internal or external disturbances. The concept of robustness has also been transferred to problems which social scientists are concerned with. Anderies et al. (2004) for example apply the notion of robustness to the analysis of social – ecological systems. This concept shows to be more appealing to the question at issue compared to the similar concept of resilience, which has its origin in ecology. Due to this origin, resilient systems are not considered to embrace components which have been consciously created or adapted on purpose. This is however the case for many social or social-ecological systems.

Thus, for this study I will opt for the concept of robustness. The literature so far misses a comprehensive definition and operationalization of robust collective action institutions for common marketing. For this study, I consider a robust farmer group as a group which is able to proactively react to current market requirements as well as sustains and develops its central functions and activities also in times of difficult external conditions. These might comprise changing market conditions, marketing difficulties and unfavourable climate conditions; moreover difficulties to access input materials and credit. Therewith, I will not define the successful collective action in terms of the actual outcome of the operations of the farmer group, but mainly measure the **efforts and activities** of its individuals aiming at achieving certification and market access, producing fair outcomes running the group in a future-orientated way. A full operationalization of the term 'robust collective action' serving as a basis for this study will be conducted in chapter 3.

2.4.3 Focus of the analysis

Keeping all discussed success factors in mind, I focus on the impact of external actors' support as well as leadership on the robustness of collective action institutions. How is this choice justified as the focus of this study? So far, the collective action literature in general has paid little attention to the influence of external factors on the collective action. Interventions by external actors intending to create collective action institutions have been almost neglected. Therewith, this paper contributes to fill this knowledge gap. Moreover, the influence of leadership is included in the analysis. Scholars have paid attention to the importance of leadership (cf. Bianco & Bates 1990, Kaganzi et al. 2009, Thorb et al. 2005, Anand 2002). However, leadership is still a controversially discussed issue in collective action theory as its precise causal relation on the emergence of collective action is hardly understood (van Laerhoven 2010). In the following we have a closer look on the existing literature concerned with these factors.

External support

Agrawal (2001) levels criticism against many scholars who are concerned with common property institutions for the management of natural resources. He found that most researchers in collective action theory explain successful group formation for a common goal of its members according to the attributes of the group, neglecting the "external social, physical and institutional environment" (Agrawal 2001: 1650). However, it is obvious that the external environment has an influence on collective action. It exceeds the extent of this study to conduct a full assessment of all potential external factors. Thus, I focus on the intervention of external actors which systematically try to

simulate collective action. Is it possible to create robust institutions from the outside? How does external intervention affect common marketing efforts?

The literature does not provide us with final answer to these questions. Opposite to the reviewed reports and literature on practical experiences with this topic (cf. section 2.2), the discussed success factors for functioning collective action suggest a negative influence of external actors' intervention. According to the design principles, collective action requires the freedom to craft own rules which should not be challenged by governmental authorities (cf. Ostrom 1990). Baland & Platteau (1996: 288) support this view by stating that "the less the state can, or wishes to, undermine locally based authorities, and the less the state can enforce private property rights effectively, the better the chances of success" of collective action institutions.

At the same time Baland & Platteau (1996) and other authors (see also Springfellow et al. 1997, Bebbington 1996, Humphrey 2008, Thorb et al. 2005, Markelova et al. 2009, Fox 1996, Bennett et al. 1996) recognize that external actors such as the state or aid donors can stimulate collective action activities and contribute to the development of robust institutions. One way of supporting groups of individuals to cooperate for shared interests is simply the initiation of such institutions by conveying the idea. This can be done by providing information about the advantages and disadvantages as well as opportunities of group formation. In uniting the potential collaborators, setting the framework conditions and sensitizing them for the opportunities and risks, external agents can be the 'driver' of the formation process (Kruijssen et al. 2009).

Moreover, donor agencies, NGOs or governmental organisations might be an important source of information and advice which is necessary to operate as a group for a special purpose (Baland & Platteau 1996). They can support the group to identify suitable markets and products in the context of potential common marketing activities. Moreover, external agents can provide training, establish contacts and assist the group to develop an adequate internal organisation as well as formal procedures like registration. The training might focus on agricultural practices, the requirements of the standard, literacy, management and administrative skills and leadership (Springfellow et al. 1997, Narrod et al. 2007). Moreover, groups can be supported in enforcing internally imposed sanctions, if the individual members lack the means to do so (Baland & Platteau 1996).

In addition, external actors can provide financial and material support. For natural resource management efforts, external actors such as the state or donor agencies could have a promoting role in providing financial assistance to compensate the group members' efforts of conservation (ibid).

Finally, financial contributions can have a catalyst role because they might provide the necessary incentives for collective action. In addition, external actors can influence the institutional setting in which the respective groups are operating. Narrod et al. (2007) describes how donor agencies and NGOs established business support services such as certification bodies in Africa to further lower the expenses for certification. For example, external agents have launched initiatives to establish contacts between credit providers and farmer groups, provided access to input materials and assisted in linking farmer groups to potential extorters or processors (Narrod et al. 2007). Furthermore, donor agencies tried to lower the entry barriers for small-scale farmers by contributing to the adaptation of the GLOBALG.A.P. standard to the local conditions which considerably helped to reduce the required investment costs for the groups.

Authors like Springfellow et al. (1997), Bennett et al. (1996), Balland & Platteau (1996), Thorb et al. (2005), Chirwa et al. (2005) and Humphrey (2008) come to the conclusion that the success of external support in encouraging collective action is especially dependent on the way of its implementation. Stringfellow et al. (1997) point to the fact that former efforts of governmental agencies, NGOs and donor agencies often did not result in the formation of durable farmer groups. Drawing on the results of project evaluations they find that especially the provision of subsidies had negative effects. Subsidies weaken the intrinsic motivation of groups to sustain the institution in their own right and might lead to dependencies. Bebbington (1996: 1169) supports this view and cautions against a "culture of the gift" which makes it difficult for groups to develop the ability to recover cost and generate capital on own strength. External actors have to consider the 'economic viability' of groups to identify their potential target markets (Humphrey 2008, Hellin et al. 2009). In case of disregard of the group's capacity and interests, programmes of external actors might fail to form robust groups and thus even discourage any collective action efforts. Especially for market access, farmer groups may lack the capacities and interest to access high value markets as it is intended by many aid donor programmes. Unfulfilled expectations and negative experiences of the participating farmers might even lead to a collapse of groups. However, if the capacities and objectives are taken into consideration, support from the outside can facilitate collective action. Thus, Springfellow et al. (1997) recommends to not putting pressure on the group by setting numerical targets to the process, since externally driven processes run the risk of acquitting the group members being responsible for the development of the group. Overambitious expectations or too rapid up-scaling efforts might undermine the farmer organisation Chirwa et al. (2005). Moreover, externally designed group functions and internal organisation might prevent groups from developing a sense of ownership for 'their' institutional arrangements. Instead, the authors stress the importance of mobilizing their own capacities and assist them in identifying their targets and abilities themselves. External donors should provide support only on request.

Marcelova et al. (2009) points to another debated issue in scientific literature. Who should be in charge to provide support to smallholders accessing markets? Is it the responsibility of the state, NGOs or the private sector? These questions are indeed challenging because both, private and public side have an interest in the integration of smallholders in to export market. Governments in developing countries have often identified the facilitation and support of smallholder groups as one pillar of the agricultural policy (for Ghana see Väth 2008). Moreover, since private parties source directly from smallholders, it might be their responsibility to develop farmer organisations. Thus, the improvement of their organisational capacities and producing may also benefit them. However, leaving the responsibility with the private sector bears the risk that companies keep the economic benefit of the smallholder upgrading for themselves. Therewith, literature favours NGOs as external agents providing support. But also efforts of NGOs did not necessarily lead to successful outcomes due to too ambitious interventions which challenged the self-initiatives of farmer organisations (Barham & Chitemi 2009). Narrod et al. (2007) presents several potential forms of partnerships between the actors from private, public and civil society sector as a favourable solution. Markelova et al. (2009) concludes that "the key issue is to identify the entities (…) who has the qualities required for effective facilitation such as legitimacy, expertise, appropriate contacts and trust."

More empirical studies also favour the idea that farmer group should be supported by a company (Nyagah 2009, Cooper & Graffham 2009). Thus, Cooper & Graffham (2009:83) state that "the most

successful GLOBALGAP-compliant smallholder schemes are (…) linked to a large, well-resourced export company". Also an evaluation report of the gtz stresses the importance of linkages between small-scale farmer organisations and exporters. The organisation draws its conclusion on a comprehensive programme trying to support small farmer organisations in Thailand, Ghana, Kenya and Macedonia to attain GLOBALG.A.P. certification and access European markets. Narrod et al. (2007) points out that exporters are interested to source from organized producer groups which manage to comply with food quality and safety requirements. Often they don't only supply them with input materials but provide also technical assistance, advice, trainings and input materials. Coulter et al. (1999) also provide a very positive picture on a strong relationship between companies and groups of small-scale farmers. They distinguish between three different forms of cooperation between exporters and farmer groups. First, producers can directly supply to exporters as outgrower schemes. UNCTAD (2006) defines outgrower schemes on the basis of four criteria. They name producers which are organized by an exporter or processor and have no own organisational structure (1). The producers normally produce on their own land (2), but have the guarantee that their crop is sourced by the buyer if they match a previously defined standard (3). They generally receive a previously agreed percentage of the final sales price (4). Moreover, producers can sell their produce as farmer cooperation – a self-organized producer organisation. Coulter et al. (1999) again categorize cooperations in two subclasses – in linkage-independent' and 'linkage-dependent' groups. 'Linkage-independent' groups are not bond to a specific company but negotiate themselves with interested buyers. 'Linkage-dependent' groups on the other hand do have a direct contractual relationship to the respective company, which might supply the farmers with input materials and technical assistance. In return, the group sells all or a considerable amount of its produce to the exporter. The authors state that the last model proved to be most successful in practice. According to them, the contractual relation between both parties has the highest likelihood to avoid cheating on either side as well as distribute risks equally. In this constellation, farmer groups proved to develop their technical skills and a 'strong business rationale' increasing their competitiveness on the market. However, they also might involve the risk that companies trade on the unequal power relationship in relation to the farmer group.

The scientific literature provides another view on this issue. Whereas the importance of connection to market parties is not denied, it is still reported that strong linkages to market parties can reduce the collective action (Markelova et al. 2009). This is because members of groups with less market connections are found to be more interdependent amongst each other, whereas strong cooperation with a company might result in a reduction of these dependencies. Markelova et al. (2009) refer to these findings derived from research on common pool resource management without discussing if they can be transferred to common marketing activities. I think that this is indeed a debatable approach. However, collective action literature dealing with common marketing efforts hardly touch upon the effects of strong relations between producer groups and buyers which is strongly promoted by practitioners. Humphrey (2008: 81) for example concludes that "business linkages involved in small farmer export production, and in particular the role of exporters, need to be better understood and incorporated into donor policy". He notices that donors are still reluctant to work with the private sector fearing, that the support of exporters will not necessary lead to a higher level of cooperation with smallholders or to an improvement of their situation. This study will shed light on this still widely ignored issue in collective action theory.

Leadership

Second, I analyse the role of leadership for collective action. Leadership has been considered to play a very central role in facilitating collective action (Bianco & Bates 1990, Baland & Platteau, Thorb et al. 2005, Anand 2002, Kaganzi et al. 2009, Markelova et al. 2009, Vedeld 2002). However, it is still not fully understood how leadership causes cooperation. Moreover, I consider leadership as one of the most important factors explaining the variation of success of external intervention. Being aware about the central importance of leadership, the external intervention of donor agencies has often strongly focussed on enhancing leadership capacities. Therewith, leadership cannot be considered as a completely independent factor in this study. At the same time, the quality of leadership is also determined by the already existing skills, experiences and capacities as well as their commitment.

Leaders might have a similar function as the support of external actors in initiating cooperation, coordinating activities and enforce internal rules. Thorb et al. (2005) identifies a leadership function as crucial. He proclaims 'power and control' to be one of the main modes of group functioning. The group is dominated by one or several group members who enforce the cooperation by means of coercion and sanctioning. Anand (2002) even identifies leadership as the most important for the performance of a group. Kaganzi et al. (2009) see a need for specialized roles in farmer groups which strive to access high value markets. The authors conclude that the "decision to empower certain group members in marketing was critical in achieving market responsiveness and overcoming new challenges that, if left unaddressed, would have caused the business to fail." (Kaganzi et al. 2009: 29). As Bianco & Bates (1990) demonstrate in their game-theoretical study that leadership is necessary to overcome situations in stalemate in which all parties would benefit from cooperation but, assuming that they are rational egoists, they do not. They come to the conclusion that leadership is most of all important for initiating collective action and less for sustaining it.

Being conscious that leadership has an important role to play, it is still open to discuss which kind of leadership has a positive influence of collective action and under which conditions does it occur. Markelova et al. (2009) and Kaganzi et al. (2009) state that *appropriate* leadership is important. The person fulfilling the leadership function needs to be trusted, respected by all members and requires the ability to motivate the group members. Moreover, leaders supervising groups in common-marketing necessitate management qualifications and a good understanding for the market and its requirements. These skills and qualifications are dependent on the respective target-market. Attaining access to the European market requires a good understanding of the GLOBALG.A.P standard. Personal linkages of the group leader to other organisations and individuals are also beneficial for the group (Markelova et al. 2009) as they might be a source to material & financial support, information or market access. These linkages might also legitimize his or her position because these linkages help to sustain the success of the group (Bebbington 1996).

Furthermore, the capacities as well as the incentive structures proved to be important for the success of the leader to facilitate cooperation. Vedeld (2002) reasons from her studies that collective action was enabled by leaders which were wealthier compared to the other group members. However, in case these endowments were utilized against the economic interest and the sense of fairness of the community members, collective action is less likely to occur. Finally, the author found that leadership had a limited impact on community cooperation in case the leader stands in close relationship with governmental authorities weakening the autonomy of the group. Anand (2002) also raises another issue concerning leadership. For many groups she has been working with, the function

of the leader has been a voluntary and uncompensated position. Thus, the group is dependent on the commitment of the leader and his willingness and capacities to contribute. Referring to the empirical results of her study Anand (2002) does not perceive this issue as a danger because "(…) a large proportion of the leaders seem to have taken their role as an opportunity for self-less service to society." It is highly questionable if this picture of leadership is realistic picture and is generalizable to other groups beyond this presented study. Other scholars concerned with leadership provide us with a different view. Thorb et al. (2005) for example explain that a strong 'power and control' mode also brings the risk of dependence and exploitation among the group members and the leader. Elite theory (cf. Hunter 1953) which describes and analyses the power structures in societies and communities provides also a different perspective on leadership. The theory argues that the real power brokers are often acting behind the official holders of positions, therewith questioning the possibility to realize the democratic ideal.

As the literature review on leadership has shown, scholars have very diverse views on how leadership affects its subordinates. We still lack a good understanding how and under what conditions leadership facilitates collective action. This study will especially focus on the influence of leadership on the formation and sustenance of robust farmer groups for market access.

2.5 The Institutional Analysis and Development Framework

The study will be supported by the Institutional Analysis and Development Framework (IAD) which has been conceptualized by Ostrom (2005). In the following, I will briefly introduce the IAD framework and its benefits for this study. The IAD framework does not contribute to the theoretical foundation of the research. A framework is a tool to identify and relate the relevant factors that constitute the focus of the inquiry. Therewith, it helps to structure the analysis of this research and construct the conceptual framework guiding this study.

As this study focuses on institutions, thus rules-in-use providing incentives to human behaviour, I consider the IAD framework as a guide to the inquiry of this research. Institutions are defined as "the prescriptions that humans use to organize all forms of repetitive and structured interactions" (Ostrom 2005: 3). Thus, the focus on institutions, the overt or implicit rules in use, is a useful approach to explain the opportunities and constraints which small-scale farmers face in their efforts to access markets. Rules or the lack of rules regulates the internal interaction among the producers, their access to information, knowledge and capital, thus determine smallholders inclusion in and exclusion from markets. Thus, the design of new institutions – as for example the foundation of producer groups – can change the rules of the 'game'. It follows that in order to be successful in accessing high value markets, farmer organisations need to develop institutions to overcome collective action problems.

The IAD framework contains similar elements as the collective action theory but opens the perspective for the context in which the certain interaction takes place. It consists of three main components: The 'exogenous factors, 'the action arena' and the 'outcome' of the analysed action. 'Exogenous factors' set the environment for a particular 'action arena'. The participants interact in an 'action situation', which takes place in the 'action arena', leading to a certain 'outcome' (see figure 1).

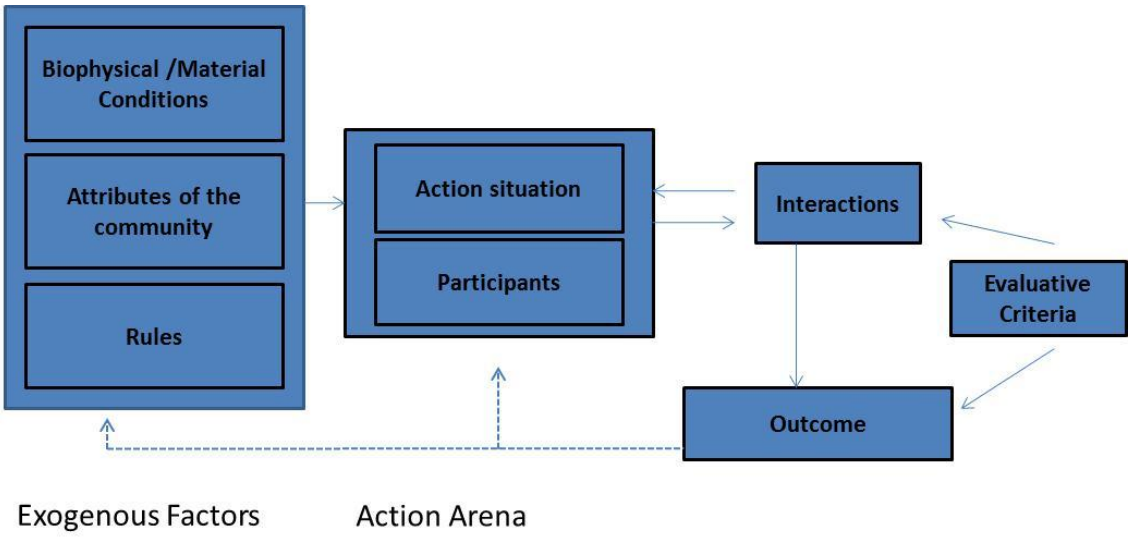

Figure 1: *Institutional Analysis and Development (IAD) framework (Ostrom 2005)*

The context of the interaction, i.e. exogenous factors is defined as the biophysical/material conditions, the attributes of the community and formal as well as informal rules. The core of the framework – i.e. the action arena – comprises the 'action situation' and the participants. The 'action situation' occurs when "two or more individuals are faced with a set of potential action that jointly produce an outcome" (Ostrom 2005:32). The action situation produces an 'outcome' which is determined by the interactions of the participants as well as the exogenous factors. The outcome can in turn have an impact on the biophysical/material conditions, the attributes of the community and institutional arrangements. Action arenas are most of the times interlinked and rarely exist isolated from other situations but interact with other action situations (Ostrom 2005). The outcome of these interactions has in turn an impact on the action situation.

3. The Conceptual Framework

At this stage, the discussed theoretical concepts will be merged to the conceptual framework of this study. The IAD framework already has been applied as a tool to analyse numerous different empirical settings and also sketches the central variables and their interlinkages which are relevant for this study. The conceptual framework of this study is built on the overall structure of the IAD framework. In this section, I first fill the IAD framework with the relevant factors for this research in order to provide an overview about all relevant variables as well as contextual setting of collective action within this research (see figure 2). Second, the conceptual framework will be presented (figure 3).

In this research, the 'action situation' is the 'effort' of the farmers trying to attain the group certification and access to the European market; the participants are the individual farmers. The action situation leads to an outcome which will be analysed on the basis of a set of criteria measuring the occurrence of collective action as well as its robustness. The outcome of the action situation is also influenced by the mentioned external conditions, namely the biophysical and material conditions, the attributes of the group as well as the rules-in-use (Ostrom 2005). These factors constitute the incentives for small-scale farmers to work collectively. For this study the biophysical and material conditions comprise the soil and the climatic conditions of the respective agricultural area, furthermore the infrastructural parameters like the transport connections (Barham & Chitemi 2009, Will 2010), the distance to exporters or processors (Barham & Chetemi 2009), the accessibility of agricultural land and availability of labour, low cost business services (Will 2010), the nature of state agencies (Kruijssen et al. 2009) as well as the characteristic of the produce and the current market situation (Markelova et al. 2009). Part of the exogenous factors are the rules-in-use. Farmer groups which try to access European export markets have to deal with the regulations of European retailers, which are defined in the GLOBALG.A.P. standard. Moreover, they interact with exporters and processors which apply their own set of requirements. Finally, farmer groups developed formal and informal rules which guide their cooperation. As a matter of fact, there are many more institutional arrangements as for example national, regional and local regulations on agriculture, trade and land rights, which enable and constrain their actions. It is not the aim of this study to identify all rules-in-use but determine the most relevant ones. The third category of the external environment is the attributes of the community. Since this study is concerned with collective action, the following characteristics are known to affect collective action: group size, social capital, past successful experiences, homogeneity of interests, heterogeneity of endowments, leadership (Markelova et al. (2009) based on based on Wade (1988), Ostrom (1990) Baland & Platteau (1996)) and financial, cognitive and managerial capacities as well as linkages to market parties (Will 2010).

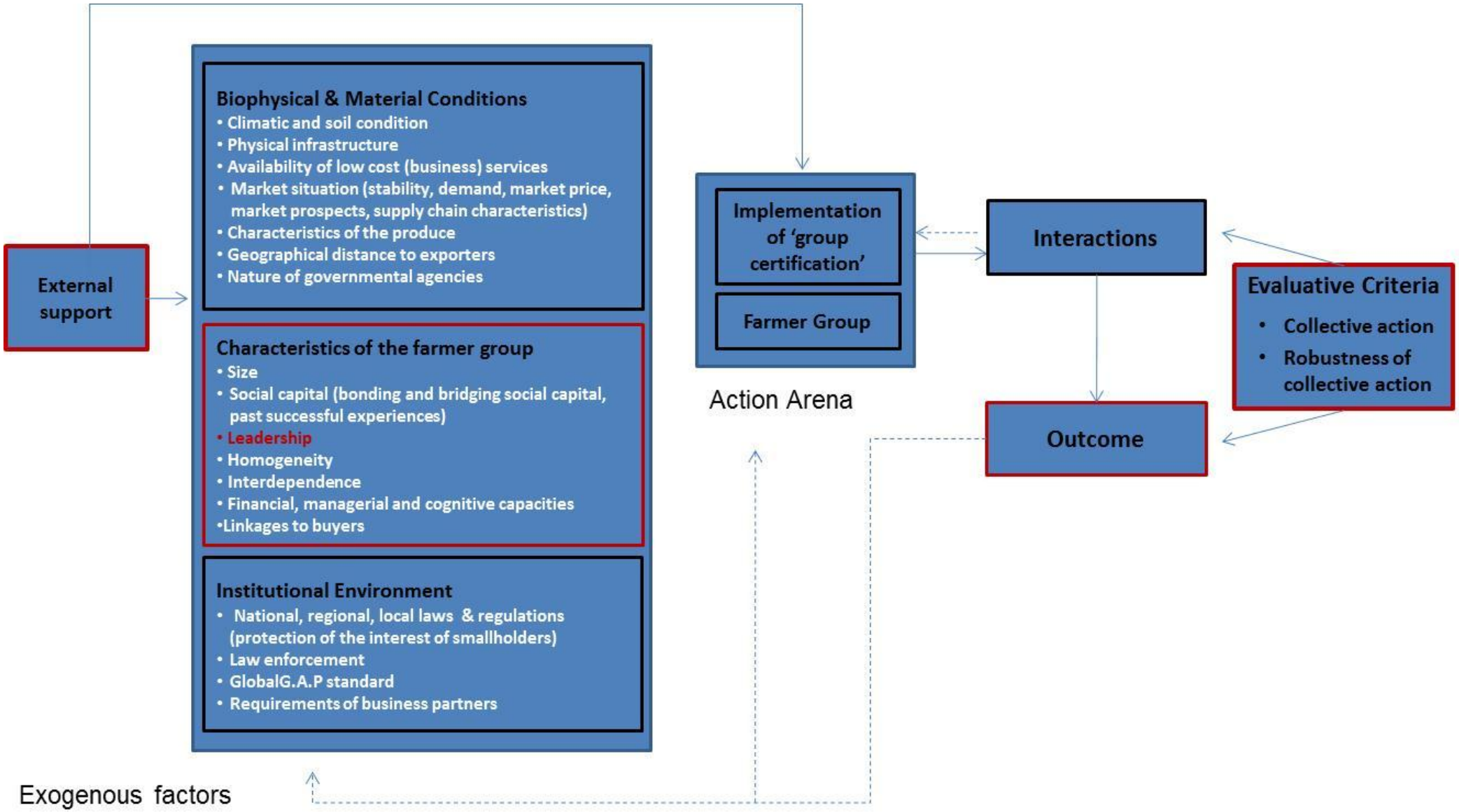

Figure 2: The adapted IAD framework

* Elements marked in red indicate the areas of interest for this research

Based on: Ostrom 2005, Ostrom 1990, Markelova et al. 2009, Will 2010, Hellin et all. 2009, Kaganzi et al. 2009, Barham & Chitemi 2009, and own amendments

For this research the IAD framework will be extended by an additional factor, namely the external intervention. Barnes (2010) already opted for an extension of the framework to analyse the influence of external actors on collective action in Joint Forest Management. She treated external actors as one of the exogenous variables. For this research, however, this factor has a more prominent position in the framework since the external actors do not only have an influence on the 'action situation', i.e. the interaction of the individual farmers, but also on the institutional setting and the material environment and the characteristics of the farmer group. Additional to the influence of external intervention, I am interested in the effect leadership of the group (for a full depiction of the framework see figure 2). It is obvious that it is impossible within the extent of this research to pay attention to all mentioned factors. This framework however helps to identify all variables which have an influence of the action situation in the focus of this research. Departing from this overview of the situation, I determine the independent, dependent and control variables for the analysis.

The conceptual framework is confined to the variables which are in the focus of this research (see figure 3). This does not imply that the other discussed factors can be neglected. In an ideal case, they should be constant for the empirical work. Although, I put a lot of effort in identifying farmer groups that are constant on these control variables, it was not possible to find groups without any variation on these factors. This issue is discussed in the empirical part of this research.

In this research, I focus on the impact of the external intervention on the occurrence of collective action and its robustness. Moreover, I discuss to what extent leadership influences robust collective action. From the literature review, I find that external intervention is considered to influence collective action with different means. I therefore categorize this variable into three factors; that is financial and material support, technical training and information as well as organisational and management training. A considerable part of the training is only provided to the leaders of the group. Thus, leadership will be treated as an intermediating and not totally independent variable. It is operationalized in three parameters, namely motivation, vision & morality, rule enforcement as well as skills & initiative. I expect that external support and a strong leadership lead to the occurrence of collective action as well as the development of robust collective action (I present a detailed operationalization in section 4.2.).

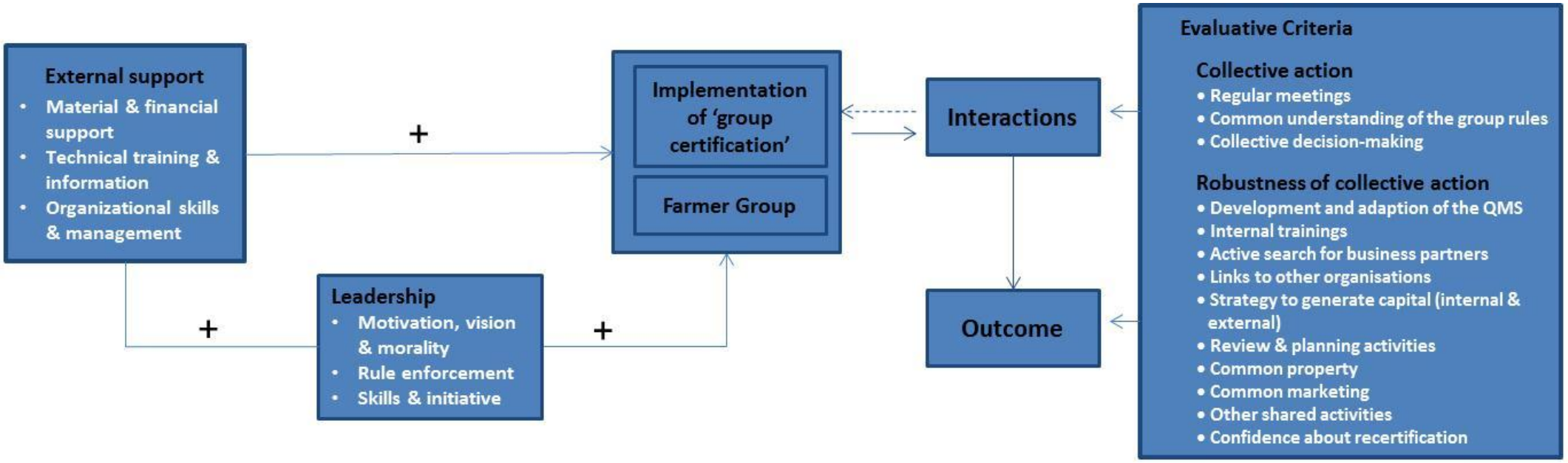

Figure 3: Conceptual Framework

Based on the review of the state of the art literature as well as on the conceptual framework I will derive three working propositions which are discussed during this research to answer the central research question:

> *"In what ways have external support and leadership an impact on robust collective action of Ghanaian pineapple farmers targeting the European export market?*

The working propositions will help to structure the research and focus the analysis on crucial factors influencing the different levels of farmer groups' success.

Whereas the theory of collective action provides us with an ambiguous view on external support, empirical studies as well as the experiences of development organisations draw a more positive picture. I assume that

- *External support of donor agencies, governmental organisations and market parties increases the likelihood of robust collective action of small-scale producer groups in order to access high value markets.*

Moreover, the literature review reveals that leadership is considered to be crucial for the development of a group. Collective action theory supports this observation, naming adequate leadership as one of the enabling conditions for the occurrence of collective action. Thus, Markelova et al. (2009) state that leaders which are trusted, have the ability to motivate members, bring the necessary skills and have connections to outside organisations have very positive impact on the group development. Anand (2002) even identifies leadership as the most important factor for the performance of a group. Thus, the second working proposition proposes that

- *Appropriate leadership increases the likelihood of the occurrence and robustness of collective action for common marketing of small-scale producer groups in order to access high value markets.*

4. Methodology and operationalization of the variables

4.1 Comparative case study

The research questions shall be answered by conducting a qualitative comparative case study analysis of six farmer groups which have participated in a project supported by at least one or several donor agencies, governmental organizations or market parties. A case study can be defined as "an intensive study of a single case or a small set of cases with the aim to generalize across a larger set of cases of the same general type (Gerring 2007: 65). Ideally, a comparative analysis will be carried out that assesses differences in time and space among the groups. Thus, this case study relies on a comparison of the situation before versus the situation after receiving the support to assess the impact of the external intervention. A quasi experimental research design is however not feasible because it was not possible to identify a suitable control group for a comparison in space. All known farmer groups in Ghana did receive support to access export markets and attain the GLOBAL.G.A.P certification. Nevertheless, the external intervention shows variation in duration and kind of support. Thus this variation serves as the basis of a cross-case analysis comparing the influence of external intervention among the groups.

The comparison in time in order to assess the impact of the external intervention is challenging due to the fact that groups did enter the project at different points of time. Moreover, the groups existed for different periods of time and thus, showed different levels of collective action and robustness before they participated. For this study, it was not possible to directly collect data in two points of time and thus, not able to generate data for the baseline scenario. Therewith the study will base the comparison on the memory of the group members and the involved experts. I primarily relied on the perceptions of the participating farmers asking them for their experiences of change after and before the intervention, as well as their perspectives on the causes of change. Being aware that the reliability of this data is easily contested, I used a triangulation of sources. Group members are interrogated individually as well as in the group. Moreover, I confronted them with my observations and assumptions and asked for their opinions. Finally, I discussed my findings with involved training staff.

To identify the effect of leadership on the collective action of the group, a comparison in time was not possible because all groups came to existence with already a certain leadership structure in place. For the assessment of this independent variable, I chose to rely just on across case comparison. The groups were guided by different types of leaders, which allowed contrasting the groups with each other. Again, it was still not possible to integrate a control group into the analysis, because all groups under investigation do have some kind of leadership. To reach the highest possible level of reliability, I again base my findings on different sets of data. As for the independent variable 'external support' interrogated several group members independently and discussed my findings with involved training staff.

This research already departs from a set of working propositions, which will be discussed in the course of the study. For their verification or falsification, I opt for a more explorative approach aiming at the extension of the collective action theory. To put it in other words, instead of focussing on the testing of causal relations, this study focuses on the exploration of causal mechanisms. The choice for this approach is mainly motivated by three considerations.

First, the causal mechanisms for the two independent variables of this research are hardly understood. According to Gerring (2007: 45) "Case studies (…) may allow one to peer into the box of causality to locate

the intermediate factors lying between some structural cause and its purposed effect". As discussed, the effect of external intervention to stimulate collective action has widely been neglected in collective action theory. Few existing studies assume a positive correlation between external support and collective action, however research hasn't been conducted on the causal pathway underlying this correlation. The same is true for the role of leadership. Scholars agree that leadership plays a crucial role for the emergence of collective action (cf. Baland & Platteau 1996, Agrawal 2001). Nevertheless "there is no general agreement about the precise relation between leadership and the occurrence of collective action" (Laerhoven 2010:541). Thus, the causal mechanism is hardly been studied. Hence, I consider a more explorative approach focusing on the causal mechanisms as most suitable to deal with this aspect, as these would have been neglected in large N cross-case analyses.

Second, case studies allow a certain sensitivity for the context of the respective cases. An explorative and more inductively driven research opens up the possibility to identify other explanatory variables which have not been taken into account from the beginning of the research. A first inquiry has shown that the available case studies show a high level of heterogeneity among the farmer groups and their respective context which might have an impact of the occurrence of robust collective action. These strong variations make a large-cross-N study a not very feasible methodology, because they might result in a spurious results not being aware of the other plausible explaining factors.

Finally, the choice for the comparative case study of the small-N sample is also founded on very practical reasons. The recent situation in the Ghanaian pineapple sector does not allow a large-cross-N study, due to the fact that only a limited number of farmer groups, namely nine, underwent the procedure of group certification in Ghana. Moreover, it would not have been feasible to conduct such a large investigation due to constraints in time and financial resources.

The pineapple sector in Ghana is an interesting context for the investigation of the collective marketing activities of smallholders. First, the currently challenging market situation demands a high level of robust collective action to successfully access high value markets. The history of the pineapple sector in Ghana proved that smallholders can play an important role in the export to the European market. However, recent developments of global agrifood system, characterized by constantly changing preferences of consumer markets, strong competitive dynamics, and the increasingly important public and private regulations in the global food trade, expose them to a difficult situation. I don't consider the situation of small-scale farmers in Ghana as representative for smallholders in developing countries targeting the European export market. Thus, the results will not easily be transferred to the situation of smallholders in other countries. However, the Ghanaian pineapple sector is in an emerging state which makes the result of this study especially relevant for Ghana. On the African continent Ghana is the eighth strongest exporter with an estimated value of $ 7,326,000,000 generated by the export of gold, cocoa, timber, tuna, bauxite, aluminium, manganese ore, diamonds and horticulture products in 2010.[5] Thus, Ghana already developed a considerable domestic infrastructure for the export sector and is in this respect far ahead compared to other developing nations. For the pineapple sector, Ghana even came fourth place in terms of export to the European Union in 2008. However, the country still faced major structural challenges in its agricultural export sector. Against this background, the current developments of the world food market have a high relevance for Ghana. Therewith, donor agencies put a strong focus on the development of the agricultural export sector in which smallscale producers can and should have an important role.

[5] https://www.cia.gov/library/publications/the-world-factbook/geos/gh.html [accessed 18-02.2011]

I chose the six farmer groups based on their variation in the respective independent variables. As discussed above, this has been a difficult task in terms of the external intervention, because all groups in Ghana trying to access the European export market have received support by at least one external actor. The variation of external intervention among the groups is however very scarce since all involved organizations base their work on a common concept. The still existing variation will be discussed in section 6.1. For leadership, also no control group could be identified because groups were obliged to appoint leaders according to the GLOBALG.A.P. requirements as well as the legal registration of the groups.

4.2 Operationalization of the variables

In the conceptual framework, I identified two independent and two dependent variables which will be defined and operationalized in the following.

4.2.1 Operationalization of the independent variables

External support and leadership are the independent variables of this research. As already discussed earlier, leadership has to be treated as a mediating variable since external actors also directly aimed at the development of leadership.

External support

I already elaborated in section 2.3.3 that external actors can affect collective action efforts in several ways. Based on the literature, I classify the intervention of the involved donor and governmental agencies into three categories which will help to discuss the causal mechanisms relating external support and collective action. The reviewed literature suggests that external actors also shape the external and institutional setting. This has likewise been the case for this project. Nevertheless, these activities are not in the focus of this research since these changes are tedious and haven't been experienced by the producer groups, yet.

- **Training in internal organisation & management**
  Groups may lack skills in internal organisation, social skills and management. According to the scientific literature, external actors support groups to establish their own system of rules and responsibilities and establish trust among the members (Baland & Platteau 1996). However, as discussed earlier, too strong external intervention which define the rules from the outside carries the danger to be not accepted by the members (Ostrom 1990).

  The training on internal organisation and management which was offered to the farmer groups is the focus of this study. Producers have been introduced to the requirements of a monitoring system, the agreement of a sanctioning procedure in case of non-compliance and the procedure of internal inspections and audits. External support of the involved organisations aimed also on the development and establishment of a Quality Management system (QMS) which is the prerequisite the certification according to GLOBALG.A.P. and defines the rules and regulations for each group. Moreover, groups have been introduced to practices which should enable them to run their farming activities as a business. The training sessions include the set-up of a business plan, financial planning, record keeping and progress reporting.

- **Technical training & information**
  The production for the export to high value markets requires technical knowledge about MD2 cultivation and the requirements of the GLOBALG.A.P. standard. Furthermore, groups might lack information about the advantages of collective marketing behaviour, the current market

developments, opportunities and risks. External actors can offer advice and provide relevant information as well as trainings and thus facilitate collective action (Poteete & Ostrom 2004, Baland & Platteau 1996). Producer groups were trained on site preparation and planning, risk assessment, integrated pest management (IPM) and pesticide handling, forcing and degreening, the application of fertilizer, field hygiene, Maximum Residue Limit (MRL) and residue analysis sometimes also harvesting, product handling and packaging. Moreover, they have been introduced the specific requirements and cultivation techniques for the MD2 variety.

- **Material & Financial support**

  External actors can provide the economic incentive for donor agencies to cooperate if this incentive is not directly generated by the collective efforts. Baland & Platteau (1996: 290) state that the success of the establishment of collective action institutions depends largely on if the individuals of a group "correctly perceive the potential benefits of collective action." Drawing on lessons of a wide spectrum of examples of common pool resource management, they found that external actors can substitute the material or financial losses arising from the conservation of the resource. In the long term, the resource might recover in such a way that it can be used in a sustainable for the domestic needs, generate employment and even cash income for its users. The same would be true for the support of producer groups. The cultivation of MD2 pineapples takes approximately 18 month till the harvest. However, the input materials have to be purchased at the beginning of the cultivation cycle. Thus, for more than a year farmers incur expenses without expecting any income. Also the implementation of the GLOBALG.A.P. standard requires certain investments. Contributions also in form of credit or grant can bridge this first period and thus provide the economic incentive for collective action. Some groups received MD2 suckers for multiplication.

Leadership

"(…) Leadership is a complicated phenomenon (…)" write Kolavalli & Brewer (1998:4). Its exact influence on the behaviour of group members is not fully understood. I derived the following criteria from Kolavalli & Brewer (1998), Markelova et al (2009) and Anand (2002) for the analysis of this study. As discussed before, I don't consider leadership as a completely independent variable for this research, because it is affected by the external support which aims at its improvement. The intervention of the aid donors mainly targets the skills of the leader and thus might have an influence on the parameter three "skills & initiative". This potential influence will be discussed analysing the empirical results of this study.

- **Motivation, vision & morality**

  First, leaders can motivate individuals to cooperate in revealing the potential benefits and boost moral to invest into the common efforts (Kolavalli & Brewer 1998, Markelova et al. 2009, Anand 2002). "Leaders and followers raise one another to higher levels of motivation and morality" (Burns 1979 in: Kolavalli & Brewer 1998: 4).

- **Rule enforcement**

  Leaders can influence the expectations of group members. Thus, members of groups tend to assume that fellows of a group are more likely to comply with the rules when a leader is present. Moreover, leaders reduce transaction cost for group members because he or she centralizes the coordination of group activities, monitor the compliance of its members and enforce sanctions (Kolavalli & Brewer 1998). Thus, their function as coordinator and rule enforcing entity might increase collective action.

- **Skills & initiative**

  Depending on the skills, expertise and capacity of the leader, he or she can initiate innovations for the group (Anand 2002, Markelova et al. 2009). Leaders might play an important role in finding a buyer, negotiate for better prices or implement innovations for the internal organisation of the group.

4.2.2 Operationalization of the dependent variable

I already defined the term robust collective action in section 2.3.2 This section will be concerned with its operationalization. Only a small fraction of the criteria to measure robust collective action, have been extracted from the collective action literature due to the fact that the theory has not been widely applied for explaining the success of common marketing activities. The criteria which have not been derived from the literature have been developed in an inductive way in the process of reviewing project reports and discussing with experts involved in the project.

Functioning collective action

In order to evaluate if functioning collective action is actually taking place, I will use three parameters derived from the literature. The literature offers more indicators for collective action. However, I consider the following ones as most important.

- **Regular meetings** *(*Poteete & Ostrom 2004)
  The frequency for interaction among the group members is an important indicator for collective action. Regular meetings enable regular face-to-face contacts of all participants.

- **Monitoring activities and adherence to group rules** (Meinzen-Dick et al. 2004, Poteete & Ostrom 2004)
  Regular monitoring activities are necessary to prevent free-riding among the members and assure the adherence to the rules. The confidence that all members fulfil their obligations contributes to the continence of the group.

- **Collective decision-making** (Meinzen-Dick et al. 2004, Poteete & Ostrom 2004, Ostrom 1990)
  Arrangements for collective decision-making are one of the key functions of collective action institutions. Members which are affected by the rules require the possibility to contribute to their modification.

Robust collective action

Robust collective action is the main concern of this study. I argue that robust collective action is necessary to access high value markets. The following parameters have been chosen to measure the functioning of the farmer group for collective marketing activities:

- **Development and adaptation of the Quality Management System (QMS) to needs of the group**
  The certification according to GLOBALG.A.P. requires the development and establishment of an internal monitoring system (QMS) which assures the compliance of all group members. Thus, this set of rules predefines the internal organisation of the farmer group. I consider a producer group which is able to refine this rule system according to their needs as proactive in dealing with difficult circumstances and changing environments.

- **Common marketing activities**
  The overall purpose of the group formation is the access to high value markets. To what level do producer groups organize their marketing activities collectively? This indicator is measured on the basis of the regularity, frequency and quality of common efforts.

- **Contributions of the members & common property** (Poteete & Ostrom 2004)
  The contribution of all members to the activities of the group reads into their commitment. The more they invest in group property, the more they develop an attitude of 'ownership' for the organisation. I measure this factor according to the quantity of material and non-material contributions as well as the level of equal distribution of these contributions among the members.

- **Level of awareness and inclusion** (Poteete & Ostrom 2004, Baland & Platteau 1996)

The extent to which the group members are aware of the group rules, contribute to the group activities and benefit from the common efforts serves as an indicator for robust collective action.

- **Efforts to extent the number of members & certified members**
  A farmer group profits from a higher number of certified members because it decreases the costs for the individual members of the group. Moreover, the group can offer a larger quantity of certified fruits which increases their attractiveness for buyers. This indicator is measured on the basis of the internal training activities and support of members to reach certification.

- **Active search for business partners**
  A central success factor for the producer groups is the establishment of buyer relations. A prerequisite is the active search for a processor or an exporter. Groups are asked to explain their strategy to approach buyers.

- **Links to other organisations, individuals & authorities** (Baland & Platteau 1996)
  Baland & Platteau (1996) already found that links to external actors are beneficial for the exchange of necessary information. Producer groups profit from linkages to other farmers, lobby groups, governmental agencies, aid donors and other individuals and organisations to learn from their expertise and experiences. I evaluate this indicator according to the frequency, their 'direction' (mutual or one-sided), purpose, and importance for the development of the organisation of the relation to external individuals and organisations.

- **Strategy to generate capital (internal & external)**
  A central challenge of all farmer groups is the generation of investment capital for suckers, input materials, the annual audit and administrative expenses. To order to sustain their business, groups need to find a strategy to gain this investment capital. Groups are asked what efforts they take in this respect.

4.3. Data collection

The study is based on a comparative case study of six farmer groups which have participated in a supportive programme aiming at the certification according to GLOBALG.A.P. and their access to European export markets. Mainly qualitative data is used for the study. At first, a desk research has been conducted reviewing the existing project reports and existing data on the participating farmer groups. In a second step, all farmer groups have been visited for a discussion with the current leadership team, at least one group discussion and individual interviews with group members. In total, thirteen interviews have been held with group leaders, 33 with individual members and seven group discussions have been conducted. I selected the group members randomly for the individual interviews; however, since not all members of the groups have been certified according to the GLOBALG.A.P. standard, it was assured that also some interview partners per group did not hold a certificate (18 out of 33 interviewees have not been certified yet). Moreover, I had several informal talks. Interviews and the group discussions have been conducted in English, whenever the participating members felt comfortable with it. In all other cases, the interrogation has been carried out in the respective local language (Twi or Ewe). Whenever possible, I attended and observed regular meetings of the farmer groups. Moreover, ten expert interviews have been held with staff of the involved in the project implementation. This includes former staff of TIPCEE, employees of Market Oriented Agricultural Programme (MOAP), AFC Consultants International, Export marketing and Quality Awareness Project (EMQAP), Africert (certification body) and one exporter (Blueskies). The interviews lasted between 30 minutes and two hours. In some cases experts have been consulted several times. All individual interviews with producers, group leaders and experts have been guided by a list of open questions (semi-structured interviews). Also the group discussions followed to a large extent some extent same set of questions (The lists of questions are included in Appendix 2, 3, 4, 5). For the purpose of quotation within the analysis, I refer to 'individual interviews'

when I received the information in the course of a semi-structured interview'. In cases I quote from informal talks, I use the term 'personal communication'. The list in appendix 1 provides an overview about the empirical material which I gathered for this study.

In addition to the above presented methods for data collection, I used a mapping technique to catch the network of the producer organisations. The group members were asked to name individuals or organisations which have been in contact with during the development of their organisation. The names of the organisations were written on paper cards and arranged on the ground around a card with the name of the producer organisation. The arrangement of the cards was carried out according to certain characteristics of the relation between the respective producer association and the other organisations. I invited them to explain their relation to these referring to the purpose, the importance (visualised in the distance) and the manner (one-sided, mutual – depicted with the arrows) (please also refer to the key). All members were asked to express their opinion and move the cards with the respective names of organisations and individuals around till all members come to a consensus. This method also proves to be a handy visualization tool for the general group discussion. The pictures in Appendix 6 show photographs of the results. For the analysis I however converted them to standardized diagrams to also include additional information from the discussion and show some more connotations coming up during the discussion.

4.4 Methodological challenges, constraints and solution approaches

This section sheds light on the limitations of this research which accrue from the design of the research and the empirical approach as well as practical issues during the field research. The gravity of some of these issues cannot be played down. I put considerable effort into minimizing these issues.

One difficulty arises from the variation of the control variables. The adapted IAD framework in figure two lists a broad set of factors which might have a considerable impact on the collective action of the respective producer groups and therefore should ideally be constant for this analysis. Although, I put a lot of effort in identifying groups operating in a similar setting and with similar characteristics, they still differ on internal characteristics as well as the external environment of the groups. Thus, the investigated groups vary in terms of their number of members, their time of existence, their social capital, ethnical background, homogeneity in terms of education and resources as well as the general level of available resources and education of the members. Moreover, the groups operate in different environments in terms of the distance to the sea-freight harbour in Tema, the connection to physical infrastructure, the availability of business or agricultural extension services as well as the natural conditions. It is obvious that these differences might have an influence on the occurrence and development of collective action institutions (as discussed in section 2.5). Thus, the direct comparison of the groups might be biased by the variation of the control variables. To deal with this methodological problem, I apply two strategies. First, do not only base this research on a comparative analysis, but begin with the investigation of single cases. The findings of the individual analysis finally feed into the comparative analysis. Second, I will introduce each single case with a review about the control variables, point to the differences and explore their potential influence on collective action.

Furthermore, the research investigated only a very small sample, which indeed might question the level of external validity of my results. As discussed earlier, the sample of this research has been carefully selected to match the purpose of this research and to reach the highest possible level of constancy of other factors influencing collective action (which however was not completely possible). The sample

allowed conducting research on a set of six farmer groups which operate in a very challenging environment which strongly encourages and requires robust collective action among small-scale farmers in order to reach high-value markets. The history of Ghana's pineapple industry has shown that smallholders can supply to the export market. About half of the pineapples for the export have been cultivated by smallholders at the start-off of the export business in the 80s.[6] Moreover, the cultivation of pineapples has also very stimulating impact on robust collective action as the fruits are relatively demanding in the cultivation, harvesting and product handling. The cultivation therefore requires special skills and knowledge to produce the required quality and quantities for the export market; however the efforts pay off due to the high market price[7]. The project in focus of this research put a lot of effort in the training and supervision of the participating organisations so that all of the analysed groups profited from extraordinary comprehensive support. Moreover, they have been selected on the basis of their earlier performance for the project, hence can be considered to be amongst the best performing groups within Ghana. It might have been interesting to include farmer groups which have profited from less support to reach a higher level of variation among the groups. However, it was not possible to identify further groups. As these specific characteristics have increased the level of comparability for the cross-case analysis of this research, they might however also bias the results of this research question and they complicate the transfer of the findings to other producer groups which operate in other economic, political, geographical, biophysical and institutional settings. Even if the analysis takes place in a very special environment, the results might still be applicable valid for small-scale farmers in a similar market situation, producing another commodity with similar characteristics. However, the transfer of results has to be taken with caution and should be carefully assessed in light of the specific context.

In addition to the challenges related to the research design, I encountered some problems in the practical process of data gathering. First, in cases in which interviews could not be conducted in English language, I relied on a Ghanaian colleague who supported me during my field work. To keep potential sources of errors stemming from the translation or recording of data as small as possible, all interviews and discussions have translated and discussed shortly after its conducting. However, to create trustful atmosphere, I relinquished a direct translation during the interview situation. However, the person interviewing on my behlf was advised to take detailed notes, which have been discussed directly after the interview. Also the group discussions have been conducted by a partner who was carefully instructed on the content and techniques of facilitation. Whenever possible, these sessions have been recorded and discussed afterwards. I forewent to transcript all interviews, but used detailed field protocols for all interviews, group discussions and observations, which are available on request.

Second, for the semi-structured interviews, I used three lists of guiding questions which have been designed for the individual interview with producers, the group discussion and the expert interviews respectively (see Appendix xy). However, these questionnaires have been altered dependent on the interview situation. In some cases where the time was for some reasons been restricted, some questions have been left out. In cases were new issues came up, other questions have been added. Thus, the not completely standardized data collection carries the risk that the gathered data is not directly comparable.

Another limiting factor of the analysis potentially arises from the sample of interviewees which did not fully originate from a random selection process. The selection of my interview partners might be biased because I have been dependent on the leadership of the producer group as well as other circumstances. In many cases I was asked for the number of interviews I would like to conduct and a group member

[6] The history of the development of the pineapple industry is introduced in section 5.4.
[7] For the influence on product characteristics on collective action see Hellin et al. 2009, Gulati et al. 2007

selected the interviewees on my behalf. Moreover, in some cases the geographical distance to the homes of some group members could not be taken due to time constraints or the unavailability of transport.

Furthermore, the research taught me that my techniques of data gathering bear some risks. The conducting of interviews was sometimes a difficult tool to generate the desired data. Especially the inquiry of the role of leadership was difficult to assess via direct questioning. Thus, for this purpose I very much relied on observations as well as additional appraisal of involved training staff. Whenever possible I attended group meetings to observe the interactions of group members and leaders. In addition, I had never the opportunity to attend a training session not to mention a whole training cycle to have a first-hand impression of the project. Instead, I had to infer from the documentation, training material and the detailed description of the participating trainers about the training content and approach. Therewith, I might not have a full picture of the GAP project and might miss some aspects of the GAP projects in the analysis.

Finally, I experienced that some group members associated me with the staff involved in the project. Thus, I was often confronted with the request for the financial support or the access to a loan or grant. Their hopes towards my visit might have biased the responses of some group members. Especially, the research on the group New Generation was influenced by the expectations of the producers.

I conclude that my research faces a number of limitations concerning the research design and the data gathering. To the best of my knowledge, I unfolded the constraints, challenges and limitations of the research and present my strategies to reduce their influence on my research. However, some influence could not be ruled out.

5. Background information to case studies

This chapter provides some further background information on the empirical part of this research. With the help of the IAD framework, I was able to identify a set of factors which are not in the focus of this research but also might have an impact on the collective action efforts of the producer groups. Therewith, the information discussed in this chapter directly refers to the adapted framework (chapter 3 & figure 3) and elaborates on these factors which shape the general context in which all producer groups are operating. First, I elaborate on the GLOBALG.A.P. standard, its requirements as well as the actors and programmes which have been involved in the projects trying to support smallholders to attain the certification and gain access to European export markets. Finally, I introduce the history of the pineapple industry in Ghana and discuss the current economic and political environment smallholders are operating in.

5.1 GLOBALG.A.P.

Producers, processors and traders in Ghana face a second challenge – the requirements of European retailers. European retailers demand for timely, constant and bulk supply of high quality products. One leading certification scheme for the European market is GLOBAL.G.A.P. which defines the quality and food security requirements for fresh produce. Currently, about 85% of the European retailers support this standard. Therefore, producers targeting the European markets are obliged to comply. It covers the complete agricultural production process starting from the seed or seedling until the product leaves the farm. The standard comprises specifications about traceability, record keeping, varieties and rootstocks, site history and site management, risk assessment, fertilizer use, irrigation, pest management as well as harvesting and produce handling.

Producers wishing to export to GLOBALG.A.P. retailers are obliged to prove compliance with the standard. The proof of compliance is a third party audit, which has to be renewed every year and is financed by the producer. Generally, audits have to be carried out for each individual producer (‘*option 1’*). However, GLOBALG.A.P. reacted to the critics of producers from developing countries, NGOs and development agencies, which fear that the standard will squeeze small producers out of the market. As the cooperation of farmers is believed to reduce transaction costs for individual farmers, GLOBALG.A.P. introduced *‘option 2’* allowing smallholders to be certified as a group. According to GLOBALG.A.P., 'group certification'

> *“can significantly reduce external certification costs such as inspection charges and overhead costs. In addition many requirements necessary for GLOBALG.A.P certifications can be centralised (e.g. pesticide controls), which allows farmer groups to benefit from the scale which the group brings. Group structures also make it easier to provide farmers with advice regarding the implementation of the standard. Peer pressure on the group members increases their motivation to comply and the operation of the Quality Management System is an integral part of the group as a non-conformance from the QMS will negatively affect the certification result for the whole group.”*[8]

‘*Option 2’* is not based on another set of criteria. Farmer groups still have to comply with the same requirements as individual producers. But instead of auditing all farmers individually, the yearly inspection will only control the quality management system (QMS) of the group and carry out some spot tests on individual farmers. The group itself is responsible to “enable the QMS across the whole group” and has to guarantee that “all members comply in a uniform manner” (GLOBALG.A.P. 2009:3). If this is

[8] *(GlobalG.A.P. 2010: http://www.globalgap.org/cms/front_content.php?idcat=70 , accessed 10-11-2010)*

not the case and the audit detects non-compliances among the members, the whole group can lose their certificate.

5.2 Actors and programs integrating smallholders into the export market

First experiences with the group certification 'option 2' however show that the pure offer of the 'group certification mechanism' does not improve the success-rate of smallholders to attain certification and access high value export markets. Thus, several development agencies, NGOs and also exporters attach main importance to the support of smallholders to attain certification (Okello et al. 2009, Mithöfer 2009, Ouma 2009, Will 2010). The concept for the project in Ghana originates from a programme of the gtz and GLOBALG.A.P which has been developed and implemented in four countries: Moldavia, Thailand, Kenya and Ghana. The overall objective of this programme was "to identify ways, in which the GLOBALG.A.P. standard can become more inclusive for smallholder farmers in developing countries and to assist GLOBALG.A.P. to develop new and adjust existing technical standards and tools appropriate for smallholder certification." (Will 2010:9). A major part of the project was the development of a manual, which should serve as a guideline for farmer groups to implement requirements of the GLOBALG.A.P. standard.

The overall objective of the pilot project in Ghana was to overcome the described challenges faced by smallholders to enter the European market (cf. section 2.1 and 5.1) and to become certified. These goals should be accomplished by introducing small-scale producers to the requirements of the GLOBALG.A.P group certification, providing training on central business and management skills in order to access European markets as well as facilitating the conversion to the new variety MD2. Three organisations are concerned with the project implementation, namely gtz/MOAP, Ministry of Food and Agriculture (MoFA) represented by its Horticultural Export Industry Initiative (HEII) as well as the Trade and Investment Programme for a Competitive Export Economy (TIPCEE). In the first stage, all organisations worked together on the development of the manual and respective training material which has been used to support six farmer groups in a pilot project. Thereafter, the involved organisations used the developed concept and training material to support additional farmer groups. In the following, these organisations and their roles will be presented in more detail.

5.3 The involved organisations and programmes

Most involved organisations which supported the project, are governmental agencies (Ghanaian or foreign) or arise from a cooperation between the Ghanaian government and international donor agencies. Moreover some NGOs, one international and one local consultancy and an exporters association have been involved marginally. Finally, two groups have also been supported by their buyer, which has not directly related to the project as such. The subsequent paragraphs will introduce the involved organisations.

The Market Oriented Agricultural programme (MOAP) aims at the improvement of the "competitiveness of agricultural producers, processors and increases the value addition generated particularly in rural areas"[9]. The programme address persistent problems of producers such as distorted market process, bad infrastructure and inadequate access to information, input materials and markets. Moreover, the agricultural sector suffers from low productivity as well as low competitiveness. MOAP has been set up to develop the potentials of the Ghanaian agriculture to increase the income of especially the rural population. Being implemented in the Greater Accra, Northern Region, Brong Ahafo and Central Region of

[9] http://www.gtz.de/en/themen/wirtschaft-beschaeftigung/7787.htm [02-03-2011]

Ghana, it supports seven commodities namely guineafowl, mango, chilli, grasscutter, pineapple, citrus and cotton along their value chains. The realization of the project is carried out by the Ministry of Food and Agriculture (MoFA) of the Republic of Ghana, the gtz and the German Development Service (DED). After the implementation of the pilot project in 2006-2007, MOAP supported two additional farmer groups.

The Trade and Investment Programme for a Competitive Export Economy (TIPCEE) aimed at the development and extension of the trade with the non-traditional export crops such as fruits and vegetables. It has been financed by USAID for the term 2005-2009. TIPCEE was mainly providing training for the cultivation of MD2 and technical assistance to the small-scale farmer groups as well as supported the pilot project with the quality assessment of fruits and the GIS mapping of farms.

The Ministry of Food and Agriculture (MoFA) was prominently involved with its programme 'Horticultural Export Industry Initiative' (HEII) which has been realized with funds from the World Bank. It focused especially on the cultivation and distribution of MD2 planting material. Moreover, HEII was in charge of the development of necessary infrastructure.

Finally, the Millennium Development Authority (MiDA) provided financial and business training to the farmer groups. MiDA is a programme initiated by the US government and the Ghanaian government to "reduce poverty by raising farmer incomes through private sector-led, agribusiness development.[10]

Moreover, a range of NGOS and consultancies were occasionally involved to carry out the trainings as well as provided additional support. The following organisations contributed to the project concept or the trainings: AFC International Consultants, Export marketing and quality awareness project (EMQAP), Technoserve, West African Fair Fruits (WAFF), Sea-Freight Pineapple Exporters of Ghana (SPEG).

All producer groups, which were able to find a buyer for their produce, operate independently from their contractors. As the only two groups among the sample, Atwia and Nsakye benefit from the supervision and support by their buyer 'West African Fruits' (WAD). In cases of technical problems the producers can turn to the technical manager of the company. WAD is a small processor and exporter who directly supplies clients in Switzerland with dried fruits processed in a small drying plant in Ghana close to Accra. The company is not part of the project, however contacted the donor agencies requesting for help to train its supplying farmer groups in GLOBALG.A.P.

5.4 Setting the scene - Development of Ghana's pineapple industry

The pineapple export from Ghana started to grow in the 1980s and steadily increased to about 10.000 tonnes a year in the mid 1990s (see figure 4). This development was stimulated by the implementation of the Structural Adjustment Programmes and the introduction of several market liberalization policies which aimed at the diversification of the domestic export market. One objective of these policies was the development of non-traditional export crops in order to become less dependent on the traditional export products such as cocoa. From the very beginning smallholder played an important role in the export of pineapples (Takane 2004). Up to its peak in 2004, the sector experienced a steep, yet unsteady growth. However, around 2004, the export of pineapples dropped drastically.

[10] Millennium Development Initiative 2011: The Compact, http://mida.gov.gh/site/?page_id=184 [accessed 02-02-2011]

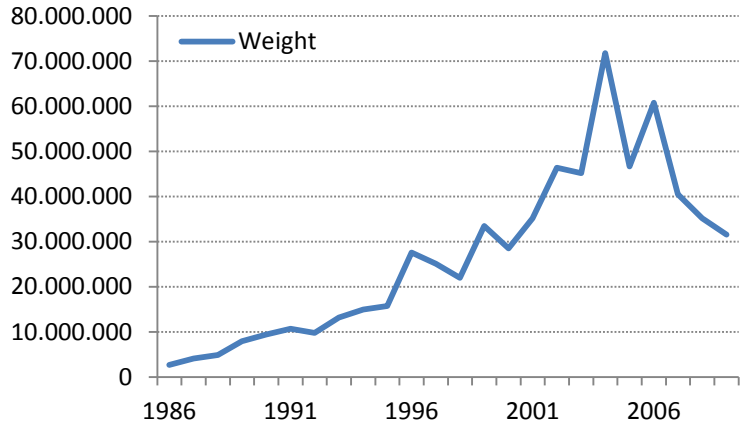

Figure 4 – Export of fresh pineapples from Ghana (in tonnes)

Source: Ghana Export Promotion Council 2010

To understand the situation in Ghana, a wider visual angle on the general trends on the global pineapple trade is necessary. The worldwide trade with pineapples started emerged shortly before the Second World War with mainly processed and tinned fruits. Fresh fruits were barely available due to the still low developed freight technology (Fold & Gough 2008). Since about 30 years non-traditional export crops[11] are exported from sub-Saharan Africa to Europe (Takane 2004). The worldwide demand for fresh pineapples grew considerably between the 1980s and 1990s. Due to its perishability, fresh pineapples were sourced from the geographically close region. Thus, most pineapples entering the European market were produced in West Africa, mainly by French companies cultivating in Côte d'Ivoire. Whereas the Ghanaian share was very small at the beginning, it grew in times of the politically unstable situation in Côte d'Ivoire. Costa Rica, which previously supplied predominantly to Northern America, managed to gain the leading position on the world market in the late 90s, also because of a technical innovation in the transport technology. About 72% of the European pineapple market was served by Costa Rica in 2008 (Fold & Gough 2008). Following Côte d'Ivoire, Ecuador and Panama, Ghana only contributed 4% to the European pineapple imports (FAGE 2008)[12].

The strong market position of Costa Rica is closely connected to the introduction of the new pineapple variety MD2 or Del Monte Gold by the transnational company Fresh Del Monte Produce. Introduced in 1996, the variety gained considerable shares on the world market and ousted the in Ghana cultivated variety Smooth Cayenne in the following year. The MD2 variety is characterized by a sweater taste, less acidity, has a rounder shape and a more golden colour. However, the popularity of the new variety cannot mainly be explained by its 'better' quality. A massive marketing campaign, research on production as well as the introduction of new and more efficient techniques of post-harvest treatment strongly contributed to its success (Danielou & Ravry 2005). Fresh Del Monte Produce profited from the changing economic policies in several states in Latin America, which tried to promote the production and export of non-traditional crops as a strategy to bring their balance of payment to a steady state and foster economic growth (Barham et al. 1992). Obtaining patents on the new variety in the US and France enabled the company to manifest its position on the American and European market. For the reason that pineapples

[11] In contrast to traditional export products such as coffee, tea and cacao, fresh vegetables and fruits such as pineapples are classified as non-traditional export crops.

[12] A detailed analysis about the market position of Ghana relating to internal and external transportation costs, labour costs, political stability, the cool chain and packing infrastructure, stability of the currency as well as existing business relations to wholesale brands in comparison to its main competitors can be found in the study of Voisard & Jaeger (2003) and Jaeger (2008).

of the MD2 variety demand a more advanced cultivation practices and post-harvest treatment in terms of cooling, packaging and transport, the company invested into these facilities. Moreover, large-scale producers serving as subcontractors were asked to adopt these innovations as well. Thus, Fresh Del Monte managed to gain control of the whole fresh pineapple chain from production to trade in Costa Rica outpacing local and also international competitors (Fold & Gough 2008).

Up to 2004, Ghana was mainly cultivating and exporting the pineapple variety Smooth Cayenne. At the start of Ghana's pineapple export in the 1980, smallholders contributed significantly to the export produce. Their situation changed around the turn of the century. As a result of the shift in demand to the MD2 variety, farmers and exporters in Ghana were unable to sell their fruits and consequentially lost their share on the European market. Although the whole pineapple sector in Ghana was badly hit by this new market trend, smallholders were especially negatively affected and dropped out of the export market. The constantly and rapidly changing nature of the export market proves to be a difficulty especially for them (Fold & Gough 2008, Gibbon & Porte 2005). Fold & Gough (2007: 1697) conclude from their Global Value Chain analysis that "the majority of smallholders previously involved in the Ghana-EU pineapple chain are only partially, if at all, still playing a role in the chain."

A by-product of this development is a loss of trust between exporters and small-scale producers in Ghana. Exporters used to buy the fruits from small producers on credit. After the produce had been sold on the target market, smallholders would have been paid two to three weeks after they delivered the fruits. About 2004, buyers were not able to sell the Smooth Cayenne pineapples on the European market and thus were able to remunerate their producers. Both sides accused each other for the current crises. Whereas producers felt betrayed because of the overdue payment, exporters blamed the producers to not produce the necessary quality needed for the export market (personal communication, Owusu, SPEG, 02.12.2010). This current situation seems to hinder both parties to profit from a mutual relationship. Larger export companies are still the only way for small producers to sell their fruits on the European market. Moreover, the conversion to the new variety MD2 is a challenge for exporters as well as for smallholders. It requires considerable investment capital to buy the new suckers. For exporters with own large plots of land considerable investments are necessary which might not be available right away. Purchasing fruits from smallholders might help them to avoid these costs at one time. Moreover, the quality of fruits from plantations shows to be of lower quality than pineapples from smaller plots which have been treated manually. Thus, cooperation could be profitable for both sides. However, the attitude especially on the side of the exporters changes very slowly (personal communication, Kofi Biney, 22.11.2010).

5.5 The current political and economic environment for small-scale pineapple producers

In addition to the discussed crises of the pineapple industry in Ghana, small-holders face further challenges. One of the most severe is the credit constraints. While the whole agricultural sector suffers from the unavailability of credits, commercial banks completely retreated from the grating of loans to small-scale producers as the repayment rate has been very low.[13] However, the cultivation for the export market and also the certification according to GLOBALG.A.P. requires certain investment capital (von Gall

[13] Producers reported that banks asked for business plans based on the expected expenses and gains on an annual basis. However, pineapples have a production cycle of 18 month, thus not generating any benefit within the first year. Moreover, I learned about cases were a loan has been granted by a local bank, but for a lower amount than stated in the proposal for the credit enquiry. Thus, the approved loan did not cover the expenses for the planned production and the producers have not been able to generate the expected revenues, which resulted in their inability to pay.

2008, Humphrey 2008, expert interview with a staff member of Africert, 15-11-2010).[14] Thus, the start-up or expansion of the business is partly constrained due to financial shortages. Donor agencies try to approach this issue, however so far with low success.

Moreover, the agricultural policy has an influence on the operation of smallholders. For decades, MoFA puts a strong focus on the initiation and development of producer groups. The active formation of FBOs has been one of the components of the Agricultural Services and Sub-Progam (AgSSIP) (MOFA 2006). Besides the expected positive economic effect on rural development, they are also supported for simple practical considerations. The MoFA provides its support mainly by means of their agricultural extension agents (AEAs) whose work is easier if they can deal with FBOs instead of individual farmers. However, the ministry has learned from the first partly arbitrary efforts to create farmer groups which resulted in poorly organized FBO with a weak economic orientation. Many farmer groups just emerged to benefit from the support of the MoFA programmes (Väth 2008). It is likely that this former political practise is still in the minds of relevant actors in the agricultural sector. During my field visits I was at least constantly confronted with request for support. Moreover, some members of FBOs complained that some fellow members are not 'serious enough' pointing to their little willingness to invest time and resources into the group activities. Väth (2008) also recognizes from her empirical work that the general support of farmer organisations provided by the AEAs has still a strong technical orientation but miss the management orientation. The increasing liberalization of the Ghanaian agricultural sector nonetheless requires a stronger market orientated approach and proactive behaviour of FBOs. Another issue is the geographical distribution of agricultural services. Whereas farmer groups which are located in relatively well accessible areas profit from very comprehensive support, other FBOs are neglected. The farmer groups which are under investigation in this study belong to the first category. Almost all groups are in contact with the extension services of the MoFA and have profited from comprehensive accompany compared to other FBOs in Ghana.

Finally, it is necessary to shortly discuss the availability of business services. A full assessment has not been conducted within this study, it is still important to mention that Ghana finally has an own certification body, which reduces the cost for certification tremendously. Moreover, none of the farmer groups complained about the inaccessibility of input material such as plastic mulch, fertilizer or pesticides. The only issue which was mentioned by one farmer group was the unavailability of tractor services. Another group experienced difficulties to find transport facilities for their fruits.

To conclude, the recent developments on the global pineapple market (and especially the conversion of the production to the new pineapple specie MD2 as well as the introduction of the GLOBALG.A.P. standard) pose a threat to smallholders trying to access the European export market. The recent crises of the pineapple sector also strained the relationship between producers and exporters. Moreover, I found that smallholders especially suffer from the inaccessibility of credits, but receive comprehensive attention by the AEAs of the MoFA. The general availability of business services is positive with only minor constraints.

[14] Von Gall (2008: 66) has calculated the 'cost of compliance' and came to the result that on average a member of a producer group spends about US $ 407,40 per growing period.

6. Empirical results

In this chapter, I present the empirical results on which this study is based on. The results of each producer group are presented separately. For the analysis, I first discuss the context in which the respective group is operating in order to identify further factors having an influence on collective action. Second, the empirical results on the manifestation of the independent variables are introduced, followed by the presentation of the level of collective action and its robustness according to the set of defined criteria. In the following chapter, I analyse these results for each group separately also taking into account the context they are operating in (chapter 7). In chapter 8, I conclude with a comparative analysis of the results.

Figure 5 – Geographical location of the case studies

All producer groups are located in the Eastern Region, Central Region or Volta Region within a reach of maximal 230 km to the sea fright port in Tema (see figure 5). The groups have varying numbers of members ranging between 10 and 53 members. They all produce pineapples, however different varieties. Whereas, Atwia is solely producing sugar loaf, a variety which is mainly sold on the local market but is also processed for the juice production or dried for the export market, some groups completely switched to the cultivation of MD2, whereas others cultivate a mixture of several varieties including the former export variety Smooth Cayenne. The cultivation of all varieties is possible in all regions; however the different climate conditions in the regions are still to different extents favourable for the fruits. This will be discussed in detail for each case.

6.1 Pinex Co-operative farmers and marketing society

The cultivation area of the producer group PINEX is located close to Hohoe in the Volta region, about 230 km from Accra. Starting with ten farmers in 2006, the number of members rose to 21 in 2010 (see figure 6). The group has been GLOBALG.A.P. certified in 2007 and sustained the group certification till today. However, the number of certified members did never exceed six and even dropped to four in 2010.

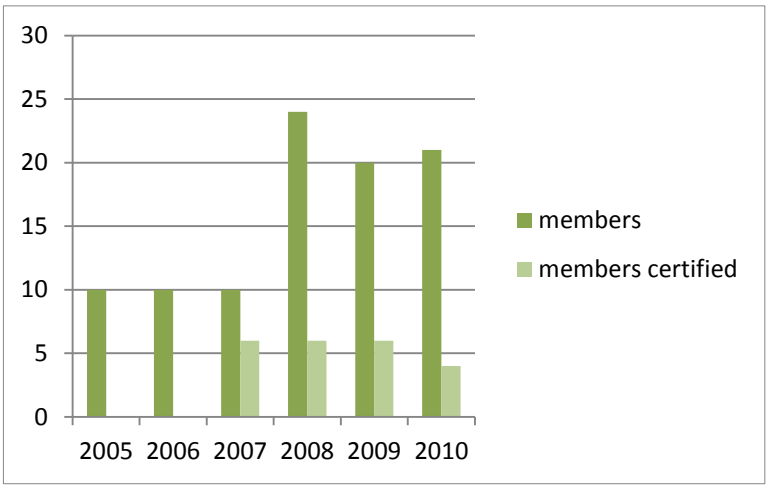

Figure 6 – Number of members, PINEX

6.2.1 Specific context

Pineapples are not a classical agricultural product in the Volta Region. However, the area offers good conditions for its cultivation. High levels of rainfall enable rain-fed production making the costly installation of irrigation systems not necessary. But still very few farmers started to grow pineapples in the region. The Hohoe district encompasses an area of approximately 117,000 hectares of which 47% (65,000 ha) are used for crop cultivation and additional 8.5% (9,962 ha) for livestock. The main crops are plantain, corn, groundnut, cassava, rice, yam, some vegetables and some fruits. Most agricultural activities are entirely rain-fed.[15] The Hohoe district is located in the wet semi-equatorial climatic zone. The two rainy seasons are a result of the southwest monsoon winds. Temperatures reach its peak around March with 28-32 °C and lowest values in July/ September. The relative humidity varies during the course of the year between 20-80% of. During the Harmattan season in December till February humidity reaches the lowest level and highest values in May till October. However, the data shows considerable variation within the last years. Hodges et al. (2003: 126) write that "across the 5 years of study, there was a sharp change in humidity conditions during the Harmattan of 1998/99 when humidities [sic!] only dropped to 45% (…)." This matches with the observations of the farmers themselves, who describe unusual rain patters causing losses in the Mango harvest. Also pineapple cultivation is effected by a very wet climate because high levels of humidity foster the spread of Phytophthora rot. According to the technical advisor of the group, the spread of the disease caused losses of about 60% of the last harvest.

[15] http://hohoe.ghanadistricts.gov.gh/?arrow=atd&_=118&sa=2515 [accessed 01.03.2011]

Besides the relatively favourable climatic conditions, the region is disadvantaged because of the distance to the sea freight port in Tema. Because of the heavy weight of the fruits and their perishability the inland transport is very costly. A drive from Hohoe to Tema takes about three to four hours and costs about 500 GhC (approximately 238.65 €) for the transport for one truck of 3500 fruits (personal communication, 20-12-2010). In most cases the transport costs are covered by the producer. The distance to the capital and harbour facilities might also be a reason why the region is dominated by one processing company, which thus has a powerful position in the negotiation with producers. The group entered into a contract with this processor company, which was obliged to take the whole produce of the group members. At the same time the group was not allowed to sell their harvest to other market parties. However, in June 2010, the company did cease the payments. Till the end of the year the outstanding payments of 16.700 GHC (approx. 7740€) were still not cleared. Up to know the group decided to not take any legal steps because of the powerful position of the processor in this region. The technical manager fears that a legal process might worsen their relationship and even obstruct the opportunity to work with the company in future. So far, no other buyer could be found since most exporters are located in the Central Region. The high transportation costs make it unattractive to approach these companies. Therewith, the group finds itself powerless against the buyer which does not appear to reconciliation meetings.

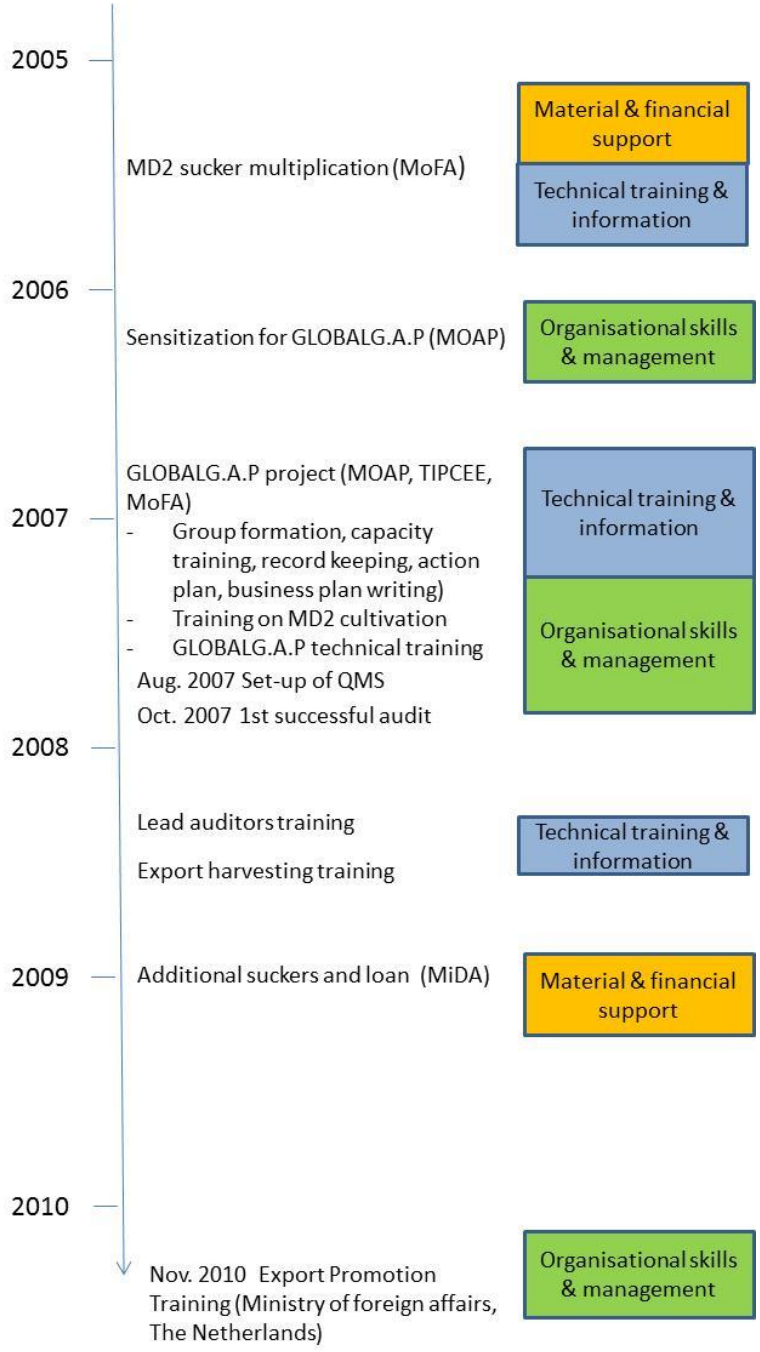

Figure 7 – History of support, PINEX

6.2.2 Manifestation of the independent variables

The next sections discuss the manifestations of the independent variables for the producer group PINEX.

6.2.2.1 External support

The group was founded 2005 for the purpose of participating in the project for MD2 tissue multiplication initiated by MoFA. The current leader of the group has been contacted by MoFA asking for his interest to form a group for MD2 cultivation. The group received the planting material in 2005, was legally registered in 2006 and has been trained in 2007 and 2008 on the implementation of the GLOBALG.A.P requirements and the cultivation of MD2. In addition, the group received support in the development and

implementation of an internal rule system which was developed in accordance with the GLOBALG.A.P. framework for the internal QMS system. The group was also guided in the development of a business and action plan in order to improve the business orientation of the group. In several follow-up meetings the members of the group were prepared for the first audit which they successfully passed in October 2007. The costs for the first audit were paid by the supporting organisations.

The technical manager of the group asked for an additional training in export harvesting and followed courses to become an auditor himself. In 2009, the members were successful in applying for a loan which has been brokered by MiDA. The standard procedure of MiDA involves a business training before the group is supported to apply for the loan. However, assessing the list of trainings the group already participated in, the organisation decided to offer a loan to PINEX desisting from another training session. Finally, the group won an award for their performance which was rewarded with an export promotion training hosted by the ministry of foreign affairs of the Netherlands. The technical advisor of the group availed him of the opportunity to take part in this seminar (for an overview see figure 7).

In comparison with the other groups, PINEX received the most comprehensive support after Oboadaka (see section 6.5). With regard to the three parameters, the group benefitted from the highest level of material & financial contributions. As one out of two groups they successfully applied for a grant with the support of MiDA. Moreover, the leader as well as the members of PINEX received additional technical and managerial training. The group has been supported by a considerable range of donor agencies, NGOs and governmental organisations which coordinated their activities well.

6.2.2.2 Leadership

In case of PINEX, the group is predominantly run by the technical manager. My observations during meetings with the group confirmed this view as he showed to have a central position among the members. He also serves as a contact person for business partners and donor agencies.

The leader of the producer group PINEX is the main promoter of the group offering a vision and motivation for the group members. The individually interviewed members expressed their trust in him and his work. Members answered to the question about their satisfaction with the leadership:

> *"The leaders inspire good ideas."*
> *"The leaders provide whatever members need."*
> *"The leadership support the members to develop and increase the production."*
> (Individual interviews with group members, 11-10-2010)[16]

Moreover, I also found that members trust his ability and willingness enforce group rules. As the technical manager is primarily responsible for the implementation and monitoring of the farmers agricultural practices in accordance with the GLOBAL.G.A.P. requirements as well as the maintenance of the QMS, one member responded:

> *"Our leader goes by rules and regulations. We know that the group can fail when just one farmer misses the rules. Martin takes good care."* (Individual interview, 11-20-2010)

[16] As discussed within the section of data collection, parts of the interviews could be conducted in English language. In these cases I directly recorded the interviews and can present the 'word for word' answers. In cases when I relied on a translator (as for most of the individual interviews with members of the PINEX group), I received a summary of the interviews. Thus, the short quotations presented here, are no direct quotes from the interviews but give a summary of the answer to the question "if and why they are satisfied with the leadership of the group". Thus the presented quotes are paraphrases of the interviewed statements, however close to the original wording.

However, the most striking contributions for the group can be ascribed to the leader's skills and initiative. Most of the activities are developed and implemented by the technical manager of the group. This is also true for the current design of the internal organisation of the group. The described adaptations of the internal this QMS system have been conceived and employed on his initiative. The data system for the group is saved on his laptop. The technical manager also requested for loans and established contracts with new business partners. After the contracted exporter went bankrupt, he initiated a small-scale processing project for juice production at his costs in his private house. The technical manager was also the one being contacted by the organisations implementing the project for which he works occasionally as a consultant. Thus, he initiated the group by selecting farmers for the formation of the common organisation. His efforts to sustain the group also involve the investment of his own capital. His farm house and chemical storage is used by all producers. Moreover, he also made financial contributions to individual farmers in case of financial problems. He himself is aware of his central position and convinced that a group needs a strong leader:

> *"Groups have to be organized around a pillar."* (Individual interview, technical manager 10-11-2010).

However, also he fears the time after his resignation, because he considers none of the members to the eligible and willing to take his position. The technical manager is highly educated and has long-standing experiences in the farming business as well as the businessman leading his own construction company. Moreover, he works as a consultant for the gtz and other organisations. He also gathered some experiences with the GLOBALG.A.P. standard as a large-scale Mango farmer. These activities are also a source of additional income, which he partly uses to support the PINEX producer group.

Summarizing these observations, PINEX is guided by a very strong leader, who attained the highest results on all three parameters. The technical manager especially attracts attention through his comprehensive skills and knowledge as well as its high level of initiative. Second, group members trusted that his monitoring activities lead to a higher performance of the group and therefore motivated their own compliance. Third, although the leader realizes that the current motivation of the group decreased because of the ceased payments by the company, he still is able to keep the group together.

6.2.3 Manifestation of the dependent variable

In the following sections, I will assess the level of collective action and robust collective action for the producer group PINEX.

6.2.3.1 Assessment of collective action

The members of the PINEX group used to meet once a month. However at the time of the empirical research, their interval of meetings extended to about once within three month. In the conducted group discussion the members expressed that they are discouraged to come to the group meetings because they currently lack the economic incentive. Also the interview with the technical manager revealed that the current business relationship negatively affects the members' willingness to contribute to the group. Thus, their willingness to uphold the good farming practices and the common farm labour decreased.

The group undertakes regular monitoring activities and is able to assure that all members follow the rules. Asking for their decision-making, the members claim that they try to reach unanimity for all decisions. If a consensus cannot be reached, decisions are taken via majority vote. However, it is striking

that all members of the executive board of the organisation belong to the family of the technical manager and have all been confirmed in office for the last re-election. From these results, I conclude that the group acts collectively.

6.2.3.2 Assessment of robust collective action

According to the parameters, PINEX achieved also a very high level of robustness of collective action. The group was able to set up a QMS system and adapt it to its needs. Beyond the requirements of the GLOBALG.A.P. standard, they developed a centralized data management, which helps to track the original plot of all fruits, evaluates the produced quantities per farmer and calculates their individual gains. On the basis of the data base, the technical manager reviews the current harvests and plans the extension of the production for the coming years.

Moreover, the group developed a system of common field labour which strengthens their internal coherence but also helps to monitor the performance and compliance of the other farmers. This system avoids that members sell their produce on their own account and not through the group channel. Moreover, the group agreed on a rule which says that the produce of each farmer belongs to the group as long it is still on the field. When it is sold, the profit is disbursed to the respective group member. This rule allows the technical manager to intervene whenever he thinks that a farmer is not able to produce according to the GLOBALG.A.P. standard. In addition, the group purchases input materials together. All activities are shared by certified and non-certified members even if they are not obliged to follow the GLOBALG.A.P requirements. Taking this into account, I consider the level of inclusion to be high. However, the group is very much guided and shaped by the ideas of the technical manager of the group. I noticed a limited level of awareness of some group members. It was also striking that four out of nine individually interviewed group members seem to have a limited understanding of the standard and its requirements. They also were not able to explain their annual amount of harvested fruits and income.

The group has a contractual relationship with an exporter. However, the exporter went bankrupted and does not pay the group since June 2010. Up till now, the group still sends its fruits to the company. At the same time, the technical manager puts a lot of effort in finding a new buyer. He started to process pineapple juice himself selling it to the local market. To generate capital internally, the group keeps 1% of the income from each individual farmer. Moreover, the group applied successfully for loans from the local bank and MiDA.

The producer group developed a very comprehensive network of organisations, which can be consulted in terms of problems related to cultivation, finding a buyer and accessing information. The network is not only the most comprehensive among the cases in this study; in addition, the producer organisation takes also the most active part in the development of this network (as the arrows in both directions indicate). It is striking is in contact with an impressive number of donor agencies (indicated in dark blue). Among them are SMV (Netherlands Development Organisation) and the Value Chain Committee (an initiative of the gtz/MOAP to promote the dialogue between the actors on the fruit exporting supply chains). However, we also find three organisations from the FBO sector.

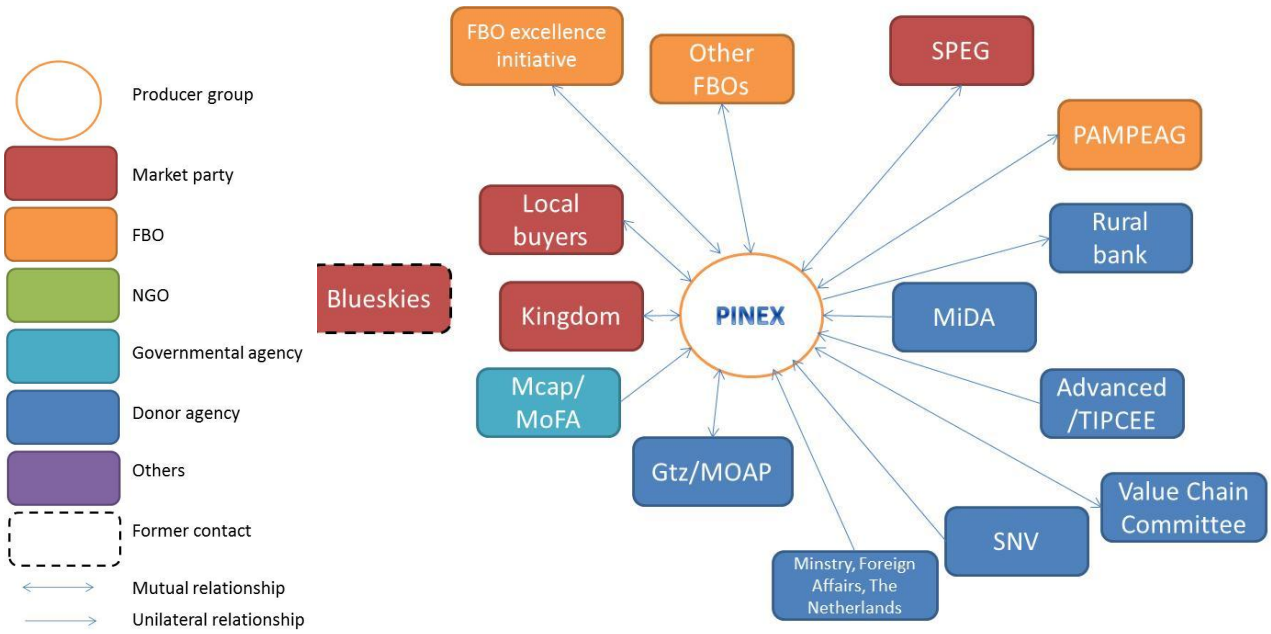

Figure 8 – Network, PINEX

Up to now, the group does not have any common property but uses the farm house and the chemical storage of the technical manager. The contributions to the group activities and financial stock of the group are not equally distributed among the members. To compensate the unequal distribution of wealth, members are able to contribute with the labour force in case they are not able to pay their dues. Despite the internal trainings and technical advices, the group does not expect to increase the number of the certified members. Even the four certified members have been still financially supported by the technical manager. According to him some members are "not serious enough" or are afraid of the financial investments which come along with the compliance to the standard.

I conclude that the group achieved one of the highest levels of robust collective action. Before the group received suckers in 2006, the individual members did not cooperate on any activities. Thus, the difference of robust collective action between 2006 and 2011 is thus very striking. I found two limitations for the level of awareness and inclusion as well as the equality of contributions the members. The individual interviews showed that some members are not fully aware of the group rules. Moreover, the members' contributions showed to be very differently. Whereas a lot of activities have been carried out by the technical manager, some members hardly contributed on a regular basis. Taking into account also the very difficult economic situation of the group, PINEX attained the highest levels together with Okyereko and Oboadaka (discussed in section 6.4 and 6.5).

6.2 New Generation

The farmer organization New Generation was also founded in 2005 when MoFA distributed MD2 suckers for multiplication to interested farmer groups. The farms of the members are located close to Dodowa in the in the Dangme West District, in the Region of Greater Accra. As PINEX, New Generation also participated in the pilot project implemented by MOAP, TIPCEE and MoFA received support in 2006-2007. After the training they have been successful to attain the GLOBALG.A.P. certification, however did not renew it for the following years. The producers of the organisation were already involved in the pineapple business in advance of the project and also cooperated on an informal basis (for example for the application of chemicals or harvesting. They cultivated and exported the Smooth Cayenne variety before

they received the MD2 suckers from MoFA. However, the farmers sold their produce on an individual basis. They were badly hit by the pineapple crisis in Ghana as they experienced a steep decline in the demand for their produce around 2003/2004.

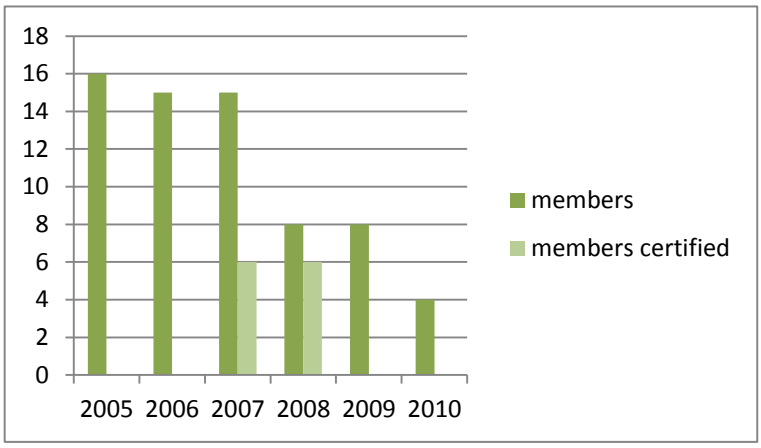

Figure 9 – Number of members, New Generation

6.3.1 Specific context

The climate in the region around Dodowa is characterized by low but erratic precipitation which occurs between September and November.[17] The mean annual rainfall in the Greater Accra Region gradually varies between 733mm in the city Accra (south-west) and 1118 mm in Akuse (north-east) (Decher & Bahian 1999). Temperatures in the region are high during the whole year but reach highest value in the main dry season in November till March and in the short dry season between July and August. Rain-fed agriculture is a risky undertaking in the region. The high levels of evaporation also bring the danger of salinization. Thus, crop losses are a widespread phenomenon in the region. However, agriculture is still possible when proper techniques are applied. Irrigation facilities are of great value. The producer group never harvested proper yields which would have been accepted by exporters. There is no direct evidence that the loss of the first harvest was caused by the unfavourable natural conditions, however it is true that the group operates under more difficult conditions. The producers for example reported shortage of precipitation.

In terms of infrastructure, the group is in a favourable position. The cultivation area is close to Accra and Tema which makes the transport to the export facilities relatively easy and cheap. Moreover, several exporters and processors are located in the region, which increases the potential to find a buyer for the produce. Also input materials can easily be obtained. In addition, the municipality of Dodowa has on office of MoFA which can be contacted in terms of difficulties and advice.[18]

6.3.2 Manifestation of independent variables

Following paragraphs present the empirical results on the manifestation of the independent variables external support and leadership.

6.3.2.1 External support

As mentioned above, the farmers who later formally registered as New Generation, occasionally supported each other in farm work in advance of the project. However, the material support in 2005 in form of MD2 suckers and first technical advices on the necessary cultivation practices mark the starting point of their regular cooperation. New Generation is also one of the six pilot groups which have been selected for the GLOBALG.A.P project. Thus, the external intervention for New Generation does not differ from the support for PINEX between 2005 and 2007. The members of the group have been familiarized with the requirements of GLOBALG.A.P. the necessary investments and potential gains (sensitization). The

[17] http://ghanadistricts.com/districts1on1/dangmewest/?arrow=dnf&_=5&r=1&rlv=climate [08-03-2011]
[18] http://dangmewest.ghanadistricts.gov.gh/ [08-03-2011]

group has been considered suitable for collective marketing activities and the GLOBALG.A.P. group certification, hence benefited from the comprehensive training from the mid of 2006 till the end of 2007. New Generation successfully applied for the group certificate in November 2007, which was paid by the involved organisations. However, the group was not able to maintain it for the following years. Finally, the group received some training on 'commercial development for farmer-based organization' conducted by MiDA. This training included budget planning, record keeping, setting-up a farm business plan (farm management). Furthermore, the group is currently supported by extension officers of MoFA to prepare for the audit for the recertification according to GLOBALG.A.P. requirements (cf figure 10).

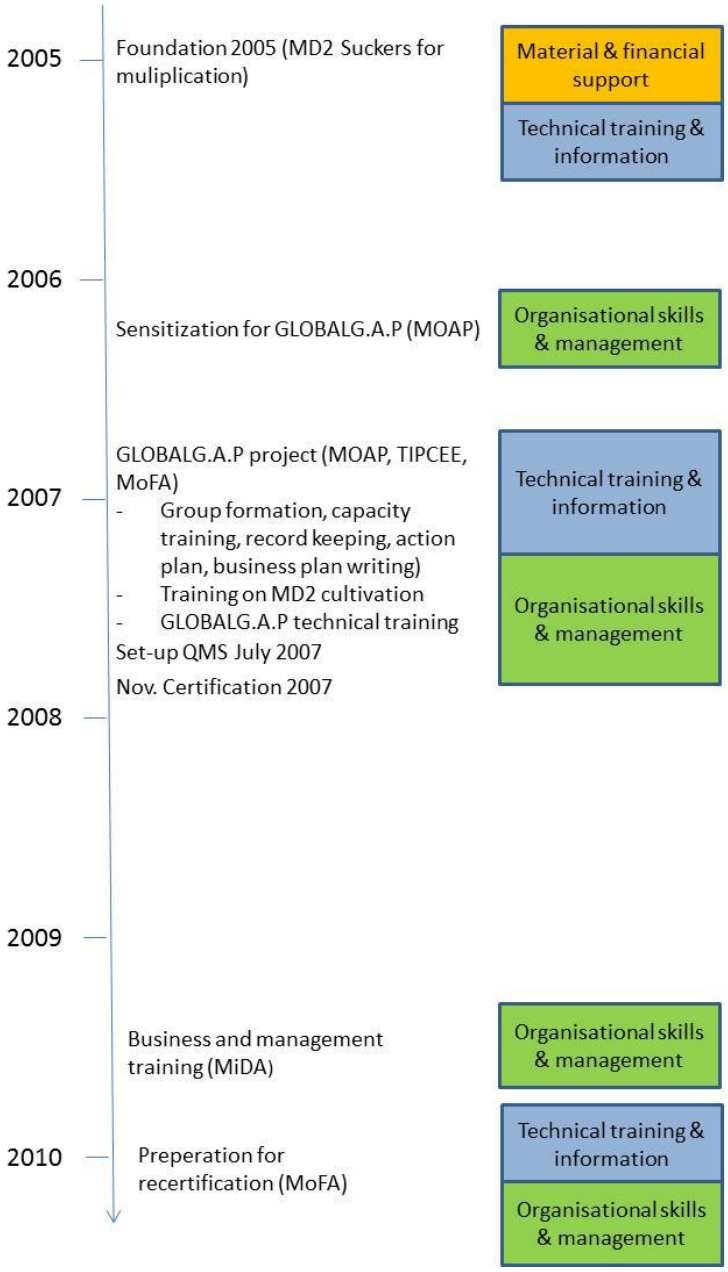

Figure 10 – History of external support, New Generation

Summing up, the group received full support in organisational skills & management as well as technical training and information. Additional support has been offered by MiDA and MoFA for the planned recertification in 2011. Thus, the group received extended supervision on agricultural business and cultivation practices. In terms of material contributions, the initiation of the group is closely related to the donation of the MD2 suckers. Nevertheless, the group was not able to successfully apply for a grant or loan.

6.3.2.2 Leadership

New Generation is headed by a chairman and internal inspector respectively and a secretary who also fulfils the function of the technical manager. They were both available for an interview. The chairman migrated about ten years ago from Denmark to Ghana and settled down in this region. Both of them expressed his strong commitment for the group and his position

> *"We have to do something because nobody is doing something for us. (…) If we want to survive today it is not easy anymore. You really have to find a way to go on now. How can we go on now? How it has been now was not a good way. So we have to change our way now." (Chairman, 13-12-2010)*[19]

[19] All interviews with the group or individual members and project staff could be conducted in English language and has been recorded. Thus, in the following direct quotes are used to support the line of argument.

"I lead them to do it in the right way. (…) We don't have big problems anymore, because everybody knows now the rules. (…) You have to follow the rules if you want to be a member. I haven't made the rules. Somebody else has done it. So I just assure that the person is following." (Chairman, 13-12-2010)

The chairman mentioned that he has a hard time to motivate the members to work together. He complained that members do not attend the meetings anymore and don't join the group activities. From his point of view their expectations have been disappointed by the involved organisations which never provided any funds to them. Asking the five available members about their opinion concerning the leadership of the group, three out of five expressed their satisfaction. The remaining two showed very emotional reactions to my questions and stressed that the problems of the group are only caused by the lack of financial and material resources and are not connected to leadership. However, they have been not willing to discuss leadership issues. Based on this data it is difficult to come to a final conclusion about the leader's ability to motivate the group members.

It was even more difficult to understand to what extent the members trust in the leader to implement the group rules and thus contribute to the compliance of all members. Most farmers stopped to produce pineapples and hence cannot comply with the group rules based on the GLOBALG.A.P. standard.

In the recent past the leadership of the group approached three buyers and two banks for loans. Nevertheless, these efforts have been not successful. Despite of the difficult framework conditions, the group leaders conduct efforts to keep the group together. They offer regular group meetings and occasionally advise the members on agricultural practices if needed. A representative of MoFA who had been involved in accompanying the group, was however sceptical about the initiative of the group and the skills of the leader:

"(…) They also complain that the do not have a buyer. But they don't have a market, because they are not exploring.(…) The group is not well organized. The chairmen complained that the members of the group do not come to the meetings anymore." (Interviewed staff of MoFA, 19-12-2010)

Nevertheless, the chairmen and the secretary also explained their plan to approach potential buyers; however the group does not produce the required quality and quantity of fruits which leaves limited chances to find a buyer. The leader is aware of this problem.

To conclude on the information discussed above, I could not gain a fully clear picture of the leadership of the group. The leaders expressed their commitment for the group. And some interviewed members confirmed their ability to motivate the group. Staff of the organisations, which accompanied the organization for the trainings, describes the leader as not very ambitious but still competent and activeI conclude on these partly ambiguous and incomplete information that, New Generation is guided by a medium strong leader according to the applied criteria of this study.

6.3.3 Manifestation of the dependent variable

The farmer group New Generation today features the lowest level of collective action compared to the other farmer groups. The group implemented a procedure for collective decision, however members do not come to meetings anymore and only partly enforces the own group rules. This is an interesting development, because the members of the group already showed some collective action before they participated in the project. They occasionally supported each other in field work before they officially joined forces in 2005. In the group discussion, the chairman describes that the group showed a great enthusiasm and willingness to cooperate when they received the suckers for multiplication:

"The problem was, when we couldn't sell our Smooth Cayenne, most of or farmers knew the product (meant MD2) already, because of that we make our group. Even on that time some of us, we knew each other already at that time. That is when we gathered some more members. That was interesting. So we made this group. So for the first time when we got the plantlets we were rushing together, like really a group. For the first one year.(…) when we started we worked here nearly 5 days in a week." (Chairman group discussion 13-12-2010)

Thus, at the very beginning of the project, the level of collective action strikingly rose. All members were actively involved in the multiplication of the plantlets. However, for the managerial & technical training the willingness to participate went down. At the point of time of the conducted research, the group does not conduct regular meetings anymore. The last meeting has been more than four month ago. Some members are still in touch via phone. The group received a GLOBALG.A.P. certificate in 2007 which was paid by the participating donor agencies. However, the group did not apply for the certification in the following years. After the unsuccessful application for a loan, the group members lost their interest in the cooperation. The group got an offer to attend another training for the recertification, but only very few members made use of it. Moreover, the problems to produce fruits in the required quality made it difficult to find a buyer. Thus, they also stopped to approach new potential buyers because they have no produce to offer. Finally, the group does not comply with the rules of their QMS. The group used to collect dues from its members, but the chairman states that the willingness to contribute was always very low. Currently, members completely stopped to pay their dues. As the group tried to apply for loans at the rural banks at the beginning of their formal existence they stopped these efforts due to the low success rate. They expressed their anger that the donor advised them to switch to the MD2 cultivation and abandon their Smooth Cayenne cultivation. Moreover, the group does not own a common property.

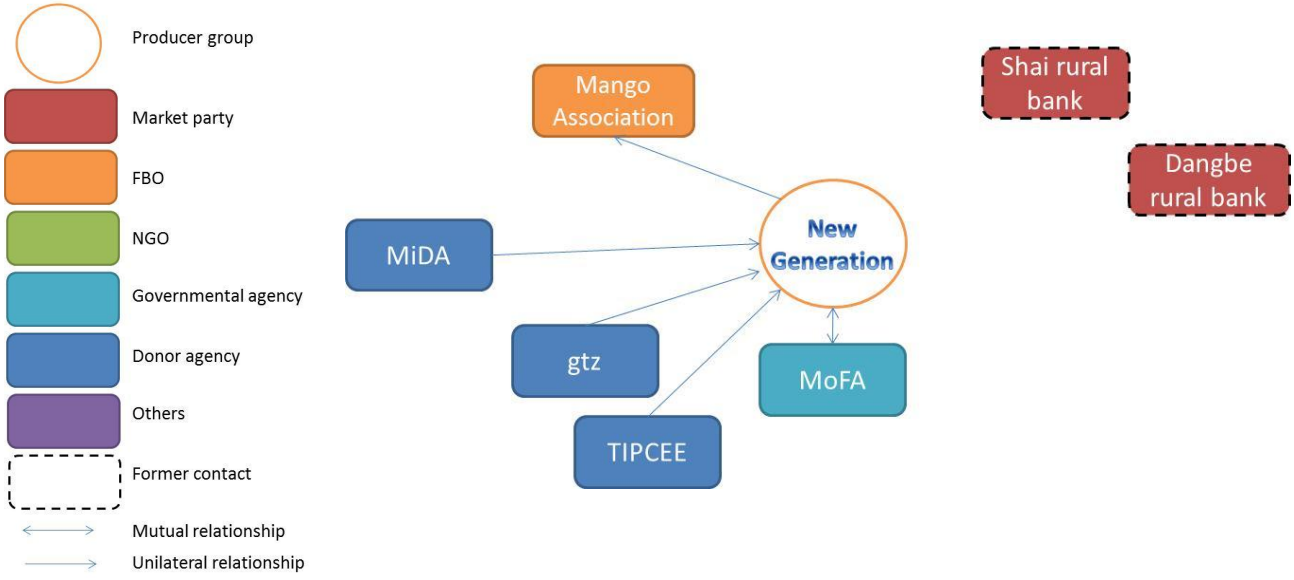

Figure 11 – Network, New Generation

As figure 11 shows, the producer group is not in contact with a broad range of actors. They reported that they approached two banks some years ago. The strongest connection exists to the local extension services of MoFA which they ask for assistance or advice in case of problems. They also established the contact to MiDA. Besides the contact the donor agencies, some members are also allied to the local mango association. However, they could not explain how this relation impacts the pineapple growing co-operation. Thus, their network is characterized by hardly any contacts established from their side, but has a very passive notion. Compared to PINEX, the network is rather small. Currently they are no efforts for common marketing or any other shared activities. Moreover, the members expressed a very low

confidence to attain a certification in the following year, although the group is again are supported by MiDA for this purpose.

To conclude, the level of collective action is very low. Moreover, the group shows hardly any characteristics of robust collective action. Out of the eleven categories to measure the level of collective action, seven are not applicable to the group. Compared to the time before the project start, the group did not significantly increase their level of cooperation.

6.3 Gomoa Okyereko Pineapple Growers

As New Generation and Pinex, the producer group Okyereko was founded in 2004 when the group members received MD2 suckers and technical assistance from MoFA. The group has also participated in the GLOBALG.A.P. pilot project. The secretary of the group also claims that the primary idea of the foundation, besides its economic idea, was also linked to the need to strengthening their negotiation power against governmental agencies:

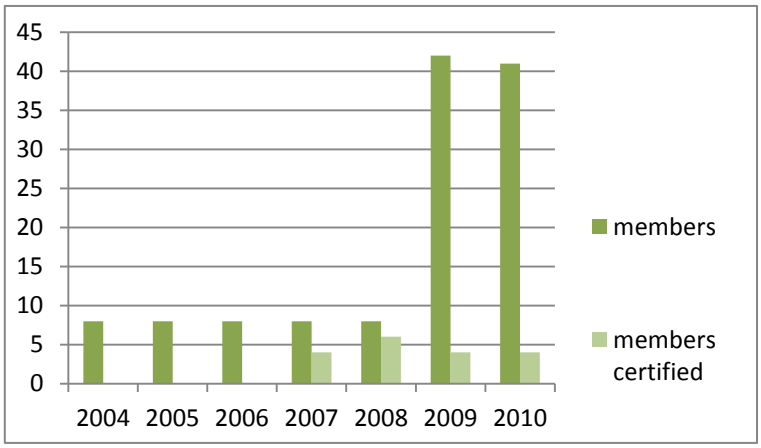

Figure 12 – Number of members, Okyereko

> *"The reasons for our foundation have been avocation and empowerment. When the government cut the subsidies for fertilizer we thought we have to do something. (…)"* (Individual interview, 02-11-2010)

Thus, the group already existed as a loose alliance of friendly producers before they received the MD2 suckers (individual interview 02-11-2010). The group got legally registered as an association in 2005. The graph (figure 12) shows a conspicuous development of the membership base. In 2004, eight members started to cultivate MD2 pineapples together. The number of members remained constant till 2008. In 2007, the group successfully passed the first GLOBALG.A.P. audit and received the group certification which could be sustained for the following years. Whereas the group was able to extent the number of certified members from four to six, it dropped again to four in 2009.

The following surprising increase of the membership base (see figure 12) is related to a training offered by MiDA. In 2009, the Okyereko producer group together with four farmer groups in the region have been asked to attend a training with MiDA on 'business skills and MD2 cultivation'. The participating famers also received a credit which was brokered by the American donor agency. The training is still taking place and a part of the producers is also preparing for the certification in 2009. The new group which is made up of the four groups from the area, named itself after the original core group Okyereko and intents to be certified as one producer group according to the GLOBALG.A.P. standard. The original members however, decided to split from this bigger group and retained their former producer association apart from the newly founded one. 200 GHC have to be paid by new members to enter this core group; however all members except of one hold a double membership and are also part of the bigger group. This is because participating producers in the MiDA training were grated the mentioned loan. The future relation between the two groups is unclear. Whereas the involved training staff as well as the members of the extended group were convinced that all producers belong to one group and also strive for one single group certification of the extended and the core group, the members of the letter rejected this idea. The

analysis, however, will focus on the core group and just refer to the extended group if necessary for the discussion.

6.4.1 Specific environment

The climatic conditions in the West Gomoa district are characterized by two rain seasons in April till July (major rain season) and September till November (minor rain season) as well as the dry seasons in December till March (major dry season) and August (minor dry season) respectively. The temperatures reach on average 29°C in February till Match and 26°C in August. The mean annual precipitation ranges between 700- 900 mm in the coastal area and 900- 1100 mm Northern and North-western part of the district. However, the rainfall pattern in the region experiences fluctuations.[20] Whereas the Northern regions of the district are characterized by the wet semi-deciduous forest vegetation on forest ochrosols and oxysols intergrades with relatively high nutrition values, the south-east (where Okyereko is located) and south-west has dryer, rocky and poorer soils (forest Lithosols). These areas can still be used for the cultivation of vegetables such as sugar cane, maize and pineapples (Yankson 2007). Nevertheless, the sometimes unreliable rain patterns and relatively poor soils pose a certain risk to rain-fed agriculture. Unexpected dry periods might cause a loss in yields. Thus, the cultivation of pineapples is possible but bears certain risks related to the natural conditions.

The local government reports on their webpage that famers in this region mainly complain about "insufficient and unreliable rains, lack of credit, fluctuations in the prices of agricultural produce, high input cost, and rampant bush fires." Moreover, farmers in the south-eastern part suffer from the lack of agricultural services such as tractor services. Farming is the main activity in the region; about 65,000 persons are employed in the agricultural sector. However, only 12 agricultural extension officers are responsible for the whole district. Thus, the ratio is 1:5400 which is extremely low in comparison with the national standard of 1:2000. The local government estimates that only 25% of the farmers benefit from agricultural extension services.[21] Also the farmers of the Okyereko core group complained about the difficult access to tractor services. In addition, the group discussion revealed that the members of the group struggle to find qualified and reliable farm workers. Due to the difficult job market and the low salaries in the agricultural sector, the region is affected by the migration of the younger generation to the Accra.

The producer group Okyereko is still in a quite favourable position in terms of a high demand from the buyers which compete for the fruits in that region. The agricultural area of most of the group members is close to the main road connecting Accra and Cape Coast and is hence well accessible for buyers. Thus, the group found a buyer for their produce with whom they entered a contractual relationship. The group sells approximately 80% of their produce for a fixed price to the processor and exporter respectively. The group is paid two weeks after they delivered the fruits. The buyer is harvesting with its own staff.

To conclude, whereas the group finds itself confronted with difficult natural conditions and also some constraints in terms of the available services, it still developed a strong market position. Thus, the economic incentives for cooperation are quite high.

[20] http://www.ghanadistricts.com/districts/?r=3&_=56&rlv=climate [10-03-2011]
[21] http://www.ghanadistricts.com/districts/?r=3&_=56&sa=2015 [11-03-2010]

6.4.2 Manifestation of independent variables

In the following sections I present the empirical data on the external support and leadership. The group is not supported by its buyer. Thus, the third variable is not applicable here.

6.4.2.1 External support

As mentioned above, the core group of the producer group Gomoa Okyereko Pineapple Growers existed on an informal basis before they received the MD2 suckers and technical advice by MoFA in 2004. Like PINEX and New Generation, the group has been informed about GLOBALG.A.P. in a one day meeting in May 2006 (sensitization). The group has been found qualified to participate in the pilot project (Will 2006), which Okyereko underwent in 2007. The core group of eight producers received their first certification in November 2007 and has been recertified for the following three years up to now. In 2009, four farmer groups in the region have been asked to attend a training with MiDA on business skills and MD2 cultivation. They also received a credit which was brokered by MiDA. The training is still taking place and a part of the additional farmers is preparing for the certification in 2009 (cf figure 13).

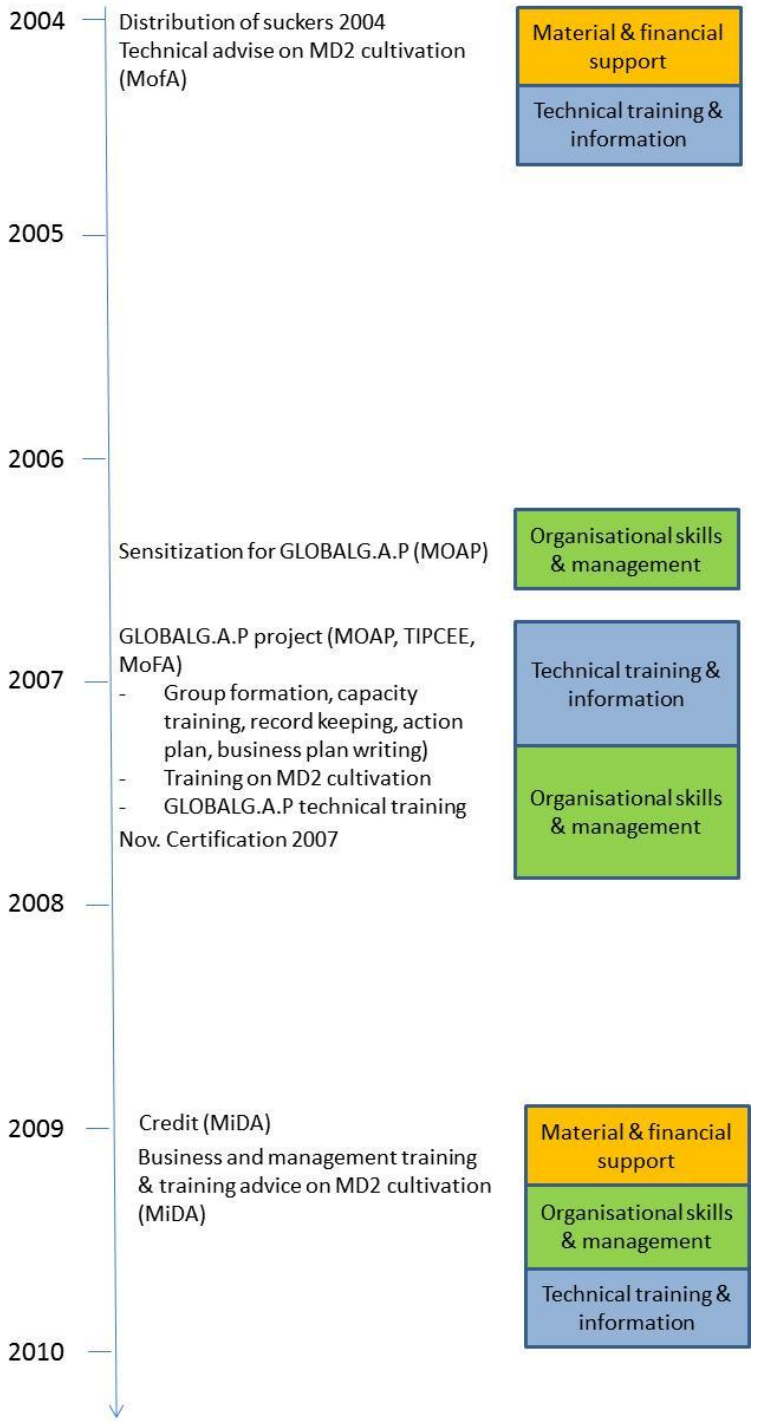

Figure 13 – History of external support Okyereko Pinapple Growers

Summing up, Okyereko producers received comprehensive support in all three categories: technical training, organisation and management skills as well as material and financial support. The producer group received similar support as the two other pilot groups PINEX and New Generation. However, the leader of PINEX has received additional support which was not offered to Okyereko and New Generation. Moreover, Okyereko also benefited from the loan and material support offered by MiDA in connection with the business training (which was not offered to the producer group New Generation).

6.4.3.2 Leadership

The chairman of the core group also fulfils the leadership function for the larger group. He invests a lot of time and own resources to support the two groups.

"I sacrifice the money of my own salary to pay the traveling costs to the group meetings, trainings and personal advice on their farms. This also takes a lot of time." (Individual interview, 15.12.2010)

Besides his functions within the producer groups, he still is employed as a police officer. After his posting to another region, he has difficulties to attend all meetings but still tries to meet the groups on a regular basis (twice a month). For all meetings I attended, he was however not present. Nevertheless, all group members stress his commitment during the group discussions as well as individual interviews. He provides the members with a clear vision and motivates them to follow the group rules. However, they also stress that all members of the core group are able to fulfil these functions. They also meet without the presence of the chairmen and also take decisions. Thus, even if the formal leader of the group is the chairman, the other members of the group assume responsibilities which belong to his responsibility.

The compliance of the members is assured by a supervisory team, which can be consulted in terms of difficulties and which also carries out the internal audits. Moreover, the group has a vice chairman and a secretary which support the work of the chairman. Almost all members hold a leading function. Because of the small size of the group, the compliance of all members can easily be checked and if necessary sanctioned. During the group discussion members expressed their satisfaction of their internal structure and transparency. To increase the level of efficiency and coordination, the group plans to open an office with a central data management system (group discussion, 4-12-2010).

Since all members who hold a leadership function have a qualified employment or retired (owner of a filling station, constructor, retired teacher, policeman) the general level of education and skills is very high. The secretary was involved in pineapple processing before and has a basic management education. The chairmen himself trained eight new members who were interested to join the group. However, it has to be stated that the general level of initiative among the members is very high and not an exceptional characteristic of the leaders.

Concluding on these observations, the group has a strong, motivating and ambitious leader, comparable to the leader of PINEX. But, due to the small size almost all members accepted a responsibility and take initiative. It is therefore difficult to differentiate the actual person fulfilling a leadership function from the others on the basis of their skills and initiative.

6.4.3 Manifestation of dependent variables

Gomoa Okyereko Pineapple Growers attained the highest level of robust collective action in comparison with the other groups and according to the defined criteria. In the following I discuss the manifestation of the dependent variables in detail for the core group.

6.4.2.1 Collective action

The core group meets about once a month. If considered necessary, they hold additional meetings. All group members except of one also join the regular meetings of the extended group. Moreover, the group members explained that they assure compliance of all members by means of regular external inspections. In three cases members have been sanctioned because they did not comply with the GLOBALG.A.P. requirements and/or did not attend the meetings. One member did not conduct the necessary record keeping, and two members stopped attending the meetings because they turned to other crops like rice and tomato. In the group discussion the attending members told me that they just send the second letter

of warning to two members. Thus, the group is able to uphold the internal rules. Concerning decision-making, ideas are discussed during the meeting and agreed upon unanimously. On a general meeting (4.12.2010) I could observe that all members contributed to the discussion and the arguments and ideas of all attendants have been treated in a respectful way. I conclude that the group developed functional collective action.

6.4.2.2 Robust collective action

The core group of the Gomoa Okyereko Pineapple Growers developed and adapted the QMS system to their needs. Currently, they are working on a system to store data about the production activities centrally. In most recent past it happened that two members forced[22] the flowering if their pineapple plants at the same time which was not discussed with the buyer. To avoid these coordination issues the group plans to establish a permanent secretariat. It still has to be decided how exactly this central data management should look like. Nevertheless, it can be concluded that the group initiated improvements of their internal management system based on their current needs. Moreover, the group introduced an entrance fee of 200 GHC (about 95€) and thus split from the larger group when the number of members rose drastically. The members explained that this increased membership fee should only allow the entry of members with "serious intentions".

The core group concluded a contract with a major exporter and processor in Ghana (Blue Skies). The certified members are obliged to sell their whole produce to the buyer, which harvests the fruits itself. The not certified members sell on an individual basis. During the group discussion, the participants confirmed that all members contribute in equal terms to the development of the group. All members discuss their problems and solutions for cultivation problems, try to find new buyers and attract new members. A common property does not exist yet, however the group plans to safe money for a tractor. The producer group follows a strategy to internally and externally gather capital. Following a suggestion of MiDA, every member cultivated an acre of corn which was sold for the benefit of the group. In addition, the group plans to apply at the Export Development Fund for financial support to extend their production. Currently, a business plan is set up. Finally, the producer group decided on a regular membership fee of 10 GHC, is be used to pay the annual audit to renew the GLOBALG.A.P certification.

All members showed a high level of awareness concerning their rules. Spot tests within the individual interviews revealed that group members had a very comprehensive understanding of the QMS and the members' obligations. Moreover, as mentioned before, the group undertake huge efforts to enlarge the number of certified members. Frist, the not certified members within the group receive strong support by the other group members. Thus, one not certified member applied for the certification at the next audit. Second, the group welcomes new members to join. According to one member of the core group:

> *"We made clear to the producers of the larger group that we are open to new members. This is also good for us. For the certification we have to pay a lot of money. We also offered them [other farmer of the extended group] support on their farms. The response was however every low. For the last month, we have been training up to eight farmers, but they all resigned from the plan to join our group."* (Group discussion, 04-dec 2010)

Asking them for the reason why members did decide against the participation, the state that the others are "not serious enough", fear the investments related to the certification or do not see the benefits for

[22] Pineapples are introduced to flower and fruit at the same time with the help of chemicals like ethylene gas or calcium carbide. This is done approx. seven month after the planting of the suckers. After forcing, fruits can be harvested in about four month. The time of forcing should be discussed with the buyer, so that he can plan the harvesting, transportation and storage of the fruits.

themselves. As I told the members in the group discussion that I experience the high membership fee and the statement about their openness for new members as a contradiction, they explained that they are afraid of an uncontrolled growth of the group.

> *"If all members will migrate, the group will collapse."* (Group discussion, 04-dec 2010)

According to the participants of the group discussions, members have to show a certain level of commitment since the whole group is dependent on the compliance of every single member. In their eyes the "attitude of people" is important. Moreover, they consider the fee as not too high, since it is in proportion with the required investments for the compliance with the GLOBALG.A.P. criteria.

As mentioned, the group concluded a contract with a processor and exporter. Still the group does not rest on this current contract but plans to renegotiate for better prices:

> *"Blue Skies [their current buyer] has to review the cost of production. Other companies come and ask for our products and we know that we have good fruits. Some say better than the ones from large fields."* (Group discussion, 04-dec 2010)

Moreover, they explained that they keep their eyes open for new buyers. Realizing the high demand for high quality fruits in the area, the members think that they can spread risk and enhance their negotiation power if they sell to different buyers.

The organisation established a relatively comprehensive network of organisations and individuals of which the members of the group are aware that they influence the development of their producer group. Figure 14 shows a considerable number of business actors such as their buyer, service providers and a exporter association. They also have contacts to other FBOs, however admit that the interactions are not very frequent. It is interesting that the members of the organisation also established a link to the value chain committee (a committee organized by the gtz and MoFA, which aims at stimulating a dialogue of actors within the value chain and discuss improvements for a better operation of the fruit export) and the district assembly. In general, I infer from this network that the organisation shows considerable activities to establish relations to important actors for their operation.

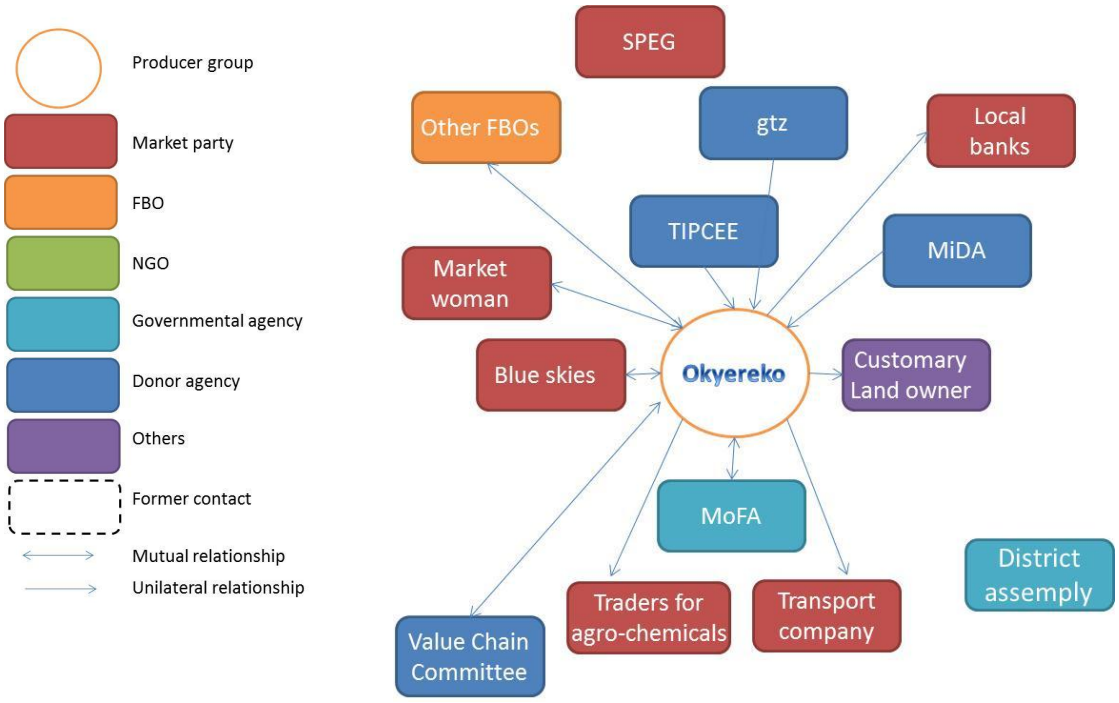

Figure 14 – Network, Okyereko Pineapple Growers

According to the underlying criteria there are only a very few limitations concerning the producer organisation's level of robust collective action. For example, up to this point the group has not invested into a common property. Concluding on these findings, Okyereko still reached the highest level of robust collective action compared to the other analysed producer groups.

6.4 Oboadaka Cooperative Pineapple Growers and Marketing Society

The producer group Oboadaka is located close to Aburi about 50 km North of Accra. The group exists already for 20 years. However – as can be inferred from figure 11 – the group experienced strong fluctuations concerning its membership base. The group was initiated by two farmers (Mr J. Parry and Mr. Offei) who found that a farmer association could help to improve the business strategy of farmers of the region and therefore enhance their market position.

> *"Pineapple farming is not ordinary farming, it is a business"* (Interview with current chairmen, 2-12-2010)

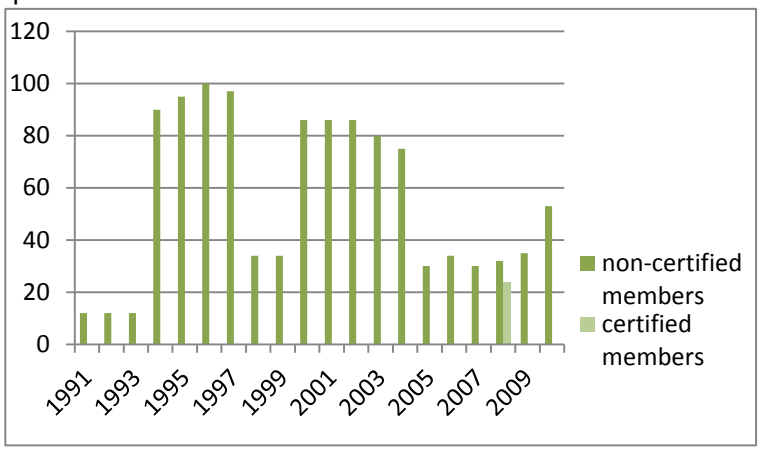

Figure 15 – Number of members, Oboadaka

Moreover, the founding leaders heard that MoFA only provides assistance to farmer groups and not individual producers. The group started to operate with 12 members in 1991. The foundation of the group gained a lot of attention by farmers in the region who wished to join. Thus 90 members registered officially as founding members in 1994. Finally, the group received their GLOBALG.A.P. certificate in 2010. 24 out of 53 farmers have been certified according to the standard.

6.5.1 Specific context

The producer group Oboadaka is located in the Eastern region, Akwapim South district. The strong economic importance of the pineapple cultivation in the region can already be inferred from the logo of the district (figure 16). The agricultural activity in the region is dominated by the cultivation of pineapples, which accounted for the 60% of the total pineapple exports from Ghana in 1995[23]. The climatic and soil conditions in this region are very favourable to grow pineapples: The district is located in the transition zone between the rain forest regions and the coastal savannah. Thus, the vegetation originally has been mainly forest (90%) and some coastal shrub and grassland vegetation (about 10%). The soils in the region have a high nutrition value. Together with bimodal rainfall pattern, which provides enough precipitation for the cultivation of pineapples, the climatic conditions are highly favourable for the business of the group.

Figure 16 – logo of the Akuapim South district

The infrastructural connection of the producer group is however difficult. The group is located far from asphalted streets and is only reachable via off-road vehicles. Nevertheless, earlier experiences show that export from the region in larger quantities is still possible. In 1999, the group received together with five

[23] http://www.ghanadistricts.com/districts1on1/akuapemsouth/?arrow=atd&_=66&sa=496 [14-03-2011]

other farmer based organisations (FBOs) and two large scale producers/exporters a credit of 1.4 million US$ to set up a cooperative marketing arrangement called Farmapine Ghana Limited. The supporters of the approach hoped to implement a marketing model which has the potential to overcome the current inefficient industry structures and also opens new options for the integration of small producers. The central idea of the business model was to establish a management for the company which supports the FBOs with technical advice on cultivation practices, input materials and organising the collective selling of the produce. This approach should help to produce the required qualities and quantities for the export market and at the same time strengthen the negotiation power of the producers. Cost for input materials and services have been deducted from the final profit of the respective farmer. The production managers of Farmapine were also responsible for technical supervision as well as the monitoring of the farming activities.

The business arrangement was designed to carry itself after some years and the credit repaid after ten years at an interest rate of 7%. The credit was provided by the World Bank. The FBOs together owned 80% of the company, the two bigger commercial producers each 10% which allowed a fair spread of risks, costs and benefits. For the first years from its inception in 2000 Farmapine has been profitable and even come second place as the nation's largest pineapple exporters. The members of the FBOs profited from this development. On average a cooperative member cultivated about five acres and an average income of $5000 in 18 month (compared to the average income of $320/per capita/year in Ghana) (Yeboah 2005).

However, the situation changed around 2003/2004 when the company went bankrupt. This happened almost simultaneously with collapse of the global market for Smooth Cayenne. However, the difficult market situation was only one reason for its breakdown. Moreover, the management of the company made considerable mistakes. It is also speculated that members of the management misused the company for their own interests und bought pineapples from other farmer groups. In addition, some farmers used the input materials distributed by the company, however sold their fruits to other buyers. The breakdown of the company together with the collapse of the market has been a rather painful experience. The first years of operation have been a great success. However, with the collapse Oboadaka lost its access to the export market completely. The history of the producer group therefore might have caused certain levels of mistrust among the farmers. On the other hand, they also experienced success of collective activities in their 20 years of cooperation (Personal Communication, Kofi Biney, 15-11-2010).

6.5.2 Manifestation of the independent variables

The following two sections provide an overview about the two applying independent variables for the producer group Oboadaka Cooperative Pineapple Growers and Marketing Society. Again, the association does not receive any support by a buyer.

6.5.2.1 External support

The group has a long history of support which cannot be analysed in detail in this study. This is also because it was rather difficult to reconstruct the full extent of the earlier support as well as trace its effect on the collective action of the group. Therewith, I decided to pay attention mainly to the aid related to GAP practices according to the standard and MD2 cultivation techniques. Nevertheless, the support before that time cannot be neglected as it might have indeed an influence on collective action. Thus, I will touch upon this kind of support by summarizing it to one category 'earlier support'.

The producer group Oboadaka Cooperative Pineapple Growers and Marketing Society which has been founded in 1999 has been supported by a wide range of stakeholders of the public, private and civil society sector before (see figure 17). 2002 marks the beginning of support related to EUROPG.A.P. /GLOBALG.A.P. and the cultivation of the MD2 pineapple variety.

In the period between the foundation and 2002, the group mainly received technical advice and training on demand by the extension services of MoFA. Moreover, the implementation of the Farmapine marketing company was to a large extent implemented by Technoserve, a US based NGO. The organisation accompanied the farmer cooperation for about three years and helped them to improve their management and production practices, set up the management structure of the company and helped to establish the necessary facilities. Thus, the training comprised mainly managerial, technical issues and aimed at the internal organisation of the producer groups as well as the cooperation among the involved producer organisations. Finally, when Farmapine was operating between 1999 and about 2004, the group was supported by the management of the company, which provided the producers with input materials and technical advice.

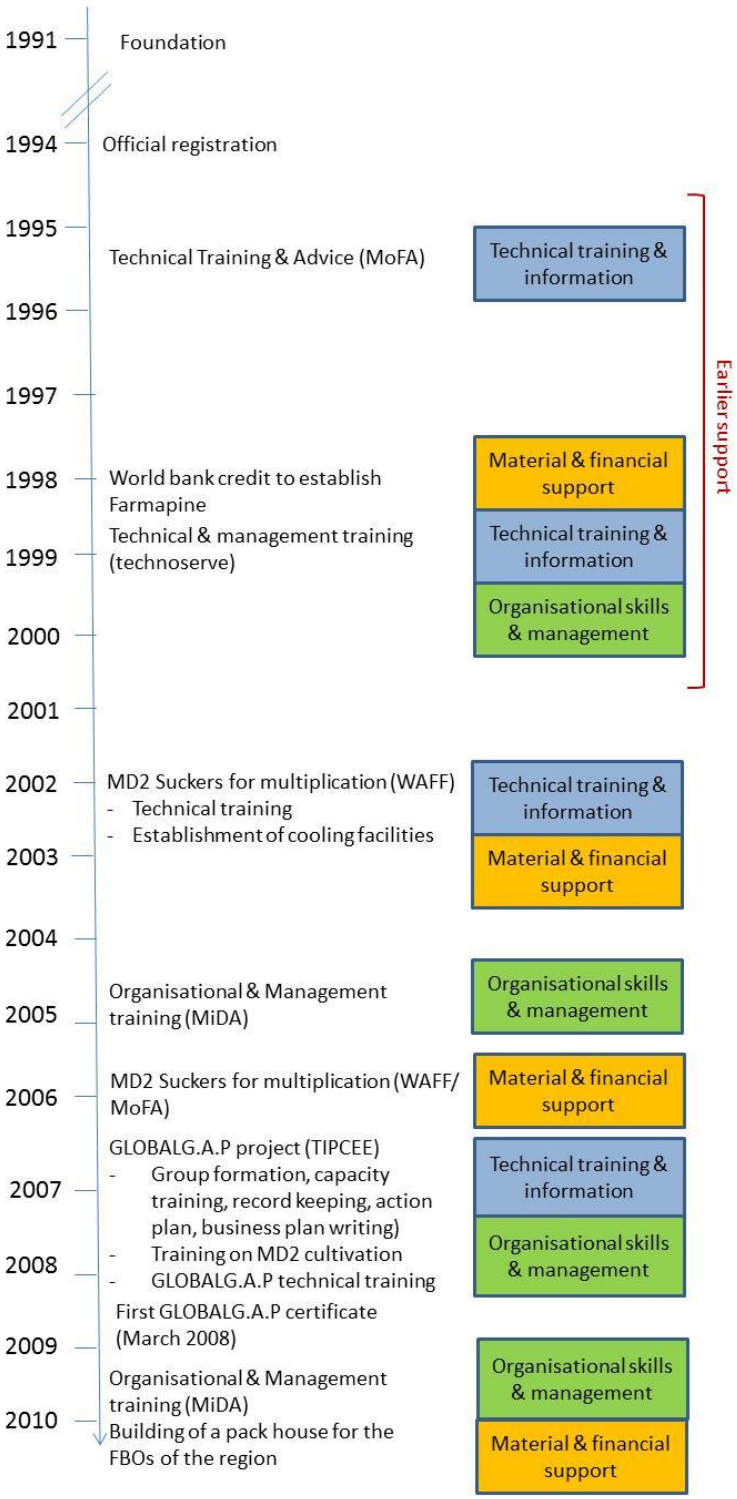

Figure 17 – History of external support, Oboadaka

In 2002, the current members of Oboadaka received each 10.000 MD2 Suckers from West African Fair Fruits (WAFF) and MoFA. WAFF is a non-profit organisation which promotes "responsible production and trade in fruit, cocoa and other commodities."[24] WAFF also trained members in cultivation practices and established a cooling facility for the group. In 2004/2005 MiDA offered a training on management practices and introduced the participating farmers to the requirements of GLOBALG.A.P. In the following year the group was again supported with new MD2 seedlings. Another comprehensive GLOBALG.A.P training was provided in 2007/2008 which resulted in the first certification in March 2008 paid by TIPCEE. Finally, the producer group benefits from an additional organisational and

[24] http://www.waffcompany.com/ [15-03-2011]

management training for 16 weekends which shall improve the business approach of the organisation. Moreover, the group members learned that this training is a prerequisite to apply for a loan at the rural bank. However, the group has not been successful with their application. Finally, MiDA is financing the establishment of a pack house for the FBOs in the region.

Looking back to 20 years of cooperation, the Oboadaka producer association has been supported by a broad range of organisations which provided material & financial contributions, organisational & management support as well as information and technical advice. Comparing the producer group's support with the support of the other organisations investigated in this study, Oboadaka clearly had the most comprehensive backing in all three defined categories.

6.3.2.2 Leadership

The leadership of the Oboadaka producer group is composed of a chairman, a vice chairman, a secretary and treasurer. Moreover, it was possible to speak also to the former vice chairman, who guided the group for 12 years. The current chairman as well as the former vice chairman showed to be the current actual leaders of the group.

In a first interview about the history of the farmer group with the former vice chairman and the current chairmen, both stress the importance of the initiative of the former executives Mr. J Parry and Mr. Offei who founded the organisation 1991 and guided the group for many years. Their importance for the development of the organisation and their meaning for the members came up through the whole field research with Oboadaka. They headed the producer organisation for several years. The current chairman shows his pride about the Oboadaka FBO. In the group discussion he mentioned several times that all members are hardworking and also have been rewarded for their efforts. During our meeting, he reminds the group of the awards they have won in the last years. On the day I visited the group, the chairman announced that they again had won a national award. The present members reacted with applause and exited cheers. Finally, they all shook hands to congratulate each other for their efforts. In the conducted four individual interviews, members stress the loyalty and transparency of the leaders, their willingness to help and support. Only one member mentioned that there were some issues concerning transparency with the former leadership who conceived suspicion to misuse the member dues.

These observations let me assume that the leaders of the group are a source of motivation for the group. The foundation by Mr. Parry and Offei gave the group a clear vision to regard pineapple farming as a business.

The group established a monitoring and internal inspection committee consisting of seven group members, which assure compliance with the group rules. The committee members do not experience any resistance of the members to enforce the rules. They inspect farms without prior notice and submit a warning to the respective farmer in terms of non-compliance. This operating procedure is well known to all members and its strict enforcement accepted. Recently, the leadership of the group wrote 15 letters to members who do not come to the meetings anymore. Moreover, the group implemented a system of open leadership which enables all members to go to leadership trainings. After their participation they are obliged to report to the group what they have learned:

> *"The organization has the rule that all members can attend leadership trainings. Afterwards they transfer the knowledge to all members and all members have to take over a function in at least one of the committees. (…)*

So far the members are satisfied with this approach, this helps to spread the knowledge among the members, thus the leaders are not the only people holding this knowledge". (Individual interview, 03-12-2010)

The group is not solely governed by the elected leaders of the group but also by six committees. Each member of the group is obliged to contribute to the work of one of the committees and therefore holds a responsibility within the group. Thus initiatives are not only launched by the leaders, but also proposed and implemented by the committees. Asking members in individual interviews, what they expect to happen if the current leaders quit their functions, they stated:

"The exit of the members would have no effect on our cooperation. Their work helps us a lot, but they are not irreplaceable." (Individual interview, 03-12-2010)

"The loss of the leaders is indeed a loss for the organization, however, we have experienced that leaders would be replaced by other leaders. That was the case for Mr, Parry., if. Mr. Asamoah [the former chairman] does not have a leadership function anymore, we fall short of his contributions, but he will still be available for the association and support them whenever possible." (Individual interview, 03-12-2010)

To summarize these described observations above, I consider the leadership of the group as strong, also in comparison with the other groups. The current chairman shows a convincing performance on all three parameters categories but is outstanding in his ability to motivate the members. However, I discussed already that parts of the responsibilities are handed over to committees. Thus, compliance with the group rules is assured by the monitoring committee and are not solely a 'leaders' responsibility'. Moreover, several initiatives issue from the committees.

6.5.3 Manifestation of the dependent variable

Finally, I elaborate on the manifestation of the dependent variables. As can be seen from table 5, the groups scores very high on collective action and the criteria for robust collective action.

6.5.3.1 Collective Action

The group meets once a month, however the former vice chairman and current chairman feel that some members do not come anymore because of the recent economically difficult situation. As already mentioned above, 15 members received a warning because of their repeated absence. They report that it is especially difficult to motivate the group to participate in trainings. Since the last training with MiDA which was expected to guarantee a loan from the rural bank, group members showed to be very disappointed by the refusal of their request. Moreover, they learned that another farmer group in the area was granted with a credit, which they however consider less qualified. In addition, the association experienced the procedure for the allocation of the loans as very intransparent and suspect irregularities.

Concerning the adherence to the group rules, the mentioned committee for internal inspection is responsible to constantly monitor the compliance of all members. Unannounced visits are carried out by the seven members. Non-compliances are punished with a warning letter. In case the member does not implement corrective actions after two warnings, a suspension might follow. The group even keeps this procedure despite the fact that they currently hold no GLOBALG.A.P. certificate.

The group follows a democratic procedure for decision-marking. The executives of the group first discuss the respective issues and then present to the plenum of the whole group. After a discussion within the group, the members seek to agree on a decision unanimously. If this proves to be not possible, the majority decides. According to the three parameters the group shows strong collective action.

6.5.3.2 Robust collective action

The producer group Oboadaka Cooperative Pineapple Growers and Marketing Society adapted the required QMS system to their needs. One example is the mentioned establishment of six committees which each take over a central responsibility for the group. Besides the mentioned committee for internal inspections, the group established additional committees for marketing the internal management, financial matters, welfare and discipline. Every member is asked to join at least one of these committees of his or her free choice. This operational structure proves to be very functional for the group. Moreover, I already mentioned the system of 'open leadership' which offers all members the opportunity to participate in trainings which are generally designed for the executives of the group.

Concerning collective marketing arrangements, the group currently does not sell fruits together. This is mainly caused by the fact that the group currently does not produce enough fruits for common marketing activities. The switch to MD2 was a challenge for many farmers who lack the financial means to rapidly extend the production. However, the group has strict rules on common marketing which – according to the chairman – will be taken up as soon as they have again enough produce and regain the certification.

The Oboadaka group owns a small piece of land which was originally thought to be used as demonstration farm. However, it has not been used yet for common purposes. Moreover, a chemical storage in an old container is in possession of the group. Meetings, however take place at the school facilities of the village.

Relating to the parameter 'awareness and inclusion', the committee work results in a high level of commitment of all members. Thus, the chairman explains that the responsibility of each member leads to the general attribute that "Everybody is somebody." (Individual interview with the Chainman, 2-12-2010). Moreover, the committees and the open leadership system help to spread the expertise and knowledge among all members according to the perception of the chairman. In spot tests all group members were aware of the group rules and their obligations. The idea for the committees arose out of the daily activities of the organizations; however MiDA recommended to extent the committees from five to seven.

The group is open for new associates, but learned from the strong fluctuations of members in their past that newcomers need to show a strong commitment to enrich the cooperative assuring a certain continuity. For a certain period of time the group distinguished between core members and affiliate members. But nowadays, all members are considered to be full associates. Interested farmers have to apply formally for membership. They need to have some land on which they already grow pineapples. Before they are allowed to enter the producer group their farm will be inspected by the compliance team. However, considering the recent size if the group, it does not actively look for new members but received requests if interested producers on a regular basis. The organisation does offer advice for members who would like to be part of the group certification, thus a larger group as in 2008 plans to be certified on the coming audit.

Currently, the producer group has no contractual relationship with a buyer. However, the group is active trying to establish a relation to an exporter or processor. According to the former chairman of the group, the marketing committee recently have approached two buyers but have been refused because of the small quantity of fruits they produce.

As most groups, Oboadaka collects dues from its members. Currently members are asked to contribute 50 GHC pesewas each month. The amount will be enhanced to one Cedi (GHC) because the group has higher expensed due to transportation costs. Moreover, it used to be the rule that all members contribute 1% of their gains to the group account. This rule is however suspended for the period the group members do not market their produce on common efforts. In addition, MiDA introduced the group to the idea to plant corn for the benefit of the group, what they successfully did for one season.

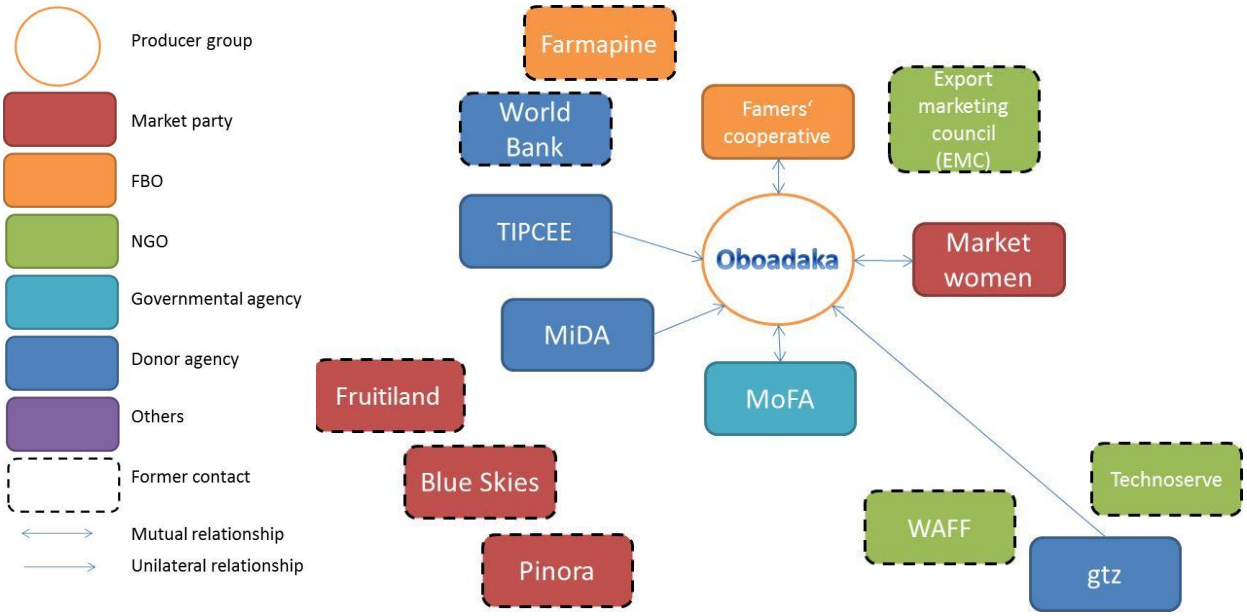

Figure 18 – Network, Oboadaka

Besides the above mentioned activities, the producer group is an active part of the surrounding communities. Oboadaka for example sponsored some boreholes for wells and supported schools in the region. This strengthens the group's reputation and therefore the pride of its members. The success of the FBO is well known in the area and also other farmers are seeking help form the group members. Moreover, the group also serves as a social security network and supports members or even community members in case of serious problems. An annual party which is organised by the producer group show also the social function of the group. Besides the strong local entrenchment of the organisation, the diagram (figure 18) shows that the Oboadaka lost quite some linkages which have been of importance before. This is especially true for the market parties which have sourced from the producer group. Still the hold the contact to other farmers cooperatives in the region.

Concluding on these empirical results and comparing them with the other groups, the FBO Oboadaka achieved a high level of collective action despite the fact that they currently do not hold a GLOBALG.A.P. certificate. Still, I discovered at least two weaknesses according to the criteria to measure robust collective action. The group shows limited activities to extend number of members. Moreover, I recognized no current common marketing activities, which is justified by the limited quantities of produce and the missing certificate. The current unfavourable conditions like the need to switch to the MD2 variety and the difficulties to find a buyer discourage some farmers to join the group activities. The group is especially hard hit because the farmers have very low financial resources. However, considering these currently hostile circumstances their robustness of collective action is surprising. Asking the members in individual interviews if they ever considered leaving the group, the all questioned group members categorically deny.

6.5 Ekumfi-Atwia Cooperative WAD Organic Farmer Society Limited

The producer group Ekumfi-Atwia is located about 120km west from Accra and 55 km east from the city Cape Coast. The group is working in close cooperation with a processor named 'Wad African Foods Limited' (WAD) which exports dried fruits to Switzerland. In 2005, WAD got into contact with the producers in the village of Ekumfi Atwia and agreed on a cooperation. As the first target market of WAD required an organic certification, the producers have been trained by the FAO for the organic production. In the following years, WAD decided to explore new markets and took notice of the GLOBALG.A.P. standard, which was introduced to the producer group in 2009. The constant numbers over time of certified and not certified members can be explained by the standards of the company.

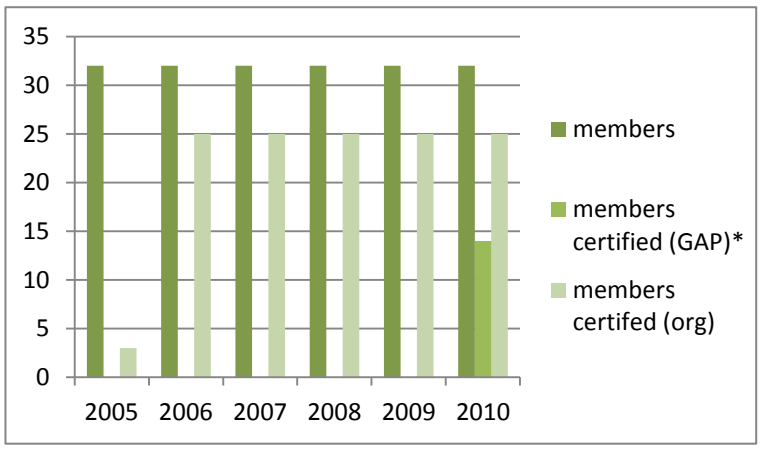

Figure 19 – Number of members, Atwia

*the producer group has been successfully certified but due to delayed payment, the certificate has not been transferred yet

6.5.1 Specific context

The producer group Atwia exclusively cultivate the local pineapple variety sugar loaf. The fruit has a more lengthy shape and is less yellowish in colour compared to the varieties MD2 and Smooth Cayenne. The plant has also lower demands in terms of water and nutrition. Moreover, it is also more robust against potential diseases and does not require the use of pesticides and herbicides. Thus, Atwia produces without the appliance of any chemicals. The sugar loaf variety is mainly sold on the local market and hardly exported. Sometimes sugar loaf is blended with other pineapples to produce juice or dried fruits. However, the demand for this variety on the export market is still very low. Thus, WAD served a niche market. This is important to notice since WAD only sources a fraction of the produced fruits of the association. The secretary of the group assumes that the sourced amount ranges between 35% and 70% and varies over time according to the demand of the company. The group is obliged to offer their pineapples first to the company and then sell the residual fruits to the local market or other buyers. Despite the fact that also local processors start demanding for sugar loaf, it proves to be difficult to find processor and exporter for overseas. Selling the fruits to the local market does not require a certification. Thus, the additional efforts to comply with the certification are unlikely to pay off. Moreover, the infrastructural connections to the harbour in Tema are not very favourable. The location of the cultivated area is relatively close to the main road between the Cape coast and Accra, but the transport to the capital takes about three hours. Moreover, most exporting companies are in closer distance to the capital.

The producer group is located in the Mfantseman East district in the Central region. Close to the sea, the area experiences relatively moderate temperatures between 24 and 28 °C. A bimodal rain pattern with an annual precipitation between 1100mm and 1600mm combined with relatively fertile soils (consisting of cretaceous-Eocene marine sands with thin pebbly sands and limestone) provide favourable conditions for the cultivation of oil palm, cocoa, pineapples, oranges, plantain, cocoyam as well as coconuts.[25]

[25] http://ghanadistricts.com/districts1on1/mfantsiman/?arrow=atd&_=58&sa=4338 [22-03-2011]

Concluding on these findings, Atwia faces a difficult market situation which mainly arises from the contractual arrangement to their current buyer. Moreover, the climatic conditions are favourable for pineapple business. However, the group might experiences a disadvantage from the relatively far distance to Accra/ Tema.

6.6.2 Manifestation of the independent variables

In the following, I present the manifestation of the independent variables.

6.6.2.1 External support

As already mentioned above, the farmer group has been supported by the FAO to attain an organic certification in 2005-2006. It was not possible to speak to involved staff of the FAO directly, but in discussion with the secretary of the producer group, I learned that the training was also composed of group building elements as well as technical aspects of the organic standard. Management issues have however not been part of the training. Finally, the FAO supported the farmers with protecting clothes, the establishment of a community house as well as some financial support for furniture and a computer. The leaders of the group received an additional training on the QMS development and implementation.

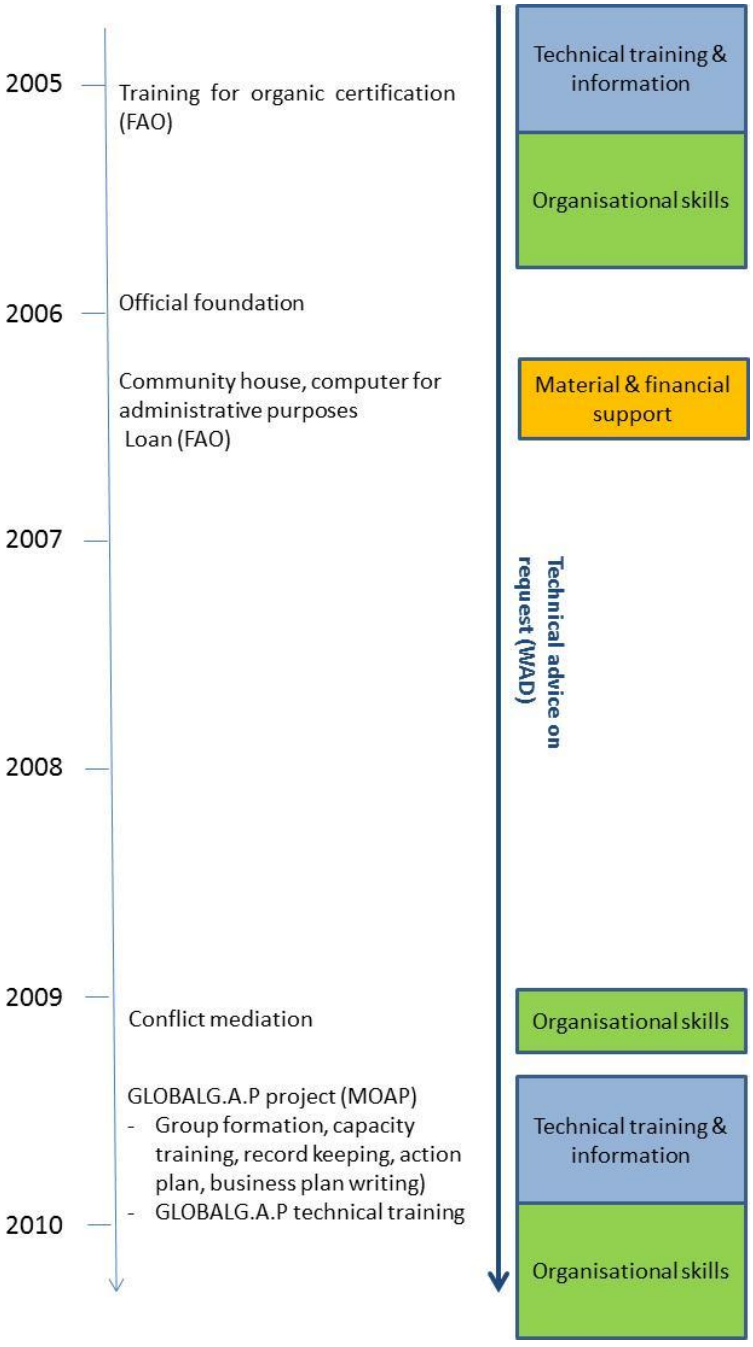

Figure 20 – History of external support, Atwia

In 2009, WAD contacted MOAP for the training of the Atwia producer group on the requirements of the GLOBALG.A.P. standard. The first visit in 2009 revealed that the group had serious internal problems. Therefore, the MOAP staff started the training session first with a mediation process with all group members. Within this first meeting a new leadership was elected and the constitution rewritten and approved. After the accomplishment of this process, the regular GLOBALG.A.P. training took place: The trainers supported the group to develop und establish the QMS and introduced the group the technical aspects of the standard. The group has not been trained on managerial issues.

Besides the support of donor agencies, the producer organisation also received support by their buyer. The cooperation is based on a regular technical support on request. Thus, if the producer group encounters a problem in their cultivation practices, they are free to consult the technical manager of the company. Thus, advice is delivered on demand. Moreover, WAD also has some responsibilities for the compliance with the GLOBALG.A.P. standard. Regular inspections to assure compliance are carried out twice a year by the technical manager of the company.

Compared to the other groups, Atwia benefited from the very comprehensive support in terms of time spend on the trainings. The producer organisation has been guided about four year for the implementation of the organic as well as the GLOBALG.A.P. standard alone. Thus, in quantitative terms the group follows Oboadaka. However, especially striking is that the group has not been trained in management issues. This is mainly justified with the fact that the producer group works in a strong cooperation with WAD and management has not been considered to be necessary in this constellation. Moreover, the group has not been trained on MD2 cultivation as well as the use of pesticides, since the producers only cultivate sugar loaf and also follows an organic standard. However, the training on the GAP standard did comprise all training modules on the group building process, QMS development and implementation as well as the technical requirements of the standard. One of the trainers remembers that the Atwia-Ekumfi producer group took longer compared to the other groups to fully grasp the idea and requirements of GLOBALG.A.P. Therewith, the trainers spend more time on follow-up meetings compared to the other cases studied in this research. Finally, the group received also some financial & material support from the FAO. However, they were not able to successfully apply for a credit in recent years.

6.6.2.2 Leadership

The Ekumfi-Atwia producer group experienced a change in leadership after an internal conflict. According to one of the involved trainers, the group was close to collapse. The reason for the internal conflict was that another company showed interest in buying the groups' fruits. This company approached the leadership of the producer group Atwia for a potential cooperation. It also offered some members financial support of 1000 GHC. In addition, the other buyer took some pineapples for test purposes and started to prepare another certification procedure. The interest of the new buyer was neither communicated within the group nor to WAD. When the issue came to light, the group felt betrayed by their current leadership. Also WAD discovered that another company showed interest in their contracting outgrower scheme. They confronted the producer group with their findings in an upset manner stating that they break the rules of their cooperation and thus endanger the future business relation. For all involved parties, the incident appeared to be a sensitive topic. It was therefore not possible to speak to the former leaders. Also the staff of WAD was not willing to itemize the leadership issue. Thus, it was not possible to gather suitable empirical material about the former leadership. Whereas the facilitator who was hired for the conflict resolution assumes the former leadership to be just "greedy and selfish" (Expert interview, 30-11-2010), other involved staff mention that the current economic market situation motivated the former leadership to betray the group (Expert interview, 15-11). However, I am not able to come to a conclusion on the defined three variables to assess the former leadership in detail. Still it is obvious that the group lost trust in them as they did not comply with the group rules themselves.

The current leadership consists of a secretary, a technical manager and a chairman. However, the chairman of the group was not able to attend one of the meetings. The secretary and technical manager explained that the chairman has to travel a longer distance to come to the community house and

therefore cannot join all meetings. They perceive themselves to have a strong ability to motivate the members and provide them with a vision. The secretary mentions two examples for this perception. First, the secretary stresses the long tradition of the producers of Atwia to cultivate sugar loaf without the use of any kind of chemicals. As the current leadership follows this tradition and encourages the members to stick to the values of the organisation, which provides them with guidance. Moreover, he reports on an incident some days before the interview took place, which should demonstrate his commitment for the group as this ability to motivate them. WAD changed their payment from price per piece to payment according to weight. Some members did not understand the new procedure for calculating the price and felt betrayed on the day of payment when they expected a higher imbursement. The secretary illustrated his efforts to convince the group members of the fairness of the new calculation procedure. Also the interviewed group members explained their satisfaction with the current leaders:

> *"The leaders have good thoughts about the group and are patient towards all group members."* (Individual interview, 19-11-2010)
>
> *"The previous leadership was not really truthful and thus they were withdraws and replaced. The new leaders are trustworthy."* (Individual interview, 19-11-2010)
>
> *"They work hard and support all group members."* (individual interview, 19-11-2010)

Even if the members and leaders themselves stress their motivating function for the group, my observations raise doubts about this perception. As will be explained later, the leaders have a limited knowledge about the benefits of the standards and their opportunities use it on the market. These circumstances makes it difficult to motivate the group.

The group members trust the new leadership to implement the rules of the group and enforce new compliance. Individual members mentioned in the group discussion that they are aware to put the whole group on risk when just one member does not comply. The technical manager is accepted within the group for having a profound knowledge on the GLOBALG.A.P. standard and the authority to advice the members on their practices:

> *"The leadership does its work. The chairman oversees everything and the secretary keeps the records."* (Individual interview 1-12-2010)
>
> *"The technical manager helps to implement the knowledge we acquired during the trainings"* (Individual interview 19-11-2010)

Concerning the skills and initiative of the group leaders, I discovered a relatively low understanding for the opportunities which the GLOBALG.A.P. standard might offer to the group. Despite a well-founded technical understanding of the standard requirements, the secretary and the technical manager asked at the third meeting about the real purpose of GLOBALG.A.P. Moreover, they could not explain their contractual agreement with WAD. Asking them for a written statement between the producer group they provided several documents not knowing about their content. In addition, their knowledge about market potentials is very limited. They did not take any effort to identify their market options. However, the secretary heard about the establishment of a new processor in the region.

Resuming this information, the leaders of the group seem to have some potential to motivate the group, but they do not provide the group with strong vision. This might also originate from their low understanding about the benefits of the standard and their little knowledge how to use the group certificate for their purpose. Nevertheless, the members trust in their ability to enforce the group rules. Compared to the other producer groups in this inquiry, the strength of the leadership is rather weak.

6.6.2 Manifestation of the dependent variables

The following sections describe the level of collective action and robust collective action of Ekumfi-Atwia.

6.6.2.1 Collective Action

The producers meet about twice a month for discussions about the current performance of the group, potential difficulties in the cultivation practices as well as issues concerning the cooperation with WAD. They also decide on the farmers who are allowed to sell their fruits to WAD for the next purchasing of the company. However, two group members revealed during the individual questioning that the meetings are not taking place in the indicated interval but less often. One member mentions that they do not have regular meetings but meet when required. The group has a strong internal system to assure the compliance of all group members with the group rules. Regular inspections are carried out by the technical manager who also advices members in case of problems. Decisions for the group are taken by vote. If two thirds of the group members have to agree on the proposed solution in order to come to a decision.

I conclude that the group shows collective action according to the defined criteria for this research. However, the assessment revealed that the group only meets occasionally.

6.6.2.2 Robustness of collective action

Ekumfi-Atwia did not develop or adapt the general framework of the GLOBALG.A.P requirements, but implemented the basic rules of an QMS system. No further positions and responsibilities have been developed. However, it has to be stated that WAD directed some of the GLOBALG.A.P. responsibility to staff of the own company. Thus, the internal inspections twice a year are also conducted by the technical manager of the company and not only by the technical advisor of the group. This kind of double leadership structure however arose out of the initiative of the WAD.

The group negotiates for prices as a group. However the management of the harvest is mainly controlled by WAD which sources only from one farmer each time and also directly pays the respective producer. Thus, payments are not channelled through the administration of the group. A representative of WAD explained that they switched to this practise because of some disputes in earlier times. The current procedure is considered to cause fewer conflicts among the group members. (Individual interview, 30-11-2010). However, it is also obvious that the group has less control about its members. The produce which cannot be sold to the company is sold on an individual basis to local traders. Thus, common marketing activities are only party realized.

The general contributions of the individual members of the group to group activities are relatively low. Group members are obliged to come to the group meetings and training sessions as well as follow the GLOBALG.A.P requirements. Further group activities are not known. I infer from the individual interviews that these meetings and internal trainings are not taking place any more since the donor agencies left. All other tasks and responsibilities are fulfilled by the leadership team who are responsible for the communication with WAD and other administrative tasks such as record keeping. The technical manager regularly inspects the fields of the individual members and provides advice if needed; he carries the biggest share of work within the group. Concerning common property, the Atwia Ekumfi producer group

has a community house and a computer which was financed by the FAO. Other common property is unknown.

The group reached a high level of awareness and inclusion. All group members achieved a fair level of understanding for the standard and the group's constitution. Asking them of what they have learned from the trainings most of the members could recall in great detail the technical aspects of the training. They recognize that the new cultivation techniques have been beneficial for the quality and quantity of yields. They also perceive that some of the learned techniques are not helpful for their specific situation. Since the group does not use chemical fertilizer, they cannot follow the recommended amount of fruits per acre. Moreover, it is not clear what will happen to the seven producers who recently applied to become part of the group. Since WAD defined the limit of certified members to 17, it is unlikely that the additional farmers will also receive permission to sell to WAD and thus will never achieve full inclusion. Because of this predefined maximal number of members and the anyway constantly varying and low sourcing capacities of the company, the producer association does not undertake efforts to attract new members. The unreliable sourcing of WAD would provide some potential for common marketing efforts on the local market. However, the Awia group did not try to find or approach any additional buyer. One member stated that:

> *"When we don't find a way to gain some financial support or to find new market the group will collapse."* (19-11-2010)

The network of the organisation is limited to donor agencies such as MOAP and the FAO which reflects the passive attitude of the producer group (figure 21). For all matters they are concerned with, they contact WAD, which also established the contacts to these two organisations. The company also manages the communication with the donor agencies. The secretary mentioned that they appreciate the support of WAD as they provide the group with a stable income and can be contacted in terms of any difficulty. To stay loyal with WAD they don't feel that they should approach other organisations. The members of the group also did not establish a relation to other associations in the region and are not aware that WAD sources also via another outgrower scheme.

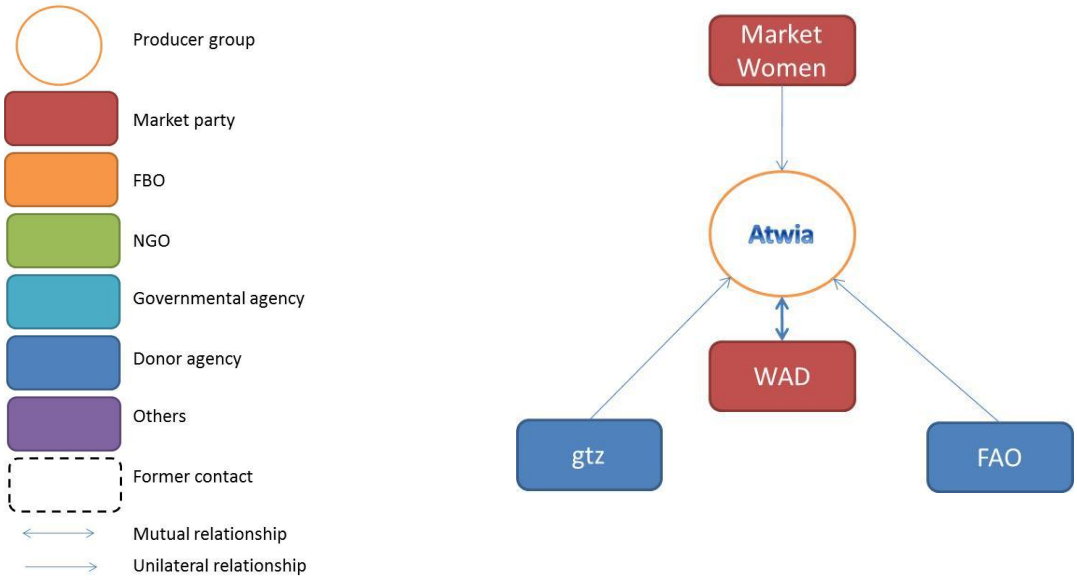

Figure 21 – Network, Atwia

In terms of capital generation, the group also shows a low level of activity. The secretary of the group explained that they asked the contact person of WAD to keep 1% of the payment to the individual members and provide it to the producer group as it was agreed among the group members. Because the WAD staff did not fulfil this request, the secretary viewed this strategy as failed. Despite the fact that the leaders of the group and also members in the individual interviews stress the fact that they need further financial support to extent their production, they never tried to approach a bank for a credit.

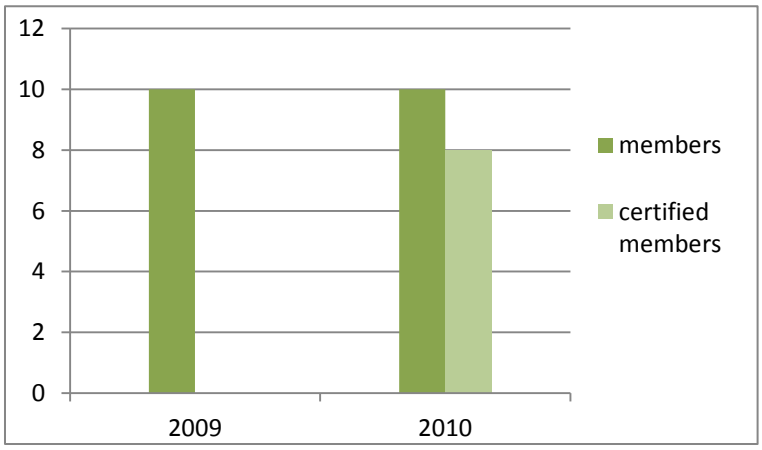

Figure 22 – Number of members, Nsakye

Overall, the Ekumfi-Atwia producer group complies partly with the three criteria defining collective action for this research; however it developed a very low level of robust collective action. For five out of the eight criteria, the members show activity. Nevertheless, the gathered data pointed to a positive or partly positive development in terms of inclusion and awareness and common marketing activities.

6.6 Fruit Farmers' Co-operative Society Nsakye

The cooperative Nsakyse is the youngest producer group among the case studies. The group has been founded in 2009 when the current leader of the group got into contact with WAD. Nsakye can be considered as the second supplier of the company; however, it does not have a contract with the processor stating the conditions of their cooperation. As figure 22 shows, the group has a constant member base for its first two years of existence. Moreover eight out of ten members have been certified after the first training. As Atwia, Nsakye has not received its certification at the time of the empirical field work in November and December 2010 due to delayed payments of the involved donor agencies to the certification body (CB). However, the delivery of the certificate has been expected for the following weeks.

6.7.1 The specific context

The producer organization Nsakye operates in a very favourable natural environment for the cultivation of pineapples. Like Oboadaka, the farms of the producers are located in the Eastern region, Akwapim South district. The area is influenced by two climate zones, namely the equatorial climate of the South East coastal plains as well as the wet semi-equatorial climate. With mean annual temperatures about 27°C and a precipitation between 800 and 1700 mm depending on the distance to the coast, the district normally experiences enough rainfall for rain-fed agriculture. However, considerable variations are possible. The soil is conductive to support the cultivation of several crops but the Akwapim South district is famous for its pineapple cultivation.

As Oboadaka, the Nsakye group is located in a relatively remote area but very close to the Accra (about 50km). Thus it is in a favourable position for the transport of the pineapples to the harbour. The members

cultivate mainly sugar loaf and Smooth Cayenne. With currently 25 acres under pineapple cultivation the organisation does not satisfy the demand of most exporters at the moment. However, the members leased or own on average 19 acres per person which provides potential for expansion.

Resuming this information, the Nsakye producer co-operation is in one of the most favourable positions amongst the producer groups, however in a very early stage of its operation.

6.7.2 Manifestation of the independent variables

The following section specifies the characteristics of the external support and leadership.

6.7.2.1 External support

The producer group Nsakye was founded at the beginning of 2009 by a retired military officer who already leased land in the region about 20 years ago. Getting into contact with the management of WAD we developed the idea to found a group in cooperation with the company. Compared to the other groups, Nsakye received the lowest level of support. Form August 2009 till June 2010 the group has been trained and guided in the implementation of the GLOBALG.A.P. criteria by MOAP and related organisations. Like all other groups, the members of Nsakye have been introduced to the technical requirements of the GLOBALG.A.P. standard. They also have been instructed as a group to design their internal rules and establish their own QMS. Three people of the group also went to the leadership training together with the chairman, secretary and technical advisor of Atwia. As the group is hardly involved in the cultivation of MD2, they have not been trained on special cultivation techniques of this variety. Moreover, the group also had only very limited management training. It was further agreed that MOAP pays for the first certification. Equal to the situation of Atwia, the certification has not been raised due to payment delays. Additional financial or material support was not provided.

The implementation of the GLOBAL-G.A.P. standard has been facilitated by WAD because the company decided to access new markets and extend its production. In order to source certified produce, WAD contacted MOAP for the training of the farmer group (as for Atwia). The producer group Nsakye has the opportunity to contact WAD for technical assistance. However, the chairman of the group confirms that the contacts between the company and the farmers are quite rare. One the technical manager has been contacted for the calibration of a atomizer to apply chemicals. Moreover, the company did not enter into a contract with Nsakye and also only sourced a small fraction of its produce in 2009 (according to the chairmen less than 2%). In 2010, Nsakye did not sell any fruits to WAD. Thus, compared to the situation of the producer group Atwia, Nsakye received even less support by the company and does hardly rely on its cooperation.

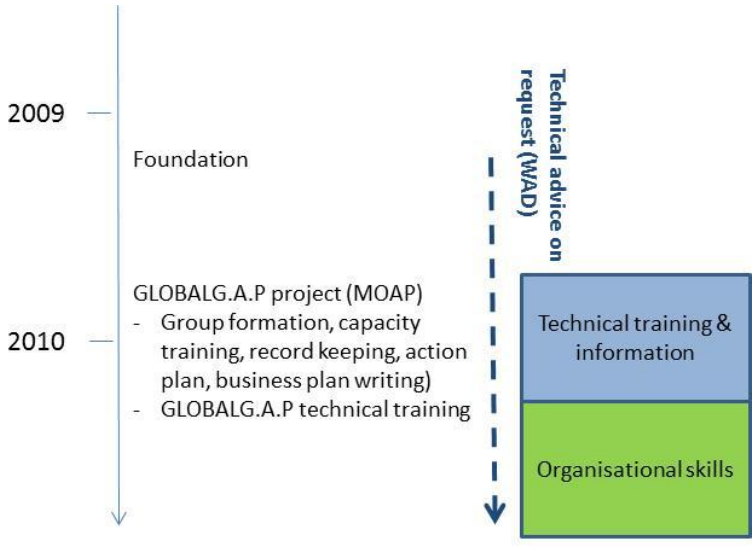

Figure 23 – History of external support, Nsakye

6.7.2.2 Leadership

The founder of the group is at the same time the current elected chairman of the group. From the discussions with the individual members, himself and from the observation of a group meeting, I found him to have a very promoting role. Within the organisation he showed a strong ability to motivate the members of the group. In the group discussion he constantly stressed the commitment of all members to contribute to the group process and their excellent performance as farmers. The chairman mentions the best performing farmers within the cooperation. He himself supported some group members with suckers who were not able to purchase them on their own. In general, the intercourse between the members and the leader is characterised by a very trustful, friendly and open communication. The group discussion was opened and closed with a prayer and handshaking between all members. A member stated in an individual interview:

> *"I am fully satisfied with our chairmen. We have a very democratic culture and feel no oppression."* (Individual interview, 29-11-2010)

However, the chairmen himself doubts about his ability to motivate the members. He recognized that some group members felt discouraged after they passed the GLOBALG.A.P. audit but did not receive the certificate.

The members trust in the leader's ability to enforce the group rules. As the group has been introduced to GLOBALG.A.P. and its requirements very recently, all members still face problems. Experiences, problems and potential solutions are discussed within the group. Sometimes group members meet at one of the members' fields to discuss potential improvements of his practise.

The leader of the group has a profound school education and developed a comprehensive understanding of the standard. With this background he served as a helpful guidance to all group members, despite the fact that he experienced the requirements of the standard as very strict and the training sessions as difficult. The chairman himself stresses the importance of the leadership training, which was crucial to fully understand the requirements of the standard.

Relying on WAD as a buyer, he however has not explored further market options yet. However, he presented a clear vision for the development of the group as well as a number of ideas which he plans to implement in the near future. Thus, one member stated:

> *"I am confident about the skills and abilities of our chairmen. He has a lot of ideas and plans for action."* (Individual interview, 29-11-2010)

Concluding on these empirical data and comparing the chairman of Nsakye with the leadership of other groups, I consider the chairman of Nsakye as very strong. He proved a good performance on all three parameters.

6.7.3 Manifestation of the dependent variables

In the following, I assess the level of collective action for Nsakye. It has to be stated that this assessment is difficult because of the young age of the farmers' co-operation. Thus, the group was also questioned about their intentions for its future development.

6.7.3.1 Collective Action

According to the defined criteria to measure the level of collective action, Nsakye shows positive results for all three criteria: The producer group meets once a month with all members. These meetings follow a predefined procedure, which starts and ends with a prayer. At the beginning the protocol of the last meeting is read out loud and an agenda for the current meeting is set up. The items on the agenda are discussed in the plenum and all members have the opportunity to express their view. The discussions might result in proposals for decision. In case no unanimity can be reached, the majority decides on the issue. Decisions are recorded in the minutes. The group agreed on set of rules which are defined in their constriction. The compliance of all members to the criteria of GLOBALG.A.P. is checked by the technical manager on a regular basis. Moreover, they conduct inspections with all members to learn from each other's practices and problems (Group discussion 26-11-2010).

7.7.3.2 Robust collective action

The inquiry came to the conclusion that Nsakye also reached a high level of robust collective action. The group adapted the required QMS to their needs and drafted an individual design of the group's constitution. Besides the usual responsibilities within the group carried out by the technical manager, the chairman and the secretary, the group defined the role of a 'patron' who is thought to represent the group in front of third parties such as market actors and local authorities. However, this position is currently not taken. The constitution also defines a clear line between the responsibilities of WAD and the executives of the producer group.

Up to the point of the investigation, the group did not cooperate in common marketing basically because they did not receive the certification yet. However, the group expressed strong intentions to start a common marketing process as soon as they receive the GLOBALG.A.P. certificate.

Concerning the generation of capital for the group, all members pay a registration fee of 10 GHC and monthly dues of one GHC. The group has no common property yet and but already contacted the community leader for a plot of land which shall be used for the construction of a store for agrochemicals and the establishment of a demonstration farm.

Observing a regular group meeting, I recognized a remarkable involvement of all attending members in discussing the issues on the agenda. All members contributed to the conversation and presented their point of view on the problem at issue. I conclude from this observation that the group has a very open, non-hierarchical and inclusive culture. Moreover, three spot test revealed that all members are informed about the constitution and the requirements of the GLOBALG.A.P.standard.

The constitution of the producer organisation lists ten founding members. The chairman of the group explained that he only invited a limited number of farmers for the beginning because he felt that the group first has to gather some experience with the standard before extending the number of members. From his point of view, the small number allowed the group to support all producers to attain the certification. Indeed, Nsakye reached the highest ratio of certified members in comparison with the number of general members. Eight out of ten members are already certified and a ninth member is currently supported to comply with the standards criteria. One of the community leaders did also join the group from the beginning but experienced himself that he was not able to invest enough time and resources in order to get certified. The group has clear intentions to grow in near future and invite new farmers of the region to join the group and receive the certification.

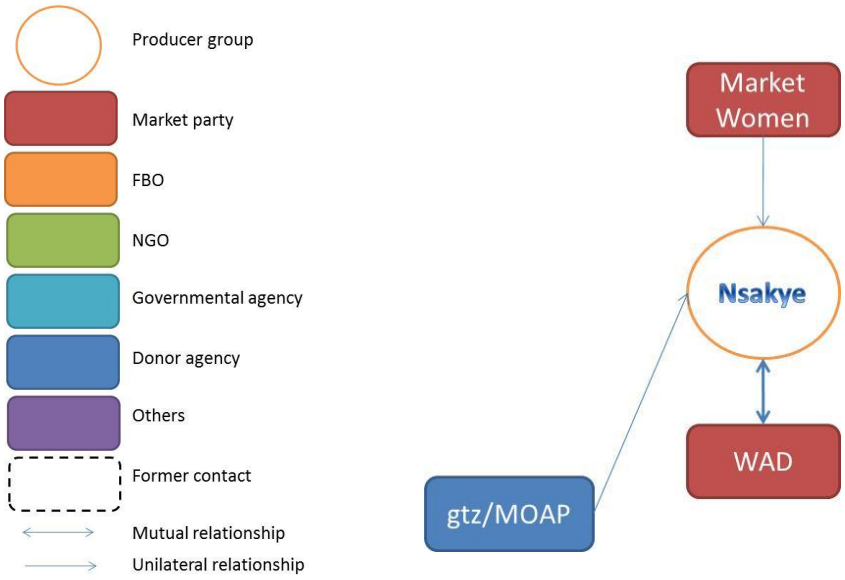

Figure 24 – Network, Nsakye

Nsakye did not invest efforts to find a buyer for their produce, yet. According to the chairman, the group hopes that WAD will increase the demand for their produce. However, the chairman reported that he has been contacted by another buyer who approached him being interested in his fruits. The group awaits to receive the GLOBALG.A.P. certificate to take are more proactive role to find aditional exporters and processors in near future.

Within the short period of their existence, the farmers organisation did not develop a comprehensive network with other FBOs, individuals or organisations which might be of interests for their goals. (see figure 24). Moreover, the organisation has still very limited resources but plans to generate capital from the common cultivation of the demonstration farm. Moreover, the chairman plans to ask for a credit when they receive the certificate.

Due to the very recent foundation and short existence of the co-operative society, it is especially difficult to make a final statement concerning the robustness of collective action of Nsakye. Therewith, a direct comparison with the other groups is rather difficult. However, the group presented comprehensive and concrete plans for the future development of the group which directly concerned the criteria I defined to measure collective action. Therewith, I estimate a high level of robust collective action for the producer group. A more reliable assessment has to be conducted in the years to come.

7. Analysis

In this chapter, I analyse the above presented empirical results (Chapter 6). Whereas the next chapter (chapter 8) deals with the comparative analysis, this chapter has a closer look on each of the producer groups separately to explore the causal mechanisms connecting the independent and dependent variables.

7.1 PINEX Co-operative farmers and marketing society

The producer group PINEX developed one of the highest levels of robust collective action. I found that the producer group experiences a very unfavourable market situation due to the distance to the port in Tema, the bankruptcy of their buyer, as well as the currently difficult climatic conditions in the region causing considerable losses of the harvest. Still, PINEX surprises with a high 'score' on all parameters measuring the robustness of their collective action. The following sections shed light on the influence of the independent variables on their level of robust collective action.

7.1.1 The influence of the external support

PINEX received comprehensive support on organisational and management issues. The members were also trained on the technical requirements of the GLOBALG.A.P. requirements and were guided in the cultivation of the MD2 variety. Moreover, the group did lavishly benefit from some financial & material support such as the MD2 suckers provided by MoFA, a loan brokered by MiDA, protective clothing as well as the first payment for the first audit of the group certification. Finally, the technical manager of the group participated in supplementary trainings which go beyond the regular introduction to the QMS system.

Training on management & organisational issues

The introduction to the requirements of the GLOBALG.A.P standard has been crucial for the collective action of the group, because its members would otherwise not been aware of the GLOBALG.A.P. standard, related obligations and potential benefits and related cost. Thus, the training had an initiating function. Moreover, the management and organisational training familiarized the members of the group with the requirements of the standard such as the rules of the QMS system. In addition, they learned basic management skills on how to operate the group based on the monitoring of their annual production as well as self-defined goals. A respective part of this training (the full training of the QMS and its development and establishment) was provided to the leader of the group which is discussed in the next section 7.1.2. The training also introduced the group with a set of rules to operate collectively. These rules, defined in the QMS and the constitution of the group, are the backbone of the daily operations and are largely based on the requirements of the GLOBAL.G.A.P group certification. As mentioned earlier (section 5.1), the group certification is based on the logic the non-compliance of one member might cause the loss of the certificate for the whole group. Especially the awareness that the compliance of every single member decides on the success of the whole group, increases their commitment. Interestingly, the design of the group certification 'option 2' provides a strong incentive for group members to not free-ride on other members' efforts. Thus, the organisational and managerial training explains the established inner organisation of the group including the implementation of the QMS, monitoring activities, regular meetings as well as the collective action decision-procedure and thus the current level of functioning collective action. However, the managerial & organisational training does not explain the robustness of collective action defined according to the discussed parameters (see section 6.2.3).

Technical training

Asking the group members if and to what extent they benefitted from the GLOBALG.A.P. training in general, they mainly remember the technical part of the advices as well as the training of the MD2 cultivation. Without exception, members perceive the technical training as most beneficial because they see a direct relation between the new agricultural practices and the increasing quality and quantity of their harvest. Although the technical skills and knowledge mainly benefits the individual producer, it also increases the economic incentive to participate in the group activities and makes them aware of their common interests. The technical training and acquired technical skills enable the group to work collectively for common marketing purposes and along the requirements of the GLOBALG.A.P. standard, but still does not explain the development of the group activities to the current level of robustness of collective action.

Financial & material support

For the financial and material support, the answer is less clear. The technical manager described the financial contribution in form of a loan as disturbing to the group activities. According to his view, the received loan brokered by MiDA was not enough to finance the intended expansion of the production. This in turn caused problems to repay the loan due to a lower harvest than expected. The group had to ask for another loan for the repayment of the former one, which discouraged their commitment for the group. However, the contribution in the form of MD2 suckers as well as the first payment for the certification did contribute to the initiation of the producer group as they provided the material basis for the cooperation and diminished the initial fear of the high investment costs. However, also this type of support does not explain the recent manifestation of collective action.

To conclude on these results, the support had a tendentially positive influence on the occurrence of collective action but lack explanatory power for its current robustness. Thus, regular meetings, the establishment and adherence to the group rules, monitoring activities and collective decision-making have been introduced by the training. Moreover, the group reported that they experienced a strong incentive to contribute to the group after the technical training as well as the material support. However, the current level of robust of collective action of the producer group PINEX cannot solely be explained by the external support.

7.1.2 The influence of leadership

The PINEX producer group is supported by a strong leader (as shown in section 6.2). He fulfils the characteristics for a strong leader (according to the parameters described in section 4.2.1). In the following, I discuss to what extent leadership can be held responsible for the high level of robust collective action. As mentioned before, the technical manager of the group has been introduced to the requirements of the QMS. Moreover, he has been trained to become an auditor himself. In addition, he participated in an advanced export business training.

Vision & motivation

The technical manager provides the group with a vision and motivates them to work together. Despite the very difficult market situation, he managed to keep up the moral of the group by declaring obliged himself responsible to find a buyer for their produce. A member expressed his satisfaction with their leader.

> "*It is difficult now. They [meant: their buyer Kingdom] don't pay us for a long time now. And I don't see that this is doing to change. (…) Martin will not give up; he tries to contact this guy [meant: manager of Kingdom]*

again and again. But he [meant: manager of Kingdom] does too many things at the same time. (…) Now Martin started to produce juice and sell it to the shops in Hohoe so we can have some income. He has many ideas." (Personal communication 11-11-2010)

The members of the group see his commitment and trust in his efforts. Although, they currently experience that his work does not bring them the hoped market success, they still believe in his efforts

Rule enforcement

Moreover, the members know about his strict monitoring work. As already mentioned the group introduced a rule - initiated by the technical manager - which permits him to intervene on the plots of all members in case he fears that the respective producer is not able to meet the requirements of the GLOBALG.A.P. standard. Thus, all members rely on his monitoring activities.

Skills & initiative

The main importance are however the skills and initiative of the technical manager. Thus, high level of accordance with the defined parameters measuring the robustness of collective action can be ascribed to his work. Asking him about the factors which contribute to the strong cooperation of the group, he states:

"My knowledge is the asset of the group." (Individual interview, 14-12-2010)

His broad professional experience with his own business, GLOBALG.A.P. and in the agricultural sector provides him with a strong background for the marketing activities of the group. As described in section 6.2.2.2, most activities of the group rest upon his initiatives. This is true for the recent design of the QMS system, the strict implementation of the common marketing activities, the advice and training of the group members to assure compliance and motivate new members to attain the certification, the search for new business partners, the internal and external strategy to generate capital as well as the establishment of a broad network of contacts to individuals and organisations. Moreover, the financial resources of the technical manager are also an important contribution to the performance of the group. Without his commitment to invest also his private savings, the group would have to generate additional financial resources requiring more efforts adding up to the recent challenges.

The technical manager of the group, however, also benefited a lot from the external training as well as the advice of the involved donor agencies. Although, he had already experiences with GLOBALG.A.P. as a mango farmer, the training staff stated that they found his fields not in compliance with GLOBALG.A.P. in advance of the training sessions. Asking him for the impact of the training, he states

"There is no way to deny the positive impact." (Individual interview, 14-12-2010)

According to the leader's perception himself, he gained additional skills in management practices, the group certification mechanism and the QMS requirements. For PINEX, I conclude that the technical managers' newly acquired skills together with his commitment for the group, his resources and existing experiences as well as his network, is the main driver for the current level of robust collective action of the group. The very dominant position of the leader has a very positive effect on its performance. The centralized management in his hands assures an efficient and targeted cooperation, leaving only little leeway for free-riders.

His dominant position within the group however also entails some disadvantages. I already stated that the group shows some deficits on awareness of its members (four out of nine had no full understanding of the group rules as well as awareness of their annual income from pineapple farming) as well as the level of equal contributions. Without any evidence that this is already the case, the strong dependency of

the group on the leader bears the risk of an exploitative relationship. Moreover, the collapse of the group is likely in case of the leader's retreat. However, his strong commitment is currently the backbone of the producer organization and enables the cooperation, which might otherwise not be possible.

7.2. New Generation

The producer group New Generation is the only group which shows a low level of collective action. Considering the external factors such as climate, infrastructure and market situation, these factors can hardly explain the weak performance of the group. Compared to PINEX, the producer group is operating in a more favourable environment. Still they experienced harvest losses, which they themselves ascribe to a lack of input materials at the time of planting.

7.2.1 The influence of external support

New Generation has been part of the pilot project and experienced a very similar history of external support compared to Okyereko and PINEX, the group collapsed shortly after the termination of the training. The question of this section will discuss why New Generation took that path and developed so differently compared to the other groups.

Training on organisational & Management issues

New Generation received the same training like PINEX and Okyereko in internal organization and managerial issues. Compared to PINEX the group attended an additional business training held by MiDA in 2010. Moreover, the cooperation is currently supported by the extension services of MoFA and MiDA to regain the group certification which they did not renew themselves in 2008, 2009 and 2010. As a result of the training the group established a common set of rules determined in their QMS system. However, the rules have been hardly followed at the time of inquiry. A trainer of the group stated that one difficulty was that frequently farm owners did not attend the trainings but send their farm managers to do so. Consequently, the farm managers sent as representatives were not authorized to take decisions but had to consult the respective farm owner for any issue. The building of internal institutions was therefore hampered.

Technical training

During the group discussion, the leader of the group explained that all producers acquired a profound knowledge on the standard and its requirements. He especially referred to the technical skills which raised interests among the members to work together. Individual members confirmed this perception.

Financial & material contributions

According to two members to whom I spoke individually, the lack financial resources has been the reason for the failure of the group. They expected financial contributions or material support in form of input materials, which they finally did not receive. Moreover, some members expressed their strong dissatisfaction that they had to invest their own resources. The members felt that their own resources were lost after the first bad harvest, which they also ascribe to the "bad" project concept.

In the eyes of these two members, the final collapse of the group was a result of the disappointed expectations. As already stated, the group was invited to participate in an additional training with MiDA on 'farming as a business' which was connected to the potential to apply for a loan. However, after the participation in this training, the application written by a consultant on behalf of the farmer group was

refused by the local bank. Receiving word that the proposal of another association was approved, which attended the same training, finally discouraged many members to still follow the group activities. This interpretation of the current situation gained from the individual interviews of two members indeed carries some truth. Members with different expectations in the project attended the trainings and thus complicated the coordination of the group. It is also very likely that the first lost harvest discouraged their cooperation

The establishment of a causal mechanism between the independent variable 'external support' and dependent variable 'the robustness of collective action' proves to be a difficult exercise for the producer group New Generation. I found that the material contribution in form of MD2 suckers again mark the beginning of the producer's cooperation. However, organizational or managerial as well as technical training did not show the intended effect of enhancing collective action activities for common marketing. Two members of the group even blame the involved organizations for a weak project design and a lack of financial support for the development of the pineapple business. Trainers however, see the fault on the side of the group members, who did not put enough efforts in the group activities, just being interested to profit from monetary support. Nevertheless, it can be concluded that external support did not establish robust collective action in this case.

7.2.2 The influence of leadership

According to the empirical findings, also the leadership of the group was not able to establish collective action. In section 6.3.2 I already discussed that the leaders were not able to motivate its members and provide a vision to the group. Moreover, it was difficult to assess to what extent members trust their ability to ensure the compliance of all members. For the skills and initiatives of the leaders the empirical data delivers a mixed picture.

Reviewing the level of robust collective action, the chairman/ internal inspector and the secretary/ technical manager developed and implemented the QMS system but now fail to maintain the group rules because hardly any group member is still producing pineapples. For those who still do, they also comply with the QMS. Furthermore, it has been the leaders' initiative to search for new business partners or approach banks for a group loan. Still their initiative has not fundamentally increased the level of collective action on the group.

However, interviews with the involved staff, which facilitated the training, provided interesting new insights into the group dynamics. Comparing their experiences with other producer groups, one advisor found, that some group members had the tendency to wait for supplies from the donor agencies. In addition, one interviewee brought to attention that a considerable part of the group members never contributed themselves to the process but relied on the resources of the chairmen.

> *"One problem of the group New Generation was that it was founded by "a white men" who most members of the group believe that he would sponsor everything; they did not contribute to the project. The group used his input materials and his storage. They saw white men as a sponsor."(Interviewee 17-12-2010)*

Furthermore, about a third of the group members had additional income from another source which did not make the pineapple business their first priority. Expecting financial contributions from the project, they were not willing to invest into group activities. Even the relatively committed leadership team was not able to convince these members of the benefits of the actual project design.

I learned that neither the external support nor the leadership could boost the level of collective action of the group. But what is the reason for collapse of the group? The former paragraphs already state some possible reasons for this issue. I assume however, that the main reason for the worsening of the cooperation was the bad market success due to the bad harvest.

This lost harvest has no single cause. But one reason might also be the late reaction of the donor agencies of the MoFA extension services to the needs of the farmer group. Being discouraged by the first problems, producers started to mistrust in the project. Moreover, it is also true that some members had different expectations in the external support by the involved organisations. Some producers seemingly saw the project as a welcomed additional source of income as they expected financial contributions to the participants. However, they have not been willing to invest own resources and time into the group process. Hence, also the very different goals and expectations of the producers finally resulted in the collapse of the group.

7.3 Gomoa Okyereko Pineapple Growers

Third, I turn to the Gomoa Okyereko Pineapple Growers and the explanatory factors behind their very robust level of collective action. As discussed in section 6.4.1 the producer group does not operate in the most favourable environment in terms of the natural environment, the access to support services and the availability of farm labour; however profits from its location close to Accra as well as the high demand of the buyers for their fruits.

7.3.1 The influence of external support

To what extent can the robustness of collective action be explained on the basis of the external support? In section 6.4.2 I came to the conclusion that the producer group received very similar support compared to the producer groups PINEX and New Generation with just a few exceptions.

Training on managerial and organisational issues & technical training

The members themselves feel that the training on management issues and internal organisation as well the technical training brought the group members closer together and enabled the group process. They even feel that the group would not exist without external support, because its existence in the current form is a product of the external input. They see that the training enhanced their skills – and related to that – their economic performance. The members are proud of the quality of their fruits which has been a result of the technical training. They experienced that buyers in the region are very interested in their produce which enforces their incentive to cooperate. Relating the managerial training, advice on internal organisation, the technical support to the parameters to measure collective action and robust collective action respectively, I again only identify a causal mechanism between external support and functioning collective action. Thus, the setup of the internal organisation, the idea for regular meetings as well as the procedures for decision-making are a result of the advice. For the parameters of robust collective action this relation could not be established.

Material & financial support

In terms of financial support, the group has a critical opinion. This is also founded on their experience with the extended group which member base rose from eight to 42 in 2009 when MiDA stated the training mentioning a loan held out in prospect for each participating member. From their point of view, the extended group recently enjoyed a large clientele because participating members had the opportunity to

receive the loan. They also observed that the willingness to participate showed to be related to the material benefits the group which members could gain from the meetings. For example, as MiDA decided to not offer refreshments for the breaks anymore, this resulted in lower participation rates of the members. Some members even asked if they could get paid out in money instead of receiving the refreshment. Moreover they found, that the provided loan was not sufficient for its original purpose. The local bank calculated the amount for the loan based on the assumed input materials per acre. Based on the experiences of the members of the core group, this amount is unrealistic to cover the expenses necessary. The fear that, members drawing on a credit will run into dept, because they will not be able to generate the profits from their harvest needed to repay the loan. This is also the reason why some of the members of the core group did not accept the loan offered. However, they find that credit is a basic need for the start of the pineapple business. Especially, the cultivation of MD2 is very costly. The members of the core group concluded in the group discussion that this form of financial contribution hampers the development of a producer organisation because members participate with a different intention than considered for the project. On the one hand, the group members have been dependent on the donated MD2 suckers and the payment of the first certification. In the group discussion they reported that they would not have been willing to invest the required amount of resources and time without being sure that these will pay-off. Finally the economic profitability motivated their cooperation.

Summing up, external support was essential to initiate cooperation. This is true for all three kinds of support. It is possible to draw a relation between the support and collective action, however not to the indicators of robust collective action. Moreover, members found that financial contributions carry some danger also to hamper the occurrence of collective action.

7.3.2 The influence of leadership

The results of the inquiry for the producer group Okyereko showed that the group is headed by a leader, who is able to motivate the members and provide them with a vision. Moreover, he is found to implement the group rules and prove strong skills and initiative developing the group. However, I also found that his role within the group is not of very central importance as all group members accept responsibility.

Thus, for Okyereko's case, leadership cannot be considered the most important factor for the development of robust collective action. Not denying that the chairman has an important role to play, the members state that he had no central function in the founding and development of the group (4-12-2010). Especially, since he is occupied as a leader also for the extended group, he has only limited time available. Thus, the group continues working also without his permanent attendance. The members state in the group discussion that all farmers would have enough skills to take his position.

7.3.3 Additional findings

I found that neither the external support nor leadership could fully explain the development of robust collective action for Okyereko. Discussing the success of the group, the members themselves came up with other factors which they consider important for their strong cooperation. The producers of the group feel that the members have a generally high level in terms of education and resources (financial means as well as available land). Almost all members pursue a profession except of one person, who is a 'full time' farmer. The high level of education within the group let them profit from the full range of expertise of all members. They share responsibilities and decide together on their next steps.

> *"Yes, this is how it works, this [meant: homogenity] helps the group to not rely on one or two leaders, but on a whole set of members which are very able to contribute to the group. We alter the attending of the external trainings. People who went to a training also report to all members what they have learned during these meetings."* (Group discussion, 4.12.2010)

However, this kind of homogeneity in terms of education and resources also bears some risks. The group reported that at least one member, does not accept the advice of the current leader team. The internal inspections revealed some non-compliances which would require corrective action. However, the member refused to do so. One member assumes:

> *"The member is an elderly person. He seems to have problems to follow the rules of the organization because he doesn't want to accept a subordinate role."* (Group discussion, 4.12.2010)

According to the group members, another advantage of the group is its size. They fear the union with the extended group due to the fact that it is more difficult to oversee the practices of all members. Moreover, the larger group has to deal with the difficulty that the members are scattered to a larger area, which complicates the coordination their activities. The subsequent quotation refers to the idea how the core members imagine a better organisation of the extended group:

> "Also, the size of the group [meant: extended group] matters, it is very inefficient, we prefer the idea to form several subgroups which meet in their regions, the travel distance also shows to be a problem. The subgroups could meet once or twice a year with all members, in the meantime information can be exchanged by the leading members." (Group discussion, 4.12.2010)

One member of the core group also states that the group members of the extended group often have "different attitudes" towards the project:

> *"The union of both groups will destroy our group, due to the number of members and due to the different attitude of some members who fear the investment costs."* (Group discussion, 4.12.2010)

The size of the group for collective marketing with the GLOBALG.A.P. group certification is however always a trade-off between coordination and costs for the certification. The Okyereko core group also benefits from the additional income of its members which allows them to keep the number of the certified members low. The annual audit for the group certification costs about 1500 GHC (approx. 690€) which is split by four. A larger group would benefit from apportioning the expenses to more members, but might face coordination problems.

Finally, the core group found their market success as beneficial for their cooperation. Seeing the fruits of their joint activities brings them even closer together and increases their willingness to invest additional resources in their cooperation.

I conclude that in addition to the investigated independent variables leadership and external support a range of factors contribute to the robustness of collective action. The members of the group explained themselves that leadership plays an important role but it cannot be seen as the central explanatory factor. Instead, group members name their small size, their relative affluence and high level of education as essential for their strong cooperation. In addition, the group is motivated by their market success.

7.4 Oboadaka Cooperation

The analysis of the producer cooperative Oboadaka came to the conclusion that the group reached the high level of robust collective action among the investigated groups. I only discovered limitations on collective marketing activities as well as the efforts to attract new members. In the following sections

again will discuss to what extent the level of robust collective action can be ascribed to the external support of the group or the leadership. The last section discusses additional findings.

7.4.1 The influence of external support

I came to the conclusion that Oboadaka benefitted the most in quantitative terms from external support provided by governmental agencies, donor agencies and NGOs. Within the 20 years of existence the association took advantage of a broad range of trainings on organisational issues, management, technical advice and support as well as information and technical advice. Moreover, the Oboadaka association was granted most material and financial contributions compared to the other organisations. The current chairman of the group founded the Oboadaka cooperation amongst other things because he knew about the opportunity to receive support by donor agencies. The development of the group was almost constantly accompanied by external organisations which enhanced the skills of its members and also motivated the current form of a collective action institution. It proved to be difficult to directly track the effects of the three different kinds of training and its influence on the collective action or robust collective action respectively. Thus, I asked the group members for their perception.

Training on managerial and organisational issues & technical training

Asking the group members during the group discussion which kind of changes they experienced after the GAP related training, they mainly remember technical innovations as for example the use if protective clothing and a more careful use of chemicals. However, they relate the training to more frequent collective activities such as the exchange of ideas, the monitoring of the QMS system, collective training sessions. Group members also mention during the group discussion that their collective efforts resulted in better quality produce and thus a stronger negotiation power dealing with exporters and processors. In the discussion, the attending members conclude that they reached the highest level of integration and collective action during the time when Farmapine was still operating. The establishment of Farmapine must completely be considered as a result of the external support. It was initiated and financed by the World Bank and implemented by a range of donor agencies and NGOs.

In four individual interviews I could discuss the perceptions of individual members on the impact of the trainings on the collective action of the group (four individual interviews, 3-12-2010). Asking the members if they consider that their association would existing without the external support, all interviewed members responded independently affirmative; however they assume the cooperation to be “less professional” or “less scientific”. But they also coincide in the perception that the organisational and management training provided the association with necessary skills on marketing and internal organisation as well as agricultural practices, which enhanced the competitiveness of the organisation.

However, there is not full accordance on the effect of the technical training. Whereas most of the members state that the technical training was very encouraging, one member puts it a bit different:

> *“The technical training brought individuals forward but not the group, however the technical aspects have been of great support. The training brought members together and common learning is helpful as well.“*
> (Individual interview 3-12-2010])

Nonetheless, the interviewed group members also stress that the skills enable them to engage in common marketing. However, some producers showed strong discouragement because the current situation does not allow them to apply this knowledge.

Concluding on this unstructured summery of responses, group members in general noticed that technical organisational as well as management advice resulted in a better performance in terms of production, and related to this to enhanced economic success. This economic success resulting out of their cooperation finally encouraged the sustenance and improvement of the collective efforts. It is especially striking that the group accepted two times (for Farmapine & the recent GLOBALG.A.P.) as externally developed organisational structure.

Material and financial contributions

As already discussed for New Generation and Okyereko, the effect of the material and financial contributions is ambivalent. First, Oboadaka gained from the financial contribution enabling the establishment of Farmapine. Also the distribution of suckers to the group opened the possibility for the group members to expand their production. Though, the group participated in a training provided by MiDA of which they believe to gain access to a loan, which was finally not the case. As for New Generation, group members experienced great discouragement after they learned about another group receiving the promised loan. Speaking to the chairman and the former vice chairman, they expressed their strong anger about the cooperation with MiDA. The members of Oboadaka experienced the same situation as New Generation. Some members spent 16 weekends for a training which was very similar to former seminars on farm management and the GLOBALG.A.P certification. They were told that the attendance at the training is precondition for the credit. In an individual interview, one member spoke of a training tantrums of some members, which are now very difficult to motivate to attend the meetings of the group. However, none of the interviewee fears that this experience causes an end to the cooperation.

> "Some are very discouraged and will fall apart. But the core will sustain. They [the leaders] plan to write letters to about 15 members because they don't attend the meeting anymore" [Individual interview 3-12-2010]
>
> *"MiDA promised to distribute loans to all members, but finally we did not receive the credit. MIDA started a ballot and distributed the money only to some organizations which took the 'White paper', Fotobi [other farmer organization operating in the region] was the only organization [which received a loan], we have the feeling that the system was misused and that the balloting was not a fair procedure."* (Individual interview 3-12-2010)
>
> *"We will still work. We do our work, if MIDA is coming or not."* (Individual interview 3-12-2010)
>
> *"Even if MIDA is not supporting, I will expand my cultivation activities. It would not affect the association heavily".* (Individual interview 3-12-2010)

Moreover, the current secretary brought to my attention that some members of the group anyway lost the interest in the loan because it did not cover the expected expenses for the cultivation. As already described for New Generation, MiDA cooperates with the local rural banks for the distribution of the credits. The banks receive money from MiDA for the distribution but are free to use they own procedures for the calculation of the amount of the credits. In the case of Oboadaka, the group has been asked to submit calculation about the expected cost for the cultivation of one acre of pineapples (MD2). The rural banks used these proposals as basis but did not grant the 20% of included labour costs. However, from the perspective of the secretary, the labour costs are of great necessity because the land needs to be cleared in advance requiring considerable labour support. He expects that the potentially offered money cannot cover the necessary expenses and thus will drive farmers into dept. This could of course not positively contribute to collective action.

Summarizing this analysis, collective action can be stimulated and developed by external support. Oboadaka profited from the concept of Farmapine and adapted to the design of the business model which was developed by external actors. However, this case also pointed out that external support has to be well coordinated and facilitated. Too much external intervention might discourage groups and

therefore decrease collective action. Especially financial and material contributions have to be well considered, timed and conceptualized to have a positive effect on collective action.

7.4.2 The influence of leadership

The assessment of leadership discussed in session 6.5.3 according to the defined criteria came to the result that Oboadaka is currently guided by a strong leader who especially performs well in motivating the members of the organisation to cooperate, even at times of a difficult market situation. But also in earlier times the group was headed by very capable leaders. The group's initiation is strongly related to the initiative of a chairman whose name is still present for all group members. He withdrew from this post as chairman very recently. In this section, I will elaborate how the strong leadership influenced the occurrence of robust collective action. For this purpose I will mainly draw on my observations as well as the four conducted individual interviews.

Asking the four interviewees what would happen if their current leadership team would resign, they gave the following answers:

> *"We send all members to trainings, so that the information is spread among all members. The loss of the chairman is indeed a loss for the organization, however, we have experienced that leaders would be replaced by other leaders … take for example Mr, Parry [founder of the group]. If Mr. Asamoah [fomer vice chairman] does not hold a leadership function anymore, he will still be available for the association and support them whenever possible."* (Individual interview 3-12-2010)

> *"We will fall short in the beginning, but this would not endanger the survival of the organization."* (Individual interview 3-12-2010)

> *"Their exit would have no effect on the association. Their support is very helpful and supportive however, they are not irreplaceable, Mr. Parry was important and he quit, however, the group is still alive."* (Individual interview 3-12-2010)

The quotes show that the interviewed members have a very similar position towards the role of leadership within the group. However, leaders are not perceived to be irreplaceable as has been the case for the PINEX group. The open leadership concept leaves enough space to introduce new members to leadership functions. Moreover, it very much reminds of the situation for the Okyereko group. However, the leadership has still a more important function for Oboadaka. Even if leaders can be replaced after a certain while and the group tries to spread responsibilities among the members, leaders still have a more leading role within the groups. Among other things, I could observe their dominant position during the group meeting. The leaders of the group did considerably contribute to the robustness of collective action because they provide the members with a vision. Frequently pointing to the former success of the group, motivates members to keep up their work. Moreover, the leaders hold a central function and good reputation within the community, with give them enough authority to coordinate the large number of members. Concluding on these findings, Oboadaka's success in collective action can partly be ascribed to a strong leadership.

7.4.3 Additional findings

In addition to the findings above, I found that Oboadaka developed a very robust level of collective action also due to the former market success of the group. The members know about the long history of their group and the successful operation of Farmapine. Thus, they learned that collective action pays off. Thus,

during the group discussions especially the leaders several times stress their former success and their endurance in bad times.

Another factor which is partly related to the former market success, is the external reputation of the group. Oboadaka won several awards and is proud of its history as a producer organization. Other producers of the region show great interest to join the cooperation or very much appreciate the advice of group members on agricultural practices. Moreover, the producer group has also a strong political role in the region. Contributing to the development of the region by supporting the school or the sinking of wells, the member of Oboadaka are in good odour. I assume that the pride for their organization is another factor which enhances their willingness to contribute to collective efforts of the group.

7.5 Ekumfi-Atwia Cooperative WAD organic farmer society limited

The producer society Ekumfi-Atwia developed a fair level of collective action, however showed to have one of the lowest levels of robust collective action. The following analysis focuses on the explanatory factors for this development.

7.5.1 The influence of external support

In section 6.2.2 I showed that Atwia profited very comprehensive support compared to the other producer organisations. However, it is especially striking that Ekumfi-Atwia was not trained on management issues. Moreover, because the producer organisation only cultivates sugar loaf and does not apply chemicals, the members of the organisation have not been trained on these issues. Nevertheless, the Atwia is familiar with two kinds of certification schemes namely organic and GLOBALG.A.P. Moreover, the organisation received some material support and a loan provided by the FAO in 2005/2006.

Training on managerial and organisational issues

To what extend has the external support a positive impact on the collective action of the group? Its initiation is also connected to external forces. WAD approached the producers to initiate a producer group with the purpose of supplying the company. The external support by MOAP introduced the group to the requirements of the standards and familiarized them with the rules of the internal organisation such as regular meetings and the design of the internal QMS. The QMS has been developed by the consultancies of the donor agencies but in close coordination with the group members as well as WAD. Moreover, MOAP together with AFC helped to solve the internal conflict within the group and overcome the deadlock situation which seriously endangered the cooperation of the group. Thus, the organisational advice contributed profoundly to the collective action of the group.

Technical advice

The technical advice resulted in better produce and thus encouraged the farmers to apply the learned techniques. However, as WAD takes only a fraction of their fruits and the group members have to sell the remaining harvest to the local market, the better quality and quantity of fruits is only of limited benefit for the group. The local market is relatively saturated and prices are fluctuating. The group provides them with a platform to share and exchange their knowledge and experiences, but still find little incentive to make use of it.

As introduced WAD offers its outgrower scheme Atwia technical advice on request. The secretary and the technical adviser of the group occasionally make use of this support. They feel well guided by the company, which also initiated the training with the FAO and MOAP. However, I could not find any hint

that the technical advice provided by WAD had a positive influence on the collective action of the group. I even speculate that the companies offer has a negative effect, because it frees the producer organisation of any responsibility to solve problems within their cooperative. In terms of difficulties they fully rely on WAD. Moreover, their feeling that they are obliged to keep a trustful and respectful relation with WAD, hampers any further activities of the producer groups. The producer group for example felt constrained to contact the donor agencies themselves as they did not received the certificate after the successfully passed audit.

I conclude that the external support had a promoting role for the development of collective action. The training on organisational issues enabled the group to cooperate according to the standard requirements. Also the technical skills provide the producer group with a basis for their cooperation. However, the favourable market situation hampers their willingness to act collectively.

7.5.2 The influence of leadership

Atwia's leadership team has considerable weaknesses. In comparison with the other organisations, they first of all lack knowledge on the benefits of the standard and the market situation; however have a good understanding of the technical requirements of the standard. Furthermore, the have the reputation to strictly enforce the standard. Their ability to motivate the members however shows only a mixed picture.

The leaders of the organisation do not have a strong promoting role for common group activities beyond assuring compliance with the GLOBALG.A.P standard. Without being aware about the potential benefit of the certification, the leaders don't stimulate any initiative to strive for a better market access beyond the business relation with WAD.

7.5.3 Additional findings

The two discussed independent variables do not provide a final answer to the reasons for the low level of robust collective action of the producer group Ekumfi-Atwia. Instead I found additional factors which deliver a more complete picture on this issue.

Frist, I already allude to the fact that the producer organisation lacks the economic incentives to act collectively. One the one hand, the producers have a preferred status as a premier supplier of a company. This relation assures the group members with fixed prices for their fruits. On the other hand, the company sources on demand, which means that they only purchase a small fraction of the whole harvest. Moreover, the cultivated pineapple variety is less attractive for export companies and therewith mainly sold on the local market for lower prices. The local market is so far less interested in the GLOBALG.A.P. certification. The effort to comply with the standard is therefore mainly in the interest of WAD but less for the producer organisation (Although the situation changes and also local processors ask for the GLOBALG.A.P. certificate (Personal communication, 4.12.2010)). One of the involved trainers even argues that the incident with the former leadership is mainly a result of this unsatisfying market situation. Thus, I infer from my observations that the current unfavourable business relation which leaves the producers in a constant unsecure situation, negatively affects developments towards robust collective action.

Second, the members of the group have a relatively low level of education and almost no additional income besides their farming activities. Exploring the market and extending their production which would provide further incentives for collective efforts partly depend on these factors.

During the field visit another issue came to my attention. The first relates to the well-functioning QMS of the group. Despite the fact that the group shows a very weak performance on most of the indicators to measure robust collective action, the organisation strictly follow the QMS requirements of the GLOBALG.A.P. standard.

> *"If you don't do what the standard says, they will suck you."* (Individual interview 1-12-2011)

All members are very aware that the business relation to WAD is dependent on the performance of every individual member of the organisation. This awareness seems to encourage very strict monitoring procedures within the group.

7.6 Fruit farmers' co-operative and society Nsakye

As for the other five farmer groups, the next sessions will elaborate on the explanatory power of the independent variables external support, leadership and the support by a buyer for the occurrence of robust collective action for the producer group Nsakye.

7.6.1 The influence of external support

Training of managerial and organisational issues

The members of the group have a solely positive opinion concerning the external support. They found that the training related to the development and establishment of the QMS provides them with a structure to organize their group activities. They also appreciate the support of WAD on request. Asking them during the group discussion why they did not join forces before they were supported by MOAP, one member answered:

> *"It is not easy to just approach other members decide on collective rules and agree on an internal structure."* (Group discussion, 26-11-2010)

The member found that the training called the benefits of cooperation to their attention and accelerated the development of the internal organization. Moreover, they found that the external support helped the, to identify a clear collective goal.

> *"The GLOBALG.A.P. training showed us what we can achieve and how we can work together toward the same objective."* (Individual interview, 29-11-2010)

Technical training

Nevertheless the members see their main strength in the technical knowledge they have gained from the training. Even if the technical training mainly benefits the individual producer, it still helped to unite them.

> *"Learning never ends. We still face some challenges applying the comprehensive GLOBALG.A.P. rules. After the trainers left we have to deal with the problems ourselves. (…) It is really helpful to do that within a group, where all have more or less the same problems."* (Group discussion, 26-11-2010)

One critical issue was raised by one of the members, who fears that the external support creates dependencies. He found that the payment for the certification for the first year might result in the perception of the group does not develop a concept to pay this annual fee themselves (Individual interview, 29-11-2010).

The effect of the companies support is however less clear. The company introduced the members to MOAP and the idea to work for a GLOBALG.A.P. certification. Moreover, the members appreciate their

offer of technical support and consult the company in case of technical problems and therefore they might contribute to the economic success of the producer group. Nevertheless, a direct contribution to the collective efforts of the group could not be found.

Thus, from the producers' perspective, the external support had indirectly a promoting role for their collective efforts. The training initiated their strong cooperation and provided them with a vision and internal structure how to proceed. The technical knowledge is inevitable for the cooperation and also requires a learning process which brought the members closer together. The only indirect financial contribution which was arranged by WAD but paid by the donor agencies raised concern fearing that the payment might endanger the sovereignty of the producer organisation.

7.6.2 The influence of leadership

For leadership, I found that the organisation is headed by a very strong leader, who has especially a strong abilities to motivate the members. Moreover, the group profits from its ideas and initiative for the future development of the producer organisation. His function as a controlling person is however less stressed by the interviewed members (see section 6.7.2). To what extent is leadership the explanatory factor for the occurrence of collective action and the robust collective action among the group members?

Motivation & vision

Two members, who have been interviewed individually, stress their satisfaction with the leader. They feel that the democratic and not oppressing atmosphere within the group which has been introduced by the leader enables a learning process and allows every member to present his ideas and express his opinion. Decisions are also discussed and only implemented if all concerns are cleared.

> *"Everyone can speak his mind. If somebody has a problem, he is free to tell the others. Yes, when he feels like. And we speak about it. (…) When we think about a solution, we all have ideas. (…) It is better we all like the ideas how to go on."* (Individual interview, 29-11-2010)

Skills & initiative

Moreover, the chairman is appreciated for his "ideas" and "actions" (Individual interview, 29-11-2010) in favour of the group. Most of the plans for the group are developed by the chairman. First of all, he established the contact to WAD and therefore benefits from the full trust as a head of the association. But also plans to approach a bank and the establishment of a demonstration farm and common chemical storage were his initial ideas. They feel that the development of the organisation is in good hands and thus, are encouraged to work together.

To conclude on these findings, the leader of the group has a positive effect on the collective action of the group. First, he initiated the collaboration for the common goal. Moreover, his way of organizing the group as well as his ideas and initiatives makes the members to trust in his leadership and contribute to the group efforts.

7.6.3 Additional findings

In addition to the above discussed independent variables, I found additional factors which might have an influence on the collective action of the group. For Nsakye, I again observed that the group put a strong emphasis on the controlling function of the QMS system. The members are very much aware that they endanger the success of the whole group if they don't fully comply with the GLOBALG.A.P standard. This awareness increases their openness of using the group as a learning platform and share their experiences

with other members. Thus, I expect a causal relation between the implementation of the QMS system and the overcoming of the free-riding problem and therewith the occurrence of collective action.

Moreover, I conclude that the support of WAD has only a limited influence For Atwia, I assumed that the business relation with WAD had a negative impact on collective action. As the company does not guarantee the group a fix income but varies in time and amount, the members of the Ekumfi-Atwia group felt little incentive to cooperate. Nsakye's business relationship is less secure. They don't have contract with WAD and sold hardly anything to the company. Still awaiting another request of WAD, the producer group does not solely rely on its buying power, but started to look for other interested processors and exporters. I therefore assume that the very loose relation to WAD has a positive effect on the collective action of the group.

8. Comparative analysis

After the separate assessment of all case studies, I turn now to the comparative analysis. For this purpose, I will revisit the former analysis of the single producer groups and discuss the identified relation between the independent variables in relation to the dependent variables in focus of this research. Finally, I elaborate on additional factors which I found to have a positive or negative influence on collective action or robust collective action.

As already discussed before, the comparative analysis is a difficult task to undertake. I demonstrated for all individual cases that the groups operate in different environments and show different group related characteristics (for an overview see table 4), which cannot be ruled out but might bias the analysis. Within the separate discussion for the cases, I pointed to these differences and took them into account exploring the link between the independent and dependent variables. Within this chapter, I will compare the findings from the analysis of the individual cases and try to identify trends within the sample.

Table 1 provides a summary of the findings concerning the collective action and robust collective action respectively. Moreover, tables 2 and 3 depict the findings for the independent variables[26]. These tables serve as an orientation to first identify correlations between the variables and finally explore the underlying causal mechanisms.

8.1 The influence of external support

To what extend can the occurrence of collective action or robust collective action be explained by external actors such as donor agencies, NGOs, governmental agencies or market parties? The separate analysis of the six farmer groups show a quite positive picture concerning the occurrence of functioning collective action as a result of external intervention. However, I come to a different result concerning the development of robust collective action. Here, external support had only a very minor influence. In the following these trends are reviewed in detail.

Table 2 shows that PINEX, Okyereko, New Generation and Oboadaka benefited from the most comprehensive and very similar support in terms of total invested time as well as kinds of support with only little variation. All four producer groups participated in trainings on managerial issues, internal organisation, technical aspects related to MD2 cultivation as well as the GLOBALG.A.P. standard and received financial and/or material contributions. Nevertheless, out of all cooperatives, Oboadaka has been supported for the longest period of time. Founded 20 years ago, the group has been supported for almost its whole lifespan from a huge range of different organisations. PINEX follows with some additional support especially for its leadership. New Generation and Okyereko hardly differ in the level of support they received. A special case is the producer group Ekumfi-Atwia. The table 1 suggests that the group received only little support compared to the others. This is true for the support related to GLOBALG.A.P. as the group has been less supported on managerial issues and cultivation practices related to the new variety MD2. However, the group members benefited from a comprehensive FAO training which introduced the group to an organic standard. Therewith, I consider Atwia on the second position in quantitative terms in comparison with the other groups. The taillight concerning support is Nsakye. The group worked through the whole GAP training but misses also the managerial support as well as the technical training related to MD2 cultivation. Additional support was not provided.

[26] Appendix 7 presents a summary of the identified factors listed in figure 2, which might have an influence of collective action and which show variation among the groups. However, these issues cannot be taken into the comparative analysis.

Table 1 – Overview about the functioning and robustness of collective action of the farmer groups after the external support

Robustness of institution	PINEX	New Generation	Okyereko	Oboadaka	Atwia	Nsakye
Regular Meetings	yes	no	yes	yes	partly	yes
Monitoring activities & adherence to group rules	yes	partly	yes	yes	yes	yes
Collective decision-making	?	yes	yes	yes	yes	yes
Functioning collective action	yes	no	yes	yes	yes	yes
Development and adaptation of the QMS system to needs of the group (no/ low/ medium/ high)	high	no	high	high	no	yes
Common marketing (yes/partly/no)	yes	no	partly	partly	partly	intended
Equal contributions of the members & common property (yes/no)	no	no	yes	yes	partly	yes
Level of inclusion and awareness (high /medium/ low)	medium	low	high	high	medium	high
Efforts to extent the number of certified members (yes/no)	yes	yes	yes	no	no	intended
Active search for business partners (no/yes)	yes	partly	yes	yes	no	intended
Links to other organizations (low /medium/ high)	high	low	yes	yes	low	low
Strategy to generate capital (internal & external) (yes/ no)	yes	yes	yes	yes	no	intended
Robust collective action (no/ low/medium/high)	high	low	high	high	low	medium

Reviewing the manifestation of the independent variable 'external support', I would expect the highest level of robust collective action for Oboadaka and Atwia, a moderate result for PINEX, Okyereko and New Generation as well as the lowest level of collective action for Nysake. Table 1 however, delivers different results. All groups, except New Generation, developed a fair level of functioning collective action, however show different results according to the parameters to measure robust collective action. As predicted, Oboadaka spearheads the groups in terms of robust collective action. Though, Atwia proves to be one of the weakest groups despite the comprehensive support. Okyereko and PINEX appear to have developed a similar level of collective and robust collective action respectively which is close to the one of Oboadaka. Despite the fact that New Generation profited from the same support as PINEX and Okyereko, the group almost fell apart and shows almost no collective action let alone robustness of collective action. Finally, Nsakye surprisingly achieved a high level of collective action, although the members have been supported the least.

Table 2 – Manifestation of the independent variable 'external support'

Type of Support	Description	Pinex	New Generation	Okyereko	Oboadaka	Atwia	Nsakye
	Earlier training/ support	-	-	-	+	+	-
Material & financial	MD2 plantlets	+	+	+	+	-	-
Technical training & Information	Technical advice on MD2 cultivation	+	+	+	+	-	-
Organisational skills & Management	Conflict management	-	-	-	-	+	-
Technical training & Information	Sensitization	+	+	+	+	-	-
Organisational skills & Management	Group formation	+	+	+	+	+	+
Organisational skills & Management	Implementation of QMS	+	+	+	+	+	+
Organisational skills & Management	Management training	+	+	+	+	-	+
Technical training & Information	Technical GLOBALG.A.P. training	+	+	+	+	+	+
Organisational skills & Management	MiDA business training	-	+	+	+	-	-
Material & financial	Financial support	+	-	+	-	-	-
Aggregation		Strong support	Strong support	Strong support	Very strong support	Very strong support	Medium level of support

+ received training, - did not receive the training

I conclude from these findings that the external support is not a very strong explanatory factor for the occurrence of robust collective action. However, the results imply that external intervention can stimulate collective action. In the following, I have a closer look on the explanatory mechanisms behind these findings.

Organisational & managerial support

First, external support can sensitize individual groups for the benefits of cooperation and therefore initiate collective action. This was the case for Nsakye, PINEX, Okyereko and also New Generation. During the one day of 'sensitization' the groups were introduced to the idea and requirements of the GLOBALG.A.P. group certification, learned about the expected costs and benefits. For the four mentioned groups, the external request for the producers interests to participate in the project mark the beginning of their cooperation. During the group discussion with Nsakye, one member explained that the training brought the producers of the region together and helped them to overcome the barrier to approach others for cooperation.

Second, external actors can support members to define a goal for their collective efforts by pointing to the potential benefits of collective action and initiating the idea to cooperate. This was especially stressed by the members of Nsakye. The involved training staff developed an action plan in participation with each group which includes the formulation of an overall aim for all producers and thus defines the direction of cooperation.

Third, external actors can demonstrate possible ways of collaboration and introduce them to strategies to organize their group internally. Thus, the participating producers formed collectives and developed a system of rules in accordance with the GLOBALG.A.P. requirements for an QMS system under the guidance of the involved training staff. This was the case for all groups. I conclude that external actors are capable to stimulate functional collective action measured according to the three defined criteria. This has been shown for five out of six groups. I found that the regular meetings, the collective decision-making as well as the form of internal organisation were established as a result of the external advice. The investigated projects followed a participatory approach in which the members contributed to the development of this set of rules, however a quite strict framework for the collective institution was predefined by the GLOBALG.A.P. standard which allowed very little leeway for the design of own rules. It is very interesting, that I found no evidence that groups experienced this predefined set of rules as too strict or disturbing for the inner group organisation. In the opposite, no single group explained that they had difficulties to adapt to the extrinsically developed management system.

Moreover, external actors can help to overcome deadlock situations in which group members face internal conflicts. However, I only observed this kind of external support for Ekumfi-Atwia. The external facilitation was necessary after the conflict partners were not able to settle their issues on their own. After the resolution of the conflict the group was able to proceed with the daily operations. Moreover the external facilitation helped the members to re-establish a trustful relation among the members.

Management skills prove to be of central importance for farmer groups, and especially for the leader of the group. It is striking that at least one of the two groups (Atwia) which did not benefit from any management training did perform very weak on functioning and robust collective action. The investigation of the skills of the leadership showed that they showed considerable deficits on management and business. Other groups which have been trained on management issues showed a

better approach in planning, the generation of capital and finding a buyer; hence developed a higher level of robust collective action.

Technical training & Information

In addition, members of all groups especially perceive the technical knowledge as beneficial for their internal cooperation. Following the argument of the interviewed members, this happens via two different mechanisms which ascribe the training an indirectly promoting influence. First, the learned technical skills and information provided them with an economic incentive to work together. The experienced improvements in terms of quality and quantity of the produce enhanced the groups' attractiveness for buyers and exporters. This experience in turn increases their willingness to cooperate. Following this argumentation, technical training leads to functioning and even collective action if the individual members experience their improved market positions. Only the perception of their improved situation stimulated further initiatives of cooperation. Second, members mention that they profit from the group as a learning platform. Recently introduced to the comprehensive and complicated requirements of the GLOBALG.A.P. standard as well as the more demanding pineapple variety MD2, requires them to exchange experiences and develop their skills. This was especially stressed by Nsakye, Okyereko and Oboadaka.

Financial support and material contributions

I also observed that material contributions especially in the form of pineapple suckers had a promoting role for the first steps of cooperation. Initial strong cooperation could be observed for all producer groups receiving MD2 suckers by MoFA. New Generation even reported that the time they received and multiplied the suckers the group reached the highest level of cooperation. The same was observed for the bearing of the cost of the first audit. All farmer groups found that they would not have been able and willing to carry the costs without knowing the benefits. Thus, I experienced that these contributions also add to the initiation of collective action.

Only one interviewee reported that he fears a dependency on external actors resulting from the payment for the first certificate. He found that the donation might prevent the producer organisations to work on a strategy to finance the annual audits themselves. Even if this issue was only mentioned by an individual person, it raises an important issue. Another issue related to the impact of financial contributions is that insufficient financial support might result in a decrease of functional and robust collective action. I found that loans brokered by development organisations did not cover the expenses for the intended extension and thus resulted in financial problems for some producers. Their difficult situation discouraged their contributions to the group efforts (This has been reported for the extended group of Okyereko and PINEX).

The described identified causal mechanisms however are hardly able to explain the occurrence of robust collective action. In some cases groups mentioned that some of their activities were inspired by external forces. For example, Oboadaka reported that a trainer of MiDA had the idea to introduce two further committees to the existing five ones. Moreover, MiDA also recommended Okyereko, Oboadaka and New Generation to produce corn in order to generate additional capital for the group. However, this activity has not been followed more than one season. All other activities which I encountered were not the result of external support but grown out of the ideas and initiatives of the groups. Thus, I found no direct relation between the external support and robust collective action.

Critical issues

Besides these mainly positive impacts of external assistance, I also observed three critical issues related to the external support, which cannot be traced back to one of the three kinds of support. Instead, they apply to the general characteristics and the context of the support. The first issue relates to the expectations connected to external support. All groups expressed their need for financial means to sustain and extend their production. This need is a very realistic one, since regular banks abstain from providing loans to small-scale farmers because of the low repayment rates and high transaction costs. Donor agencies have partly tried to compensate this lack of credit. Thus, producers often expect financial support by the government or donor agencies. This might also be rooted in the history of Ghana's agricultural policy. For a long time, the Ghanaian government strongly and sometimes even arbitrarily encouraged the formation of farmer groups as they were regarded as a promoting force for the development of especially rural areas. Although the political strategy changed, farmers still perceive the participation in farmer group as a possibility to absorb external support (Väth 2009)[27]. Thus, there is a tendency that producers expect financial contributions, however are not interested to invest time and resources in the establishment of a group. Their hope for credits is sometimes their main incentive to participate in the trainings. This might be the case for some members of New Generation. The different expectations for group members might have resulted in the collapse of the group. For Oboadaka and the extended group of Okyereko, I found that different expectations and especially the expectation for financial contributions lead to strong fluctuations in the number if members. This unstable situation made it difficult to organize the group and assure compliance of the members to the group rules.

Second, I reported that some members felt 'over-trained' or did not perceive the support as useful, when they have been asked to attend a seminar on issues which they had already been acquainted with in trainings before. The respective group members expressed their anger about the additional time they had to invest for the advisory meetings. This has been reported by members of Oboadaka and New Generation. Both groups participated in the training with the expectation to receive a credit after. They have been told that the request for a credit is dependent on the participation. Nevertheless both groups have not been rewarded with the expected credit. Producers of both groups report that the perceived unnecessary training together with the disappointment for their declined bank proposal resulted in the unwillingness to further contribute to the group activities. For Oboadaka about 15 members stopped to attend the regular meetings. Members of New Generation blame this situation for the collapse of their group, because it disappointed expectations for the development of the group.

Third, continuous support by external actors which is not limited to a certain timeframe might lead to the dependency of the producer organisation and hamper the cooperation to become self-sufficiently operating. This can be observed for Atwia. Relying fully on the support of WAD and the donor agencies restrained their initiative to develop a more robust collective action. I observed that group members feel not dependent on the group, instead depend their success on the activities on the WAD company.

From this comparative analysis of the impact of external support on the six cases I conclude that external intervention can have a positive influence on collective action. Donor agencies can initiate the cooperation among producers by informing them about the potential benefits, facilitating the definition of a collective goal, the development of an internal organisational structure. Introducing producers to agricultural production techniques might provide the necessary economic incentive to cooperate.

[27] See also section 5.5

Material contributions also help to initiate cooperation by overcoming the fear of investment costs. However, external support might also have disturbing effects in case it is not well coordinated or does not match with the expectations of the group members. Finally, external support might establish dependencies if it is not limited in time.

8.2. The influence of leadership

I infer from my analysis that external support cannot fully explain the occurrence of robust collective action. In a second step, I turn now to the independent variable 'leadership' and discuss the findings of the individual analysis of all six producer groups in a comparative manner. The table below 3 summarizes the results from the former assessment relating to the identified parameters. I found that PINEX, Okyereko, Oboadaka and Nsakye are headed by the strongest leaders as they all showed a positive manifestation for all three indicators. To be more precise, the chairman and technical manager of PINEX impressed especially with his strong skills and manifold initiatives. Moreover, he proved to have considerable private resources which he also uses to support the group. The leaders of Oboadaka and Nsakye demonstrated very strong motivating skills. For New Generation and Atwia, the leadership is less strong. They compromise on the ability to provide the groups with a clear vision and motivation. Moreover, especially Atwia's leader misses skills and initiative to promote the development of the group.

Table 3 – Manifestation of the independent variable 'leadership'

Type of leadership	Pinex	New Generation	Okyereko	Oboadaka	Atwia	Nsakye
Motivation, vision & morality	+	-/+	+	++	-/+	++
Rule enforcement	+	?	+	+	+	+
Skills & initiative	++	+/-	+	+	-	+

+ applies - does not apply

According to the presented second working suggestion, I argue that strong leadership results in a high level of robust collective action. Thus, the presented results lead to believe that the groups PINEX, Okyereko, Oboadaka and Nsakye developed the most distinct level of collective action and robust collective action. And indeed, the correlation is striking. All groups which have a strong leader reached a high level of collective activity. In the following, I again review the explanatory mechanisms which I could identify from the analysis of the individual cases.

Skills and initiative

I found that especially the skills, experiences and initiatives of the leader make a difference in the development of robust collective action. These are determined by the former education and work experience of the leader but also by the individual training provided by the respective donor agencies. As stated already several times, parts of the GAP training have been offered only to the group leaders. The skills of the leader in implementing adapting the rules of the organisation, observing the market, approaching buyers and supporting the producers in case of technical problems has a major impact on the level of collective action. A very striking example is the leader of PINEX. The development of the collective action can almost solely explained by its initiative. A negative example is Atwia. As the group leaders brought to my knowledge that they do not understand the purpose and benefit of the standard.

Motivation, vision & morality

In addition, the leader's ability to motivate its members also in times of a difficult market situation has likewise a strong effect on the robustness of collective action. Especially convincing examples are Oboadaka and Nsakye. After the collapse of Farmapine, the producer organisation Oboadaka had to start from scratch. Members expressed their commitment to the leaders who manage to cohere the group despite of the difficult situation. Nsakye is still at the beginning of the group process, however also in a difficult situation. The members struggle with the requirements of the standard and felt overwhelmed throughout the whole training process. Trainers even reported that the group leader had serious doubts if they manage to reach full compliance. Nevertheless he showed great efforts to boost morale among the members. The leadership of Atwia, however, they have big difficulties to lead the group and also motivate for the collective effort, also because they were not aware of the benefits of the standard.

Rule enforcement

In addition to the above discussed issues, I made an unexpected observation. I use three parameters to define strong leadership which I derived from the literature. However, consulting my field data, I did not find evidence that leadership has been considered important for the enforcement of the group rules. Instead several groups pointed to the regulatory function of the QMS system they had to comply with. Still a member of the group was considered responsible to assure that the single members stick to the requirements of the standard. However, compliance is almost guaranteed as the group members are aware that the non-compliance of single member can lead to the failure of the whole group. Thus the regulatory or controlling function of the leader was of minor importance to most of the producers. This observation has been made for all groups except New Generation. Especially, group members of Atwia, Oboadaka and PINEX stressed the controlling function of the QMS.

In terms of leadership, Okyereko showed to be an exceptional case. The group is headed by a strong leader according to all three parameters; however the group often operates independently from his advice. I assume that this is on the hand possible because of the average high level of education within the group; on the other hand the group is the smallest among the cases. Thus, groups with a smaller number of members are less dependent on a superordinate coordinator. I also introduced the 'open-leadership' system of Oboadaka, which also distributes the leadership responsibility to all leaders. However the group has currently 53 members and is in need of a leadership which coordinates the group activities. Thus, the empirical results let me assume that leadership is a factor which is interrelated with the size of the organisation.

To summarize the above discussed findings, I consider leadership an important factor for the occurrence of robust collective action. Group leaders with comprehensive skills and experience can initiate collaboration. The discussed examples in this research show that often a number of collective activities can be ascribed to the leader of the group. Moreover, executive staff has an important function to motivate the group members. This proves to be especially the case if producer groups face difficult circumstances like unfavourable market conditions.

8.3 Additional findings

Besides the discussed independent variables, I identified additional factors which might have an influence on robust collective action. These observations are however not systematically tested but showed to be important factors during the process of data gathering. In many cases they have been raised by the producers themselves. I will present these in the following paragraphs.

One of the most important factors is the perceived economic incentive of the group members to cooperate. Thus, the perception of the current market situation influenced to a large extent the willingness of group members to act collectively. I already discussed that a strong leader might have the ability to counteract this trend; however all of them experienced that the reluctance of the members to attend meetings and engage in other group activities decreased when the market situation worsened. This has been shown for PINEX. The leader of the group reported a decrease in the attendance of the group members since their buyer Kingdom ceased the payments. The same occurred for Oboadaka. The group still shows a high level of robust collective action. Nevertheless, it declined since the collapse of Farmapine and the group struggles to re-establish their strong cooperation. Atwia is also an example which shows that bad market prospects diminish robust collective action or hinder its development.

Linked to this issue is simply the availability of resources as well as the level of education of its members. The access to European export markets requires a certain level of skills and financial means. It is necessary to have some understanding of the market, as well as business and management skills to be able to operate as a producer group for the export market. Moreover, investments are necessary to establish the required infrastructure and purchase input materials for the cultivation. If these are not available it is very unlikely that the producer organisation is able to follow the requirements of the GLOBALG.A.P. standard. The own ability or inability to comply with these requirements influences the members' perception about their potentials to succeed on the market. Thus, the research revealed that producer groups which members have an additional income such as PINEX, Okyereko and Nsakye have a more favourable initial position to develop and expand their production and thus, easier task to success on the market. Thus, their promising market position also leads to a high level of robust collective action. These groups are at the same time also the groups with the highest level of education. Also New Generation has also to be ranged into this category. About a third of the group had an additional employment and thus an additional income, still the group performed very weak in terms of collective action. The advantage of a high level of education and resources also brings a disadvantage in terms of collective action. For Okyereko as well as New Generation, I observed that some members have been less dependent on the other group members and therefore showed a low willingness to contribute to group efforts. Okyereko reported about problems with two group members which had did not accept the advices of the elected group members. These live on rice and tomato cultivation respectively and see the pineapple cultivation as an additional income source. The same occurs to New Generation, which members are partly involved in other business and do not intent to invest a lot of time and resources into the group.

Another factor which came to my attention is the homogeneity or heterogeneity of producer groups concerning financial resources as well as education. It is striking that all producer groups confirm that they experience the heterogeneity of their groups has an advantage for collective action. Interviewed members often explained that heterogeneity helps to build trust because producers support each other. An often cited example is that some members are illiterate and need help for the record keeping. In some groups the producers offered material or financial contributions to other members. For the group Okyereko, homogeneity even seems to cause a problem for the collective action of the group. As

explained above, the members reported that some producers did not accept the executives' advice or warnings. The group speculates that the financial independency as well as the age of the respective member caused problems of authority and respect within the group.

A factor strongly contributing to collective action for common marketing is former market success of the group. Members who already experienced that collective action is beneficial show a higher willingness to contribute the group efforts. Moreover, they show a higher readiness to sustain lean periods in which the advantages of cooperation are not obvious. The most suitable example for the importance of this factor is the producer group Oboadaka. The cooperative experienced a high level of market success with Farmapine. In discussions with members the former success of the group was frequently mentioned. The validity of the factor can also be seen for the producer groups PINEX.

I also encountered that the external reputation of a group can contribute to its collective action. For Oboadaka some members expressed their pride to be part of the producer organisation, because the group won several awards and has been consulted by producers from the same region asking for support to found an organisation themselves. Moreover, members have been contacted for advice on agricultural practises. Finally, the producer organisation is recognized as an important part of the communities in the region as they supported schools and infrastructure projects financially. PINEX, Okyereko and Nsakye also report about the external reputation of their organisations as well as frequent requests for support of producers in their region.

All these issues however are deduced from coincidental observations during the field research and require further inquiry. Nevertheless, I assume that the economic incentive for cooperation (and especially the perception on the groups market potential), the availability of resources and education, the heterogeneous distribution of these among the group members, former market success as well as external reputation can influence the collective action or robust collective action of a group.

9. Conclusion

This chapter reviews the empirical findings of the single case and cross case analysis of the chapters 7 and 8 and relates these to the theoretical considerations presented in chapter 2 and 3. Finally, I answer the central question by revisiting the working propositions which I formulated in chapter 3. The findings serve as a basis to derive some policy recommendations for practical efforts trying to integrate small-scale producers into European markets. These are presented in the following and very last chapter of this research.

The research question guiding this study was formulated based on observations of the recent situation of small-scale pineapple producers in Ghana as well as theoretical knowledge gaps in collective action theory. It reads as follows:

> *In what ways do external support and leadership have an impact on robust collective action of Ghanaian pineapple producers targeting the European export market?*

In the following, I recall the practical and theoretical considerations providing the foundation for this research:

Small-scale pineapple producers are badly hit by the recent developments of the global trade of pineapples. The rapid shift of the demand on the world market to the newly introduced variety MD2 as well as the increasing importance of the food quality and safety standard GLOBALG.A.P. led to a wide-spread drop out of smallholders off the export market. To counteract this trend governmental agencies, aid donors and NGOs developed and implemented strategies to enable producers to access these high value export markets. One strategy is to support the collective market behaviour of producers. Producer organisations are found to overcome some of the challenges which smallholders face trying to access export markets. The literature provides scientific evidence that producer groups have advantages compared to individual producers. Robust collective market behaviour is believed to significantly reduce transaction cost resulting from local market deficiencies and information asymmetries, benefit producers from economies of scale, provide them the opportunity of common learning and the exchange of experiences (cf Baron 1978, Stockbridge 2003, Markelova et al 2009, Thorb et al. 2005, Hellin et al. 2009, Stringfellow et al. 1997).

Collective action theory is concerned with the voluntary action taken by a group of individuals trying to achieve a common goal (Meinzen-Dick et al. 2002). Recently, it has gained considerable attention by scholars dealing with collective marketing efforts (cf. Narrod et al. 2007, 2009, Markelova et al. 2009, Hellin et al. 2009). Whereas the theory provides us already with a profound knowledge about conditions enabling the occurrence of collective action, I identified two knowledge gaps which are discussed in this paper. First, collective action widely neglects external factors influencing collective action focusing mainly on the attributes of groups as well as the internal institutional design of cooperation (Agrawal 2001). Thus, this study is concerned with the possibility to create collective action institutions from the outside. To put it into the practical context of this study, I pose the question to what extent can governmental and donor agencies, NGOs and market parties facilitate the formation and development of producer groups? Second, scholars found that leadership is one of the crucial factors which facilitate collective action (cf. Bianco & Bates 1990, Baland & Platteau, Thorb et al. 2005, Anand 2002, Vedeld 2002); however it is still

unknown how exactly leadership is related to collective efforts (van Laerhoven 2010). Thus, the purpose of this study is also to contribute to fill this knowledge gap.

Reviewing the already existing literature on collective action theory as well as the findings from practitioners working on the integration of smallholders into high value markets, I formulate two working propositions which helped to structure the research. In the following, I will answer the research question by turning to the discussion of these propositions in light of the empirical findings of this research.

1) *External support of donor agencies and governmental organisations and market parties increases the likelihood of robust collective action of producer groups in order to access high value markets.*

2) *Appropriate leadership increases the likelihood of the occurrence and robustness of collective action for common marketing of small-scale producer groups in order to access high value markets.*

Recalling the central research question, I finally conclude on the empirical results of this study that external support as well as leadership have a mainly positive impact on robust collective action of Ghanaian pineapple farmers targeting the European market. However, a closer look is necessary. The following paragraphs will summarize the findings for the causal mechanisms between the independent and dependent variables of this research discussing the two research questions of this study.

9.1 Working proposition 1 – external support increases robust collective action

Based on the findings of former scientific studies, I assumed a positive correlation between the external support and the occurrence of robust collective action for collective market access. The empirical findings of this study suggest that external actors' interventions tendentially have a positive influence on functioning collective action. However, I could not find a positive correlation with the occurrence of robust collective action. I identified a number of causal mechanisms which explain this correlation. Moreover, I also identified some potentially negative influences of external intervention.

At first, a range of scholars found that external actors can serve as the initiators of collective action (cf Baland & Platteau 1996, Springfellow et al. 1997, Bebbington 1996, Humphrey 2008, Thorb et al. 2005, Fox 1996, Bennett et al. 1996, see also section 2.4.3). I conclude that this is the case for at least five out of six farmer groups. It was also encouraged by the external actors to meet on a regular basis and define a procedure of democratic decision-making. Moreover, these five farmer groups also have completely adapted the proposed internal management system in line with the GLOBALG.A.P. requirements. This is an interesting observation as it contradicts with the findings of former studies on collective action theory. Ostrom 1990 and Baland & Platteau (1996) state that groups need a certain freedom to self-organize and craft their own rules. However, the GLOBALG.A.P. group certification dictates a rather strict set of rules the group has to comply with. But despite the fact that the internal organisation was to a large extent determined from outside, none of the groups experienced problems in its adaptation.

In addition to the role of initiators, the literature suggests that external actors can enhance the skills of producer groups (Baland & Platteau 1996) and provide them with necessary knowledge enabling them to act collectively to access high value markets (Kruijssen et al. 2009, Narrod et al. 2007, Springfellow et al. 2007). The empirical results confirm the assumption that the gained knowledge enabled functional collective action. However, I could not identify a direct relation between the provided training and the

parameters defined to measure robust collective action. Instead, I recognized an indirectly positive impact of the technical training. Two causal mechanisms relate the technical training and robust collective action. Frist, in almost all cases the technical training resulted in a better quality and quantity of the harvest. This in turn increased the potential of a better market access because the producers were able to supply fruits complying with exporters' demand. The experience that the collective production results in a better market position and higher financial returns increased the incentive to act collectively and even extend the cooperation. The second mechanism which I encountered is the arising need of collective learning. Producers described that they increased the number of meetings to learn from each other's experiences with the implementation of the technical rules of the GLOBALG.A.P. standard.

Third, scholars found that collective action can be stimulated by material or financial contributions. Baland & Platteau (1996) for example find that external actors might compensate groups managing natural resources to compensate them for their efforts in case they are not directly profitable for the group. The study of the six producer groups showed that material & financial contributions can have either stimulating effects but also carry the potential to hamper collective action efforts. I found that the distributed MD2 suckers as well as the first payment of the certification increased the level of cooperation for all groups. However, insufficient support (for this study in terms of credits), which does not lead the group to the expected benefits, might have a negative effect on collective action. Some investigated producer groups received credits which did not cover the cost for the production and run them into debt. Thus, members felt discouraged to contribute to the collective efforts.

In addition to these findings, I also encountered some more critical aspects of external support which might have a discouraging effect on collective action. First, the timely unlimited contact to a supporting actor might carry the danger of dependency. Markelova et al. (2009) already found that strong linkages to market parties decrease collective action because they reduce the dependency among the group members. Within this study, I observed this relation as well. For one producer group, I observed that the constant guidance by its buyer decreases the own initiatives of the members to derive solutions within the group, therewith hampers the development of robust collective action. In addition, I encountered that the insufficient coordination of the activities of donor agencies resulted in the frustration of farmer groups. These found that they received too much training but were not able to apply it due to current circumstances. In cases where groups do not see the value of the support or do not perceive the training to benefit their development, it might discourage collective action. Finally, the empirical results of this study also showed that external support raises expectations among group members and might even attract additional producers who are mainly interested to absorb the support. Thus, I found that the prospect of external contributions lead to an uncontrolled growth of groups, which complicated their inner organisation.

Reflecting on these findings, I can partly confirm the working proposition, even though I found some limitations. I conclude that external support can initiate cooperation and advice on the internal organisational structure. Skills and knowledge have an indirectly positive effect as they enable economic success which in turn increases the incentives to act collectively. External actors might also provide material incentives initiating functioning collective action. Nonetheless, I did not find evidence that the external interventions lead to robust collective action as defined in this research. Further, external support might hamper the development of functioning and robust collective action if it is not limited in time and encourage the independent development of collective action institutions. Dependency might result out of continuous support. Moreover, uncoordinated or insufficient external intervention might

also discourage collective action. Finally, external support might hamper cooperation if it raises different expectations among the group members and leads to uncontrolled group growth.

9.2 Working proposition 2 – Appropriate leadership increases robust collective action

The empirical research of this study suggests that the second working proposition can fully be confirmed. The two variables leadership and robust collective action show strong correlation. I identified a range of causal mechanisms which explain their relation.

From the literature I inferred that leaders need the ability to motivate the members to work together (Markelova et al. 2009, Baland & Platteau 1996). Together with the external actors, leaders showed to have a central position to initiate collective action by motivating individual producers for the cooperation on common marketing activities. Moreover, I identified leaders to have a crucial function in times if difficult market situation in which the financial returns of the common effort have been absent or in long time coming.

Scholars also suggest that leaders have an important function to enforce the rules of the collective action institution. Thorb et al. (2005) name 'power and control' one of the three most important 'modes' of the functioning of groups. Also Kolavali & Brewer (1998) ascribe great importance to the coordinating function of a leader. According to them, leading figure centralizes the cooperation of the members and therefore reduces transaction cost. Moreover, they found that leaders increase the expectations of the cooperating individuals that all members stick to the rules and thus hold on to their contributions to the collective effort. From the empirical findings of this research I however conclude that this function of the leader seems to be of subordinate importance. I found that executive members are indeed involved in the monitoring of the members' performance for the investigated groups. However, a stronger control function emanates from the implemented QMS system in compliance with the GLOBALG.A.P. requirements. This system is built on the logic that a single farmer which does not fulfil the requirements of the standard, endangers the certification of the whole group. This awareness leads to a high level of compliance of all members. Thus, the GLOBALG.A.P. requirements for the group certification showed to be an effective system to overcome collective action problems.

Markelova et al. (2009) and Anand (2002) attach importance to the skills, knowledge and initiative of the leaders for the development of collective action. Depending on their skills and knowledge, they can facilitate its development. And indeed, the analysis of the data which serves as a basis for this study shows a strong causal mechanism between these two factors. Leaders with strong skills and long-term experience developed a high level of robust collective action. The converse observation could also be made for low skilled leaders, which had a hard time to stimulate robust collective action.

Concerning leadership, two groups showed an exceptional approach to organize their internal cooperation, which decreased the importance of a leadership function within the group. Although the respective leaders are characterized by a strong motivating influence and a high level of skills, knowledge and initiative, a lot of responsibilities of the executives are carried out by the members. Whereas for the other groups the development of robust collective action was clearly steered by the leadership of the group, Oboadaka and Okyereko followed a less centralized leadership approach. Thus, initiatives for the group development also grew out of members ideas. This phenomenon was strongest for Okyereko. The arrangement has the advantage that the level of awareness and inclusion among all members is higher (which is also defined as one of the factors measuring robust collective action). The centralization of

knowledge and responsibilities in one or a few persons carries the risk that the group falls apart with the resignation of the leading figure.

Leadership was not a fully independent variable in this research. Especially the skills and knowledge of the leader have been enhanced by external actors training. Still, the leaders of the group were without exception members with a higher level of formal education and resources compared to the other members.

I conclude, that the second working proposition which assumes that appropriate leadership measured according to the three discussed factors enforces robust collective action, has been verified within this research. I found a number of causal mechanisms which explain the causal relation between the two variables. Especially, the skills & initiative strongly had a positive effect on the development of robust collective action. The ability to motivate the members proved to be important especially for the initiation of collective action. Moreover, during times of economically difficult situation strong leaders could avoid the collapse of the group. Finally, I found only little evidence that leaders had a strong role to play for the enforcement of the internal rules. Instead, the structure of the QMS system assured a high level of compliance.

9.3 Additional findings and recommendations for further research

The findings of this research but also its limitations (comprehensively discussed in section 4.4) provide interesting starting points for further research. Reflecting on the whole research, this study provides valuable new insights on the factors external intervention and leadership and their impact on the occurrence of functioning and robust collective action. The study is based on the in-depth analysis of six small-scale pineapple farmers in Ghana which provide an interesting sample for the purpose of this research. The history of the Ghanaian pineapple sector (section 5.4) proved that smallholders can have a major part in the export market. Its emerging position of the export-market for non-traditional crops has also a strong potential for the involvement of small-scale producers. Moreover, the cultivation of pineapples – a fruit characterized by its vast perishability and high value – provides strong incentives for collective action because it requires comprehensive skills and efforts for the production of the required quantity and quality which are rewarded by a high market price. Within this challenging environment, I have shown that external support and leadership have a strong role to play. However, further research on these two factors has to be undertaken, to gain a full understanding of their impact. This approach was beneficial for the purpose of this study as it allowed the investigation of robust collective action under especially challenging circumstances. However, the sample also complicates the transfer of the findings to other producer groups which operate in different economic, political, geographical, biophysical and institutional settings. Thus, further research is needed which compares the findings drawn from this investigation with the results from the inquiry of other samples. Interesting results might arise from groups operating in a different market environment and producing other commodities. Since this research was more concerned with exploring causal mechanisms, I also suggest a more standardized cross-case analysis with a larger sample to test the identified relationships.

Moreover, we still miss a full understanding of the impact of leadership on collective action. I found that the ability to motivate the group members as well as the skills and initiatives of the leader played a crucial role. However, it was surprising that the control function was of minor importance. The research revealed that the internal rule system based on the logic that the success of the group can be endangered by the non-compliance of one member fulfilled a strong control function within the investigated sample of groups. Thus, further research is needed to investigate to what extent the structure of internal rules has

an impact on collective action. Another aspect, which has not been in the focus of this research, is the *type* of leadership and its influence on collective action. However, I discovered its potential importance during the data gathering process. I already introduced the concept of 'open-leadership' which distributes the responsibilities of the executives among the members and therefore establishes a more democratic approach of leadership. Moreover, I also encountered a much more centralized and autocratic approach of leadership. Both forms of leadership showed their advantages and disadvantages in terms of collective action. Research into the nature of leadership might lead to interesting new insights for collective action theory.

Additionally, I would like to reaffirm Agrawal's (2001) general request to conduct more research on external factors influencing collective action. Collective action does not take place in an empty space and is likely to be influenced by the "external social, physical and institutional environment" (ibid 2001: 1650). Besides external actors following the intention to facilitate collective action, I found a range of other factors which require further research (see figure 2). This research contributed to the development of collective action theory by having a closer look on the role of external actors trying to facilitate collective action. More research is needed to enlarge the scope to other of the theory to other external factors.

The research came to some additional findings which have been discussed in detail in section 8.3 and for the single case analysis. In addition to the variables of external support and leadership, the collected field data strongly suggest that the current economic incentives, former market success, the small size of the group, its external reputation, the general level if education and resources as well as the design of the standard had a contributing effect to the development of robust collective action of the groups. Some findings are not very surprising since they already found recognition in the collective action literature. Nevertheless, some factors might provide new impulses to extent collective action theory. I especially recommend further research on the external reputation of an organization and its effects on collective action which has so far been neglected in the research on collective action.

The advantages of producer groups for market access are well known and have been comprehensively discussed in this research. However, I encountered an interesting observation which is of high relevance for the integration of smallholders into the export market. Producer groups enhance the potential of smallholders to access the export market. But I also found hints that the strong cooperation with a buyer again decreases the level of robust collective action as the group members are less dependent on the activities of the group (see the discussion of the producer organization Ekumfi-Atwia, section 7.5). The consequences for the respective group have been a decrease of their negotiation power and a strong dependency on their buyer who uses this relation for its own advantage. This occurrence still needs further research and has strong implications for practitioners (which will be addressed again in the next chapter on policy recommendations).

Finally, this study had a clear focus on collective action theory as it provides very valuable insights to improve the situation of small-scale farmers in developing countries. Nevertheless, in chapter 2 I also reviewed other theoretical approaches such as the Global Value Chain Concept and the Sustainable Value Chain Approach. Also these approaches allow important insights into the integration of smallholders, but take a different starting point for their investigation. Whereas collective action theory takes a very actor centered view, the value chain concepts start from a systems perspective. However, it is obvious that both approaches have to go in hand in hand to gain a full picture of the issue. Thus, I encourage an approach which merges both viewpoints.

10. Policy recommendations

The theoretical results of this research imply that the efforts of governmental organisations, donor agencies, NGOs and market parties can indeed stimulate functioning collective action of donor agencies. But they also suggest that it is to a large extent dependent on the producer organisation and especially its leader to develop a level of robust collective action which allows successful collective marketing of small-scale farmers targeting the European market. In the following paragraphs I finally present some recommendations how the external intervention can be improved to stimulate robust collective action of producer organisations.

As discussed above, external support may have a stimulating effect on collective action for the purpose of accessing markets. The design of the evaluated project produced convincing results as five out of six investigated farmer groups developed an impressive level of robust collective action, which can partly be ascribed to the external intervention. Collective action cannot be equalled with market success since additional factors determine if a farmer group can overcome the entry barriers to high value markets. Examples of these additional factors are the natural conditions related to the soil and climate, the occurrence of plant pests, but also the overall development of the international, national and regional market, the infrastructure and (lost-cost) business services available to the farmer groups. I described the current difficult situation for the Ghanaian pineapple industry, which proved to be especially challenging for smallholders (see section 5.1). Considering these circumstances, it is even more striking that the supported farmer groups have been successful to sustain the level of collective action. To even improve their cooperation and improve their access to the European export market, I recommend the following:

- **Sharing of expertise and responsibilities**

  In many groups the expertise and responsibilities within the group are centralized in one or two persons. This is reinforced by the separate training of the group leaders. Whereas the training had a very positive effect on the development of leadership, the strong focus on the training of the leading figures might carry the danger of the disbandment of a group caused by the resigning of the central figures. To avoid this from happening, the leadership training might be offered to more group members. In the field I encountered the idea of a 'open leadership' approach, which distributes responsibilities and expertise among all members. These arrangements might help to share work load, responsibilities and knowledge as well as establish a stronger sense of ownership among all members. Finally, it might enhance the robustness of the farmer organisation.

- **Contributions of all members**

  Especially two groups within the sample relied to a large extent on the material and financial resources of the leader, whereas other members did not contribute. Therewith, groups should be encouraged to establish internal systems to generate resources to which all members have to contribute. A constant contribution of all members helps to generate more commitment and ownership among all associates.

- **Management training**

  The results of the research indicate that especially the management training made a difference in the development of robust collective action – thus a stronger level of cooperation and more

proactive market behaviour of producer groups. Thus, I strongly encourage the market-orientated approach for the training of smallholders.

• Awards

Especially, members of producer groups under investigation explained that their membership enhance their social status and reputation within the community. Their efforts are recognized and they have been consulted by other farmers for advice on cultivation practices. Thus, many members expressed their pride to be part of a farmer group. External recognition of groups' efforts is also expressed in awards. I found that members are especially proud of won awards for their cultivation practices. Therefore, I recommend the launch of competitions and awards as a helpful way to strengthen the cohesion of groups.

• Support to generate capital

As anticipated, all farmer groups asked for financial support or a grant during the field visits. As described by the involved training staff, farmers have developed strong expectations towards donor agencies which might be triggered by earlier practices of governmental agencies and aid donors. However, the cultivation of MD2 is more capital intensive than the former varieties and thus requires certain investment capital. Due to the fact that many banks do not provide credits for small scale pineapple farmers because of the low repayment rates, smallholder groups should be introduced to methods to generate own capital. Financial management is already a part of the trainings. However, groups might be encouraged to commonly cultivate other crops to acquire some common resources for the group.

• Planning & Coordination among the donor agencies

I found that inadequate, repetitive or too frequent trainings provided by external actors resulted in a discouragement of collective action. For the investigated sample, these situations were party a result of the weak coordination of donor interventions. Hence, improved cooperation for programmes and projects among donor agencies, governmental organisations, NGOs and private parties by agreeing on respective tasks and responsibilities might prevent these negative effects of external support.

• The careful design of farmer-buyer contracts

This study did not provide us with a final answer concerning the influence of strong cooperation between producers and exporters on the robustness of collective action. I argue that robust collective action of a farmer group is necessary to access markets and overcome entry barriers of markets. The formation of farmer groups helps to decrease transaction costs and can serve as a leaning platform. Moreover, the individual producers can benefit from the economy of scale. However, these advantages of farmer groups do not guarantee the access to markets per se. Groups might also benefit from linkages to companies, which provide them with technical advice, input materials and trainings. However, I found hints that these relations might negatively affect collective action. Strong buyer relations might implicate that the farmer group has to cease parts of their freedom to self-organisation, a stronger guidance by the company and decrease their negotiating power against the buyer.

The optimal model of organisation between the exporter and the farmer group still has to be found. Coulter et al. (1999) distinguishes between linkage-dependent and linkage-independent groups. Linkage-dependent groups do enter a long term relationship with a service provider

which is interested to source from the organisation. The company will provide support to the organisation as long as it suits its interests. The cooperation might thus be more beneficial for the buyer compared to the farmer group. The linkage-independent groups negotiates operate autonomous form any buyer. The group negotiates on behalf of its members for the best deal. However, the group also carries all risks. An optimal model should combine these two models but has to be designed to the respective market situation and the capacities of the producer group. It is desirable that groups keep a certain level of self-organisation to negotiate with the buyer and protect themselves to be exploited. The discussed forms of cooperation between farmers and buyers (exporters or processors) have shown to be at the disadvantage of the farmer groups in three out of four cases. But also exporters need to be protected against farmers which don't fulfilling their duties. A common problem is that farmer groups bypass their contractor and sell to somebody providing a temporarily higher price. Taking into account that several different market models and forms of cooperation might lead in the respective situation to the most favourable outcome, requires also the current GLOBALG.A.P. group certification to be more flexible. One important question concerns the ownership of the certificate. The buyer holds considerable power over a farmer group if it claims the certificate for itself, avoiding that the group sells to another buyer. At the same time, the group is bound to one company being in an unfavourable condition to negotiate. Farmer groups would benefit from legal support in negotiating for contracts, which spread the risks on all shoulders. Furthermore, groups might need advice how to assert their rights in front of the buyers. Donor agencies could take a facilitating role in this process or instruct existing organisations for this task.

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Appendix 1 – Overview of empirical data

Pinex –
3 interviews with two group leaders (secretary, technical manager (2X), 2nd one on the phone)
1 group discussion (5 members)
9 individual interviews (2 certified, 7 not certified)
Several informal talks (with wife of farm manager and Martin Afenyo)
(2 days of visit 10-11, 11-11- 2010, 14-12-2010 phone call)

New Generation –
1 interview with group leaders (secretary & chairman)
1 group discussion (3 members)
5 individual interviews (all members are not certified)
1 interview with field officer (MoFA)
(2 visits: 13-12, 17-12-2010)

Okyereko –
3 interviews with group leaders (technical manager, secretary, chairman)
2 group discussions (1 with core group (4 members), one with extended group (about 25 members))
6 individual interviews (4 certified, 2 not certified, 3 have also been a member of the small group)
Several informal talks
Observation of a group meeting (core group)
(4 days of visits on 2-11, 9-11, 4-12, 14-12-2010)

Oboadaka –
2 interviews with group leaders (secretary (2x), vice chairman)
1 group discussion (11 members)
4 individual interviews (2 certified, 2 not-certified)
(2 visits: 3-12, 4-12-2010)

Nsakye –
2 interview with the group leader (chairman (2x))
1 group discussion (6 members)
Observation of one group meeting
2 individual interviews (one certified, 1 not certified)
(2 visits: 26-11, 29-11-2010)

Atwia –
2 interviews with group leaders (technical manager & secretary (2x))
1 group discussion (5 members)
7 individual interviews (6 certified, 1 not-certified)
(3 field visits: 17-11, 19-11, 1-12)
2 interviews with company manager (WAD)

Expert interviews: (8 experts)
Several interviews and informal discussions with **Ali Abdulahi** (former MOAP staff) (7-12-2010)
Mawuli Asigbee (former TIPCEE staff – smallholder expert) (15-12-2010)
Emily Afaribea Boahen (former TIPCEE staff – supported Valpo & Oboadaka) (3 interviews)
Emmanuel Owusu (SPEG – Exporter association, has been involved in the training) (9-12-2010)
Consultant of Africert Ghana (15-11-2010)

Michael Asomani-Adem, Linda Nartey-Tokoli (MiDA) – managing of MiDA training (14-12-2010)
Nana Adomeko (has been working as a trainer, now AFC) (2 x) (9-12, 20-12-2010)
Frank Assiedu (AFC International Consultant) (22-12-2010)
Eric Bentsil Quaye (Export marketing and quality awareness project (EMQAP – consultant, has been involved in the training) (1-12-2010)
Kofi Biney (MOAP staff, manager of the GLOBALG.A.P. project) (several informal talks)

Appendix 2 – Questionnaires for the individual interviews with members of the producer groups

Thanks a lot for your time and effort! We are conducting a research on the group certification of GLOBALG.A.P. (option 2). You already worked for some time with the GLOBALG.A.P group certification, thus your experiences and your opinion are very important for our work. The participation is voluntary, you are always free to not answer a question or quit the interview, if you don't feel comfortable. We will take some notes about what you are saying. But please be assured that everything you tell me will be kept confidential by the research team and will not be used for other than research. If you cannot answer some of the questions please leave them blank.

Date:
Name of the group:
Are you certified (GLOBALG.A.P.)?
[ ] yes [ ] no, because:_____
[ ] if not, do you plan to attain the certification for the next year? [ ] yes [ ] no [ ] I am not sure
[ ] if not, why not? _____
[ ] since when are you part of the group?_____

1. Did you have another job besides your activities as a pineapple farmer?
   [ ] yes, namely_____ [ ] no

2. How do you know the other farmers before you joined the group? If yes, how do you know them?

3. What was your reason to join the group?

4. For which kind of activities did you cooperate before you participated in the project for GLOBALG.A.P. certification?

5. How did you develop the constitution of your organization?

6. What has changed after your group participated in the training on the QMS and on management issues concerning the activities of your group?

7. What has changed after your group participated in the technical training on MD2 cultivation and concerning the activities of your group?

8. The group received some support in form of xy (the MD2 suckers, payment for the certificate, a credit). What do you think is the impact of this support?

9. How did you decide on the leadership and positions within your group (QMS manager, director general, director, production manager, field manager, internal inspections)?

10. Are you satisfied with the leadership of your group? Please explain.

11. Are you confident that the leaders of the group have the necessary knowledge and capacities for their position?

12. What do you think would happen when your leader would quit the organisation tomorrow?

13. Have you ever thought about leaving the group? Please explain.

14. Which characteristics of your group contribute to the strong cooperation of your group?

[ ] Male	[ ] female	
Education: [ ] no formal education [ ] Tertiary	[ ] primary school [ ] Other	[ ] Junior Sec. [ ] Senior Sec.
Can you read and write fluently? [ ] yes	[ ] a bit	[ ] no
Do you speak English? [ ] yes, fluently	[ ] a bit	[ ] no
Do you hold an official position on group? [ ] yes If yes, which position:	[ ] no	
Do you have a bank account? [ ] yes	[ ] no	
Do you have a car? [ ] yes Do you have a bike? [ ] yes Do you employ farm workers? [ ] yes How many? (full time) (part time)	[ ] no [ ] no [ ] no	
Size of own land:_____acres (lease/family land)		
Produce: Pineapple [ ] sugar loaf acres: Others	how many acres: [ ] Smooth cayenne acres: how many acres:	[ ] MD2 acres:

Appendix 3 – Questionnaires for the individual interviews with the group leaders

Thanks for your time, effort and willingness to answer our questions. We are conducting a research for the Utrecht University on the group certification of GLOBALG.A.P.

As a manager of a farmer group which attained group certification, you already worked for some time with the GLOBALG.A.P group certification. Moreover, you have a good overview about the group development. Thus, your experiences and your opinion are very important for the research. The participation is voluntary, you are always free to not answer a question or quit the interview. I will take some notes about what you are saying, but your answers are kept confidential.

Please give me a brief history of your group (use the timeline).

1. What was the reason for the foundation of the group?

2. Who came up with the idea to form a farmers' group?
   - [ ] members of the group
   - [ ] MOAP
   - [ ] MoFA
   - [ ] other external organization, namely_____
   - [ ] I don't know

3. What was your reason for the group to take part in the project with xy? Please explain:

4. Which kind of support did the group receive? For how long and when?

Kind of support	Organization	Time (mm/yy – mm/yy)
1.		
2.		
3.		
4.		
5.		
6.		
7.		
8.		
9.		
10.		

3. Can you please describe the development of your group before and after you received support by xy. How did the number of members and certified members develop?

	Found.	2005	2006	2007	2008	2009	2010	Plans for 2011	Plans for 2012
Total no. of members									
Certified members									

4. What are the driving factors behind this development?

5. What were the reasons for some members drop out of the group certification?

6. What were the reasons for former members to leave your group?

7. Do you have member fees/ dues?

   [ ] yes, _____ per week/month/year [ ] no

8. Are all members able to pay these fees?

   [ ] all [ ] more than half [ ] some have problems [ ] no

9. How do you generate money for the annual certification?

10. Does the group have common property?

    [ ] yes [ ] no

    If yes, please specify:

11. Are all members of your group able to read and write?

    [ ] yes, all of them [ ] more than 75% [ ] more than half of them

    [ ] more than 25% [ ] Less than 25 [ ] none

12. Do your members have more or less the same resources and assets in terms of financial resources and land property? Please explain.

    a) Land (leased, owned) (smallest plot – largest plot)

    b) Financial resources – How many farmers have a job besides their farming activities? Which kind of jobs? Which additional professions do they have?

c) How many of the group members employ farm workers?

13. To whom do the group sell its produce? Do you have a contract with the buyer? What were the terms of cooperation?

14. Do you feel respected by the members of the group?

15. Do you have the feeling that you can motivate them to keep working on GLOBALG.A.P standard?

16. What are the main challenges and problems of the group?

17. Did you face any conflicts in the last years?

18. What are the plans of the group for the next 5 years?

Appendix 4 – List of questions for the group discussion

Discussion guide

General information about the group

Founded in		Legally registered as	
Accreditation since		Reaccreditation	

Introduction

Thanks for your time and effort to attend this meeting! I am a student from Utrecht University, The Netherlands, Europe and interested in the 'group certification' of GLOBALG.A.P. and especially in the impact of the support you received to enter the export business. You are working with the GLOBALG.A.P. standard for some time and thus have already experiences which are very valuable for the research.

There are no right or wrong answers, so it is likely that you don't agree on some issues. It is good to have contradicting ideas during our talk. We will be simply discussing your views, opinions and experiences, so please feel comfortable to really say what you think!

Participation is voluntary, whenever you like you are free to not answer a question or quit the discussion. I will record our discussion, because it is difficult for me to remember all the things you are saying. Are you all ok when I record the session? Of course al information will be kept confidential.

0) Introductory questions

1. Please introduce yourself (first name). How long have you been involved in the pineapple business?

2. Why did you decide to cooperate?

3. Which organizations do you in contact with (donor agencies, companies, associations, important individuals)? (use the diagram: the distance indicates how important the organization has been) What are the purposes of these contacts? Did you notice any changes after the training?)

1) Main part

4. You received training on how to keep records and the establishment of the QMS. Moreover, your leader received additional training on the QMS. What do you think was the impact on the cooperation of your group?

5. You received a lot of technical training (GLOBALG.A.P. practices – like application of fertilizers & pesticides, field hygiene, storage of chemicals) Please describe the changes you notice for your group since you received the training?

6. You received as well some financial & material support (MD2 suckers, protective clothing, credits MIDA, the first payment for the certification)? What kind of changes do you notice for the cooperation of your group?

7. Imagine all the organisations like TIPCEE, MIDA, gtz, MoFA and MOAP have never come to Okyereko how would your organization look like today? Do you think it would still exist?

8. How do you organize your work within the group? Please describe your internal rules and responsibilities.

9. Do you take any effort to increase the number of certified members?

10. Do you have a strategy how to generate capital within your group (for the annual certification, investments for the group, administrative costs)?

11. How did you establish the contact to your recent buyers?

12. Do you think it is a problem that your members in your group have different levels of education and wealth? Does that effect the cooperation within your group?

2) Closing

13. Are you confident that you manage to attain the group certification within the next year? Why or why not?

14. What are the future plans of the group?

Appendix 5 – Questionnaires for the expert interviews

1. What was your duty/role in the GLOBALG.A.P. 'option 2' pilot project of MOAP/ TIPCEE/ MoFA?

2. Which groups have you been working with in the last five years?

3. Which other organizations supported these groups?

4. What has been the impact of the group formation training as well as the establishment of the QMS on the activities on the group? If you observed group specific processes please explain.

5. The QMS is a quite strict set of rules and regulations prescribing the internal organization of the group. Did you face difficulties to introduce the groups to the requirements? Please explain.

6. What has been the impact of the technical GAP training on the cooperation of the supported groups? If you observed group specific processes please explain.

7. TIPCEE/ MOAP/ MoFA have been paying for the certificate of the groups and sometimes provided suckers, other input materials and served as a broker between the groups and the local banks (MiDA). What do you think is the impact of the financial & material support of the groups?

8. Which characteristics of your group contribute to the (strong) cooperation of your group? Can you give examples?

9. The groups show quite different levels of internal cooperation? What do you think are the main reasons for that?

Appendix 6 – photos of network diagrams

Diagram – Okyereko (core group), 4-12-2010

Diagram – New Generation, 13-12-2010

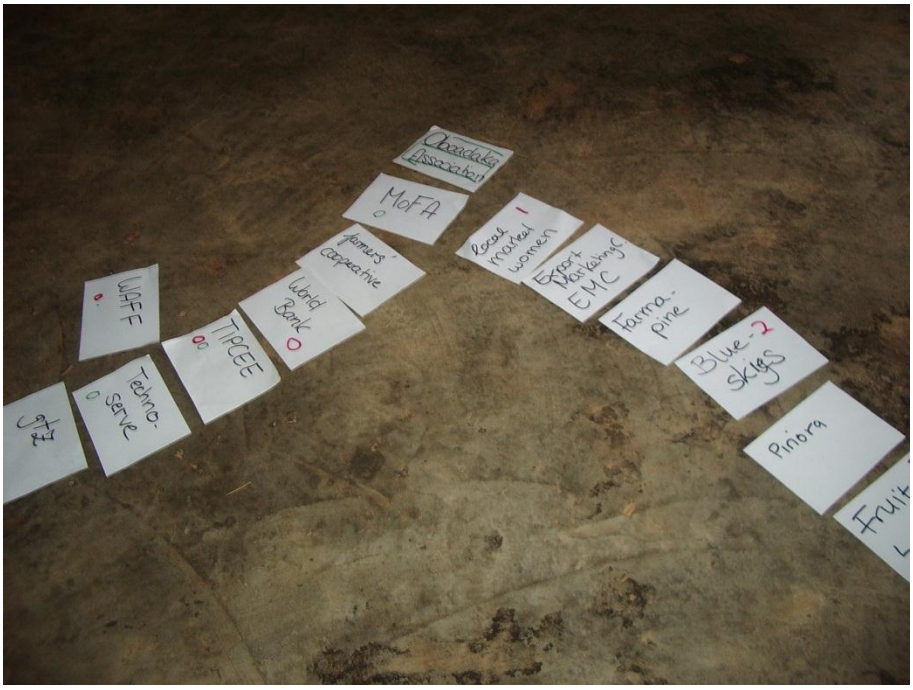

Diagram Oboadaka,
2-12-2010

Diagram Atwia,
19-12-2010

For PINEX and Nsyake I could not take a photo due to technical reasons.

Appendix 7 – Variation of factors (external environment & group characteristics) among the groups

This table presents a summary of the identified factors listed in figure 2, which might have an influence of collective action and show variation among the groups.

	PINEX	New Generation	Okyereko	Oboadaka	Atwia	Nsakye
Climate & Soil conditions	+ (favourable conditions, but sometimes too high humidity)	+/- (occasionally too less precipitation)	+/- (unreliable rain patterns and relatively poor soils)	++ (highly favourable conditions)	+ (favourable conditions)	++ (highly favourable conditions)
Cultivated variety	MD2	MD2	Mainly MD2	MD2, Smooth Cayenne, Sugar Loaf	Sugar loaf	Mainly Smooth Cayenne and Sugar Loaf
Individual market situation	- (buyer ceased payments)	- (no buyer and currently no produce)	++ (constant export of their fruits, relation to reliable buyer)	- (no buyer and currently no produce)	-/+ (relation to a buyer, however varying quantities of produce are sold)	? (positive prospects, but no buyer yet)
Physical infrastructure, distance to Accra	- (230 km to Accra)	++ (approx. 55km to Accra)	++ (approx. 55km to Accra)	-/+ (approx. 50 km to Accra, remote area)	- (approx. 120km to Accra)	+ (approx. 50 km to Accra, remote area)
Size	21	14	8	53	17	10
Homogeneity (Resources & Education)	heterogenic	heterogenic	homogenous	heterogenic	homogenous	heterogenic