

Swedish University of Agricultural Sciences Faculty of Natural Resources and Agricultural Sciences Department of Economics

Smallholder transformation:

NGO participation in agricultural development in Sub-Saharan Africa

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Abstract

With smallholder farmers identified as the core of several recent development programs, coupled with the very important role agriculture can play in the eradication of extreme poverty, hunger and food insecurity in the world. The aim of this paper is to identify conditions necessary for smallholder farmers to capitalise on new business opportunities emerging from the reorganization of supply chains around the world. A comparative case study approach provides views on the most favourable conditions. The research makes use of an extensive literature review on patterns and constraints to agricultural marketing in Sub-Saharan Africa to identify potential areas for intervention by different stakeholders. The main focus is on the role NGOs are playing in market-oriented smallholder agricultural development in this part of the world. Selected theories, business model frameworks, concepts and principles like stakeholder theory, transaction cost theory, the concept of collective market and Oxfams five principles of linking smallholders to formal markets are used to analyse the ability of NGO proposed business models in meeting smallholder agricultural development challenges. Empirical data for analysis was gathered from four (4) agricultural projects in three (3) different SSA countries (Kenya, Uganda and Zambia), pioneered by three different international NGOs; Swedish Cooperative Centre and FARM-Africa. Collective action was identified as the model NGOs are applying as a best option for smallholders to overcome barriers to entry into high value markets, with group characteristics, type of product and market, institutional arrangements, the role of facilitators and the external environment emerging as determinants of success for any collective action initiative. NGOs acting as facilitators are expected to have very clear exit strategy, as this is crucial for project sustainability. NGOs should concentrate more on building the capacity of smallholder farmer groups such that they are able to conduct business on their own and be able to stay in the market even if NGO support ceases.

Abbreviatons

ADB- African Development Bank

AGM- Annual General Meeting

CBO- Community Based Organisation

CBT- Community Based Trainers

CIDI- Community Integrated Development Initiatives

DRC- Democratic Republic of Congo

EDP- Enhancement of Dairy Productivity

FAO- Food and Agricultural Organisation

KARI- Kenyan Agricultural Research Institute

FARM-Africa-Food and Agricultural Research Management-Africa

FFS- Farmer Field Schools

FPG- Farmer Production Groups

HIV/AIDS- Human Immuno-deficiency Virus/Acquired Immuno-deficiency Syndrome

Ksh- Kenya Shillings

IFAD- International Fund for Agricultural Development

IFPRI- International Food Policy Research Institute

ILO- International Labour Organisation

INCORET- Indigenous Consultants Researchers and Trainers

KDC- Kitui Development Centre

MATF- Maendeleo Agricultural Technology Fund

MBOCS- Mpongwe Bulima Organic Cooperative Society

MDG- Millennuim Development Goals

MoALD- Ministry of Agriculture and Livestock Development

NARO- National Agricultural Research Organisation

NEPAD- New Economic Partnership for Africa's Development

NGO- Non Governmental Organisation

OECD- Organisation for Economic Co-operation and Development

OPPAZ- Organic Producers and Processing Association of Zambia

SCC- Swedish Cooperative Centre

SCM- Swedish Cooperative Movement

SIDA- Swedish International Development Agency

SSA- Sub- Saharan Africa

SCC- Swedish Cooperative Centre

TechnoServe- Technology at the Service of Mankind

UCCCU- Uganda Crane Creameries Cooperative Union

UGX- Ugandan shillings

USAID- United States Agency for International Development

USDA- United States Department of Agriculture

WB- World Bank

ZOS- Zambian Organic Standards

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1 Introduction

Smallholder farmers are at the core of several recent agricultural development programs (WEF, 2010). The world lately has been experiencing major shifts in consumption patterns, marketing approach, production and trade (McCullough et al, 2008). These shifts are resulting from changes in incomes, population growth, as well as technological changes for managing food chains (ibid). The understanding of this changing economic conditions and the identification of possible opportunities and challenges it may present to different stakeholders is very important (ibid). Also important is the need to analyse how changing trends in the organisation of food systems and supply chains are affecting smallholder producers especially in developing countries. With increased recognition of the important role agriculture plays in hunger, poverty reduction and rural development, organizational changes in developing country food systems are becoming inevitable (IFAD, 2010). NGOs in the past decades have gradually turned out to be major players in this development agenda, with an increasing amount of development aid being channelled through them (Kindness and Gordon, 2001). NGOs deliberately work in remote and disadvantaged communities where their principal target population are the poorest households (ibid). Most of these poorest households who constitute the principal target of NGOs have agriculture as their main income generating activity. Reasons why some NGOs are becoming very involve in agricultural development activities as an option for promoting their broader welfare goals (ibid). Some NGOs like the Swedish Cooperative Centre, TechnoServe, FARM-Africa, CARE international, Oxfam Agriterre, just to name a few have even adjusted their altruistic purpose inorder to accommodate business oriented activities within their development strategies as their focus is gradually shifting towards longterm development goals (*ibid*). The issue at stake right now is to know how much have NGOs achieved with this new approach, how are they achieving it and how far can they go with this new approach?

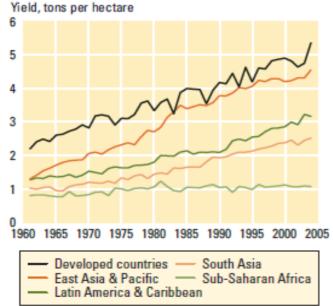
1.1 Problem background

In one of its recent publications, the World Economic Forum cited that "Agriculture can better fulfil the world's most basic social needs" (WEF, 2010, 4). But more than a decade after the adoption of the United Nations Millennium Development Goals (MDG), with the first goal being the eradication of extreme poverty and hunger in the world by 2015, the world is yet to witness a major change in agricultural production in some parts of the world (Rosegrant et al., 2006). A majority of the rural population in East Asia and Sub-Saharan Africa who rely on agriculture for their livelihood still live below US\$1.25 per day (IFAD, 2010, 16). For most of this rural people, agriculture is their most likely escape route from poverty and hunger, either directly as smallholder farmers, or indirectly as farm labourers, with women contributing a bulk of the farm labour (WEF, 2010; World bank, 2002; World Bank, 2004). The extents to which these small scale rural farmers can rely on agriculture for poverty alleviation greatly depend on their ability to improve productivity and access markets for agricultural produce (IFAD, 2010). Agricultural activities therefore do not only produce some of the most basic goods for human livelihood, but to a certain extend contributes to social stability and also enhances human and economic development (FAO, 2010; WEF, 2010). It is based on this relationship between the farmer and the society that most agricultural development strategies and programs stress the need for increased productivity, with aim to ensure food security as well as growth in income (IFAD, 2010).

This unfortunate situation presents an urgent need for new policy options and intervention in agricultural development especially in Sub-Saharan Africa (SSA) (SCC, 2007). Programs which if well implemented could stimulate production and increase income to farmers by means of greater production and higher prices. Such agricultural development programs could stress market-oriented production, while conserving the natural resource base and preserving the landscape of the countryside. Agriculture has to be efficient, competitive, and most importantly environmentally friendly (Nyberg, 2010). There is also a need for a change in public perception of agriculture especially when farming in some countries in SSA is still not yet fully regarded as a potential commercial activity. Farmers need to be encouraged to put in more effort towards the intentional production of an "excess" which can be absorb by the market.

1.2 Problem

Judging from several publications by various international development agencies like the World Bank, FAO and OECD, countries in Latin America and Asia are enjoying a substantial gain in food production and real income (FAO, 2003, 185), whereas Africa is the only continent where food production per hectare has been declining (FAO, 2006). Figure 1.1 below depicts graphically, differences in yields of cereal production per hectare between SSA and other regions of the world, from 1960 to 2005.



(World Development Report 2008, 15)

Figure 1.1 Yield gap for cereal production per hectare between SSA and other regions of the world.

It is clearly visible from figure 1.1 above that Sub-Saharan Africa remains the only part of the world where yields per hectare are yet to withness an increase. In addition, capital and productivity per worker in Sub-Saharan Africa are lower than in any other region of the world, despite enormous government investment in the agricultural sector in several Sub-Saharan African countries in recent decades (FAO, 2006). Remarkable progress is yet to be experienced in this sector. There is therefore an urgent need to examine every fact regarding agricultural development in Sub-Saharan Africa, to find out the reasons and possible consequences of this slow growth. Food price statistics in recent years show a trend of increasing prices for food crops, and considering claims by some researchers that small scale

farms may be or are more efficient than large farms, this presents some opportunities for small scale farmers (Wiggins, 2008). But unfortunately, there is continuous marginalisation of small scale farmers, as most research on agricultural productivity has been in favour of large scale farming, where as small scale farmers still face high transaction cost and other food crop commercialisation related challenges (Henson *et al.* 2008). Reasons why a broad network collaboration of most relevant stakeholders like international donor agencies, NGOs (both national and international) multilateral organisations, government and private extension organisations, input suppliers, retailers, financial institutions, farmer cooperatives and farmer organisations is required to effectively provide smallholder farming sector with improved support for its development (SCC, 2007b). The future of the small scale farming sector's ability to prosper in agricultural production and marketing will depend on strengthening their performance in marketing systems which serve small scale farmers (Wiggins, 2008).

1.3 Aim and delimitations

The aim of this project is to analyse how some of the agricultural development programs initiated by some NGOs and international agencies address challenges faced in Sub-Saharan Africa, with a focus on smallholder agricultural food crop production/marketing development programs. Specific research questions of interest are;

- What business models are NGOs applying for the development and support of smallholder farmers in Sub-Saharan Africa?
- Who are the stakeholders?
- How can a business model influence the performance of smallholder farmers and how are they facilitating favourable market linkages for smallholder farmers?
- What factors are responsible for the success of these NGO proposed business models?
- And what are the measures put in place by the various NGOs to ensure sustainable success when external support ceases?

This study has been delimited geographically, demographically, theoretically, sectorally and also interms of time and number of case studies used. Geographically, the study focuses on agricultural development in the Sub-Saharan region of the African continent. This region has been identified amongst those regions in the world at great risk of food insecurity and poverty, and with most of the populations still living on less than US\$1.25 per day (IFAD, 2010, 16). Figure 1.2 below differentiates the Sub-Saharan region from the rest of the African continent.



Figure 1.2: Map of Sub-Saharan Africa.

Though the Sub-Saharan region is made up of 48 independent countries, further geographical delimitation has been done, to involve only those countries where the chosen NGOs have carried out projects relevant to this study. The countries in question are Kenya, Uganda and Zambia.

Demographically, the study shall focus only on smallholder farmers, eventhough agricultural development usually involve both large scale agricultural parastatals and smallholder farmers. Further delimitation has also been done, with respect to the number of case studies chosen for this study. Two out of the numerous NGOs involved in Agricultural development in SSA have been chosen for this study. And four (4) completed projects carried out between the year 2000 and 2010 in the portfolio of these two NGOs shall be used for empirical studies. Reasons to motivate both the choice of NGO, projects and time frame are presented in Chapter 2 (Method), of this report.

Theoretically, the stakeholder theory, transaction cost theory, the concept of a business model and the concept of collective action are the theories and concepts chosen for the analysis of the empirical data for this study, eventhough there are numerous theories, models and constructs on sustainable business development, marketing, organisational structure, cooperatives and supply chain management, which could have significant implications on the outcome of the analysis of the empirical data in this studies. Arguments to motivate the choice of these theories and concepts are presented in chapter 2 (Method), of this report.

1.4 Outline

The structure of this paper is presented diagramatically in Figure 1.3 below.

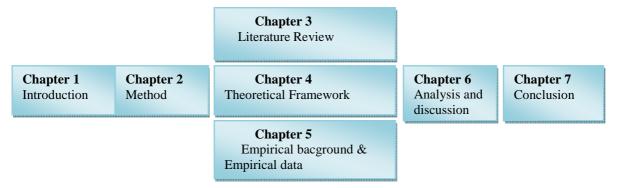


Figure 13: Structure of thesis report

The paper begins in Chapter 1, with an introduction, consisting of a brief presentation of the problem background, the aims of the study, applicable delimitations and definition of keywords and terms. Chapter 2, presents the method applied. In this chapter, data collection techniques, analytical approach, choices of case studies and theories, are presented. Chapter 3 is an extensive literature review of key concepts and previous work in alternative field of research. In Chapter 4, there is the presentation of the theoretical framework used in the analysis of the empirical material collected. Chapter 5 consist explicitly of empirical data, both primary and secondary, of the various case studies chosen for study. Chapter 6 presents an analysis of the empirical data collected, by making use of the chosen theories and concepts. This chapter also discusses the analytical results with findings and opinions of other researchers who have conducted previous research in related area(s). The last but not the least is Chapter 7, with concluding statements, and recommendations for further research in this area.

1.5 Definition of terms

The following definitions are provided to facilitate the understanding of this thesis report.

1.5.1 Agribusiness

At first thought, a probable definition of Agribusiness would refer to it as a large scale business whose revenue comes entirely from agriculture. But this definition doesn't clearly identify its scope and nature. In an attempt to identify the scope and nature of agribusiness activities, Collins English Dictionary, (2003), defines agribusiness as the various businesses involve in processing, distribution and support of farm production. Woolverton et al., (1985) also thinks the scope of agribusiness should cover supply industries, commodity processing, food manufacturers as well as food distributors. Agribusiness therefore should be regarded as a differentiated activity that systematically goes from the agricultural producer, to the distribution of final products (Binotto et al., 2004). According to Binotto et al., (2004), agribusiness operations cuts across the agricultural sector, industry sector and service sector, with modern farmers being regarded now as specialist, whose operations have grown beyond just growing plants and raising animals. The American Heritage Dictionary of the English Language in its updated version of 2009 extended the definition of agribusiness to include the manufacture of farm equipment and machinery. For the purpose of this study, the idea raised by Samuel et al., (1996), seems most appropriate. They are of the opinion that agribusiness has evolved from just having its roots in agricultural economics, to an established management science that covers agricultural production, farm management and agricultural marketing.

1.5.2 Business model

The term "business model" may be viewed differently in different disciplines, different perspective and in different subject matters. This is an indication which reveals that most scholars do not yet agree on what is refered to as a "business model" (Zott et al., 2010). A good starting point for any discussion on business model creation therefore is to first establish a clear understanding of what a business model actually is. This concept should be well understood, simplified and relevant, so as to facilitate description and discussion. Zott et al. (2010), while carrying out a literature review on business models found out more people are accepting the notion that a business model is a unit of analysis which presents a systematic perspective on how firms should do business, while taking into consideration organizational activities. They believe business models present a holistic approach towards explaining how organizations/ firms do business. Osterwalder and Pigneur, (2009, 14), in their handbook for business model generation defines a business model as "A rationale of how an organization creates, delivers and captures value." From this definition, a good business model should be able to show how a firm intends to make money, and it has to reflect the four main areas of business, that is the customer, the offer, infrastructure, and financial viability (Osterwalder and Pigneur, 2009). Vorley et al., (2009, 3), are of thesame opnion that the business model concept is linked to business strategy and business operations. They consider a business model to be a description of how a firm organises itself and its relationships inorder to create and capture value. All two definitions above are quite similar to an earlier definition by Shafer et al., (2005, 202), who defined a a business model as "a representation of a firm's underlying core logic and strategic choices for creating and capturing value within a value network." Firms can only creat value when they are able to differentiate themselves from competitors. And what differentiate a firm from its competitors are its core competencies, capabilities and positional advantages (Johnson et al., 2008)

It is interesting to note that key issues like "value creation" and "value capture" keep repeating in all three definitions above. However, a more simplified and explicit definition which is adopted for this study, is the definition by Magretta, (2002, 4), presented in Zott *et al.*, (2010, 6), where he/she defines a business model as;

"Stories that explain how enterprises work. A good business model answeres Peter Drucker's age old questions: who is the customer? And what does the customer value? It also answers the fundamental questions every manager must ask: How do we make money in this business? What is the underlying economic logic that explains how we can deliver value to customers at an appropriate cost?"

1.5.3 Collective action

Collective action occurs when farmers cooperate for a common purpose or benefit (Wandschneider and Yen, 2007). Farmers may cooperate or get together to improve access to markets or to improve access to farm inputs. When scattered smallholder farmers bulk their produce inorder to access urban markets or processing industries, this marketing arrangement is formally refered to as Collective marketing (Giel Ton, 2010). Most farmers in developing countries have found out that they can increase their income and efficiency by joining with other farmers to market their produce and also to collectively purchase farm inputs and increase access to technical assistance (Robbins *et al.*, 2004). Commonly cited examples of collective action arrangements are cooperatives, producer associations, and village enterprises amongst others.

Collective action, be it for market access, access to finance, access to inputs and/or technical assistance may occur occasionally or on regular basis, and such arrangements may take the form of formal or informal structures (Wandschneider and Yen, 2007). Informal cooperation may occur when farmers decide to exchange labour during harvest periods. This is common amongst neighbours, who need help to harvest and/or transport very perishable crops. Therefore these opportunistic and flexible collective action may emerge in response to a particular need or opportunity and usually there is no need for establishing a well defined group nor does it require any formal group management structure, since the need is short leave (Wandschneider and Yen, 2007).

Formal structures which are of much interest to us may emerge when farmers act collectively on a regular basis through a group organisation. This may either be a farmer association or a cooperative (*ibid*). Usually, cooperations of this type have more members, very complex and costly to manage. They always have a particular purpose which all members share, a defined size, a status and institutional arrangement, and for farmers within a specific geographical region (*ibid*).

1.5.4 Non- Governmental Organisation

A Non- Governmental Organization (NGO) has been defined as a non-profit, voluntary group which is organised locally, nationally or internationally (www, ngo, 1, 2011). The activities of NGOs are organised around specific issues such as social welfare, human rights, health, environment, poverty and agriculture.

NGOs can also be understood by their orientation and level of operations (www, gdrc, 1, 2011). Orientation maybe charitable or service oriented (*ibid*). With charitable orientation, the NGOs activities are directed towards helping the poor and/or relief activities during a natural disaster or crisis. Whereas service-oriented NGOs are engaged in the provision of services such as education, health or family planning (*ibid*). Another type of NGO orientation which is of much interest to this study is; empowering orientation. NGOs with an empowering orientation may aim to help poor people develope better understanding of political, social and economic factors affecting their lives (*ibid*). Most at times, empowering NGOs may develope spontaneously due to a problem or an issue, with workers from the NGO playing a facilitating role in development (*ibid*).

Although many NGOs may share similar goals, their approaches vary. Kindness and Gordon, (2001), distinguish NGOs as either welfare oriented or business-like. Business-like NGOs according to Kindness and Gordon, (2001), would embrace and harness commercial activities to promote their objectives. The social and commercial objectives of this kind of NGOs are not mutually exclusive. The role these commercial activities play within the development strategy, and the competence with which these activities are planned and undertaken varies considerably amongst those NGOs who are prepared to use commercial activities to achieve their social objectives. NGOs try to balance marketing success with the social benefit needs of beneficiaries (*ibid*). NGOs have realised they can pursuit their development objectives by embarking on small enterprise development work. Business-like NGOs now focus on the promotion of small-scale enterprise and marketing as an approach to sustainable development (Kindness and Gordon, 2001).

Based on levels of operations, Cousins, (1991), also distinguishes two types of NGOs; National NGOs and International NGOs. National NGOs are NGOs whose activities are limited in a particular country, but they may have branches in different states and cities and also assist other local NGOs. International NGOs commonly referred to as Northern NGOs are mostly involve in funding of local NGOs, institutions and projects. Northern NGOs are

mostly based in industralised countries, but are actively involve in poverty alleviation and development in developing countries (Matenga, 2001). Some northern NGOs may undertake their activities directly in a developing country, or they may be involved indirectly by funding local organisations.

The principal focus of this paper would be on those northern NGOs whose operations involve direct intervention and actual execution of a development activity in the south. These kinds of NGOs usually mobilise financial as well as materials resources, and make use of volunteers to carry out a variety of projects in different areas (Willetts, 2002). They often operate with a main head office, which coordinates budgets, plan projects, and communicate with operational fieldworkers (*ibid*).

1.5.5 Small farms

The definition of small farms vary with different sources eventhough the most common definition is that which considers small farms as those with less than 2hectares of cropland (Hazell *et al*, 2007, 1). Other criterias used in distinguishing small farms from large identified by Hazell *et al*, (2007) are level of technology, orientation of production and kind of labour employed. The level of technology used in small farms is low, with high dependency on household labour, with most of the production destined for household consumption (Hazell *et al*, 2007). There is a substaintial overlap between small farms, family farms, and subsistence farm (Lipton, 2005). Family farms are those farms where the labour use is essentially from the family. In parttime farms, the farm manager devotes most of her time to other activity, which is a main source of her income (*ibid*). Subsistence farms on their part are mostly for growing staple crops (Lipton, 2005).

The US Department of Agriculture defines a small farm as "a farm with a gross farm income of less than US\$250,000 per year "(Poole, 2004, 1). This definition does not take into consideration size, orientation, labour nor technology used. Most of the farm operators do farming as a form of commercial activity, with most of the farmers coming from a non-farm background (Poole, 2004).

The context also matters, average farm sizes varies between countries, for example, the average farm size in Latin America could be more than 10hectares, where as in India, average farm size could be less than 1hectare (Hazell *et al*, 2007, 1). Smallholder farmers in India are those marginal and sub-marginal farm households that own or/and cultivate less than 2 hectares of land (Singh *et al*, 2002, 3).

It is very important to make this clarification on what is referred to as a small farm, because whatever characteristics which are identified would have an influence on the development of strategies and policies suitable for small farms. For the purpose of this paper, small scale farmers are those farmers who cultivate on cropland of 0.25 to 3 hectares and/or keep a maximum of two animals and make use of traditional crop and livestock husbandary methods (Temu and Temu, 2006, 3).

2 Method

The research follows a case study research approach. Drawing inspiration from Perry (1998, 787), "case study research is concern with describing real world phenomena, rather than developing normative decision models." A recommended methodology for a case study research is one that operates within the realism paradigm (Perry, 1998). By this, there is a blend of both inductive and deductive approaches, that is, the methodology shouldn't only emphasizes the building of theories, but should also incorporate prior theories on related topics (Perry, 1998). In other words, a good case study research approach is characterized by the researcher making deductions from their data analysis based on theoretical issues that were raised in the literature review.

2.1 Choice of method

Robson (2002,178) defines a case study research as "a strategy for doing research which involves an empirical investigation of a particular contemporary phenomenon within its real life context, using multiple sources of evidence." The word "empirical" and the phrase "particular contemporary phenomenon within its real life context" are of great interest. Firstly, "empirical" identifies the need for the collection of evidence (data) about what is going on, while "a particular phenomenon within a real life context" tells you that the study is "specific" and care must be taken before any generalizations are made. In a real life research, it is necessary to have substantial knowledge of a phenomenon of interest before setting up any formal experiment/research (Robson, 2002). A realist researcher makes use of previous experiments and research, theories and observations to build his/her knowledge and understanding of the mechanisms through which an action(s) evolve or interact to produce an outcome, and the various context which provides the ideal conditions for the mechanism to operate (Robson, 2002). Robson, (2002) also recognises the fact that they may be more than one mechanism involve in a particular situation, and whether a particular mechanism operates or not would depend on the context.

After conducting an extensive literature review on related analytical models, constructs and theories, as well as research issues identified in this area of study, data for empirical analysis was then collected from both primary and secondary sources. Primary sources constitute answers to structured questions of qualitative interviews with senior staffs working at the head office and regional offices for East and Southern Africa of the Swedish Cooperative Center as well as from senior staffs of FARM-Africa at the regional offices in Kenya and Uganda.

Secondary data on the other hand was obtained from sources like books, journal articles, web pages on issues relating to agricultural development in SSA and most importantly field reports and publications of the various case studies on their programs and agenda for the African continent. The results obtained from the empirical findings was analysed and compared with appropriate theoretical issues raised in the literature review.

2.2 Literature review

The literature review for this paper builds on an in depth review of journal articles written in the area of agricultural development in Sub-Saharan Africa. The extent to which information contained in various articles were reviewed depended on the focus of the writer(s), and how it relates to the areas of interest of this study. Most of the review entailed detailing of historical perspective of events and the level of involvement and interaction of various stakeholders concern with different agricultural systems in the SSA region. The outcome of this literature review inspired further research into new developments and interventions in agricultural development in SSA. NGOs were identified as key players in agricultural development in SSA, and selected business theories were used to analyse sustainability of selected NGO-initiated smallholder farmer development projects.

The search for journals was conducted in three phases:

Phase 1: Identification of potential sources of articles

The starting point was a review of reports and discussion papers relating to agricultural developing challenges in Sub-Saharan Africa, on the Food and Agricultural Organization (FAO) website. The principal idea behind this was to have a clue to possible keywords, search terms and how to identify relevant articles. The most accessible databases identified were e-journals from databases like Emerald, JSTOR, ScienceDirect, Willeyinterscience and archives of the FAO and IFPRI.

Phase 2: Retrieving of articles

After identifying possible sources of relevant articles, the next step was to access these articles from the databases of the SLU and Nordic African Institute libraries. A reference database like Google was also use to source for articles. Table 2.1 below summaries some of the search terms used to retrieve potential articles.

Table 2.1: Search terms used in retrieving articles					
TEXT ALL TEXT	AND	TEXT ALL TEXT			

TEXT ALL TEXT	AND	TEXT ALL TEXT	AND	TEXT ALL TEXT
Agriculture		Sub-Saharan Africa		Challenges
Agricultural		Africa		Constraints
Marketing		West Africa		Difficulties
Agricultural		East Africa		Opportunities
development		Southern Africa		
Agricultural policies		Developing countries		
Agribusiness				
Food crop marketing				
Smallholder farming				

More than 1500 articles were reached, and the results were refined base on three criteria: 1- Only articles written after 1990 were relevant. The period from 1980's is very significant in SSA agriculture, because this was the period when most SSA countries started liberalising the marketing of agricultural produce, as part of their structural adjustment programs. And 10 years after is good time for any effective analysis.

2- There was a preference for articles based on case study research, either using a particular country, region or crop. From a personal point of view, it is easier to understand and compare researcher's findings and opinions, when they have similar interest in a particular regions, countries or crops.

3- Thirdly, there was also an overwhelming interest in articles written by researchers based in Africa, as it is believe they may be more familiar with some non measurable aspects which may have significant impact on the outcome of their study. But strangely, most of the articles reached were either written by researchers base in Europe and America, and working for an international organization or educational institution.

The reference list of most of the articles reached had also served as a potential source for more articles.

Phase 3: Categorisation of Articles

The articles identified were then categorised firstly according to geographical regions (Southern Africa, East Africa, West Africa and Central Africa) and then according to year of publication. This arrangement is presented in Table 2.2 below.

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Table 2.2:	Cate	gorisation	of articles

Year of publication	No of Articles related to particular regions				
	East	Southern	Central	West Africa	TOTAL
	Africa	Africa	Africa		
1980-1990	3	3	2	2	10
1991-2000	10	12	8	8	38
2001-2005	10	10	8	9	
2006-2010	16	12	11	12	37
					50
TOTAL	39	37	29	31	

From Table 2.2, it can be noticed that the greatest number of articles are written on research carried out on agricultural marketing mostly in east and southern African countries. It could also be noticed that interest in this area increased significantly after the year 2000. A possible reason for this increased interest could be the Millennium Declarations by the United Nations, and the adoption of the Millennium Development Goals (MDG) in 2000. With the very first of the goals being the eradication of extreme poverty and hunger by 2015 (Rosegrant *et al*, 2006). Africa south of the Sahara constitutes a potential target group. It is also worth mentioning that articles which were written on Sub-Saharan Africa, Africa and Developing countries as a whole were counted in all the regions.

As earlier mentioned, the principal purpose of this literature review was to identify some conceptual issues which have been distinguished by most researchers to have significant impact on agricultural marketing, specifically in SSA. Also, though not explicitly specified, during the analysis of the articles, there were some broad ideas which facilitated the understanding of the content and context of the various articles.

Firstly the nature of the agricultural commodity in question. Different commodities have different characteristics, and usually, the characteristics of every agricultural commodity have a significant impact on its marketing arrangements and hence different marketing constraints/challenges.

Secondly, considering the fact that there was a strong preference for articles based on case study research from different countries and/or different commodities, with an aim to cut across different cultures, religion, political, economic and social systems, as well as different

climatic and geographic regions. Such factors too may have considerable implications on the analysis of agricultural systems in different countries.

2.3 Qualitative interview

Qualitative interview are the most appropriate when you wish to get a respondent's view of a phenomenon. Lindlof and Taylor (2002), in their book *Qualitative Communication Research Methods*, refers to qualitative interviews as an interview with principal objective to establish a description of a respondent's view of a phenomenon, and try to interpret the meaning of this described phenomenon. Robson, (2002) considers interviews as a flexible and adaptable way of finding out things, as it provides a possibility to modify a line of enquiry, to follow up on interesting responses, and also to investigate underlying motives. On the otherhand, Robson, (2002) also thinks interviews are time consuming, especially when it requires careful preparation of notes, making appointments to visit, securing permission, rescheduling appointments in the event of crises, and transcription, in cases where a tape was used. However he advices that a good interview should take the form of a conversation, with straightforward questions which gets the interviewee to talk freely and openly, while keeping the interview session as short as possible (Robson, 2002,274).

Field officers working on agricultural and rural development programs for Africa at the Swedish Cooperative Centre as well field and extension staff working on smallholder agribusiness development at regional offices in Africa of FARM- Africa, were interviewed based on project reports published, to get their opinion on issues related to the business models they have put in place to tackle those challenges related to smallholder agricultural development in Sub-Saharan Africa specifically.

2.4 Choice of case studies

The choice and number of case studies for a particular research as proposed by most writers should greatly depend on the researcher's judgment, if they would be appropriate to draw conclusions and make theoretical generalisations on critical issues. Perry (1998, 792), suggest that "multiple case studies should be used because they allow cross-case analyses to be used for richer theory building." Also, quoting Yin, (1994, 45) in Perry, (1998, 792), "multiple cases should be regarded as multiple experiments, and not multiple respondents in a survey."

With regards to a recommended number of cases, most writers do not yet provide any exact number or range for an acceptable number of cases appropriate for any research. Some of them like Eisenhardt, (1989), think "cases should be added until theoretical saturation is reached" (Perry, 1998, 793). This is not feasible, as most qualitative researches are faced with a time and budget constraint. Hedges, (1985), is of the opinion that the greater the qualitative data, the more difficult it is to effectively assimilate. Eisenhardt, (1989, 545), however recommends a range for an acceptable number of cases, she thinks;

"While there is no ideal number of cases, a number between four and ten cases often works well. With fewer than four cases, it is often difficult to generate theory with much complexity, and its empirical grounding is likely to be unconvincing.

Based on Eisenhardt's recommendation, six agricultural projects were initially chosen for this study at the start, that is, two projects from each of the three NGOs selected initially (Swedish Cooperative Centre, FARM-Africa and TechnoServe Inc). But due to delay in response from one of the selected NGOs (TechnoServe), only four (4) projects from the remaining two NGOs (SCC and FARM-Africa) were finally used.

2.4.1 Criterias for selecting NGOs of interest

NGOs vary interms of origin, orientation and level of operations. For the purpose of this study, some general criterias served as guidelines in chosing the three NGOs of interest. Firstly, the NGO has to be a Northern NGO, which is an NGO with head office in an industrialised country, but with most of their operations in a developing country. In addition to being a northern NGO, the NGO should be operations/welfare oriented, with operations that involve direct intervention in smallholder agricultural development in Sub-Saharan Africa. Another very important factor taken into consideration in selecting the NGOs is the fact the NGOs should be business-like in nature. For as Kindness and Gordon, (2001), puts it, organisations which encourage small businesses needs to themselves resemble small businesses interms of their structure, systems, culture, people and behaviour.

The Swedish Cooperative Centre was chosen as a possible case study, firstly because it meets the general criterias and secondly its head office is in Sweden where the study is being carried out, so data collection would be more easy, less costly, and less time consuming. The organisation also has a good track record of successful agricultural development programs and other humanitarian activities in the African continent (SCC, 2007b). It also has the political, intellectual and financial capacities to successfully initiate an agricultural development scheme with great multiplier effects (SCC, 2007b). This centre also demonstrated great willingness to provide data for this research.

FARM-Africa was a random choice from the several other NGOs which met the general criteria. They have their head office in London, United Kingdom, and carry out most of their projects in Africa. FARM-Africa has been actively involve in agricultural development in SSA for more than a two decade now, and can boost of several successful agricultural development projects in SSA. Good examples are its Maendeleo Agricultural Teaechnology Fund (MATF) projects.

2.4.2 Criteria for selecting the various projects

After chosing the three NGOs for this study, it was also necessary to come up with some criteria of selecting 4 projects which were going to serve as case studies for gathering empirical material. The two NGOs do have a good number of smallholder agricultural development projects carried out in SSA which could be very relevant to this study, but for purpose of convenience, only two projects were chosen per NGO.

Some of the factors which could influence the choice of a project included;

- Project outreach. There was a preference for projects with a higher target population.
- Gender considerations; projects with higher level of female participants had an added advantage.
- Duration of project. The longer the project, the better. As on a personal point of view, longer projects have increased chances for success, as it gives room for constant and continuous review of strategy.
- Nature of agricultural product. The research tried to select the projects in such a way that projects involving different categories of crops for example staple crops, cash crops, dairy and livestock are covered.
- The target market. The target market would refer to whether the products are for local or export markets. But products which target both local and export markets have an added advantage.

It was however very difficult to find projects which met all the above criterias, but projects which met most of the criteria were highly preferable.

2.5 Choice of theories

Delimitation has also been done with respect to the selection of the theoretical framework for analysing the empirical material. As earlier mentioned, there are several theories available which could have strong implications on the analysis of the empirical findings and hence the outcome of this study, but the choice of theories used is closely guided by the aims of this project. Selected theories include- Transaction cost theory, stakeholder identification theory, the business model concept and the concept of collective action.

The choice of transaction cost as one of the theories for this paper was inspired by the fact that the isolation of transaction cost factors could greatly assist in identifying policy intervention and institutional innovations which could help alleviate constraints and improve small scale farmer's ability to participate in commercial agriculture (Makhura *et al*, 2001). Especially now when there is an urgent need to analyse institutional responses to questions like; how to include smallholder farmers in export markets? And what kinds of contracts are suitable for smallholder farmers and what role do the contracts play? (Kherallah and Kirsten, 2001). The principal focus in all of this is to find out if farmers facing lower transaction cost would participate more in agaricultural markets than those facing a higher transaction cost.

Seconly, the identification of different stakeholders and their attributes can help NGOs and Managers of organisations to systematically sort out the various stakeholder classes, and their perceived relationships and claims to the organisation, when, how and why they should the claims be addressed. Both NGOs and managers of farmer organisations need to be sensitized on the legal and moral implications of their actions with respect to various classes of stakeholders. Mitchell *et al.*, (1997), believes the stakeholder identification theory holds the key to a more effective management of a firm in a society.

The concept of collective action was choosen as one of the concepts for analysising the empirical material because it has been highly cited in recent pro-proor development programs as the most feasible option which can help smallholders meet basic requirements for entry into high value markets. Markelova *et al.*, (2009) and Kayobyo *et al.*, (2010) highlighted the fact that collective action and cooperation serves as a crucial mechanism through which smallholders can gain access to vital resources.

Zott et al., (2010) identified the fact that with a good business model, managers can be able to develop a sustainable business. The business model concept was chosen because most NGOs are now adopting a business oriented approach as a means to meeting their longterm objectives. In that light Oxfam's Five principles appeared to be the most recent and updated construct which can be use to evaluate the feasibility of the various NGO smallholder transformation approaches.

3 Literature review

Most of the information in this chapter is built from an in-depth literature review that was carried out in the area of agricultural marketing in Sub-Saharan Africa. The literature review aimed at establishing a profound understanding of conceptual issues related to agricultural markeing in SSA, and to set a solid base for further research in this field of study. The analysis of the articles was carried based on conceptual issues like; the relationship between agriculture and poverty, a case for smallholder farmers, opportunities for smallholder farmers in SSA, constraints to agricultural marketing in SSA, areas for intervention, and gender aspect of agriculture in SSA.

3.1 Linking agriculture to hunger and poverty alleviation

Citing William. H. Gates, co-chair of the Bill and Melinda Gates Foundation, and the World Development Report 2008 of the World Bank respectively, "If we are serious about ending extreme hunger and poverty around the world, we must be serious about transforming agriculture" (World Economic Forum, 2010, 8) and "In the 21st century, agriculture continues to be a fundamental instrument for sustainable development and poverty reduction." (World Bank, 2008, 1). These two citations explicitly indicate that agriculture, hunger and poverty are inextricably linked.

Usually in developing countries, the poor spend a high portion of their income on food, so where there is poverty, food insecurity and hunger sets in. The Food and Agricultural Organisation (FAO), defines Food Security as a situation when "people at all times have physical, social and economic access to sufficient, safe and nutritious food that meets their dietary needs and food preferences for an active and healthy life." (FAO, 2010, 8). Therefore food insecurity which is the opposite of food security would exist when people do not have physical, social and economic access to sufficient food. The World Economic Forum (2010) in its "New Vision for Agriculture" stresses the importance of agriculture in fulfilling the worlds's most basic social needs. They believe because nearly 1 billion people still go hungry today, this greatly impedes human and economic development in the world (World Economic Forum, 2010, 4). Malnutrition as a result of poverty usually results to both physiological and cognitive damage on human capital, with a possible consequence being diminishing productivity in every economic activity (World Economic Forum, 2010). The International Food Policy Research Institute (IFPRI) confirms this statement in its "2020 Vision" Discussion paper that agriculture is central to rural development and rural poverty alleviation, and they draw attention to the fact that very few countries have successfully industrialised without prior development of their agricultural sector (Hazell et al., 2007). This is very much in line with the Swedish Cooperative Centers view point that "no country has managed a rapid rise from poverty without increasing agricultural productivity" (SCC, 2007, 5).

Agriculture still constitutes a very significant share in GDP and employment for most poor countries, with an average of 34% in GDP, and 64% of employment (World Bank, 2008, 27). According to the World Development Report of the World Bank, (2008, 27), three out of every four persons in developing countries live in rural areas, and depend on agriculture for their livelihood. Therefore, a significant increase in economic growth is only noticeable when there is an increase in agricultural development, even if there maybe significant growth in other non-agricultural sectors (World Bank, 2008). This relationship suggests that poverty is concentrated in agriculture, and therefore any growth in non-agricultural sectors may not have a significant impact on the rural poor. Therefore a more dynamic and inclusive agricultural

policy could be very instrumental in reducing rural poverty and hunger in developing countries. (World Bank, 2008).

The IFPRI and the World Bank, in a joint publication on the role of agriculture in achieving the Millennium Development Goals (MDG), have also established a strong relationship between agriculture, poverty and hunger. They believe by improving the productivity and economic returns from agriculture for farming households, this would have an immediate effect on rural poverty and hunger, since increases in agricultural income for rural households would lead to increase consumption levels, and this would inturn, produce further economic shocks which would lead to a reduction in food prices, and a reduction in food prices would improve the purchasing power of the poor, both those engaged in agriculture and other sectors (IFPRI, 2006). This is a clear indication that agriculture is very vital for development and growth. Citing the African Development Bank (2010, IV), agriculture employs well over 60% of the economic active population in Africa, and supports the livelihood of over 80% of the poorest people in the African continent, reasons why the *Agricultural Sector Strategy 2010-2014* of the African Development Bank aims primarily at contributing to the broader development objectives for greater agricultural productivity within the African continent.

In conclusion, "..... any organisation that is seriously engaged in poverty alleviation has an obligation to engage in rural poverty and the situation of smallholder farm households." (SCC, 2007, 5). The question then arises – why a preference for smallholder farm households?

3.2 A case for smallholder farmers

"Agriculture may play a central role in development, but this does not necessarily imply that smallfarms should have an equally central role." (Hazell et al., 2007, 10). Following from this citation above, one then becomes tempted to ask- what then is the case for small farms.

There do exist considerable literature which presence opinions of various international organizations, governments, donor agencies as well as researchers, on why smallholder farmers should receive greater attention when designing agricultural development policies especially in developing countries. These opinions can be grouped into socio-economic, political as well as environmental considerations.

As concerns socio-economic considerations, the agricultural sector from the point of view of the World Economic Forum is the only sector that can address simultaneously the three pressing global issues of food security, environmental sustainability and economic opportunities (World Economic Forum, 2010). But within this broad agricultural sector, smallholder farm development promises to be more equitable and with a potential to generate great local multipliers, and can also creat greater opportunities for the engagement of women in farming (Global Donor Platform for Rural Development, 2008). The World Bank, (2005), also believes a productivity revolution in smallholder farming is required if agriculture-based countries intend to use agriculture as the basis for economic growth. Hazell et al., (2007), argued that, efficiency, equity and poverty issues as the principal considerations for their choice of small farms. They are of the opinion that small scale agriculture is more efficient and would yield greater returns per hectare than large scale farms. This same opinion is shared by Djurfeldt, (2010), who disqualifies the popular myth that "Big is beautiful" especially when it comes to agricultural production in developing countries. Djurfeldt, (2010), also thinks small farms are more rational and efficient than large scale production especially when you compare yields per unit area.

Closely related to efficiency is the aspect of transaction cost. Hazell *et al.*, (2007), differentiated the transaction cost advantage small farms have over large farms base on their ability to reduce particular cost divers like labour cost. Small farms are more labour intensive, making use of the farmer's poor household, as well as labour from their equally poor neighbours. This reduces the transaction cost related to the labour market, as there is almost no cost associated to supervising hired labour, as would be the case with large mechanised farms (*ibid*). Outside workers or employees which large farms rely on are often not strongly motivated and require constant surveillance and a regular pay at the end of the day or a specified period, were as family labour tends to be highly motivated and is prepare to wait until harvested crops are sold before they can receive any form of payment (Djurfeldt, 2010).

Oxfarm International, (2010, 4), in one of its publications on smallholder farmers believes that companies can diversify their portfolio of suppliers by taking advantage of the estimated 500 million smallholder farmers spread across the globe, with farm sizes of less than 2 hectares. By incorporating smallholders into their supply chains, companies may not only improve corporate sustainability and brand development, but they can also increase customer loyalty especially when they communicate how their purchasing choices can improve the lives of poor men and women farmers (Oxfarm International, 2010). There is also an increasing proportion of customers seeking better quality of fresh products with positive health effects, fresh appearanace, environmental friendliness and eating quality (Temu and Temu, 2005). This creats a competitive advantage for companies which incorporate smallholder farmers in their supply chains. The World Bank in its Policy Research Working paper No 4573, also highlighted the fact that smallholder farmers have a competitive advantages in supplying high value markets for horticultural and livestock products, which exhibit alot of dynamism with regards to product standards (Henson et al., 2008). Such advantages may result from their lower cost in accessing and managing family labour. Henson et al., (2008), also identified the phenomenon of emerging new agricultural systems, led by private entrepreneurs in extensive value chains, which constitute many smallholder farmers, supported by a farmer organisation. Such systems have great potentials in enhancing smallholder's capacity in supplying modern procurement systems like supermarkets, and in meeting compliance with emerging food safety and export standards.

Also closely related to the socio-economic considerations for smallholder farmers is the aspect of equity and poverty reduction raised by Hazell *et al.*, (2007). Hazell *et al.*, (2007), are of the opinion that smallfarm households have more favourable expenditure patterns that promote the growth of local non-farm economy, and Nyberg, (2010), believes large scale production focuses on international markets, not the local food needs, which make them an unfavourable alternative for local food security. Smallholder farming strives to maintain and promote traditional food crop production and life patterns where as largescale commercial agriculture creates dependency on an entirely new system, thereby religating traditional production systems and creating a negative social impact on the local host community (Nyberg, 2010).

A petinent socio-political factor which is attracting so much international attention lately and which is now creating interest in smallfarm holdings is the issue of "land grab." Djurfeldt in his article titled " *Land speculations and the rights of the poor*" cited estimate of over 32 million hectares of African farmland reported in media as landgrab, resulting from agreements between governments and foreign investors between October 2008 and 31st August 2009 (Djurfeldt, 2010, 11). This amount of land constitutes a significant 14% of all cultivated land in the Sub-Saharan African region. This issue is raising alot of concern as to whether the establishment of such large plantations are an ideal option for a pro-poor agricultural growth. In a country like Brazil, where there is a noticeable shift from a smallholder dominated

system, with average farm sizes of 2 hectares to the establishment of large plantations of thousands of hectares, resulting to countless smallholders and herdmen have being deprived of their land, and they now constitute a significant proportion of the urban poor (Djurfeldt, 2010). Therefore in trying to solve one problem, another serious one is being created. "As long as the rural population continue to depend for their livelihood and food security on their landm lost of it is likely to have major negative impacts on the local people, despite compensation and creation of jobs promised by large scale agricultural investors" (Nzioki, 2010, 36). Nzioki, (2010) is also of the opinion that smallholders can not effectively negotiate in their favour, when dealing with very powerful national and international investors, nor can they successfully enforce agreements if the investors fail to provide promised jobs and local facilities. Because several researchers and participants at various conferences held to discuss issues related to food security in developing countries, have been very critical towards the leasing or acquisition of large parcels of land by foreign investors for agricultural production as an ideal approach to solving food crisis, Djurfeldt (2010); Hallam (2010); IFPRI (2009); Larsson et al., (2005) and Nzioki, (2010), have proposed new approaches to agricultural development in developing countries that would involve smallholder farmers, ratherthan deprive them of their farmland. Hallam, (2010), while identifying the fact that land acquisition for foreign direct investment have often provoked political, social and economic conflicts, strongly suggest outgrower schemes and contract farming which would be more beneficial and inclusive of smallholder farmers and their associations.

Another political factor which Temu and Temu, (2005), identified which may act in favour of smallholder farmers is the changes in international trading policies and different trade agreements. Temu and Temu, (2005), believe the African Growth and Opportunity Act (AGROA) and the Lome Agreement, have created room for preferential treatment especially of agricultural products from developing countries to American and European markets respectively. In addition to favourable international trading terms, most governments of developing countries now provide condusive environments for investment in the agricultural sector, as most laws governing agricultural businesses are non less restrictive, tax rates have been rationalised and there is a noticeable reduction of export taxes for agricultural products (Temu and Temu, 2005). It is very evident that most policy environments no longer favour large scale farming (*ibid*).

As concerns those environmental factors which are tilting investment interest away from large scale agricultural production, Nyberg, (2010) cited the fact that large scale farming involves extensive use of pesticides, monoculture and over consumption of water, which is also not ecologically sustainable. In addition, large scale production may destroy forest and grazing land, thereby threatening biodiversity and undermining ecological sustainability (Nyberg, 2010).

3.3 Constraints to effective smallholder agricultural production and marketing in SSA

Constraints facing agricultural production in SSA have attracted so much attention from researchers in the past decades, and most of these constraints have been identified as the cause of low farm productivity and consequent low income of most African farmers (Acquah and Masanzu, 1997). These constraints are spread throughout the supply chain of agricultural commodities in SSA, with the most common constraints cited being; inappropriate land tenure systems, lack of R&D and extension services, lack of finance, poor infrastructure, difficulty in procuring inputs, complex government regulations and tax systems, poor institutional arrangements and lack of market information and skills (Acquah and Masanzu, 1997).

3.3.1 Inappropriate land tenure systems

Most countries in SSA suffer from shortage in arable land for food crop cultivation (Maxwell and Holtzman, 1997), and most of the good arable land close to major cities or close to transport and processing infrastructure are usually limited or very expensive (NEPAD, 2004). Ayieko et al, (2006), while analysing land tenure arrangements in Kenya noticed that the traditional inheritance practice in most African countries have resulted in the distribution of smaller and smaller parcels of land, which poses a major setback to farm extension and large scale production. In addition to the above, there is a lack of clear guidelines on land ownership and utilization in many SSA countries. A common case mostly cited is Zimbabwe, where the Land Tenure Commission has failed to provide a sustainable solution to resettlement problems and the right to water (Acquah and Masanzu, 1997). This situation makes it very difficult for communal or small scale farmers to have access to water and arable land (Acquah and Masanzu, 1997). In other countries like Malawi, the government is practising what Holtzmann et al, (1997), refers to as "zoning", whereby certain activities are restricted to certain areas in the cities. This practice has forced most farmers to establish their farms in rural areas which are not properly served by road networks. In Tanzania and Zambia, the state owns all the land in the country, so most of the land used for agriculture belongs to the state, and the farmers are just tenants (Stringfellow, 1996). This law discourages most farmers to carry out long term investments on leased plots as most at times the payback period exceeds the lease, and farmers cannot also use such plots as collateral to apply for credits from financial institutions (Stringfellow, 1996).

3.3.2 Insufficient R&D and extension services

Some researchers on agricultural development in SSA complain of a noticeable bias in government spending on research and extension services in agricultural production (Hensen et al., 2008). Extension services have been classified as inadequate and technical support unavailable from government in most SSA countries (Hensen et al., 2008). In countries like Zambia, extension services are almost absent, where as in countries like Ghana and Zimbabwe, scholars complain that most of the technical support and extension services have mostly benefited the large scale parastatals (Stringfellow, 1996; Hensen et al., 2008). In Zimbabwe, government extension services are the only source from where small scale farmers can get technical services, but they are constantly being discriminated in favour of large scale commercial farmers, so smallholder farmers are not benefiting from any research on improved farm inputs (Acquah and Masanzu, 1997). Left on their own most small scale farmers are not financially strong to support strong research on high yielding seeds, and coupled with the low level of technology in SSA, there exist very weak network of local farmers which can bring any form of technical assistance or provide access to improved inputs and processing (Stringfellow, 1996). Even in situations whereby donor agencies have come in to assist in

funding research, there are so many cases whereby most early studies in new crops and new processing techniques are being applied to an entire subsector (Stringfellow and Coulter, 1997). In a few countries like Ghana and Kenya, where there has been remarkable advancement in the horticultural sector, most extension service officers still face difficulties to widely provide their services in areas where it is highly needed, due to inadequate provision of operating expenses as a result of limited budget allocated by the government (Bingen, 2003). Mozambique and some other central and east African countries are particular cases where there has been a complete breakdown of extension services due to long periods of civil war, resulting to most farmers in rural areas keeping away from their farms (Boughton *et al.*, 2007).

3.3.3 Lack of finance

Lack of access to finance is a crucial constraint to agricultural development in SSA, as identified by a number of researchers (Acquah and Masanzu, 1997; Coulter, 2007). The credit mechanisms in most countries are largely unused or unavailable (Coulter, 2007). Most farmers especially smallholder farmers either lack the knowledge to properly manage credit facilities, or there is poor information on how to access credit facilities (*ibid*). This is a great setback, as there is a great need for huge capital investment if small farmers wish to expand their production capacity, procure seasonal inputs and farm assets. Conditions for granting of credits are designed in such a way to favour mostly large scale farmers, and if at all a small scale farmer succeeds in getting credit, it is just enough to purchase farm inputs and at very high cost of 35%, in some cases in Zimbabwe (Acquah and Masanzu, 1997, 10). In countries like Zambia and Malawi, though the commercial banking system is more developed than in other countries in the region, there is a limitation in savings and investment capital, coupled with high public sector demand for credits, leaving banks with so little to meet private sector demands. Smallholder farmers are only considered for credits after government and prime private sector claims have been satisfied (Coulter, 2007).

Therefore most small scale farmers operate just to maintain basic subsistence as they cannot afford to make long term capital investments (Beintema and Gert-Jan, 2004; Coulter, 2007). The situation in a country like Tanzania is a rather a lack of sources of finance and if at all there is any, it would require a very high collateral (Staatz and Dembele, 2008). Some farmers also complain about the inefficiency in banking services, as banks take so long in clearing especially foreign checks to farmers, thereby slowing down their operations. Farmers in Mozambique as Boughton *et al.*, (2007) gathered, complained of incidence of discrimination in banks as some banks prefer to give credits only to non-agricultural sector. The same situation prevails in other SSA countries like Ghana, Malawi and Kenya, where farmers too complain of the lack of access to credit and finance (Jayne, 1997 and Tollens, 2006). The situation is a bit more complicated in Zambia, where the rate of inflation is relatively high, coupled with a high interest on loans. Farmers therefore find it very discouraging to go for credits, and most commercial bank are also very reluctant to give credit to small farmers for start up, as they know it would be very difficult for them to repay the credits (Tollens, 2006).

3.3.4 Poor infrastructure

The poor state of most infrastructures in most SSA countries is having a severe impact on its agricultural production capabilities. Most SSA countries are noted for their insufficient investment and maintenance of basic transport and communication infrastructure (World Bank, 2002). In most rural areas where most of the small scale farmers have their farms, there is a poor supply of basic utilities like roads, water and telephone, just to name a few (World Bank, 2002). Electricity which is a basic necessity for elementary processing is not readily

available in most rural areas (*ibid*). Therefore farmers face enormous difficulties and risk when transporting their products from production areas to either packing facilities or the market (Abbot, 1995; Jaffee and John, 1995; NEPAD, 2004). Even in situations where the roads exist, they are poorly maintained (Chowdhury *et al.*, 2005). A country like Malawi has very strict rules as to who may engage in the transportation of certain goods and persons, thereby leaving certain areas poorly served with transport services (Chowdhury *et al.*, 2005). Farmers therefore have to transport their produce over very long distances to the nearest roads and in certain cases, carrying the poorly packed produce over rough roads and long distances to markets or export ports reduces the quality of the products (*ibid.*).

Also related to poor infrastructural development is the lack of proper storage facilities. Most airports lack refrigerated storage facilities for perishable goods (Edwards *et al.*, 1997), and it is common to find piles of perishable products either losing their quality or going bad at airports due to improper storage and infrequent flights from most SSA countries to Europe (Edward *et al.*, 1997; OECD, 2008). These transportation difficulties are transferred to farmers in the form of very high cost for exporting goods to European countries and America. Sea freight and air freight vary significantly between different SSA countries. These factors therefore reduces farmers incentives to produce more due to very high marketing margins with other countries due to cheaper transportation cost, thereby giving them comparative advantage.

Another crucial infrastructural set-back is that related to communication technologies. Telephone services are not readily available in most rural areas, making it difficult for most rural farmers to get up to date information about the market, and where these communication services exist, they are very expensive for rural farmers (Bertolini, 2004; Chowdhury *et al.*, 2005).

3.3.5 Difficulty in procuring inputs

Irrespective of suppliers of inputs inability to provide appropriate inputs, due to lack of finance, most farmers are still unable to acquire cost effective farm inputs (Holtzman *et al.*, 1997; OECD, 2008). In a country like Mozambique where the government has liberalised the marketing of farm inputs, the marketing activities are still very inadequate (Firmino, 2000). There is a poor supply of inputs, especially in the northern parts of the country (Boughton *et al.*, 2007; Firmino, 2000). Whenever the inputs are available, the cost is so high due to high cost of importation and numerous government regulations and taxes (Bingen, 2003; Staatz and Dembele, 2008). The Zambian government in an effort to stimulate agricultural production and exporting introduced a drawback program whereby farmers can get a refund of import tariffs on farm inputs after they effectively export their products. But unfortunately, this initiative hasn't been very successful, for according to Chirwa *et al.* (2005), most farmers complain that the waiting periods for repayment are too long and characterised by so much administrative bottlenecks and paperwork.

3.3.6 Complex government regulations and tax systems

Most writers cited the fact that many governments in different SSA countries still have so many different taxes in place, and some of these tax requirements are usually very high for small scale farmers to support, this has made participation in business activities very costly for them (OECD, 2008). In a country like Zambia, the taxes are so high, coupled with high levels of inflation, so most farmers consider evading taxes in order to survive (*ibid*). The most common taxation methods are those whereby taxes are applied at each point of sale, making the prices of the final product so high, and this discourages so many individuals (*ibid*).

In addition to the above, most laws with regards to business operations are generally too old and outdated, but still in force. Most of these laws are not so clear with regards to private sector farming, as most of the laws were enforced after independence, and were largely in favour of parastatals (Maxwell and Holtzman, 1997). Although some SSA governments are trying to reduce the high degree of complexity involve with the registration process for food processing and farming businesses, the procedures still appear very complicated and lengthy to some farmers (OECD, 2008). Most small farmers prefer to remain informal, rather than spend so much time and money to register their businesses, when they are not sure of any significant benefit (*ibid*).

The management of exchange rate to is another area where government regulation in most SSA has been noticeably very poor (Edwards *et al.*, 1997). Most governments have failed in finding equilibrium in exchange rate of their currency (OECD, 2008). There are cases of governments providing four different exchange rates and most businessmen are often confused as to which to apply when doing business. This poorly controlled foreign exchange rate is greatly preventing most unregistered smallholder farmers from importing inputs for their operations (*ibid.*). In addition because of a poorly controlled exchange rate system, most governments do not encourage their citizens to operate overseas accounts (*ibid.*).

3.3.7 Poor institutional arrangements

There are considerable overlaps in the roles and spheres of action for most institutions directly or indirectly involve in agricultural development in SSA. Institution here refer to government controlled structures, Community-Based organizations (CBO), and other Non-Governmental Organizations (NGO). This is a potential problem for it is causing a lot of confusion, and ineffectiveness in their services. Most smallholders too are so confuse as they are not so sure of which institution to affiliate with, as most of their programs turn to overlap (Tschirley, 2007). However, as Bingen (2003), describes it, most CBOs and NGOs have initiated programs which encourage farmers to organise themselves in associations so as to increase their capacity in accessing and delivering appropriate inputs and services. According to Bingen, (2003), this approach could be beneficial to a country like Kenya and Ghana, which has potential markets in Europe for their horticultural products and dehydrated fruits, and also vegetables like papaya and mangos, as well as some exotic products even though their exported volumes have remained small due to poor production response, Glover (1990), also considers poor institutional arrangements as the main reason why most of the exports in agricultural products from SSA is dominated by outgrowers and contract farmers, who acquire products from small scale farmers at very low prices. In Malawi, a country which Jayne and Jones, (1997), thinks could have a great potential for high valued products like chilli peppers, spices and peas, but strangely most of the small scale farmers who carry out production in towns close to the main airport still rely on middlemen to sell their products. Nyoro, (1993); Jayne and Jones, (1997) and Tollens, (1997), believe there is a complete lack of institutional policies for supporting smallholder agriculture in most SSA countries. In Kenya for example, there is an increasing loss of market share for its fresh produce in European markets, due to activities of middlemen who are disrupting the orderly marketing of fresh produce, and they do not have strict respect for quality (Jayne and Jones, 1997; English et al, 2006). The situation in Tanzania is a bit more serious, as for more than 25 years, there has been no active farmer association, as all efforts has been concentrated to the public sector; with a common believe that private sector associations or community-based organisations are considered political and illegal (Chirwa et al., 2005; Collion and Rondont, 2001).

3.3.8 Lack of human capital and market information

This particular constrain is identified by most writers as the main factor responsible slowness of most African to exploit entrepreneurial opportunities (Edwards et al., 1997; NEPAD, 2004; OECD, 2008; World Bank, 2002). There is a common ideology in most SSA countries that civil service salary jobs are the best and most secure (NEPAD, 2004). This ideology can be traced back to colonial and post independent eras, whereby most Africans were made to understand that making money privately was considered politically incorrect (ibid). In countries like Tanzania, according to Springfellow and Coulter (1997), a majority of Tanzanians still consider state employment as their only option and farming is considered a mean job, only for illiterates in rural areas, while businessmen are considered crooks. This has greatly affected the desire by most Africans to seek for knowledge and training in business management and agricultural operation skills (Tollens, 2006). Most farmers do not yet consider farming as a potential economic activity (Tollens, 2006; OECD, 2008). As a result, the level of technical and managerial skills of most small- scale farmers are considered very low and labour is mostly family labour, with no specialised training on farm operations (OECD, 2008). This low level of education of most small scale farmers coupled with inefficient or inadequate communication facilities is greatly limiting the ability of most small scale farmers to receive and utilize market information (Neven and Reardon, 2004; Henson et al., 2008).

According to Tschirley, (2007), most SSA countries offer great opportunities for agribusiness production in high value products. But despite these opportunities, most smallholder farmers cannot meet the sophisticated demand requirements and increasing need for accountability for production practices expected by most customers (Tschirley, 2007; Henson *et al.*, 2008). The participation of smallholder farmers in outgrower arrangements in certain countries is also not feasible, due to stringent standards imposed by exporters (English *et al.*, 2006).

The principal disadvantage of the absence of knowledge in production of appropriate products and markets, as well as inadequate managerial capabilities and lack of experience in trading and business operations as perceived by most researchers is a great production driven attitude whereby, most smallholder farmers engage in considerable investment in agriculture without any prior market information (Bertolini, 2004). This knowledge is very important especially with the existence of more stringent market requirements and standards with regards to quality and food safety (Bertolini, 2004). Unfortunately, even in situations where farmers have tried to solve this problem by recruiting professionals, the labour laws in most countries require a minimum wage which cannot be supported by smallholder farmers, so they turn to rely only on family labour and government extension services (English *et al.*, 2006)

3.4 Potential areas for intervention in smallholder agricultural development in SSA

Based on research findings, a few areas of intervention across different countries have been proposed by some authors like Coulter, (2007) and Tschirley, (2007). Even though each SSA country has its unique characteristics and different levels of agricultural development and marketing challenges, which calls for specific kind and level of intervention, in general some of the recommended areas of interventions appear to be applicable across countries. Some of these areas are;

- Providing training in agribusiness management and operational skills (Tschirley, 2007)
- Improving access to financial services (Coulter, 2007)
- Providing support for development associations (Coulter, 2007)

• Enhancing research and infrastructural development (Chowdhury et al., 2005; NEPAD, 2004; OECD, 2008)

Each of these suggested areas for interventions are discussed in greater details below (3.4.1 - 3.4.4).

3.4.1 Providing effective training in agribusiness and operational skills.

Almost every writer identifies the need for most farmers to acquire the know-how in farm operations, as well as basic knowledge in farm and business management. Farmers must be able to understand export markets and should be aware of demand requirements, pricing and financial management (Tschirley, 2007; Henson *et al.*, 2008). There is a general recommendation for the provision of practical courses in agribusiness and related fields in universities and vocational institutions. Institutions should develop courses for technicians and middle management personnel for agricultural enterprises (Bertolini, 2004; English *et al.*, 2006; Tschirley, 2007; Henson *et al.*, 2008).

3.4.2 Improving access to financial services

This particular constraint has been a little bit tricky, for it is usually very difficult to set up proper credit schemes which can meet the needs of both creditors and borrowers. Most formal financial institutions in SSA consider farmers, especially smallholder farmers as high risk borrowers, due to their lack of adequate collateral and sound knowledge in business principles (OECD, 2008; Coulter, 2007). Many proposals made in this area have been very shallow. A few cases of very good credit schemes initiated by some commercial banks have been suspended, due to costly follow-up procedures (Coulter, 2007). An example cited by Tollens (2006), is the case of the Prudential Bank in Ghana, which had put in place a model for credit extension to worthy smallholder farmers, but could not pursue it effectively, because the measures put in place to follow-up poorly performing farmers is so costly. So far donor credit schemes like the GTZ credit scheme or the EU's "Credit for the Poor" projects are the most cited projects as highly recommended for smallholder farmers. Most writers go further to still urge the EU to assist rural community banks and Bank associations in different SSA countries to identify innovative ways to extend affordable credit to rural farmers (Edwards et al., 1997; Tollens, 2006; Coulter, 2007; Staatz and Dembele, 2008).

3.4.3 Providing support for development associations

The existence of efficient farmer associations has a great potential of boosting smallholder farmer's economies of scale, thereby strengthening their links with market channels. Development associations too may have the potential to help farmers attain the level of critical mass necessary to deal in powerful market channels (Stringfellow and Coulter, 1997; Chirwa *et al.*, 2005). According to Stringfellow and Coulter (1997), the emergence of small scale farmer associations and marketing cooperatives in primary processing activities like storage, grading and packaging, are adding more value to produce by small scale farmers. Whatever their level and strategy, private sector led groupings or associations have an advantage in achieving optimum benefits for their members (Coulter, 2007).

A form of association for farmers recommended for several SSA countries is an association that provides integrated services, from financial to management assistance (Coulter, 2007). A good example is mentioned by Neven and Reardon (2004), is the Kenya KEDs project which has created a sustainable agribusiness service centre for farmers. The project helps farmers share the risk involve in acquiring inputs, packaging, storage and marketing of smallholder horticultural produce (*ibid*). Most of these associations can also act as facilitators for

individual farmers at start-up and growth of their businesses as well as to secure a higher price for their produce (Neven and Reardon, 2004; Tschirley *et al.*, 2004).

3. 4.4 Enhancing research and infrastructural development

Government intervention is generally recommended in road improvement, restructuring of sea and airports, possible privatization of inefficient public telecommunication and transport parastatals, building of irrigation systems, and also in improving the availability of information on wholesale commodity prices. This could all be done through the ministry of agriculture or related organs. According to Chowdhury *et al* (2005), the government should also develop enclave areas with great agricultural potentials; provide vital services that cannot be effectively handled by the private sector for example pesticide regulations and infrastructures both physical and institutional to enable horticulture farmers to meet the requirements of European markets. The building of relevant processing and packaging operations around core farmers is also recommended (World Bank, 2002; Chowdhury *et al.*, 2005). Acquah and Masanzu (1997), further suggested that both the private sector and NGOs should be allowed to get involved in the provision of infrastructure.

As concerns intervention in basic research and development, some writers recommended the building of suitable integrated research and development centres capable of developing products with natural comparative advantages, such as encouraging research in nut crops and some spices (NEPAD, 2004; OECD, 2008). The OECD (2008), cited the fact that the already existing technical research in horticulture in some countries should be greatly encouraged and better channels put in place for information management and dissemination. Edwards *et al.*, (1997), on their part recommended more sophisticated expertise in the handling of tropical fruits, due to high requirements for quality.

It is also worth mentioning that a few researchers have also proposed possible areas for diversification by small scale farmers, like encouraging farmers to aim for new markets offered by the middle east, where transportation cost is relatively minimized, and also product diversification into other high value products like nut crops and spices, with relatively slow rates of perishability (Chowdhury *et al.*, 2005; NEPAD, 2004).

3.5 The role of women in smallholder agriculture in SSA

"Women play a vital role in development in less-industralised societies, regardless of economic development level, population pressure, democratization, globalization or origin. Empowering women and incorporating gender into development programs not only can improve women's life chances, but also has a spin-offs that benefit society as a whole," particularly children who are the most vulnerable segment of the world's population. (Scanlan, 2004, 1822). Scanlan, (2004), believe that by improving the life chances of women imparticular, there is a general increase in welfare of the society. Women play an essential role in most world's food production (*ibid*). Their role can be withness from preparation of land, acquisition of inputs, production, processing and marketing of agricultural products (*ibid*).

Studies have revealed that women do not only provide a significant share of farm labour, but they also play a major role with regards to decision making at farm level. They are either seen as farm mangers on their own farms, or as managers of a household farm (Quisumbing, 1994). They assume such roles either because of their specific skills or due to the absence of

their husbands who are employed in urban areas (*ibid*). Recent findings on the role of the Nigerian Igbo women in crop production, show increased participation of Igbo women in agricultural production due to the fact that most men have turned to non- farm activities and waged employment (Ezumah and Didomenico, 1995). In most developing countries, women devote countless hours in food production, ranging from planting, harvesting, herding and going to the market to either sell or buy (Scanlan, 2004). Alene *et al.*,(2008), recommends increased access to production inputs and support services to women farmers, as there are potentially large output and welfare gains when more women are in agricultural development programs. While analysing the economic efficiency and supply response of women as farm managers in Kenya, Alene *et al.*, (2008), also realised that women are also very responsive to price incentives interms of output supply and input demands.

Women are more involve in farm management now than previous generations (Farmer-Bowers, 2010). Women are increasing their participation in running farming businesses and making money from farming. Women influence decisions about a family farm based on intrinsic interest, family considerations, personal skills and resources, as well as social factors. With each womans influence in her family unique (Farmer- Bower, 2010). Adesina and Djato, (1997, 48), after analysing data collected in 1993-1994 from a random sample of 347men and 63women rice farmers in three northern districts of Ivory Coast, found out that eventhough both men and women had an almost equal access to extension services, women still face special difficulties as farm managers due to their lack of access to formal education and credit. However, irrespective of their limited access to education and finance, women are still able to mobilise labour for their farm from their informal intrahousehold linkages and other female enterprises (Ezumah and DiDomenico, 1995). In a study on the relationship between gender and farm efficiency using the profit function method, Adesina and Djato, (1997, 52), concluded that there is no economic rationale why rice development strategies should favour male farmers in Ivory Coast, for with equal access to similar inputs, both male and female farmers have equal levels of economic efficiency. Women are now very interested in education and in improving their skills and competences (Farmar-Bower, 2010).

In most areas of Ethiopia, women are soely responsible for garden plots, where they plant fruits, vegetables, root crops and other non-food plants like spices (Tsegaye, 1997). Rural women in Ethiopia also have amazing knowledge in the identification and characterisation of the various crop plants they deal with, and play a very vital role in the conservation of biodiversity (Tsegaye, 1997). Women also have important labour roles in animal production (Ajala, 1995). However their role varies according to type of animal, type of production as well as cultural factors. In some parts of Kenya for example, women are found managing large flocks of sheep and goats (*ibid*). In Northern and Central Somalia, trading in Sheep and Goat is exclusively in the hands of women (Reusse, 1982). While trying to identify the main task of women in goat husbandry in Southern Nigeria, Ajala, (1995), realised women did not only owned most of the goats in the family herds of several families, they are also responsible for feeding the goats, ensuring the goats are in a safe place at night, as well as marketing of the animals for immediate cash for family use.

4 A theoretical framework

The following chapter is a presentation of a theoretical framework that makes use of different theories, models and constructs on agribusiness development to address some of the constrains encountered especially by smallholder farmers in SSA. The various theories, models and constructs are needed in chapter 6 to analyse the empirical data from the various case studies. The chapter begins with a presentation of theories on stakeholder identification and salience followed by transaction theory, the concept of collective action, and selected concepts on business models creation like Oxfam's five principles of linking smallholders to markets and the new business model assessment framework by Oxfam.

4.1 Stakeholder identification theory

The nature of the relationship stakeholders have with an organisation might affect the success or failure of a business strategy (Johnson et al., 2008). Decisions managers make on the purpose and strategy of their organisation are strongly influenced by the expectations of different stakeholders. Meeting the expectations of these different stakeholders is a challenge to managers. This challenge is so great and managers have to be so skilful in handling the various conflicting challenges (ibid). They would have to take a view on stakeholders with great influence, the expectations they need to pay attention to, and the extent to which stakeholder attention and influences vary (ibid). By being able to understand how much each group of stakeholders is determine to make their expectations reflect in the organisation's purpose and strategic choices, managers can easily identify possible blockers and facilitators of a strategy, and how to respond to them (ibid). There has however been no consensus on "who" or "what" managers should consider as stakeholders and how much attention should be given to them (Mitchell et al., 1997). Different organisations may need to address different stakeholder needs based on their strategic choices, as well as thesame organisation may also need to address different stakeholder needs for different projects (Johnson et al., 2008; Mitchell et al., 1997). As identified by Mitchell et al., (1997), the crucial decision that most managers need to make remains who to consider as a stakeholder.

4.1.1 Who is a stakeholder?

A stakeholder has been defined by Freeman, (1984, 46) as "any group of individuals who can affect or is affected by the achievements of the organizations objective." Rainey, (2006, 711), defines a stakeholder as "any individual or group that is directly or indirectly affected by the products, programs, processes and/or systems, but does not directly benefit as an economic participant such as a customer or supplier."

Mitchell et al., (1997), differentiates definitions of stakeholder by different scholars as either "Broad" or "Narrow" views. Scholars like Freeman and Reed, (1983) and Nasi, (1995), which Mitchell et al, (1997), identifies as having a narrow view of who or what should be considered as a stakeholder, focus their definition of a stakeholder interms of their necessity for the firm's survival. They identify a stakeholder as those directly relevant to a firm's core economic interest, and these are the groups of people managers should focus attention, time and resources to. Narrowing the range of stakeholders requires carefully applying some generally acceptable and justifiable sorting criterias (Mitchell et al., 1997). Most criteria are relationship based, such as the existence of an implied or legal contract, an identifiable power-dependence relationship, an exchange relationship, and other claims based on the existence of attributed legal or moral rights (ibid).

The broad view on who and what is a stakeholder is offered by Brenner, (1995); Donaldson and Preston, (1995) and Freeman, (1984). They based their definition on empirical reality that companies can be affected by almost everyone, and they can also vitally affect almost everyone (Mitchell *et al.*, 1997). They believe managers should be able to recognise and respond systematically to those set of entities or groups who may have or may not have legitimate claims but are able to affect and are affected by firms (*ibid*).

4.1.2 Stakeholder identification and salience

Stakeholders can be identified by their interest in an organisation, whether or not the organisation has any corresponding interest in them (Donaldson and Preston, 1995). "The interests of all stakeholders are of intrinsic value. That is each group of stakeholder merits consideration for its own sake and not merely because of its ability to further the interest of some other group such as the shareowners" (Donaldson and Preston, 1995, 67). Mitchell et al., (1997), are of the opinion that stakeholders could be identified from different perspective. They could be owners or nonowners of the firm, owners of capital or owners of tangible and less tangible assets, right-holders, moral claimants, contractors, actors or those acted upon by a firm's activity, those having a voluntary or involuntary relationship with the firm, resource providers to the firm or those dependent on the firm's resources, risk-takers, influencers and those to whom the agent-manager bear a fiduciary duty (Mitchell et al., 1997, 854).

Johnson *et al.*, (2008, 188), presents a simplified structure of the stakeholders of a large organisation, as shown in Figure 4.1 below.



Figure 4.1: Stakeholders of a large organisation in Johnson et al., (2008, 154).

From Figure 4.1 above, Johnson *et al.*, (2008), classifies the external stakeholders of a large organisation into three broad categories; Economic stakeholders (like suppliers, competitors and distributors), socio-political stakeholders (which include government agencies, regulators, and policymakers) and technological stakeholders (such as standard agencies, key adopters and owners of competitive technologies). Mitchell *et al.*, (1997), believes persons, organisations, institutions, groups, neighbourhoods, societies and even the natural environment can be qualified as actual or potential stakeholder.

Going beyond the question of who is a stakeholder or non-stakeholder is the issue of stakeholder salience, which explains to whom and to what should managers actually pay attention and the degree to which managers can prioritise competing stakeholder claims (Mitchell *et al.*, (1997). Mitchell *et al.*, (1997), classifies stakeholders based on three attributes; power, legitimacy and urgency.

Power arises when one social actor "A" in a relationship is able to get another social actor "B" to do something that social actor "B" would if otherwise not have done (Mitchell *et al.*, 1997). Power is variable, and may vary from non-existent to complete; it may be gained and lost (*ibid*).

Legitimacy on its part has been presented by Mitchell et al., (1997, 869), as "a generalised perception or assumption that the actions of an entity are desirable, proper or appropriate within some socially constructed system or norms, values, beliefs and definitions." Legitimacy like power is variable, and claimants may perceive the legitimacy of their claims differently, as well as managers may have varying perceptions about stakeholder legitimacy (ibid).

Urgency refers to "the degree to which stakeholder claims call for immediate attention (Mitchell et al., 1997, 870)."

These three features of stakeholder attributes as identified by Mitchell *et al.*, (1997), individually may not be perceived correctly by stakeholders, managers and others in the firm's environment except when combined with another attribute. For example, power may only gain authority through legitimacy and is exercised as urgency. Legitimacy gains rights through power and is voiced through urgency and a combination of legitimacy and urgency promotes access to decision making channels (*ibid*). Figure 4.2 below depicts the outcome of a combination of the three features of stakeholder attributes and the various related type of stakeholder groups as presented in Mitchell *et al.*, (1997, 874).

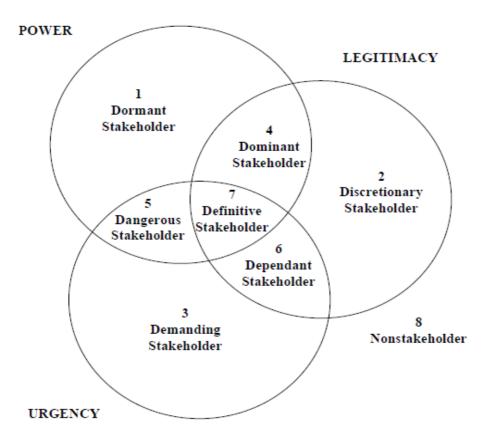


Figure 4.2: Stakeholder typology (Mitchell et al, 1997, 874).

In Figure 4.2, Mitchell et al., (1997), presents seven (7) types of stakeholders; dormant stakeholders, discretionary stakeholders, demanding stakeholders, dominant stakeholders, dependent stakeholders, dangerous stakeholders and definitive stakeholders. Dormant stakeholders possess power, but have no legitimate nor urgent claims. Discretionary stakeholders have legitimate claims, but with no power to influence the firm and their claims are not treated with urgency. Demanding stakeholders have urgency attribute but possess neither power nor legitimacy to push their claims. Mitchell et al., (1997, 875) refer to them as" the mosquitoes buzzing in the ears of managers." Dominant stakeholders are the group of stakeholders who are both powerful and with a legitimate claim. These are the group of stakeholders who receive much of the manager's attention and have some formal mechanism in place that acknowledges their relationship with the firm, for example stockholders. Dependent stakeholders are those groups of stakeholders with an urgent and legitimate claim but have little or no power to enforce their claims. They depend on the power of other stakeholders or the manager to push their claims. Dangerous stakeholders are those groups of stakeholders who may be coercive and possibly violent. They possess both urgency and power attributes, but their claims lack legitimacy. Possible examples of manifestation by dangerous stakeholders cited by Mitchell et al., (1997) are employee sabotage, wildcat strikes and terrorism. Definitive stakeholders by definition exhibit both power and legitimacy and their claims are treated as urgent. This group of stakeholders are given priority and receive much attention from managers.

4.1.3 The power and interest matrix

Johnson *et al.*, (2008), use the power and interest matrix to describe how stakeholders can be classified in relation to the power they hold and their interest in supporting or opposing a particular strategy and how managers should respond to them. Figure 4.3 below is a diagrammatic representation of the power and interest matrix presented in Johnson *et al.*, (2008, 156).

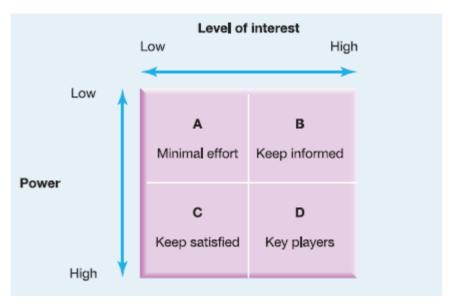


Figure 4.3: Power and interest matrix (Johnson et al., 2008, 156).

The matrix indicates the type of relationship an organisation needs to establish with the group of stakeholders in the various quadrants, by trying to ensure formulated strategies meet expectations of various stakeholders (Johnson *et al.*, 2008). Stakeholder group in quadrant D (key players) are of major importance, they could be major investors like major shareholders or government funding agencies, with a lot of power. Johnson *et al.*, (2008), characterises the stakeholder group in quadrant C as relatively passive, though they may suddenly reposition to quadrant D if they realise their level of interest is underrated by management. Institutional shareholders such as pension fund and insurance firms mostly fall into this category. The stakeholder group in quadrant B though with little power can always influence the attitude of more powerful shareholders in quadrant D and C, so managers are adviced to always keep them informed. Possible examples are community groups. Quadrant A constitute stakeholder groups which do not receive so much attention from management because they possess little or no power and show little or no interest in the organisation.

It must however be emphasied that the kind of relationship an organisation has with the various group of stakeholders in the different quadrants and how managers handle the relationships will depend greatly on the governance structure operating within the organisation, and its stance on corporate responsibility (Johnson *et al.*, 2008).

4.2 Transaction cost theory

The theory of transaction cost economics is always useful when there is a need to analyse firm's boundary and property right issues (Williamsson, 1985). Transaction cost economics gives an insight into markets and mechanisms involve in the exchange of goods and services (*ibid*). Transaction costs have always been linked to the determination and distribution of property rights, the role of middlemen and medium of exchange (Coase, 1988). The transaction cost concept highlights the idea of bounded rationality and opportunism (Williamson, 1996). Bounded rationality assumes the economic agents intend to be rational but have limitations (*ibid*), This limitations are the reason for the need of property rights which must be protected (Coase, 1988).

Allen, (1999), while trying to establish a definition of transaction costs, identified the prevalence of two definitions in existing literature on transaction cost. One of them which he

classifies as "neoclassicals" defines transaction cost as a cost which only occurs when a market transaction takes place. The other group which he classified as "property rights" has a definition which relates transaction cost as resulting from property right problems. Allen, (1999), also cited Adams Smith in his discussion on foreign trade, endowments and corporate ownership, who believes transaction costs, occurs due to high information cost and the ability of individuals to exploit others who are ignorant of their own advantages. Because individuals cannot foresee every possible outcome of an exchange, they are limited in their ability to formulate in advance responses to all future eventualities (Cook, 1995). With this assumption, all contracts are therefore unavoidably incomplete; and may require institutional arrangements which will facilitate knowledge processing, settlement of disputes and adaptation to externalities which are now very important elements of economic and organizational theories (Cook, 1995). Kherallah and Kirsten, (2001) believes its because of the existence of imperfect information about the future that contracts are necessarily incomplete, and if people were never opportunistic, incomplete contracts would never meet enforcement problems.

However, in most transactions, one party in the transaction may know more than the other, and the less knowledgeable party would not want to be exploited because of ignorance (Cook, 1995). Contracts may become inevitable. But contractual issues have always resulted in a third cost dimension, which is increased governance cost (*ibid*). The effectiveness of any type of contract is limited by factors such as bounded rationality, opportunism, moral hazards, adverse selection and difficulties in monitoring and control (Milgrom and Roberts, 1992). Bounded rationality in transaction cost economics raises the possibility of opportunistic behaviour as well as self-interest in every transaction. Opportunism according to Williamsson, (1985), refers to the deliberate distortion or incomplete disclosure of information by one party, in an effort to mislead or otherwise confuse one of the parties in an exchange.

The idea of transaction cost theory can be better understood from 3 dimensions; the frequency of the transactions, the level of uncertainty surrounding the transactions, and the degree of asset specificity (Williamsson, 1996). As the frequency of every exchange increases, so too does the costs of negotiating, monitoring and enforcing the exchange between the parties to a transaction while the level of efficiency of the transactions decreases. On the otherhand, as the level of uncertainty surrounding a transaction increases, the market structure becomes less attractive, especially when uncertainty leads to renegotiation of costly contracts which may result to opportunistic behaviours. Externalities on their part may push vertical integration as a firm tries to guard against negative externalities imposed by participants in adjacent markets. The degree of asset specificity may result in transaction cost especially for such transactions which have technologically separable interfacies, implying one stage of an activity terminates and another begins (*ibid*).

Transaction cost economics is especially relevant when analysing agricultural markets in developing countries (Kherallah and Kirsten, 2001). The agricultural sector has become so globalised such that it is preferable to treat every transaction as a unit of analysis (*ibid*). In the case of smallholder farmers in Sub Saharan Africa, Makhura *et al.*, (2001) identifies transaction cost to constitute the cost of searching for trading partners, cost of screening the trading partners, bargaining cost, monitoring cost, enforcing cost and the cost associated with the reorganisation of household labour and other resources. The transaction cost framework can also contribute in explaining the choice of contracts suitable for small farmers and local traders, as well as small farmers and/or local traders with multinationals (Kherallah and Kirsten, 2001). Especially now, when there is an increasing need for greater coordination, trust and relationships, vertical linkages, information asymmetries and strategic alliances (*ibid*).

The transaction cost economies theory as it can be deduced from the analysis of Kherallah and Kirsten, (2001); Makhura *et al.*, (2001) and Williamsson, (1996), could be useful in explaining the reasons for some of the problems encountered by small farmers in an exchange, but it doesn't propose alternative courses of action. Markelova *et al.*, (2009), believes an alternative course of action for small farmers to overcome or reduce transaction cost could be collective action.

4.3 The concept of collective action

Collective action initiatives may arise from a voluntary action by a group of individuals (in this case farmers), who share a common objective (Meinzen et al., 2002). The common objective could be to access technology, efficient and sustainable resource or market access (ibid). Kayobyo et al., (2010), cited collective action as an option which can help smallholder farmers meet basic market requirements for high value products such as minimum quantity, quality and frequency of supply, which they may be unable to achieve as individuals. Governments and some development agencies especially in developing countries are placing considerable emphasis on collective action as a strategy to effectively engage smallholder farmers in new markets (*ibid*). Through farmer organisations, smallholders may have a way to participate in markets more effectively (Markelova et al., 2009). Collective action and cooperation could serve as a crucial mechanism through which smallholder farmers can gain access to vital resources and markets (Thorp et al., (2005); Markelova et al., (2009)). Resource management and market access are identified as potential obstacles for smallholder development, Kherallah et al., (2002); Markelova et al., (2009) and Thorp et al., (2005). They believe collective action can help smallholder farmers to reduce some of the barriers to entry into markets and also improve on their bargaining power. It is also important to understand under what conditions farmer organizations and collective action are feasible and how should they be established and maintained.

4.3.1 Determinants of success of collective action

Existing literature have identified a few aspects as vital for the success of any collective action initiative and farmer organization. These factors for the purpose of convenience are grouped into 6 broad areas; group characteristics, type of products, type of market, institutional arrangements, facilitators and external environment.

> Group characteristics

Internal group composition is an important aspect which determines the success of a producer group (Markelova and Meinzen-Dick, 2009). Group size, degree of heterogeneity, boundaries and social capital are very important for the success of any collective action (Markelova *et al.*, 2009). Groups with members of thesame socio-economic status is most likely to be more stable and effective (Markelova and Meinzen-Dick, 2009). Kayobyo *et al.*, 2010), highlights the idea of group homogeneity, and proposes that farmers should form groups based on a common interest and trust. Collective action especially for marketing purpose may also be greatly facilitated in pre-existing social groups which is build on shared norms and social capital. Clearly defined group boundaries and tighter membership rules would greatly facilitate collective action and facilitate group effectiveness, eventhough this may exclude some poor members (Markelova *et al.*, 2009). Markelova *et al.*, (2009), are of the opinion that external programs should not push collective marketing activitives on pre-existing social groups, unless the group members want to market collectively. Interdependence amongst members is a crucial aspect for the success of any collective action (*ibid*).

Group size is one of the aspects of group characteristics raised by Markelova *et al.*, (2009) and Kayobyo *et al.*, (2010). Though larger groups are more likely to benefit from economies of scale in marketing, members in small groups are more close to each other than in larger groups (Coulter *et al.*, 1999). Markelova *et al.*, (2009, 2), proposes small group sizes of 20 - 40 members. Small groups with membership of 10 to 30 members have an advantage of enhancing face to face interaction between members, thereby reducing the scope of conflicts, and also facilitate despute resolution (Kayobyo *et al.*, 2010, 13). This is most likely to have appositive impact on management, monitoring and coordination cost (*ibid*).

As earlier mentioned, the success of any collective marketing strategy depends greatly on the willingness of the farmers to adopt decision making and management systems based on trust and common goals. The adoption of a democratic governance leadership structure and a transparent management system are key features which must be addressed inorder to encourage participation and to build trust amongst members (Kayobyo *et al.*, 2010). A skill wide base of leadership skills most exists for the farmer group to be able to maintain market networks (*ibid*). There is usually a natural tendency for leadership to evolve in groups with internal differentiation in age and wealth (Markelova and Meinzen, 2009). Dedication and commitment of the leader are very vital for farmer groups to access and maintain links with markets especially when dealing with higher value markets. Particular traits of the leader of a group are also very important for collective action (Markelova *et al.*, 2009). The leader must be trusted by the members, and have the necessary skills to motivate members and create business links with outsiders. The leader needs to be more vigilant to ensure that problems are solved as they emerge (Kaganzi *et al.*, 2006).

> Type of product

The type of product has an influence on collective marketing. There are significant differences in the marketing of staple foods, perishable crops and cash crops. Markelova *et al.*, (2009) classifies staple crops as bulky but relatively easy to store and transport, compared to perishable crops. Cash crops on the otherhand require high degree of processing and are often for export. Collective action is more advantageous for producers of staple crops, because they have an advantage of bulking, storage and inputs (*ibid*). Perishables usually require a greater technical expertise and updated market knowledge which smallholders may not have. Collective action is necessary for technical expertise, access to equipments, transport and for market knowledge. High value products usually involve processing and require greater technical assistance due to their perishable nature, but may offer greater returns to collective marketing than staple crops (*ibid*).

> Type of market

Collective marketing offer more significant benefits in allowing smallholders to reach larger urban, regional and international markets. By acting collectively, farmers are able to reach the required quantity and quality standards necessary to supply most international markets and also to cope with transportation and storage issues (Markelova and Meinzen-Dick, 2009). Smallholders face greater challenges to access markets with very long market chains. Local markets on the otherhand are easier to access and offer lower potential gains (Markelova *et al.*, 2009). Collective action may therefore be recommended if farmers need to access markets with longer market chains and greater potential gains (*ibid*). National markets now offer higher returns especially with the rapidly growing supermarket chains and restaurants. Exports markets may offer higher returns but also present some challenges to smallholders' interms of quality, transportation and other market risk. Collective action may enable smallholders tap into higher value distant markets (*ibid*).

Collective action or organising farmers into groups can also be detrimental due to lack of incentives especially when increased supply is not matched by increase in demand and prices (Kaganzi et al., 2006). "Collective action needs to provide tangible profitable benefits if it is to be effective or sustainable (Kaganzi et al., 2006, 14)." Collective action may also be necessary to overcome the high transaction cost involve in marketing underutilized varieties and species of products. Such products always require new skills from farmers and outside agents inorder to expand their markets (Markelova et al., 2009)

> Institutional arrangements

Kaganzi et al., (2006), recommend participatory learning approach in interventions related to collective marketing engagements when dealing with farmer groups, for this strengthens the prospects of sustainability, as farmers become part of the learning and decision making process in new interventions, ratherthan mere recipients of information and guidance. Rules designed within the group and which adapt to the local context are easily understood and followed, and contribute more to the effectiveness and sustainability of any collective marketing efforts than rules which are designed outside and imposed on the group (Markelova and Meinzen-Dick, 2009). Kayobyo et al., (2010), proposed the fact that farmer group empowerment should address gender concerns, as this builds the organisations capacity to understand and address the interest of men and women as well as youths. Markelova and Meinzen-Dick, (2009), call for institutional arrangements that involve state agencies, companies, NGOs and producer organisations, as this would take care of all the various relationships along the supply chain, and ensure timely provision of business development services and funding where necessary.

> Facilitators

The ability of farmers to organise and learn new skills and innovations still high depend upon effective and longterm support from service providers (Kayobyo *et al*, 2010). Facilitators would smooth the process by which smallholder farmer groups overcome barriers to entry into high value markets such as financial constraints, information asymmetrics and technical capacity (Markelova and Meinzen-Dick, 2009). Many experts have reported collective action and farmer organisations to have greater potentials to enhance farmer's access to markets, but usually smallholder farmers can rarely self-organise to meet the level of formalities required to supply high value markets (Markelova *et al.*, 2009). Markelova *et al.*, (2009), highlights the fact that most cases of successful collective action have been catalysed by a facilitator who provides information, technical assistance as well as builds both the human and financial capacity of the farmer group.

Eventhough most literature acknowledges the importance of a facilitator, the important remains on who (public or private sector) is best positioned to take the role of a facilitator (Chirwa *et al.*, (2005); Markelova *et al.*, (2009); Thorp *et al.*, (2005)). Some critics like Markelova *et al.*, (2009), believe public intervention may not be sustainable, as there is usually inadequate feedback to providers of services on whether their services are appropriate or not. Also, state provision of business development services are highly subsidized, and this may distort market prices (*ibid*). Private individuals on the otherhand seeking to organise farmers may be doing so primarily to increase their own profits (*ibid*).

NGOs have been cited by Markelova and Meinzen-Dick, (2009), as best suited as facilitators of collective action. Inaddition to having a stated development agenda, NGOs work on the ground and are more likely to understand the context and origin of the existing social capital that would provide the basis for the formation of any marketing group (*ibid*). NGOs facilitating collective action should have clear exit strategies, as this is critical for

sustainability of any collective action initiative (Kayobyo *et al.*, 2010). NGOs should reinforce initiatives which build the capacity of farmer groups to be able to conduct business on their own. NGOs are best suited in facilitating collective action around marketing processes ratherthan providing direct financial assistance (Markelova and Meinzen-Dick, 2009). NGOs maybe tempted to intervene too actively to the extend of bailing out farmer organisations with financial difficulties (Berdegue, 2001).

Farmer organisations should be able to ensure clarity of services provided by facilitators and their cost implications (Kayobyo *et al.*, 2010). Information on cost associated with providing services to support collective action should be clarified, as this helps to ensure sustainability of collective action once subsidies provided by promoter agencies are no longer available (*ibid*).

> External environment

The market and the state are two major aspects of the external environment that may have significant influence on the success of any collective action (Thorp *et al.*, 2005). Group formation for any form of collective action cannot be successful within the context of state hostility or microeconomic instability (Markelova *et al.*, 2009). Good governance and a reliable legal and credit system would undoubtedly increase economic opportunities for smallholders, thereby encouraging them to join together and take advantage of these opportunities (World bank, 2001).

4.4 The business model concept

As proposed by Zott *et al.*, (2010, 6), with a good business model managers should be able to answer Peter Drucker's age old questions about who is the customer? What does the customer value? How can we deliver value to customers at an appropriate cost and how do we make money in this business? In responding to these questions, Oxfam proposes five principles for adapting a business model that can link smallholders to markets, and an assessment framework for assessing its feasibility. The five principles and the assessment framework are presented in chapter 4.4.1 and 4.4.2 below.

4.4.1 Oxfam's five principles for linking smallholders to markets

Oxfam international while adapting business models to incorporate smallholders into supply chains have advanced five principles that form a framework which can best engage smallholders in dynamic markets. The five principles in questions include; Chain wide collaboration and innovation, market linkages, fair and transparent governance, equitable sharing of costs and risks and equitable access to services (Oxfam, 2010).

Chain wide collaboration and innovation

This principle stresses the movement away from business models which focuses on individual firms, with the existence of clear cut boundaries between the role of the firm and the role of partners and clients to the development of models which encourages chain-wide processes involving multiple actors (Oxfam, 2010). Interdependence and collaboration among the different actors is essential for the identification and resolution of problems relating to commercial and social performance (Oxfam, 2010). Vorley *et al.*, (2009) believes a collaborative network is necessary when dealing with perishable commodities with special food safety and quality requirements.

Market linkages

Oxfam, (2010) and Vorley *et al.*, (2009), have identified market linkages as a common weak point between smallholders and formal markets. Market linkages must provide a consistent supply of quality and safe products for buyers at a competitive price. Direct communication must exist between producers, suppliers and buyers to ensure stability in demand and supply. Where direct collaboration between a single producer and buyers is not feasible or scalable, group organisation can increase farmer's incentives to cooperate and act as a single supplier (Oxfam, 2010). Market-oriented NGO's can also assist in facilitating farmers in developing organisations that would establish an attractive and ethical source of supply from farmers (*ibid*). In some situations, intermediaries may be required to aggregate production from small-scale growers and also provide support and services which ensure quality and consistency of production (*ibid*).

➤ Fair and transparent governance

"Fair and transparent governance of the supply chain is important in ensuring better quality and consistency of production, and more stable benefits for producers (Oxfam, 2010, 11)." This principle proposes the existence of clear and generally agreed terms of trade, pricing structure and quality standards throughout the supply chain from the outset. Oxfam, (2010), believes when farmers act individually, they are hindered by the lack of business expertise and market knowledge, so this makes them susceptible to exploitative contracts of trade. But when contracting as an organised group of farmers, there is the existence of transparency and smallholders can negotiate better prices and terms of trade (Oxfam, 2010).

> Equitable sharing of costs and risks

This principle identifies the fact that lead firms usually have a market advantage of access to customers and usually take much of the profit, while smallholders and intermediaries borne much of the risk related to production and other investment cost (Oxfam, 2010). Risk sharing should be equitable throughout the chain, accompanied by better communication about the various risk management schemes. Constant monitoring and reporting should exist to ensure that risks are identified early (Oxfam, 2010).

> Equitable access to services

Ensuring equitable access to services is essential for a successful trading relationship between small-scale producers and processing companies (Oxfam, 2010). Smallholders need assistance in accessing farm inputs, appropriate finance, business training and technical expertise (*ibid*). If left alone, smallholders may not effectively develop best practises for water, soil, labour and chemical management on their farms (*ibid*). Partnership with government agencies, NGO's and other companies can support smallholder farmers with additional financial and technical resources (*ibid*).

It is worth mentioning that all five principles are required for setting up a framework which can link smallholder farmers to formalised markets. The Oxfam's five principles have also been identified as useful for improving existing supply chains; develop new value chains for bringing products to markets, and also in implementing new third party certification systems (Oxfam, 2010).

4.4.2 New business model assessment framework

Acting as a compliment to the Oxfam's five principles of linking smallholder farmers to formalised supply chains is the Oxfam's *New Business model assessment framework*. This assessment framework is a systematic evaluation of the five business model framework elements, to determine their adaptability in specific economic and social environment. Table 4.1 below represents an adapted version of Oxfam's new business model assessment framework with the various framework elements and related assessment questions

Table 4.1: New Business model assessment framework (Oxfam, 2010, 15)

	D 1 1	
	Framework elements	Assessment questions
1	Identify the opportunity	-Improved quality and security of supply.
	existing or new supply	-Supply chain efficiencies
	chain.	-Improved and expanded supply chains that incorporate small-scale
		producers
		-New marketing/product opportunities.
		-An improved social "licence to operate"
2	Feasibility analysis testing	-Is the offer attractive to men and women smallholders?
	the business and	-Can the crop be grown efficiently and cost-competitively?
	development case	-Waht investment is needed to overcome structural barriers and performance
		issues at farm and processing levels to meet required volumes and standards?
		-How do costs compare with current suppliers?
3	Engage stakeholders and	-What benefits are available for smallholders and the wider stakeholders in
	investors	the supply chain?
		-How are governments, NGOs, smallholder organisations, community groups
		and commercial organisations in the supply chain prepared to support you?
4	Design smallholder	-Establish the value proposition and test it across internal marketing,
	sourcing programme	operations, and supply chain management teams.
		-Adapt practices for sourcing and purchasing to include smallholders, against
		the five principles.
		-Upgrade the enterprises along the chain, based on the identified needs, to
		improve productivity and to meet requirements for production and post-
		harvest handling.
		-Manage partnerships and attract co-investment to overcome structural
		barriers and performance issues, enabling smallholder's interests to be
		represented and improving the social/environmental performance of the chain.
		-Ensure that the corporate culture supports partnership with incentives for
		buyers that are aligned with creating long-term stability in supply chains.
5	Measuring outcomes and	-Analyse risks to the company, smallholders, and other affected parties such
	managing risks through	as climate change, changing consumer preferences and currency movements.
	implementation	-Assess progress regularly: reporting back, discussions across the supply
		chain, and a collaborative approach to identifying and solving problems.
		-Draw up an exit plan and ensure the exit of NGO's and donors, prepare a
		plan to move out of the market without damaging smallholders in the event
		that market forces change.

Applying the five principles together with the new business model assessment framework offers a guide to creating a sustainable trading relationship that would return more value to small-scale farmers while delivering quality products (Oxfam, 2010).

All theories and concepts explained in the above chapter most at times may not be as successful as we may expect. Usually, the outcome or success of a model or concept would depend on the context in which it is applied. The chapter which follows is a presentation of empirical material of four (4) agricultural development project carried out by two different NGOs in different African countries. This empirical material shall be analysed in subsequent chapters using the various models and concepts presented above, to determine the applicability of such models in the Sub Saharan context.

5 Empirics

This chapter presents the empirical background and findings use in the analysis in chapter 6. The section onfolds with a presentation of the three business oriented international NGOs choosen as case studies for analysis. After an introduction the various NGOs, is systematic presentation of the principal unit of analysis which are six (6) agribusiness development projects carried out in Sub-Saharan Africa by the respective NGOs. The empirical material is a combination of extracts from project reports from the six (6) individual projects and responses to follow-up interview questions which where generated from the project reports. The responses to the various interview questions help to give a deeper understanding of the various project reports.

5.1 Presentation of case NGOs

Basic information on the three NGOs (Swedish Cooperative Centre, and FARM-Africa) are presented in Table 5.1 below. Table 5.1 consist of information on the origin of the NGOs, its vision, mission and source(s) of funding. Table 5.2 highlights method of work, priority areas of intervention and target groups of the NGOs.

Table 5.1:Basic Information on case NGOs (origin, vision, mission and sources of funding)

Name of NGO	Swedish Cooperative Centre	FARM-Africa
Origin	SCC was founded by the Swedish Cooperative Movement (SCM) in 1958, with an intention to express solidarity with poor people (SCC, 2007a, 6). SCC has more than 60 member organisations in Sweden, and has been actively involved in international development cooperation programmes in Africa, Latin America, Asia, Middle East and Eastern Europe for more than 50years (SCC, 2007a, 6) "A world free from poverty and injustice" (SCC, 2007a, 9)	FARM-Africa was founded in 1985 by Sir Micheal Wood and David Campbell as a charity organisation to help poor farmers and herders in rural Africa to grow more food, keep healthy livestock and make a basic living while managing natural resources in a sustainable way (www, farmafrica, 1, 2011). FARM-Africa has operations mainly in African countries. A prosperous rural Africa (www, farmafrica, 2, 2011)
Mission	-The guiding principles of SCC strategy are to help for self-helpTo support smallholder farmers and their organisation in their agricultural development effortsTo support poor men and women by enabling them to organise themselves to increase their incomes, improve their living standards and ability to defend their rightsTo strengthen the democratic and economic development of their partner organisationTo contribute towards the development of a democratic and just society.	-To reduce poverty by enabling marginal African rural farmers, herders and forest dwellers to make sustainable improvements to their wellbeing (www, farmafrica, 3, 2011)
Source(s) of funding	The principal source of funding for SCC projects is the Swedish International Development Agency (SIDA), contributing over 72% of total income (SCC, 2011). Other sources of income include fundraising, grants and donations.	-Institutional donors -Trusts and corporate -Appeals and legacies -Community fundraising -Committed givings (FARM-Africa, 2011,26)

From Table 5.1 above, though both NGOs were not established in the same year, with the Swedish Cooperative Center existing morethan two decades before FARM-Africa was created, both NGOS share common vision and have almost the same mission. They are both very interested in the African continenet and in the eradication of extreme poverty from this part of the world. Both NGOs relly on free will donations from supporters of the work,

The next second part of the presentation of the NGOs looks at the target groups of the two NGOs, they areas of intervention and their metod of work. This information is presented in a tabular form in Table 5.2 below.

Table 5.2: Target groups, areas of intervention and method of work of NGOs

Name of	SCC	FĂRM-Africa
NGO		
Target groups	-Rural poor householdsMembers (men and women) of SCC partner organisationsFarmer organisations (national farmer unions, cooperatives, commodity associations)Smallholder farmers (men and women), who are members of farmer organisations supported by SCCFarmer organisations who promote smallholder farmer's interest	-Smallholder farmers -Pastoralists -Forest communities (www, farmafrica, 5, 2011)
Priority areas of intervention.	-Market information and analysis -Sustainable agricultural production -Market access and sales -Organisational and business development -Financial services -Policy development and advocacy	-Smallholder developmentPastoral developmentCommunity forest management. (www, farmafrica, 4, 2011)
Method of work	-Through partnerships, by placing great emphasis on local ownership and influences. Local partner organisations are made to understand they are owners of their activities and SCC only comes in to share its know-how and experience (SCC, 2007a, 45) -SCC's work is also carried out through networks and alliances with local organisations	-Empowering grassroot communities by involving them in the process of developing and testing agricultural innovations. -Developing model s of good practices in smallholder development, pastoral development, land reforms and community forest management. -Sharing of expertise with government, private sector and community members to improve agricultural practices. -Using latest communication methods to increase the understanding of and engagement in African agricultural development by organisations and public companies in the northern and southern hermisphere. -Influencing agricultural policies. (www, farmafrica, 4, 2011)

Both SCC and FARM-Africa has as principal target group smallholder farmers in rural areas, and their main area of intervention is smallholder agricultural development in the form of

promotion of sustainable agricultural practices and market access. And their principal method of work is through development partnerships with local organisations.

5.2 The empirical results

Selection of the unit of analysis is done to have some connections with the selected theories, with all of them sharing a common denominator which is smallholder farmers. The selected projects which consists the unit of analysis include;

- Eco-Marketing project in Zambia (by SCC)
- Enhancement of dairy productivity project in Uganda (by SCC)
- Community-based sunflower promotion integrated with bee keeping, Kitui District, Kenya (by FARM-Africa)
- Improving household welfare by improving indigenous chicken production through programmed hatching, Rakai district, Uganda (by FARM-Africa)

Presentation of the empirical material is done systematically following some specific headings. The headings in question are; basic information on the project, project objectives, project participants, capacity building/strengthening and indications of success of project.

- I. Basic information shall reveal information relating to the name of the project, sponsoring NGO, project code, host country, name of partner organisation in host country, project duration, participants, and sponsoring organisation.
- II. Project objectives shall state the expectations from the project. What the NGOs, farmer organisations and other participants intend to realise at the end of the project lifespan.
- III. Participation is dedicated to the participants and this referes to those individuals and/or organisations having a direct impact in the project or are impacted by the project.
- IV. Capacity building/ strengthening would be identifying systems put in place to improve the ability of project participants to operate much better and monitor issues affecting their organisations.
- V. The main indications of success/failures of projects which are reflected in the empirical findings are; changes in production volumes, changes in incomes, access to markets and marketing services, and contributions to poverty alleviation.

5.2.1 Eco-Marketing project in Zambia

The Eco-marketing project was initiated by SCC's southern Africa regional office in 2006, with principal objective to increase production and income of organic farmers in the five districts in Zambia (Kabwe, Mongu, Chibombo and Mpongwe).

I. Basic information

Table 5.3: Basic information on Eco-marketing project

Name of project	Eco-Marketing project
Name of sponsoring NGO	Swedish Cooperative Centre
Project code	P222
Host country	Zambia
Name of partner	Organic Producers and Processing Association of Zambia
organisation	(OPPAZ)
Project duration	3years (2006-2009)
Direct project participants	
-organisation	104 organic groups
-men	551 men
-women	368 women
Principal sponsors of	SCC and Sida
project	

II. Project objective(s)

The main objective of SCC's Eco-Marketing project in Zambia was to help farmers practising organic agriculture and processing to be able to increase production and improve quality of organic product (SCC, 2009). With increased production and quality, organic farmers can gain access to niche markets for organic products and increase their incomes by selling at premium prices. SCC intends to help smallholder organic farmers in Zambia tap some of the benefits from the ever increasing demand for high quality organic products while producing in an environmentally sustainable way (SCC, 2009).

III. Project Participants

The Eco-Marketing project targeted farmers practising organic agriculture in the districts of Kabwe and Chibombo in the Central province, Mongu in the Western province and Mpongwe in the Copperbelt province. Most of the project participants belonged to a producer group or cooperative society. A total of 104 organic farmer groups participated directly in the project, while an estimated 36000 smallholder farmers were also participating indirectly through outgrower production schemes for crops like cotton, vegetables, rice, beans, onion and bee product (SCC, 2009). Each of the 104 organic farmer groups elected a board that represented them on all issues concerning price negotiations, marketing, sharing of bonuses and also cost and risk sharing (SCC, 2009, 21).

IV. Capacity building/strengthening

The farmers in the districts of Chibombo, Kabwe, Mongu and Mpongwe received regular training from experts sponsored by SCC and OPPAZ. There was significant improvement in the frequency in delivery and quality of training noticed from the year 2008 (SCC, 2009, 21). The capacity of OPPAZ to source and access better markets for organic produce from Zambia has also increased during the course of the Eco-marketing project. Most members of organisations participating in the Eco-Marketing project can now successfully solicit for funds for their organic farming practises. A good example is the Mpongwe-Bulima Organic

Cooperative Society (MBOCS which was able to secure funding for their organic farming activities from the United States Agriculture Development Fund (SCC, 2009).

V. Indications of success of project

The first indication of success of the Eco-marketing project has been significant improvements in production volumes of most organic products. Outstanding increases were noticed in groundnut and rice production. Groundnut production went from 20tonnes in 2007 to over 28 tonnes in 2008 (SCC, 2009, 21). Rice production especially in the Mongu district also went up by 24% between 2007 and 2008 (*ibid*). More farmers especially in Mongu and Chibombo districts are now adopting organic farming practises (*ibid*).

Incomes levels for most organic farmers have increased significantly, especially as organic farmers are now able to get premium prices for their products (*ibid*). Groundnut producers have seen their incomes increase by over 29.4% between 2006 and 2008 (SCC, 2009, 21). Cotton farmers in Kabwe got a 20% price increase for their products sold to Dunavant (*ibid*).

Farmers of organic products are now able to access competitive markets for their produce due to the Eco-marketing project. Groundnut and red onion farmers are now able to market their products in neighbouring countries, with organic producers now displaying their produce in trade fairs in Zambia and abroad. Cooperative societies like MBOCS have been making negotiations too with some foreign companies for the supply of organic groundnut (SCC, 2009). Access to remunerative organic markets have been facilitated by the fact that more male and female farmers are receiving organic certification, with a total of 78 more female and 82 male farmers in Kabwe and Chibombo district registered for organic certification in 2008 (SCC, 2009, 21). OPPAZ has also received approval for its certified organic producers to use organic labels that conform to Zambian Organic Standards (SCC, 2009).

The SCC's Eco-Marketing project's contribution to poverty alleviation can not be left out. As a result of the project, smallholder organic farmers have been able to raise their incomes, and this increase in income is lifting them out of poverty (*ibid*).

5.2.2 Enhancement of Dairy Productivity Project

The Enhancement of dairy productivity project was initiated by SCC's eastern Africa regional office, with principal objective to enhance the capacity of the Uganda Crane Creameries Cooperative Union (UCCCU) and other district cooperatives.

I. Basic information

Table 5.4: Basic information on EDP project

Name of project	Enhancement of Dairy productivity
Name of sponsoring NGO	SCC
Project code	P814
Host country	Uganda
Name of partner	Uganda Crane Creameries Cooperative Union (UCCCU)
organisation	
Project duration	4years (2006-2010)
Direct project participants	
-organisations	7 District unions of 90 primary diary cooperatives
-men	20, 000 men
-women	35, 000 women
Principal sponsors of	SCC/ Sida
project	

II. Project objective

The main objective of SCC's Enhancement of Dairy productivity project was to improve the capacity of the Ugandan Crane Creameries Cooperative Union (UCCCU) to do business more profitably through the collection, processing and marketing of dairy products (SCC, 2009, 18).

III. Project participants

The dairy productivity enhancement project at the initial stage had involved different stakeholders. Most of the stakeholders actively participated in the transformation of UCCCU from a weak diary farmer's association with neither office nor staff to a potentially vibrant regional farmers union with a secretariat which coordinated activities of the other 6 district unions (SCC, 2009, 18). Each of the 7 district unions have a representative in the board of UCCCU and who works in close collaboration with the resident field officer at the secretariat of UCCCU. Selection of a representative to the board of UCCCU is done by election in the Annual General Meeting (AGM) of the various member unions (SCC, 2009).

IV. Capacity building/strengthening

The EDP project has greatly improved on the capacity of UCCCU to do profitable business in dairy products. During the project period, UCCCU was able to review her administrative and financial management procedures. The union and most of the member unions have adopted computerised financial accounting software which has greatly increased their efficiency in managing union funds (SCC, 2009, 19). Selected union staffs were continuously trained on how to use the accounting software. With assistance from SCC, feasibility study and mobolsation of funds was successfully carried out for the acquisition of infrastructure to establish a processing plant for dairy products (SCC, 2009). Part of the funds mobilized was also used to facilitate and meeting the requirement for the award of a license to operate a plant. UCCCU after its transformation into a potentially vibrant diary farmers union is now able to secure longterm credit for local credit unions (SCC, 2009, 19).

V. Indications of Success

Production volumes have increased tremendously. More primary diary cooperatives are now joining UCCCU after the EDP project. With the establishment of a strong dairy farmer's cooperative, dairy farmers now have greater influence in the market (SCC, 2009). More farmers who had neglected dairy production for years and turned to beef production are now producing milk (SCC, 2009). Bulking of milk from union members has also inspired production, especially as most farmers are escaping the transaction cost involve in marketing of their dairy procedure.

Milk prices have steadily rised from UgX100-200 to UgX 280-300 (SCC, 2009). UCCCU members recorded an annual turn over of Ug 9.9 in 2007 (ibid) UCCCU members recorded an annual turn-over UgX9.9 in 2007 just one year after the start of the EDP project (SCC, 2009, 18). The increase in income coming from the sale of raw milk and processeg dairy products by UCCCU (*ibid*).

The marketing of milk from union members was done exclusively by UCCCU, who could market in a wider market. The poor smallholder dairy farmers with land holdings of between 2 to 5 hectares are gradually finding their way out of poverty as a result of the EDP project (SCC, 2009). Farmers were encouraged to regard dairy farming as a potential commercial activity. As the three years of the project passed by, UCCCU increased its efficiency in the collection and markeing of member's milk. Many more dairy farmers now have an almost steady flow of income from ethe sale of their produce.

5.2.3 Community-based Sunflower promotion integrated with beekeeping project This project falls amongst FARM-Africa's portfolioof successful projects carried out in SSA in the area of agriculture and agribusiness. The project was one of the numerous projects financed by MATF and involved the introduction of new high yielding varities of sunflower and new technologies in honey production in Kitui district, Kenya.

I. Basic information

Table 5.5:Basic information on sunflower promotion integrated with beekeeping project

Name of project	Community-based Sunflower promotion integrated with
	beekeeping
Name of sponsoring NGO	FARM-Africa
Project code	N/A
Host country	Kitui district, Kenya
Name of partner	Kitui Development Centre (KDC)
organisation	
Project duration	2 years
Direct project participants	
-organisation	4 Community based organisations of 2256 farmers
-men	
-women	
Principal sponsors of	Maendeleo Agricultural Technology Fund (MATF) and FARM-
project	Africa

II. Project Objective

The principal objective of the project cited by FARM-Africa was to improve food security and raise incomes for households in the Kitui district (FARM-Africa, 2007, 46). The project also intended to train participants on how to use new skills and knowledge in sunflower farming and beekeeping. Because no major cash crop is grown in Kitui district of Kenya, so many households are obliged to sell part of the food they grow to raise cash for the home. (FARM-Africa, 2007).

III. Project Participants

The Sunflower promotion and beekeeping project attracted participants from several sectors; NGOs, Community-based Organisations (CBO), government and the commercial sectors (FARM-Africa, 2007). Initiation and coordination of the project was carried out by the Kitui Development Centre (KDC), and involved the participation of 2256 farmers from 632 households who participated directly (FARM-Africa, 2007, 46). The farmers were either planting sunflower or practising beekeeping or doing both, and belong to one of the four CBOs that were part of the project (*ibid*).

From the government, the Ministry of Agriculture and Livestock Development (MALD), provided technical input in the form of practical training on bee hive management and sunflower production on demonstration plots in Farmer Field Schools (FFS) in the Kitui area. Training on community organisation and leadership development was provided by staff from the Ministry of Gender and Sports, while extension staff from the Ministry of Cooperative and Marketing Development came in during the second year of the project to give lectures on cooperative formation and loan management (FARM-Africa, 2007, 46). Most of the research on sunflower varieties that would be suitable for the Kitui area was carried out by scientists at the Kenya Agricultural Research Institute (KARI) (FARM-Africa, 2007).

From the commercial sector, African Beekeepers Ltd initially acted as a guaranteed purchaser of honey produced by the project participants and also adviced them on the commercial aspect of honey production. Private agro-vet shops and local carpenters also participated actively in the supply of certified sunflower seeds and improved beehives respectively (FARM-Africa, 2007).

IV. Capacity Building/ Strengthening

Apart from the training provided by the Ministry of Agriculture and Livestock Development, the Ministry of Gender and Sports as well as the Ministry of Cooperative and Marketing Development, more training facilitated by KDC was also given on group leadership and book keeping for leaders and book keepers of other self-help groups affiliated to the CBOs (*ibid*). Most of the training held by the Ministry of Agriculture at community level took the form of talks and practical demonstrations on plots. Some of the training material was also distributed to farmers, both to participants at the various training sessions as well as to non participating bee farmers (*ibid*).

V. Indicators of success

During the course of the project, the typical yield of honey per farmer has increased from 2kg to 7kg per hive in a harvest (FARM-Africa, 2007, 47). Harvesting periods have also improved from 2 to 4 times in a year (*ibid*). The number of self-help groups in the participating communities have also significantly increased from 78 to 100 groups (FARM-Africa, 2007, 48). The increased production of sunflower oil has also increased its availability to other community members at an affordable price (*ibid*).

Household incomes from the sale of honey has also risen from an estimated Ksh16.00 (16.00 Kenyan Shillings) per day to Ksh 50.00 (FARM-Africa, 2007, 47). This increase in prices is due to improved quality, quantity and marketing options. Participants in the project had a guaranteed market for their honey which was provided by African Beekeepers Ltd until 2006 when most of the marketing was now coordinated by KDC. Some middlemen also buy the honey to process and sell in the capital Nairobi (FARM, 2007, 48).

As a result of increased and improved production and income, there has been changes in consumption patterns as most households now have an almost steady source of income, so they no longer sell most of the staple food harvest for cash. The Kitui community now has four oil pressing machines, a semi-processing machine for honey and 1065 improved Langstroth hives (*ibid*).

5.2.4 Improving household welfare by improving indigenous chicken production through programmed hatching

Also one of those projects financed by MATF, this project was initiated in 2003, in the Rakai district of Uganda, and led to the introduction of new chicken breeding technologies for poultry farmers in the district and beyond.

I. Basic information

Table 5.6: Basic information on indigenous chicken production project

Name of project	Improving household welfare by improving indigenous chicken
	production through programmed hatching
Name of sponsoring NGO	FARM-Africa
Project code	N/A
Host country	Rakai district- Uganda
Name of partner	Community Integrated Development Initiatives (CIDI)
organisation	
Project duration	2years (2003- 2005)
Direct project participants	
-organisation	20 groups
-men	Target was 2640 households representing 14 480 individuals
-women	
Principal sponsors of	Maendeleo Agricultural Technology Fund (MATF) and FARM-
project	Africa

II. Project Objective

The primary objective of the project was to reduce the level of poverty of subsistence farmers in the sub counties of Lwanda and Ddwaniro, especially amongst women and orphan-headed households through the introduction of new chicken production techniques (FARM-Africa, 2007, 35). In an effort to improve indigenous chicken production, the project aimed at encouraging the adoption of new technologies in selected breeding, programmed hatching, stock management, healthcare, housing and feeding of poultry (FARM-Africa, 2007, 36).

III. Project participants

The project benefited an estimated 14480 individuals from 2640 households in sub counties of Lwanda and Ddwaniro, eventhough direct participants were just 400 households (FARM-Africa, 2007, 41). The participants took part in training sessions and also benefitted from improved technology and free birds. The principal partner organisation to the project –

Community Integrated Development Inititiative (CIDI) coordinated most of the activities during the project lifespan, including activities by other partner organisation.

Other active participants in the project include The National Agricultural Research Organisation (NARO), which provided most of the information from research findings on indigenous poutry, the Department of Animal Science in the Faculty of Agriculture at Makerere University trained some of the participants on data collection and record keeping. A few local organisations like Rakai District Agricultural Training and Information Centre (DATIC), Indigenous Consultants Research and Trainers (INCORET), St Jude's Organic Rural training centre and district extension coordination office of Rakai all provided training at one point in time during the project (FARM-Africa, 2007, 37). Another active participant was Rakai District Farmers Association, who helped in mobolisation and sensitisation of farmers on the benefits of the project and in the dissemination of information and supply of inputs (*ibid*).

IV. Capacity building/strengthening

Training of the project participants involved both theoretical and practical teaching methods, which began with sensitisation seminars at the beginning of the project to establish good working relationships with district officers at various levels. The trainers used leaflets, handouts and in some cases visual aids. The courses focused on construction of improved poultry houses, selective breeding, feeding and feed mixing, disease control, programmed hatching, business education as well as marketing promotion (FARM-Africa, 2007, 39). The project participants were encouraged to form groups to enable the benefits of the project reach as many farmers at a reasonable cost in the shortest possible period. The groups were also trained on group dynamics, to ensure the group members are able to manage the groups themselves (*ibid*). Community-based trainers (CBTs) were also selected from amonst the farmers and trained on improved technologies in managing poultry which they later transferred to other poutry farmers in their communities.

V. Indications of success

Several factors can be identified and related to the success of FARM- Africa's improvement of indigenous chicken production project. Firstly, there is a reported improvement in family incomes, as most of the households who participated in the project reported they can now comfortably pay school fees for their children at school (FARM-Africa, 2007, 42). The improve quality of poultry products is being reflected in improved prices and production of poultry.

To improve access to markets, Indigenous Chicken Breeders and Marketing Association was setup and some farmers who are members of the association also selling their produce through the association. One of the farmer groups- The Tweyambe Kionyem Group was able to secure an order to provide 2000chicks to the local market every month for five months (*ibid*). But due to lack of an incubator to help scale up production, the group alone could not keep up with this order, so it had to request for assistance from other groups to meet this order (*ibid*).

Most households are now reducing their vulnerability to poor harvest of poor staple crops especially as chicken manure is being used on farms to increase crop yields. The production and sales of maize has greatly increased as this is a source of poultry feed as well as staple food. This additional flow of income from poultry, coupled with increased production of staples crops has greatly improved household nutrition (*ibid*).

6 Analysis and discussion

This chapter analyses and discuss outcomes of empirical material of the project with help of the various theoretical propositions. The entire process is geared towards answering the research questions. As it is necessary to get a full picture and deeper understanding of the situation and to acertain if the empirical findings are in line with the theoretical proposition and research aims.

For a quick reminder, the aims of this research were; to identify the business models NGOs are proposing for smallholder development, how these models facilitate favourable market linkages and performance, the factors responsible for success of the business models, the relevant stakeholders, and exit strategy of NGO's. The analysis begins with an identification of the various stakeholder clusters followed by a presentation of transaction cost in the smallholder agricultural sectors may manifest. Subsequent headings are; an identification of the business models NGOs are applying in their smallholder agricultural development programs in SSA, followed by an illustration of how Oxfam's five principles for linking smallholders to markets and its new business assessment framework can be applied to NGO proposed business models. Other aspects discussed in the analysis include; how NGO's are meeting smallholder marketing challenges and factors responsible for success of NGO models.

6.1 Stakeholders of an NGO sponsored agricultural project.

As Mitchell *et al.*, (1997), suggested, directors of every organisation even NGOs need to be sensitized on both the moral and legal implications of their actions. In that light, the identification of the different stakeholders of an agricultural development project and their attributes would help NGOs know how to effectively manage their programs in a society. Based on Freeman (1984) definition of a stakeholder, any individual or group of individuals who can affect or are affected by the achievements of an organisation's objective. It is also important to specify that a stakeholder must not necessarily benefit as an economic participant (Rainey, 2006). The identification of the various stakeholder classes can be done systematically base on their perceived relationships and claims to an organisation (Mitchell *et al.*, 1997).

The Swedish Cooperative Centre (SCC), in a publication of its strategy for smallholder development highlighted the existence of a wide network of stakeholder and they grouped them into 5 clusters (SCC, 2007a). The 5 clusters in question are;

- Cluster 1, which is made up of development agencies like multilateral organisations, multilateral and national NGOs, as well as national donors.
- Cluster 2, is made up of service providers like private and government extension organisations, financial institutions, farmer organisations, research institutions, international and national NGOs.
- Cluster 3, are policymakers such as the central banks, parliament and trade organisations.
- Cluster 4, is made up of the civil society comprising of thr trade unions, social movements, private-public partnership organisations, churches and some political movements.
- Cluster 5, consist of the target group or beneficiaries, which are the smallholder farm households themselves, farmer groups, farmer cooperatives, commodity associations as well as farmer unions.

The listed stakeholder groups can be very usefull for NGOs who undertake development programs aim at supporting and improving the wellbeing of smallholder farmers especially in SSA. It should however be noted that this list is not exhausive. The SCC list only provides details on possible clusters of stakeholders, but does not specify who are the most relevant stakeholders in a particular program.

To further identify and analyse the relevant stakeholders of an NGO proposed smallholder agricultursal development program, we shall introduce Mitchell *et al.*, (1997) approach to identifying stakeholders into the various stakeholder clusters, and try to distinguish them base on their attributes. If the various attributes of the various stakeholders can be identified, then it can also be vary possible to evaluate their relevance to a particular project and how their demands should be addressed.

Table 6.1 below is a classification of the possible stakeholders of the 4 agricultural development projects which have been presented in chapter 5.2 above, with the help of SCC stakeholder clusters and Mitchell *et al.*, (1997) stakeholder typology model.

Table 6.1: Classification of stakeholder clusters of an NGO pioneered agricultural project using the Stakeholder typology model

		Types of stake	Types of stakeholders, attributes and claims	s and claims			
	Dormant stakeholder	Discretionary stakeholder	Demanding stakeholder	Dominant stakeholder	Dangerous stakeholder	Dependent stakeholder	Definitive Stakeholder
Projects	Power	Legitimacy	Urgency	Power and legitimacy	Urgency and power	Urgency and legitimacy	Urgency, legitimacy and power
Eco – marketing project in Tanzania	Development agencies like Sida, which is the principal sponsor of project	Producers of non- organic agricultural products	Associations and promoters of organic produce. For example Zambian Organic Standard (ZOS) -Research institutions	Government institutions and financial institutions	-Consumers and processors of organic produce.	-The Mongu, Mpongwe, Chibombo and Kabwe communities where the project is taking place.	Smallholder organic producers and processors of organic products in Kabwe, Mongu, Chibombo and MpongweOPPAZ
Enhancement of dairy productivity project in Uganda	-The principal sponsor of project which is SidaThe ILO's Coop Africa Challenge FundThe World Bank.	Dairy farmers in Uganda who are not members of dairy cooperatives or members of a Primary dairy cooperative which is not affiliated to UCCCU.	The government agency responsible for the issue of a license to operate a dairy processing plant.	-The Ugandan government, through the National Agricultural Advisory programmeOIKO credit, which provided a longterm credit to UCCCU repayable in 6years	-Consumers of dairy milk in Uganda -Retailers of domestic dairy products - Competitors selling imported dairy products	-Dairy animals -Members of households with dairy animals.	-Project participants (members of UCCCU)Primary dairy co- operativesDistrict unions

-632 households who are direct participants in the projectKDC -FARM-Africa -MATF	-MATF -402 target households who were direct participants of the project the 200 new households who further benefited improved birds.
-The over 70% of the population of Kitui District who are facing food shortage and living in povertyThe earth -New varieties of sunflower which are being introduced.	-Women and orphan-headed household in Rakai District affected by HIV/AIDSImproved breeds of poultry birds, both cocks and breeder hens.
-Consumers (households and hotels who buy sunflower oil and honeyThe African Beekeepers Ltd which had agreed to buy honey from the farmersRetailers of sunflower oil or other substitute to sunflower oil.	Consumer's of poultry products and eggs
-Service providers like extension services providing training at community levels like KARI and the MoALDNGOs, CBOs, government and commercial partners participating in the projectTrade unions	Most partner organisations to the project like Makerere University, INCORET, Rakai District Agricultural Training and Information Centre (DATIC) -CIDI -FARM-Africa
Middlemen who buy honey from KDC to process and sell in Nairobi.	The indigenous chicken breeders and marketing association which acted as a middleman between farmers and buyers.
Trade unions and trade organisations involve in honey and sunflower businessIndirect project participants.	Indirect beneficiaries who learned the improved technology from direct beneficiaries.
Donors to the MATF fund (Rockefeller foundation and Gatsby Charitable Foundation)	Donors to the MATF fund
Community- based sunflower promotion integrated with bee- keeping project- Kenya	Improving household welfare by improving indigenous chicken production through program hatching - Uganda

From Table 6.1 above, the classification is done based on the stakeholder claims and attributes. It should however be noted that this list is not exhausive as more groups and individual stakeholders can still be added to the list. As it can be noticed from the table, each of the various stakeholders of an NGO project which SCC (2007b, 10) have grouped into five different clusters can be further subdivided based on their attributes and claims to a particular NGO project. As pointed out by Mitchell et al., (1997), it is important to mention the fact that the three stakeholder attributes (power, urgency and legitimacy) are multidimentional and a combination of these three may result in defferent attention from the organisation. Taking an example SCC stakeholder's clusters, SCC and Sida are grouped under the cluster "development agencies", but when you need to classify SCC and Sida based on their claims and attributes to a project like the Eco-marketing project, Sida would be classified as a Dormant stakeholder while SCC is a Definitive stakeholder. Reasons being that Sida acts only as a donor to a project but does not take active part in the execution of the project, so it has only "Power" as an attribute. Sida posses "power" because without its donations, the Ecomarketing project would not be executed. SCC on its part as a definitive stakeholder possesses all three attributes (power, urgency and legitimacy). Its power is reflected in fact that it is the pioneer of the project, it provides the funds and coordinates most of the resources. Its legitimacy claim is reflected in its desire for the project to be successful, while the fact that SCC has a specified time frame to execute the project and get results is an indication of its urgency claim. This falls in line with Mitchell et al., (1997) proposal that time could be very important when determining the urgency of a stakeholder claim, and also how critical a relationship is with the organisation.

It should also be understood that stakeholder attributes are not in a steady state (ibid). Some stakeholders may also gain or lose different attributes under different circumstances. And this would result to a gain or lose of salience. For example, a financial institution which has provided a longterm credit for a project to a farmer organisation remains a Dominant stakeholder (power and legitimacy) or even a Definitive stakeholder (power, legitimacy and urgency) when the financial institution is own by the members in the case of a cooperative society. Once the farmer organisation completes repayment of its debt, the financial institution may cease to be a stakeholder in the particular project, and receives no salience from management.

As Mitchell *et al.*, (1997), had cited, stakeholder attributes are socially constructed. Eventhough this differs with the opinion of Freeman and Evans (1990), who classified stakeholders as individuals having a contractual relationship with the firm. In the present situation of NGO projects, it may be convincing to state that most NGO relationships with partner organisations and target group or beneficiaries are socially constructed, due to the altruistic objectives of NGOs. In a situation like the four NGO pioneered smallholder transformation projects being analysed, as the chain moves from NGO and smallholder farmers, to the market, where we now have relationships between smallholders and market agents (wholesalers, retailers, suppliers) or smallholders and some service providers (financial institutions, transport agencies,insurance companies), the relationship switches to a contractual relationship. These changes in nature of relationships also generate changes in attributes and require change in salience. Managers and directors of both NGOs and farmer organisations must be able to identify such changes in attributes and claims inorder to effectively address various classes of stakeholders.

Though both SCCs stakeholder clusters and Mitchell et al., (1997) Stakeholder typology model could be very useful in classifying stakeholders, the important questions still remains

identifying how much attention managers and directors should give to the various stakeholder classes.

6.1.1 Stakeholder salience

Stakeholders can always use their power and interest in an organisation to oppose or support a strategy Johnson *et al.*, (2008). Realising their importance, Johnson *et al.*, (2008), uses the power and interest matrix to describe how stakeholders can be classified in relation to the power they hold and their interest in supporting or opposing a particular strategy and how managers should respond to them. Figure 6.1 below is a classification of the various stakeholder types based on the power they hold and interest in an organisations strategy.

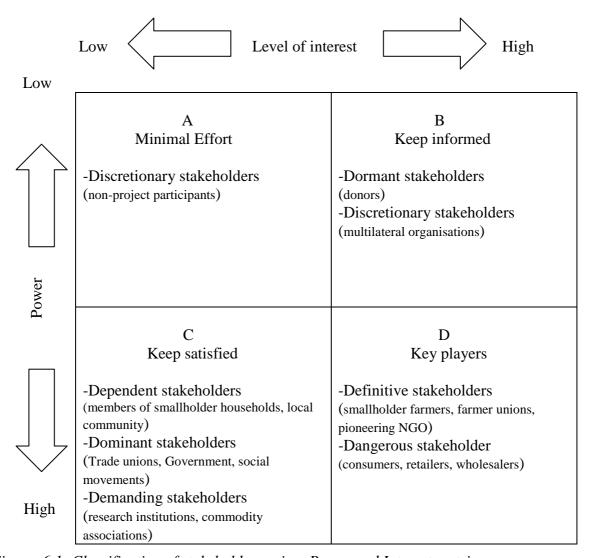


Figure 6.1: Classification of stakeholders using Power and Interest matrix.

Usually, the power and interest matrix works perfectly well for firms and other profit making organisations, but it may be a little bit tricky when applying it to NGO programs. Most NGO initiatives are voluntary, with the overall objective being social welfare. In this light, one would expect every stakeholder in an NGO program to share thesame non-profit ideology, with great interest in social welfare. Fitting these stakeholders in the Power and interest matrix may require some careful considerations. For example, the stakeholder group "donors," constitute a very important stakeholder category, for without donors, programs can not be funded. Going by Mitchell *et al.*, (1997) classifications base on stakeholder attributes,

the most feasible category where donors fall is Dormant stakeholder, due to the fact that they possess power with little or no urgency nor legitimacy claims., since most at time they never participate in project execution.

Fitting "donors" in the power and interest matrix, donors would fall in Quadrant B, because they have a high level of power but with a low level of interest. In the situation of an NGO project like the ones we are working with, a donor like Sida in the case of SCC projects or The Rockefeller foundation in the case of FARM-Africa, donors usually possess power and a high interest in the outcome of the project., so managers always make sure they are kept informed. This additional attribute (high interest), moves donors from quadrant B to quadrant C.

As it can be noticed above, different stakeholders may attract different stakeholder salience based on surrounding circumstances. Reasons why Mitchell *et al.*, (1997), concluded his theory by acknowledging the fact that there hasn't been any individual organisational theory that has offered definite answers to questions on stakeholder- manager relationships.

Some relationships like those with the type of stakeholders classified as "dangerous stakeholders" who posses both urgency and power attributes, for example, the relationship between smallholders and their suppliers, smallholders and wholesalers or smallholders and middlemen, in some circumstances if not well handled may result in an additional cost for smallholders. This additional cost that arise due to an exchange relationship which Williamson, (1996) has baptised "transaction cost" is highlighted by so many scholars including Hazell *et al.*, (2007); Jayne *et al.*, (2007); Kherallah and Kirsten, (2001) and Makhura *et al.*, (2001) as a principal constrain to active participation of smallholder farmers in high value markets.

6.1.2 Women as key stakeholders in smallholder transformation

The role of women in smallholder agriculture has been classified by Temu and Temu (2006). as very significant. Reasons why their claims should be treated with urgency. Women can be found playing the role of farmers in their field, labourers on the fields of other farmers, and even food vendors in the market. Women in SSA, typically have to shoulder much of the household maintainance work and child care in addition to their work on the field, reasons why the Swedish Cooperative Centre has classified them to have the toughest job in the world. Temu and Temu (2006), also highlights the fact that women are indirectly the managers of most food crop farms, but unfortunately, they still do not have full access and right to own and control most productive resources. In several parts of SSA, the male heads of households are still the only ones with right to own land, eventhough the women are the ones who work and manage the land. They even cases whereby when the male head of the household dies, the widow and other family dependents are deprived of the land, which is passed on to another family relative (*ibid*). Identifying the fact that if those challenges women face in land ownership are addressed, this could lead to great improvements in production volumes in SSA, there has been increased sensitization from NGOs and other actors who have been fighting mainstream gender issues. These efforts have are gradually resulting in a change of mentality and some women now own land (SCC, 2007a).

The Swedish Cooperative Centre in most of its strategies has always adopted policies which mainstream gender equality in farmer organisations. And with this approach, it has not only looked at internal opportunities and leadership issues with respect to gender, but they have extended their attention to political and structural gender related issues within the agricultural sector as a whole. This approach can be noticed in the number and composition of participants

in the projects they have initiated. For the EDP project, out of a total of 55, 000 direct participants, 35,000 were women, and the Eco-marketing project had 368 women organic farmers who participated actively. FARM-Africa also considers women as key stakeholders in smallholder agricultural development, reasons why the principal target group were women and orphan-headed households for its improvement of indeginous chicken production project. This gender equality approach to agricultural development is been shared by Oxfam, they are also of the opinion that smallholder agriculture especially in SSA depends greatly on women labour, so if women can have equal access to training, coupled with a reduction in their domestic workload, this would greatly increase productivity and overall efficiency of the supply chain (Oxfam, 2010). Oxfam also believes that if women earn more income, there is improved nutrition for the family, therefore by equalizing women's status with those of men could cut rates of child malnutrition for children under 3 years of age (Oxfam, 2010, 7). Also in support of the fact that there are potential large output as well as welfare gains if women farmers are given increased access to production and support services, Alene et al., (2008) request the development of human capital assets of human. This could take the form of education of girls and the setting up of extension programs that are appropriate for women farmers.

Ezumah and DiDomenico (1995), writing on the role of Igbo women in Nigerian agriculture, brought forward the need for an improved method of resource allocation, which allow women imparticular access to resources to improve their productivity. Sharing in this idea, Temu and Temu (2006), recommended that agricultural loans and other resources should be allocated to farmers in proportion to their actual contributions to total agricultural production and not on gender grounds. Talking about loans, the Global Donor Plateform for Rural Development (2008), highlighted the fact that women have also been reported to be better re-payers of loans in micro-credit schemes, yet they still have limited access to credits. With improve access to capital, women can lease more land for farming, buy farm inputs, farm equipments and even hire labour (Temu and Temu, 2006). Reasons why some gender conscious extension services are increasingly designing gender specific approaches which allow for a redress of gender disparities.

In addition to the above mentioned potential benefits from investing in women, Tsegaye (1997), had identified the fact that labour exchange practises, which is common amongst most women groups in SSA, can also serve as a potential source of cheap labour for the farm. Women are also very flexible in exchanging information, either between individuals, or amongst groups (*ibid*). In many rural areas in SSA, women meet regularly in informal meetings, and this serves as a medium for information sharing. Information is also shared by women on their way to the market or to the farm. Tsegaye (1997), also cited the fact that women have been found to have tremendous wealth of knowledge in identifying and characterising the various crops they grow. This special skill helps them in differentiating crop quality base on the colour, size, taste and hardiness. These factors are quite significant in the storage life, price, marketing, cooking and nutritional quality of a crop. Therefore such skills could be of significant benefits to both producers and consumers.

In a nutshell, for any agricultural development program, it is important to determine first which gender produces for subsistence, who produces for the market, and who are those involve in non-farm activities. Such distinctions which employ gender issues provide a good base for a meaningful agricultural development program with greater impact, as support is being channelled where it is highly needed.

6.2 Manifestation of transaction cost.

The ability for smallholders to participate in high value markets is often reflected in their ability to successfully compete with alternative suppliers (Henson *et al.*, 2008), and the willingness of buyers to procure from them within their particular regulatory context and commercial requirements (*ibid*). As identified by Kolk and van Tulder, (2006), it is most common to see market leaders sourcing from a particular base of smallholders when it is profitable to do so, and they would quickly switch to new suppliers when problems arise and/or new opportunities show up for them to reduce their procurement cost. Though these economic agents intend to be rationale, they do have limitations. A phenomenon which Williamson, (1996) refers to as bounded rationality and opportunism. Both are key aspects that best describe the attitude of economic agents.

With the restructuring of global value chains and the always increasing recognition and adoption of agri-food standards, transactions are becoming more complex and require closer coordination of activities and traceability of products and raw materials with the supply chain (Poulton *et al.*, (2006). As Poulton *et al.*, (2006) reveals, most downstream buyers are instead seeking to consolidate their relationships with "preferred suppliers" ratherthan creating new relationships. And because meeting market entry requirements maybe very costly, especially for smallholders, buyers too on their part usually do not want to take full responsibility of certain market function (Pingali *et al.*, (2005). This factor amongst others greatly hinders smallholder participation in high value market channels.

Transaction cost in smallholder agricultural in SSA as cited by Jaffee, (2005) and Winter-Nelson and Temu, (2005), is also often reflected in the lack of cultivable land, infrastructure, key production assets and market information. In addition to observations made by Jaffee, (2005), Hazell *et al.*, (2007), identifies small scale farming in SSA as characterised by undercapitalisation, and often undereducated farmers who have special disacdvantages in accessing farm inputs, new technologies, credits and markets.

Transaction cost originating from the procuration of appropriate farm inputs as identified by Staatz and Dembele, (2008) as well as Bingen, (2003), constitute a mmajor constraint to smallholder development. In some countries in SSA, smallholders are still unable to access cost effective farm inputs, due to numerous administrative bottlenecks especially when such inputs are provided by the government (Bingen, 2003). Such was the case with poultry farmers in Rakai district Uganda, who had to turn to commercial sellers of vaccines, because local organisation (Community Intehrated Development Initiative, CIDI) which always out of stock of vaccines, due to the fact that government funds to the local government councils are irregular. But with the initiation of FARM-Africa's Improvement of indigenous chicken production project, most the famers received birds from CIDI that were already vaccinated.

Having access to new technology is another constraint smallholders face. Technology and infrastructure are closely related to the aspect of asset specificity as a cause of transaction cost raised by the Williamson, (1996). Some farm equipments for example a tractor are so expensive for a single smallholder farmer to buy. If he owns one, his farm operations are so small for him to be able to cover running cost of the tractor. Taking an example from FARM-Africa's Community sunflower integrated with bee-keeping project, most of the farmers growing sunflower in Kitui district could not afford an oil press, which is needed to get the oil out of the flower. The relied on the services of private owners of oil presses which at times are far away, overcrowded, and with a high fee to pay. But FARM-Africa has provided two oil presses, which serve the community, and farmers only contribute a fee to KDC for maintainance and servicing of the press. This has greatly increased production volumes of

sunflower oil. Another good example is the EDP project pioneered by SCC in Uganda. Where SCC realised the only way farmers could avoid exploitation from private owners of dairy processing plants was if the farmers owned their own processing plant. With the coordination of UCCCU, a dairy processing plant was set up now serves all the 70 primary dairy cooperatives who are members of UCCCU.

Related to asset specificity is the issue of certification and liscencing. Most farmer can only be certified for the production of a single crop, and would require a separate organic certification if he wants to produce another kind of product. Also, certain certifications are only recognised by specific customers, and a smallholder may be faced with the need for several types of certifications if he/she wishes to sell in several markets. A certification becomes useless if he/she losses market share in a particular market. In SCC's Eco-marketing project in Zambia, it was advantageous for organic farmers to acquire a group certification for each organic product they intended to market. This process greatly reduced cost and risk to individual organic farmer.

Linking informal smallholder producers to formal markets require constant accessibility to market information (Javne et al., 2007). Transaction cost may result due to high information cost and because individuals want to exploit others ignorant of their advantages (Allen, 1999). Sometimes this cost may include the cost of searching for trading partners, cost of screening the partners, bargaining cost, enforcing cost and cost associated with negotiating (Markura et al., 2001). Some of this market information is proprietory and only available to those willing to pay (Jayne et al., 2007). This is very true when it comes to negotiating and bargaining. A cooperative like the Mbongwe-Bulima Organic Cooperative Society could only negotiate effectively with the Dutch company- Trading Organic BV, by making use of the services of both legal and marketing consultants. This is where the low level of education of most smallholder farmers in SSA acts as a setback and agency cost also steps in. As Jayne et al., (2007) explained, the legal systems are so sophisticated for smallholder farmers to understand, reasons why some contracting arrangements have often generated numerous disputes. Because most farmers are not educated enough to effective manage more sophisticated agricultural business operations, coupled with the fact that some grades and standards are incomprehensive to most smallholder farmers, and would always require expensive visual inspections (ibid). Most supermarkets now impose stricter standards for consistency in both quality and timeliness in supply, and at times trace the consignments back to the source to confirm how they have been produced (Hazell et al., 2007). Some farmers in an attempt to solve this problem have tried recruiting professionals, but the labour laws in most SSA countries require a minimum wage which a single farmer can not pay (English et al., 2006). Reasons why acting collective has been strongly suggested by Markelova et al., (2009).

The medium of exchange and role of middlemen were identified by Coarse, (1988) as potential breeding grounds for transaction cost. To support this statement and relate it to SSA, Jayne and Jones, (1997) identified the slow development of institutional policies for supporting smallholder agriculture in SSA, as the main factor which has resulted in an almost total dependence on middlemen by smallholder farmers for the marketing of their products. Most of these middlemen are more knowledgeable about market trends than the farmers. FARM-Africa was keen to realise the weak bargaining power of the honey farmers in Kitui district and the middlemen who come from the capital city Nairobi to buy their honey. The project they pioneered was able to link the farmer groups to African Beekeepers Ltd, who had guaranteed purchase of all the honey the farmers produced until 2006. This guaranteed market boasted production and encourages more farmers to take up apiculture. The farmers also

received training on commercial production of honey from African Beekeepers Ltd, and this further strengthened their bargaining position with buyers from big cities.

Transaction cost can also manifest as smallholder farmers attempt to comply with complex government regulations and tax systems. Because smallholders have relatively little political influence, their opinions are usually not reflected in regulations governing this agricultural sector (Jayne *et al.*, 2007). The OECD, (2008), highlighted the fact that there is still a high degree of complexity in the registration process of businesses in most SSA countries. This constitutes one of the reasons why most smallholder farmers have preferred to remain informal ratherthan spend time and money to register their farm business when they are not sure of significant benefits.

Haven identified transaction cost as a potential constrain which doesn't only hinders initial entry of smallholders into high value markets, but also affects their ability to sustain participation in high value markets. Some NGOs like SCC and FARM-Africa as well as some journal articles like Hazell *et al.*, (2007); Kherallah and Kirsten, (2001); Markelova *et al.*, (2009), just to name a few, have identified alliances, collective action, vertical linkages as possible options to help reduce transaction cost and improve coordination and trust in supply chains.

6.3 Identification of NGO proposed business model

Intervention in smallholder agricultural development in the form of training in agribusiness management and operational skills can be very instrumental in enhancing smallholder capacity (Tschirley, 2007). Taking into consideration the fact that agricultural development may require considerable investment, it is necessary to have adequate and appropriate market information before engaging in any considerable investment in agriculture (Bertolini, 2004). In support of Bertolini, Henson *et al.*, (2008), proposes that SSA smallholder farmers should be aware of demand requirements, understand export markets, pricing mechanisms and have atleast elementary knowledge in financial management. Summing the various opinions, Zott *et al.*, (2010) summarises the various schools of thought in his assertion that – with a good business model, managers can be able to develop sustainable business. This idea has been adopted by SCC and FARM-Africa, who are both actively involve in smallholder farmer transformation in SSA. The two NGOs have proposed different approaches towards building sustainable smallholder agribusinesses. These approaches are examined below;

6.3.1 SCC's approach

The Swedish Cooperative Center cited in its strategy for market based agricultural development that "the challenge for small-scale farmers is now to find ways and means to develop their own sustainable organisations which can assist them to find links to gainful market." (SCC, 2007b, 8). They believe that for smallholders to take advantage of emerging opportunities in new global value supply chains and sophisticated food markets, they need to become more professional, organised and more focus on the market and its dynamics (SCC, 2007b). Most SCC sustainable agricultural development programs focus on supporting the formation and development of farmer organisations. SCC believes with a strong organisation, farmers can develop methods for sustainable agricultural production and strengthen their capacity to access markets. Farmer organisations can also develop and improve methods to access affordable rural financial services. By striving to enhance its network and collaboration with farmer organisations in Southern and Eastern Africa, SCC was urge to sign a

Memorandum of Understanding with some regional and national farmer organisations. SCC realised only a limited number of farmers can be reached if they had to target individual farmers, but by using farmer groups, it can easily bring benefits to a much wider population.

6.3.2 FARM-Africa's approach

FARM-Africa has baptised its models "models of good practice." FARM-Africa expects these models to be sustainable, adaptive, cost effective and risk free. The main focus of FARM-Africa's models is on innovations in technology, partnerships and process. The aim is to improve people's ability to take advantage of opportunities for increasing their household incomes, improve on their access to food and nutrition, as well as also improve animal health care, while protecting the local environment. By helping African farmers find local solutions to their problems, FARM-Africa believes this would boast their entrepreneurial spirits and constitute a solid foundation for a prosperous rural Africa. FARM-Africa is making use of the experience it has gained over several years of pioneering agricultural projects in Africa to develop models of good practices which are adaptive and replicable within and beyond FARM-Africa's programs. Such models emphasises bringing farmers together as a way for them to connect with each other, thereby strengthening their position in the market. Good examples of FARM-Africa's models of good practice are withness in projects financed with the Maendeleo Agricultural Technology Fund (MATF).

Maendeleo Agricultural Technology Fund (MATF) projects

Both the sunflower integrated with beekeeping project and improvement of indigenous chicken production through program hatching project are part of the MATF projects. The principal objective of these projects was to promote the dissemination of innovative technologies. The technologies ranged from the introduction of a new variety of a crop that farmers already grow, to the establishment of an entirely new farm enterprise and/or the promotion of knowledge about new ways of managing existing enterprises.

The approach FARM-Africa used in the MATF projects was geared towards bringing together partners with complementary expertise and resources to work with farmer groups. The combination of partners included atleast one organisation with access to the new technology in promotion, another organisation with resources to help take up the new technology to a significant scale, partners to provide training, those to facilitate market access, and in some cases, partners who can provide financial services to farmer. A common feature in all MATF projects was to tackle those identified constraints in the current marketing systems and to enable farmers take advantage of new opportunities. All the projects stress the need for partnerships, be it partnership amongst the farmers, partnership between project facilitators and partnership between farmer groups, NGOs, CBOs, governments and private sector.

With principal objective of the MATF projects the dissemination a new technology such that it has an impact on the farmers and other stakeholders in the wider community. At the center of both the sunflower integrated with beekeeping and improvement of indigenous chicken projects were farmer groups. FARM-Africa had either worked with existing groups or had encouraged farmers to form new groups. These groups provided a structure within which most of the project activities are carried out. FARM-Africa also introduced what she calls Farmer Field Schools (FFS). Farmers voluntarily agree to join an FFS, where they meet regularly during a whole cropping season with an extension worker or a scientist who guides them as they try out experiments with new technologies to see how they could be applied to

their circumstances. In the FFS the farmers share ideas and draw their own conclusions about the benefits of a new technology and how it can adapt to their own farming system.

From the analysis of the approaches used by both SCC and FARM-Africa, it is very clear that both NGOs encourage group formation and for various reasons prefer dealing with groups of farmers than with individual farmers. Some of the points forwarded by both NGOs for their preference of farmers groups to individual farmer include the following;

- Groups especially existing groups already have a considerable amount of social capital which provides an advantage for the success of projects.
- There is a high degree of identity, solidarity and an element of trust amongst group members, which provides a ready-made forum for introducing new ideas.
- Working with groups is very cost effective, as it reduces the need for multiple training sessions and the multiplication of training materials.
- Groups have shared resources, and in some cases this facilitates the provision of credits.
- Groups are more likely to continue operating even when project funding ceases and support from NGOs is no more available.

Therefore the principal business model the two NGOs are proposing for smallholder development is collective action, and they both believe that if SSA farmers find solutions to their problems locally, such solutions are more sustainable than solutions imposed on them by outsiders.

6.3.3 Discussions on collective action as a business model for smallholder farmers

Innovations in existing value chains and marketing arrangements are presenting new approaches that can transform in favour of smallholder farmers. IFAD, (2001) had cited approaches that encourage the demand for traditional products through new ways of processing and other value-adding activities. Markelova et al., (2009), is of the opinion that collective action in the form of farmer organisations offer favourable conditions for smallholders to participate in markets more effectively. They identify collective action and producer organisations to be amongst the focal areas of pro-poor market approaches. They also cited some cases where the support of farmer organisations have mitigated market inefficiencies which have prevented smallholders from participating in markets which can give them opportunities to raise their incomes (ibid). In support of Markelova et al., (2009), Thorp et al., (2005) believes collective action can help smallholder farmers overcome or reduce barriers to entry into markets by improving their bargaining power with buyers. In addition, Stockbridge et al., (2003) proposes collective action as a favourable option for smallholder famers as they try to reduce transaction cost associated with procuration of farm inputs, accessing new technologies, obtaining necessary market information and participating in high value markets. Collective action in the form of farmer organisations or producer groups may also help famers overcome other setbacks smallholders face like poor rural roads resulting in high cost of transportation, the need for research and extension services as well access to credits (Hazell et al., 2007).

Most buyers on their part would always prefer to deal with producer groups ratherthan individuals because they are more certain of a stable supply than when dealing with individual farmers Vorley *et al.*, (2007). In support of this fact, Markelova *et al.*, (2009), highlighted claims of increasing evidence of willingness of supermarkets to include smallholder producer groups into their procurement chains if they can successfully deal with economies of scale and coordination issues. Talking about supermarkets, it is interesting to mention

Weatherspoon and Reardon, (2003), who are of the opinion that some producer groups would prefer to deal with domestic supermarkets ratherthan export markets. Reasons being that domestic supermarkets also offer a stable market with good profit margins and in some cases less stringent food safety and quality requirements. This could be a very good option if only the quality and safety requirements are good enough to guarantee the safety of consumers and whether supermarket chains in SSA countries are well developed. Individual farmers on their part may find it difficult meeting up with increasing market demand and increased cost of production whereas with farmer groups, it is easy to handle this cost, as it is shared amongst group members.

In conclusion therefore though farmer groups may have so many advantages, forming and sustaining groups is usually not so easy, as it may require special skills in managing conflicts, especially conflicts related to financial issue (FARM-Africa, 2011).

6.4 Application of Oxfam's five principles and its new business model assessment framework

Incorporating smallholder farmers into domestic and global supply chains has kept on featuring in so many pro-poor development programs. Oxfam in its publication about adapting business models to incorporate smallholder farmers strongly supports a pro-poor approach as a very feasible option that could have significant positive impacts on development. By drawing lessons from both successes and failures of programmes related to smallholder agricultural development and value chain development, their have proposed five principles for linking smallholders to formal markets. The principles proposed by Oxfam as earlier mentioned include; chain-wide collaboration and innovation, market linkages, fair and transparent governance, equitable sharing of cost and risk, and equitable access to services. Tables 6.2, 6.3, 6.4, 6.5 and 6.6 below presents an analysis of these five principles respectively, and shows how they relate to the various NGO proposed business models and projects presented in this paper.

6.4.1 Principle 1: Chain-wide collaboration

As highlighted in Oxfam, (2010), the development of sustainable commercial relationships with shared goals is essential for the identification of both commercial and social problems in a value chain. They also added that collaboration has always stimululated innovation as actors in the value chain grow to understand their interdependencies and needs to adapt to changing markets. Table 6.2 below analyses how both SCC and FARM-Africa collaborated with various actor in selected projects

Table 6.2: An analysis of chain-wide collaboration in NGO projects

Swedish Cooperative Centre

- -SCC has always tried to involve its partners at all levels of a project, from the making of resolutions, planning of project activities, and even during periodic monitoring of the progress of a project.
- -SCC is also greatly increasing learning within local partner organisations, and has always builds on existing systems within a partner organisation to enhance monitoring and capacity building. For the Eco-marketing project, SCC actively collaborated with OPPAZ, which acted as the principal partner organisation. OPPAZ was able to mobilise 104 organic farmer groups from the districts of Kabwe, Mongu, Mpongwe districts, who were direct beneficiaries of the project.
- -Chain-wide collaboration can also be noticed from the involvement of buyers of organic produce, like the case of Dunavant, who purchased cotton from Kabwe cotton farmers. The Zambian Organic Standards organisation was also active inspecting the farmers to ensure they produce organically and issued organic certifications to deserving farmers.

FARM-Africa

- -FARM-Africa for its projects has involved a wide range of partner organisations. They most of the time collaborate with other NGOs, university departments, CBOs, research institutions, government ministries, and even commercial companies.
- -For the promotion of indigenous chicken and programmed hatching project, FARM-Africa worked in collaboration with atleast 8 partner organisations. There was the Community Integrated and Development Institution (CIDI), who was very active in coordinating the activities of the project, Makerere University through its department of Animal science, who helped trained farmers especially in data collection and record keeping. Other partners included INCORET, who trained farmers on innovative hatching technologies, St Judes Organic Rural Training Centre, which provided space for on-farm demonstrations on sustainable agricultural techniques and the distric extension coordination office of Rakai which helped in the vaccination of the birds. More partners included the Rakai Farmers Association that mobilised the farmers who participated in the project and the Indigenous Chicken Breeders and Marketing Association which was set-up to assist farmers market their products

As cited by Oxfam, (2010), certain pre-conditions must exist for a successful chain-wide collaboration in a program. For the larger the number the partners, the more complicated it can be to coordinate and manage the activities of a project. The pre-conditions include;

- Each of the partners should have the right skills and resources needed for a particular project.
- The vision/goals of the project must be shared by every partner.
- The expected role and responsibilities of the partners must be clearly stated from the start of the project.
- There must exist good communication amongst partners both formally through regular meetings and informally amongst staff from the different organisations.
- There must also exist the possibility and willingness for the partners to adjust their programmes in their organisations such that it accommodates the needs of the project.

Both SCC and FARM-Africa from experienced gained working in partnerships for development projects always make use of a Memorandum of Understanding to reach and keep agreements.

Writing to support the need for collaboration in smallholder development, the World Economic forum (2010), suggested a type of collaboration which they called "a bread basket," whereby resources are concentrated in an area with the most agricultural promise. They believe this has the advantage of maximising efficiency, improve food security and creat some suplus for off-farm development. Another option for collaboration could be in the form of value chain interventions, as this has the advantage of targeting the stimulation of business investments in the production of a particular good, with the aim of improving its value along the value chain. Collaboration in the form of intervention by external development agencies like NGOs has been encourage by Wenar, (2006), as this has the advantage of promoting improvements in accountability, a focus on technical implementations as well as ensuring sustainanble benefits for smallholders and their livelihoods. The establishment of trading networks between small exporting marketing enterprises in Africa and importing countries may help reduce the risk of transaction cost, while increasing the capacity of smallholders to access credits and market information (Maxwel and Holtsman, 1997). Collaboration too in the form of contract farming could be essential for business to ensure a regular supply of raw materials for export and processing (ibid).

The role of the private sector too can not be underestimated, for it may actively participate in investments in supply chain infrastructure, transfer of technical know-how as well as market information to smallholders (Humphrey, 2006).

6.4.2 Principle 2: Market linkages

Smallholders now have opportunities to exploit niche markets for agricultural products (Hazell. *et al.*, 2007). Such opportunities can exist in markets for staple foods, and some high value export crops. But one of their greatest problems is reaching these markets (*ibid*). Oxfam, (2010) believe intermediaries could play the linking function. But most intermediaries are dealing in the supply of multiple products and can help smallholders spread their risk by linking them to other markets for different grades of crop (*ibid*). Table 6.3 below analyses Market linkages in NGO business models

Table 6.3: An analysis of market linkages in NGO project

Swedish	Cooperative	Centre

During the project period for the Ecomarketing project, organic producers from Mpongwe, kabwe and Chibombo provinces were able to display their products in trade fairs in the capital Lusaka, and in another organic fair in Germany.

Negotiations were on the way between MBOCS and Cross Border Association in the Democratic Republic of Congo (DRC) for the supply of 20million tonnes of red onion. MBOCS also entered into negotiations with Trading Organic BV a Dutch company for the supply of groundnuts.

There was also the possibility for more market linkages as more and more farmers were receiving organic certifications

FARM-Africa

FARM-Africa in partnership with KDC was able to convince African Beekeepers Ltd, one of the partners in the community sunflower integrated with beekeeping project to buy all the honey produced by participating bee farmers until 2006. Most of the honey being produced after that period is now sold locally through KDC and also to middlemen who come from big cities to buy.

Another example of market linkages was through the creation of the Indigenous Chicken Breeders and marketing association by 20 farmer groups in the Rakai district of Uganda. This association served a significant portion of the total market outlet for poultry products, and also owns a central poultry feed centre and sells vaccines to most farmers.

Though Table 6.3 identifies some market linkages as a result of NGO projects, Oxfam, (2010) cited the fact that some NGO intermediaries still find it difficult to combine commercial and development goals. Temu and Temu (2006) while writing on the market for horticulture products in Southern Africa mentioned the contributions of market drivers in the creation of favourable market linkages for smallholder farmers. In a situation involving high value agricultural products, (HVAPs), the increasing pressure from urbanisation, coupled with changing income levels and the increasing awareness of most people about the health benefits HVAPs are generating a tendency of continous demand for fresh products. With the increased cost of production in most developed countries, some suppliers are now looking for cheaper sources of the products they supply in Africa, Asia and Latin America (Singh, 2002). Rural-urban migration in Africa is also creating a huge domestic market for agricultural products in urban centres. The urban population has showed a high dependence on the market for food rather through subsistence farming (Temu and Temu, 2006).

6.4.3 Principle 3: Fair and transparent governance

With regards to fair and transparent governance, it is important that there is a general agreement and understanding of the terms of trade, pricing policy, cost structure and quality standards from the out-set, through out the supply chain, to avoid disputes which may arise. Such disputes may jeopardise the sustainability of a supply chain if they are not clear and farmers feel exploited. Table 6.4 below tries to identify some examples of fair and transparent practices in NGO projects.

Table 6.3: Analysis of fair and transparent governance in NGO projects

Swedish Cooperative Centre

Most organic farmers who had obtained certification received premium prices for their products. Seeing the benefits organic farmers were having from niche markets, farmers practising inorganic farming started adopting organic farming practices, and they were allowed to join organic farming groups. With every farmer having equal access to training and marketing outlets.

Every member of OPPAZ had the right to participate in the election of a board which would represent their group in issues of concern.

In the EDP project, all member district unions of UCCCU participated in internal auditing of the union, and also elected their leaders in an AGM who represent them in the board of UCCCU.

Most of the district unions adopted a gender equality policy, which gave equal rights and priviledges to both male and female members.

The UCCCU had adopted a policy to always review her administrative and financial management procedures as a move towards efficient management of union funds.

FARM-Africa

For every project pioneered by FARM-Africa, every farmer who has received training is expected to train more farmers in his/her community.

During the project period of FARM-Africa's improvement of indigenous chickenproject, every selected farmer who participated in the project was given Layer hens and a cock which were cross breeds between exotic birds and a local breed of poultry bird. These beneficiaries on their part are expected to return two laying birds to CIDI after their birds start producing. The returned birds are then distributed to more households in the area.

Transparent governance is most likely to exist in an organised group of farmer (Oxfam, 2010). Therefore contracting with an organised group of farmers may be one way of ensuring transparent governance as the group is better able to negotiate better prices and terms. However, Simmons et al., (2005) raised concerns over situations of discerning buyers who impose requirements which may exclude less endowed producers from marketing arrangements. The exclusion of less endowed and poorer smallholder farmers from marketing arrangements may further result in income disparities in the community, and this would greatly distort the achievement of a broader economic objective (Reardon and Burret, 2000).

6.4.4 Principle 4: Equitable sharing of cost and risk

Smallholders face considerable risk when operating in highly competitive markets. The risk which ranges from the selection of the kind of crop to grow, the amount of investment to make and the weak marketing arrangements they use which may be characterised by last minute changes in customer demands. There are also risk associated with transport losses and bad weather conditions which may be borne by smallholder farmers if there are no strategies in place for equitable sharing of this risk in an organisation and through out the chain. Table

6.5 identifies a few examples of how farmer groups try to share their cost equitably, such that it doesn't weigh much on individual farmers.

Table 6.4: Equitable sharing of cost and risk in NGO projects

Swedish Cooperative Centre -In the EDP project, after analysing additional benefits dairy farmers may have if the union owned a dairy processing plant, the UCCCU, started mobilising for funds in 2007 to set up a processing plant and meet up with the liscensing requirements to operate a processing plant. Part of the funds was raised internally from contributions of member, and another part was from a longterm credit that the union had secured from a financial institution.

-With the Eco-marketing project, most participants understood how extreme wet seasons in Zambia could affect the quality of rice produced. And in the even of such a situation, every faermer sharres the cost of a drop in income from the sale of rice.

FARM-Africa

In FARM-Africa's community sunflower integrated with beekeeping projects, the participants were educated on the fact that if they wish to transform their honey business into a self sustaining commercial enterprise. They had to start anticipating an investment in honey processing equipment that would fetch them higher prices in the market. And for this purpose, the farmers had to make cash contributions so as to develop a sence of ownership and commitment to the project.

Oxfam, (2010), proposes better communication channels along the supply chain as an option to mitigate risk. Smallholders are also expected to have some market knowledge about changes in demand and supply, investment and financial management risk as well as an idea in trade regulation as this would help them to easily monitor and mitigate the effect of different kinds of risk associated with either production or marketing. Eskola, (2005) however suggested that smallholder farmers especially in SSA vary in their abilities to sustain risk. In the presence of risk, some risk adverse smallholder farmers may decide to keep their production at a subsistence level ratherthan increase production and face a risk of market failures. In support of this idea, Barret *et al.*, (2001) also highlighted the fact that most farmers prefer taking up non-farm activities alongside their traditional subsistence farming activities.

6.4.5 Principle 5: Equitable access to services

Smallholders if left on their own may lack the necessary technical expertise needed to establish successful trading relationships with processing companies (Oxfam, 2010). Based on this, smallholders therefore need assistance to develop their capacity for effective market participation. Table 6.6 analyses how NGOs through their projects are providing extension services to smallholder farmers aimed at improving their capacities to access formal marketing channels.

Table 5.6: Analysis of equitable access to services in NGO projects

Swedish Cooperative Centre

- -SCC realised the need to significantly improve on the training of participants in the Eco-marketing project, reasons why farmers received training sessions more frequently in 2008 than in previous project years. Such renewed interest could have stemed from the fact that more and more farmers were adopting organic farming practices because of the increasing demand for organic products.
- -Every organic farmer had access to certification services, and most of them had registered for the certification process.
- -In the EDP project, UCCCU had designed and publishes an annual magazine called Dairy Year book, which serves as a platform for dairy farmers to share their experiences and also highlight hot issues related to the dairy sector.
- -UCCCU was also in the process of establishing a dairy processing facility which would serve members and non-members of UCCCU. This processing plant would also create some off- farm employment opportunities for the local community.

FARM-Africa

Several partners in FARM-Africa's community sunflower integrated with beekeeping project assisted in the training of project participants. The Ministry of Agriculture and Livestock Development used their FFS to train participants on modern beekeeping techniques. The participants also received training on loan management and cooperative formation provided by the Ministry of Cooperative and Marketing Development. More training also came from scientist at Kenya Agricultural Research Institute (KARI) who trained the farmers how to manage new sunflower varieties suitable for their area.

-Trainers of trainers were identified from amongst the farmers in a given community and they were given training as well as bee harvesting equipments and protective suits which they used when training other beekeepers on honey harvesting. The trainers also provided services to farmers who are unable to harvest honey themselves. The project also provided sunflower presses which served the community.

NGOs working in partnership with governments, CBOs and the private sector can effectively provide technical, marketing and in a few cases financial assistance to smallholder farmers. Such assistance is very necessary for the longterm survival and participation of smallholders in high value markets (Chirwa *et al.*, 2005). Interventions by NGOs in the form of capacity strengthening of individuals or groups for the creation of linkages to relevant market information and to other stakeholders in the market chain (Kindness and Gordon, 2001). However, Kindness and Gordon, (2001) suggested that NGOs should try to be less interventionist in their attempt to create more sustainable marketing linkages for smallholder farmers. They discouraged other forms of intervention like the creation of enterprises owned by the NGO, which employs beneficiaries, or the establishment of a satalite production unit which buys raw materials from beneficiaries at a predetermined price or makes use of a predetermined pricing formula. Stringfellow *et al.*, (1997) also supports Kindness and Gordon, (2001), as they think such methods of intervention may not be the best option for a sustainable solution eventhough it guarantees a secure market for farmers at predetermined prices.

6.5 Determinants of success of NGO proposed business models

Most of the NGOs used in this paper have a long period of experience working in SSA and have come out with several practical solutions to pressing problems in rural areas in SSA. Their rich experiences in agricultural development activities have put them in favourable positions to successfully initiate, implement and monitor agricultural activities (Kindness and Gordon, 2001). Some of the factors which are use to analyse the success of NGO projects include; group characteristics, type of agricultural product, type of market, institutional factors, facilitation, and some environmental factors.

6.5.1 Group characteristics

As proposed by Kayobyo *et al.*, (2010), groups formed with members of thesame economic status are likely to be more effective as interdependency amongst members is crucial for the success of a collective action initiative (Markelova *et al.*, 2009). Group size, degree of homogeneity and social capital are very important for the success of any collective action (*ibid*). Clearly defined group boundaries and tighter membership rules would greatly facilitate collective action. Kayobyo *et al.*, (2010), support the idea that larger groups are more likely to benefit from economies of scale, whereas Coulter *et al.*, (1999) was of the opinion that members of smaller groups are more close to each other than in larger groups. This closeness increases interdependency, trust and interaction between group members. This idea of smaller groups is also shared by Kindness and Gordon, (2001), who suggested that breaking down the group makes it easier, as smaller groups are more focused, more specialised and usually share common ideologies and goal.

In the four agricultural projects analyses in this paper, most of the NGOs have worked with a good number of small groups formed in different communities. In the Eco-marketing project pioneered by SCC, the number of participating groups were 104 small groups of organic farmers from different districts, with each group electing a board which represented them. In the EDP project also, SCC targeted already existing 90 primary dairy cooperative societies with membership ranging between 10 to 30 dairy farmers. FARM-Africa for both the beekeeping project and indigenous chicken projects had to encourage the creation of new small groups. In the community sunflower integrated with beekeeping project, most of the groups were created during the project period under the coordination of KDC and the number of groups steadily rose from 78 to 100 small bee farmer groups. Eventhough it was essential for most of the groups to be formed based on a common interest (Markelova and Meinzen-Dick, 2009), Markelova *et al*, (2009), strongly believes that pre-existing groups with members of thesame socio-economic status are more likely to be stable and effective.

6.5.2 Type of product

Markelova *et al.*, (2009) identified the fact that there is a significant difference between the marketing of staples, perishables and cash crops. Collective action is more advicable for growers of staples as they have an advantage of bulking and most staples are less perishable, whereas perishable crops require greater technical expertise and updated market knowledge (*ibid*).

The success of the four NGO projects analysed in this paper can be greatly linked to the choice of product the farmers were growing. Most of the products are staple crops with low perishability. Honey and sunflower oil which are the principle products for FARM-Africa's Sunflower integrated with beekeeping project, are both staple products with very low rates of

perishability. Both products are less bulky and easy to transport eventhough the require further processing inorder to add their value. In SCC Eco-marketing project, the organic products grown by most of the organic farmers were cotton, rice, groundnuts, beans and onion, just to name a few, all of them staple crops with longer shelf life but for cotton. There is however a difference with the EDP project of SCC, most dairy products are very perishable and not so recommended for collective marketing (Markelova *et al.*, 2009). Inorder to increase chances for success of the EDP project, SCC primary objective was to promote the establishment of a dairy processing plant by UCCCU, where milk from the farmers can be processed before marketed sinced processed dairy products have a longer lifespan and added value. This falls in line with the proposal by Stringfellow and Coulter (1997), that the involvement of smallholder farmer's associations in primary processing activities like storage, grading and packaging are adding value to the produce of small scale farmers.

6.5.3 Type of market

Collective action can be very detrimental if increased production is not matched with increase demand and better prices (Kaganzi *et al.*, 2006). Markelova *et al.*, (2009) in their article on collective action suggested that markets with long market chains offer potential gains eventhough they are characterised by alot of challenges for smallholders like transport cost, and storage. Local markets on the otherhand are easy to access but offer lower potential gains (*ibid*). To support this idea, the highly cited Markelova and Meinzen-Dick, (2009), raised the fact that most international markets require supplies in significant quantities and quality. And meeting these quality standards is very necessary to be able to supply most international markets. (*ibid*). However, some national markets in SSA now offer potential gains due to rapidly growing supermarket chains and restaurants (Markelova *et al.*, 2009). Reasons why Chowdhury *et al.*, (2005), suggested that smallholders should also look into other options in national markets to diversify.

In our four NGO projects, most of the products are sold locally, eventhough the Mpongwe-Bulima Organic Cooperative Society (MBOCS) in the Eco-marketing project had initiated negotiations to start selling out of Zambia. As cited by Markelova and Meinzen-Dick, (2009), FARM-Africa could not think of encouraging the bee farmers in Kitui district to engage in selling honey internationally because selling internationally requires production in significant quantity and quality. They however had a significant local market for their products. African Beekeepers Ltd guaranteed purchase of honey produced until 2006 and sometimes complained of the farmer group's inability to meet up with required quantity. There are always middlemen who come to buy and resell in big cities. Sunflower oil produced is bought by local household and some sold to restaurants and hotels.

6.5.4 Institutional arrangements

The FAO, (2010), proposes that one critical option for promoting livelihoods is by the government supporting informal institutions like institutions dealing with longterm needs in sustainable agriculture and natural resource management. Warner and Kahan, (2008), proposes collaborative approaches in the form of private-public partnerships which can have value-adding propositions especially for infrastructural improvements in a market-oriented agricultural development programs. But this however depends on how best the necessary financial and institutional arrangements are formulated (*ibid*).

Neven and Reardon, (2004), suggested the existence of institutional arrangements which promote the creation of associations which allows for farmers to share the risk involve in acquiring inputs, processing, storage as well as marketing of their agricultural produce. In support of Neven and Reardon, (2004), Kaganzi *et al.*, (2006), recommends a participatory learning approach for any form of intervention, as this strengthens the prospects of

sustainability especially when farmers participate in the decision making process ratherthan being just mere recipients of information and guidance. Rules should be designed such that they adapt to the local context, as this is easily understood and followed by participants, and it has greater chances of contributing more to the effectiveness and sustainability of any collective action initiative (Markelova and Meinzen-Dick, 2009). Markelova and Meinzen-Dick, (2009), also strongly recommend institutional arrangements which allow for the participation of state agencies, NGOs, CBOs as well as private companies. As this would take care of the various relationships along the supply chain and also ensure timely provision of services and funding.

Relating these suggestions/recommendations to our NGO projects, both projects by SCC and FARM-Africa had involved participants from several sectors. In the sunflower integrated with beekeeping project for example, FARM-Africa had involved different actors from different sectors who actively participated in the realisation of the project. Participants included FARM-Africa as an NGO, Kitui Development Centre (KDC) a CBO, from the government, you had the Ministry of Agriculture and Livestock Development, research institutions like Kenyan Agricultural Research Institution (KARI), while Agro-vet shops and African Beekeepers Ltd represented the private sector. It should be noted that most of this participants are locally based, and most of the demonstrations of the new technologies were done in the communities where direct beneficiaries lived. The purpose of this was to ensure that the project is designed and adapted to the context of the benefitting communities, such that it can produce sustainable solutions to the focal problem.

6.5.5 Facilitation

The World bank, (2002), in its recommended policies on agricultural development in SSA proposed that government should intervene in the development of enclaved areas with great agricultural potentials, through the provision of vital services that can not be effectively provided by the private sector. Chowdhury *et al.*, (2005) suggested that government should intervene by building roads, processing centres and packaging operations around areas with great agricultural potentials. For effective provision of these services, Kindness and Gordon, (2001), identified the fact that most governments in SSA are seeking for ways to sub-contract agricultural development functions wherever feasible. Reasons why Acquah and Masanzu, (1997), had earlier suggested that both the private sector and NGOs should be allowed to get involved in the provision of infrastructure.

Answering the question on who can best play the role of a facilitator, Kindness and Gordon, (2001) believes NGOs are more suitable, judging from their long periods of experimentations with pressing problems in rural Africa. They also think that NGOs are smaller, more flexible and innovative, and appear to have distinct advantages in pursuing income-generating activities. They further added that most fundings for development activities in developing countries to build indigenous capacity are now being channelled through NGOs. With these aforementioned advantages amongst others, NGOs as facilitators can better help smooth the process of smallholder farmers to overcome barriers to entry into high value markets. However, Markelova *et al.*, (2009), suggested that it is essential that NGOs should have clear exit strategies, as this is critical for the sustainability of a project. Farmer organisations should be cleared on the services provided by the NGO (facilitator) and their cost implications (Kayobyo *et al.*, 2010). Information on the cost associated with providing services to support a smallholder development program should be precised, such that it ensures sustainability of project once subsides provided by promoter agencies are no longer available (*ibid*).

Most of the facilitation role by NGOs in the selected projects being analysed took the form of training and capacity building. SCC for example trained selected staff of UCCCU on how to

use accounting software for record keeping, and it adviced and guided UCCCU on the establishment of a dairy processing plant. FARM-Africa on its part has always initiated, spearheaded and generously sponsor the training of Community based trainers for most of its projects. Training in most of their programs takes the form of talks and practical demonstrations at FFS. In the FFS, much of the work is done by the project participants themselves, with a scientist or researcher who only acts as a facilitator. The purpose of this approach as indicated by FARM-Africa is to promote sharing of ideas by the farmers, and to encourage them to come out with practical solutions to problems which they face in their communities. These trainers who have been trained at the FFS are expected to carry the knowledge and train more farmers back in their communities. And the chain continues.

6.5.6 External environment

In SSA, most countries in post-conflict economic development/reconstruction, have always classified social protection as principal public measure and concern. With conflicting ideas about defining the scope of public assistance to agriculture (FAO, 2010). There is the petinent question on whether limited public budget should be allocated to investments in agricultural productivity enhancement or used for formal social protection measures like expanding safety nets (*ibid*). This falls in line with Markelova et al., (2009), who is of the opinion that collective action cannot be successful within the context of state hostility or microeconomic instability. It is undoubtably true that the existence of good governance and a reliable legal and credit systems and essential to increase economic opportunities. Rounding it up, Thorpet al., (2005), identifies the fact that the market and the state are two major aspects of the external environment that may have significant influence on the success of any collective action.

6.6 An analysis of NGO exit strategies

It is important that NGOs ensure that the benefits of a project to a community continue to spread to farmers in different areas, even after the life of the project. Both SCC and FARM-Africa are taking this into account, and they have always established exit strategies for each of their projects, such that continuity is taken care of. The exit strategies of both NGOs fall under three identifiable areas; working in partnerships with local governments and organisation, secondly, encouraging the development of farmer organisation and thirdly, the training of trainers and active involvement of the local government.

For an NGO like FARM-Africa, it brings together local partners with complementary expertise and resources to work with farmer groups. The combination of partners include atleast one organisation with access to the new technology they are introducing, another organisation which has resources which can take up the technology to a significant scale, partners involve in training, markeing partners as well as a partner to provide financial services. With such an approach, FARM-Africa only takes the role of a coordinator. It helps farmer organisations to create links with other partners such that this kind of collaboration shall continue. SCC on its part has also carried out most of its projects through networks and alliances with local governments. The farmers and local organisations are made to understand that they are the owners of their activities and SCC only comes in to assist. It is important that the goals and visions of the project are shared by every partner, and every partner has the right skills and resources needed for a particular function. As SCC clearly puts it, it also important that the roles and responsibilities of every partner are clearly stated at the beginning of the project. Both SCC and FARM-Africa acknowledges the fact that when working with local partners who posses the skills and resources needed for a particular project, it is possible to carry out most of the practical demonstrations in the communities where the direct beneficiaries live. Another advantage from using this approach is the fact that the solutions to focal problems are designed such that they adapt to the local context where they are to be applied, and in most cases, it makes it easier to convince local government bodies on the benefits of the new technology or system being introduced, and why they should commit funds from their budget to support future uptake of this project.

The second exit strategy of NGOs identified is the promotion of the creation of farmer organisations. Both SCC and FARM-Africa chosed to work with farmer groups, either existing groups or new groups. They had strive to enhance network and collaboration with farmer organisations, as they believed with a strong farmer organisation, farmers can develop methods for sustainable agricultural production and strengthen their capacity to access markets with or without external support. In the EDP project, SCC had helped transformed the UCCCU from a small district union to a very vibrant cooperative union, with a secretariat that coordinates the activities of other district unions. The UCCCU was now also capable of negotiating and market the milk and other dairy products on behalf of farmers. SCC also engaged in training the staff of the union on administrative and financial management procedures, as this would help improve on their capacity to better manage union funds and activities. While working with groups, the two NGOs had promoted a participatory learning approach, whereby the farmers were actively involved in the decision making process, ratherthan just being mere recipients of information and guidance. Working with groups also presented a cost sharing advantage, as the cost incurred in projects or the purchase of equipments can be easily borne by all group members. With regards to cost, it is necessary for the NGOs to educate the farmer organisations on the cost implications of their services, such that the beneficiaries already have an idea on how this cost shall be covered when the NGO withdraws its support.

The third smooth exit approach used by the two NGOs was through training of selected farmers who later acted as trainers in their communities. In a case like the sunflower integrated with beekeeping project, selected farmers were trained on new honey harvesting techniques, and were given harvesting equipments and protective suits, which they would later use in their communities to train other farmers and also help them in harvesting honey. Another interesting approach to project sustainability was that implemented by FARM-Africa in its promotion of indigenous chicken through programmed hatching project. Most of the beneficiaries in this project had received improved birds, and they are expected to return atleast two birds when the birds start producing. The returned birds are later shared to other beneficiaries, and the chain is expected to continue. FARM-Africa imparticular had also initiated and setup Farmer Field Schools (FFS), where they had actively involved grassroot communities in the process of developing and testing of agricultural innovations. With this approach, they were able to share expertise with government, private sector and community members. Participation in FFS was voluntary, and the farmers met regularly during an entire croping season to try out experiments with new technologies to see how it could be applied to their own circumstances. In this process, the farmers share ideas on how to come out with innovative solutions to their problems. With this approach, there are high chances of coming out with more sustainable solutions, and the farmers are more likely to repeat this same exercise whenever they face other challenges, with or without NGO support.

7 Conclusion

This chapter relates the outcome of the analysis of the empirical material to the aims of this study. The research actually aimed at identifying the business models NGOs are applying for the development and support of smallholder farmers in SSA, how this business models can influence the performance of smallholders, and facilitated access to high value markets. The paper was also analysing the factors responsible for the success of these NGO proposed business models and the exit strategy of the various NGOs.

There is the existence of a considerable amount of literature which highlights the fact that smallholders face numerous challenges in accessing markets which can bring them added income from the sale of their products. Those challenges cited amongst others include; lack of access to credit, lack of access to farm inputs, limited access to market information and high transaction cost. Acting collectively is the most feasible model that NGOs and other stakeholders are proposing as a solution for smallholders to overcome those barriers to entry they face. Acting collectively can help them pull together both financing, technical and labour resources which can help smallholders meet up with the required quality and quantity needed to supply high value markets, reduce high transaction cost, increase access to credit and improve on their bargaining power.

But smallholders if left on their own can rarely self-organise to meet the level of formalities required to supply high value markets (Markelova *et al.*, 2009), reasons why most cases of successful collective action has always inolve a facilitator who provided information, technical assistance and also helped build the human and financial capacity of the farmer group. Because NGOs have some of the quality required providing effective facilitation like legitimacy, contacts, trusts and expertise as cited by Kindness and Gordon (2001), they are always cited as best suited for the role of facilitators. In addition, for a successful collective action initiative, some factors like group characteristics, types of product, type of markets, institutional arrangements and favourable environment should exist. Staple crops and shorter market chains are most suitable for collective action and recommended for smallholder farmers in SSA, eventhough perishables and longer market chains may offer greater returns. Good institutional arrangements and a facilitator are also necessary for building the capacity of smallholders to effectively engage in collective action. The external environment may also have significant infkuence on the success of any collective action, for collective action cannot be successful within the context of state hostility or microeconomic instability.

Also very important is the fact that NGOs facilitating collective action initiative should have clear exit strategies, as this is crucial for sustainanbily. The best form of intervention is one whereby farmers actively participate in the decision making and learning process. Rules should be designed within the group, and should adapt to the local context as this would contribute more to the effectiveness and sustainability of any collective action initiative. And in addition, the NGOs should try to avoid direct financial assistance and try to educate the farmer association on the limits of the services they provide, and their cost implications. Recommended areas for NGO intervention include; the development of farmer organisations, assistance in the establishment of networks and collaborations with local partners, capacity building and training in management and administrative skills and also the provision of market information.

Though the models being applied by NGOs have generally been associated with success, some limitations were identified in the course of this study and a listed below.

7.1 Limitations of NGO proposed business models

The major limitation identified with the NGO models and other business models for smallholder farmer development is the fact that these models do not go beyond market linkages. Most of them concentrate on helping smallholders overcome barriers to entry, and very little or no proposals are made on how smallholders should operate in high value markets Drawing reference to FARM-Africa's community sunflower integrated with beekeeping project, the local honey farmers could only negotiate a guaranteed market for their honey with African beekeepers Ltd for a limited period of about 2 years. The big question is what happens next?, It is essential for smallholder farmers to know how to operate in high value markets, if they need to sustain their participation.

Secondly, the models do not touch the aspect of smallholder farmer group management. Effective management of a farmer group is very necessary inorder to maintain the group hence sustain its participation in markets. Especially as there is the likelihood of a continous increase in group size as the smallholder farmers try to meet up with increasing requirements for quantity supplied. Based on these two limitations, the following areas for further research are proposed.

7.3 Suggestions for further research

The first proposal would be to try to identify a management model that would best suit smallholder farmer groups when they are engage in commercial activities. General, most of the models proposed in several literature on smallholder farming activities, have been inspired by a pro-poor agricultural development objectives. Most of these organisations usually have altruistic goals and the smallholder groups are mostly formed based on social ties. But when these farmer groups become more market-oriented it is very possible that the commercial or profit making goals will override the social goals. If such a situation arises, it would therefore creat the need for an organisational structure which accommodates both the commercial and social goals.

Secondly, should a cooperative model be applied to smallholder farmer groups? If yes, how should the property right issue be handled?

Bibliography

Literature and publications

- Abbot, R. D. (1995), Sub-Saharan African Exports of Horticultural products to the European Union: Consolidation and Synthesis. Agribusiness and Marketing Improvement Strategies Project paper No. 2. Maryland, USA.
- Acquah, E. T and Masanzu, F. M. (1997), *Stimulating Indigenous Agribusiness Development in Zimbabwe: A Concept Paper*." Technical Paper No. 72, United States Agency for International Development, USAID
- ADB African Development Bank, (2010), *Agricultural Sector Strategy 2010-2014*, Agriculture and Agro-industry department and Operations Resource and Policies department, African Development Bank, Tunisia.
- Adesina, A. A and Djato, K. K, (1997) "Relative efficiency of women as farm managers: Profit function analysis in Cote d'Ivoire." *Journal of Agricultural Economics*, Vol.16, p47-53
- Alene, A.D., Manyong, V. M. Omanya, O.G. Mignouna, H. D. Bokanga, M. Odhiambo,G.D, (2008) "Economic efficiency and supply response of women as farm managers: Comparative evidence from Western Kenya." *World Development*, Vol.36, No.7, p1247-1260
- Allen, D.W, (1999) Transaction Cost" Department of Economics. Simon Fraser University, U.S.A
- Ajala, A. A, (1995) "Women's task in the management of goats in Southern Nigeria." *Small Ruminant Research*, Vol. 15 p.203-208
- Ayieko, M, Tschirley, D. and Mathenge, M. (2006), Fresh Fruits and Vegetable Consumption and Trade in Urban Kenya. Working paper No. 19, Tegemeo Institute for Agricultural Policy and Research, Nairobi, Kenya
- Barret, C. Reardon, T. and Webb, P, (2001) "Non-farm income diversification and household livelihood strategies in rural Africa: Concepts, dynamics and policy implications." *Journal of Food Policy*. Vol. 26, issue.4, pp 315-331
- Beintema, M. N and Gert-Jan, S. (2004), "Sub-Saharan African Agricultural Research: Recent Investment Trends." *Outlook on Agriculture*, Vol. 33, No. 4, pp239-246
- Berdegue, J, (2001) "Cooperating to compete" Associative peasant business firms in Chile. Phd thesis, Wageningen University
- Bertolini, R. (2004), *Making Information and Communication Technologies Work for Food Security in Africa:* IFPRI 2020 Vision, International Food Policy Research Institute. Washington. D. C
- Bingen, J. (2003), Community- Based Producer Organizations: A Contribution to the West African Regional Program Action Plan for the initiative to End Hunger in Africa. Agriculture Policy Development Program, Order No. 5, USAID AFR/SD
- Binotto, E., Hamer, E. Nakayama, M. K. and Silveira, R. A, (2004), "The cycle of knowledge creation and learning agribusiness." Informing science and IT education joint conference, Rockhampton Australia, June 25-28
- Boughton, D., Mather, D. Barrett. C. B. Rui. B. Abdula. D. Tschirley. D. and Cunguara. B, (2007), "Market Participation by Rural Households in a Low-Income Country: Asset-Based Approach Applied to Mozambique." *Faith and Economics*, pp 64-101

- Brenner, S. N, (1995) "Stakeholder theory of the firm: Its consistency with current management techniques." In J. Nasi (Ed.), *Understanding Stakeholder thinking*. p75-96. Helsinki:LSR-Julkaisut Ov.
- Chirwa, E., Dorward, A. Kachule, R. Kumwenda, I. Kydd, J. Poole, N. Poulton, C and Stockbridge, M. (2005), "Walking tightropes: Supporting Farmer Organizations for Market Access." *Natural Resource Perspective* 99, pp1-6
- Chowdhury, S., Negassa, A. and Torero, M. (2005), *Market Institutions: Enhancing the value of Rural-Urban links*, IFPRI Discussion Paper 195, International Food Policy Research Institute. Washington. D.C
- Coase, R. H, (1988) "*The firm, the market and the law*." University of Chicago Press, Chicago Collins English Dictionary, (2003), Complete and Unbridged version, Harper Collins publishers (Available online at www.thefreedictionary.com)
- Collion, M and Rondont, P. (2001), *Investing in Rural Producer Organizations for Sustainable Agriculture*, The World Bank, Washington. D.C
- Cook, M. L(1995), The future of Agricultural Cooperatives: A Neo- Institutional approach, American Journal of Agricultural economics, vol 77, p 1153- 1159
- Cook, M. L. and Chaddad, F. R, (2000), "Agroindustralization of the global agrifood economy: bridging development economics and agribusiness research" *Journal of the international association of agricultural economist*, Vol 23, issue 3, pp207-218
- Coulter, J, Goodland, A. Tallontire, A. Stringfellow, R, (1999) "Marrying farmer cooperations and contract farming for service provision in a liberalising Sub-Saharan Africa" ODI *Natural Resource Perspectives* No 48.
- Coulter, J. (2007), Farmer Groups Enterprises and the marketing of Staple Food Comodities in Africa. Collective Action and Property Right- CAPRI, working paper No. 72, Washington. D. C, USA.
- Cousins, W, (1991) "Non-Governmental initiatives in ADB: The Urban poor and basic infrastructure services in Asia and the Pacific" Asian Development Bank, Manila
- Delgado, C. (1999), "Sources of Growth in Smallholder Agriculture in Sub-Saharan Africa: The Role of Vertical Integration of Smallholders with Processors and Marketers of High value added items." *Agrekon*, Vol 38, pp 165- 189
- Djurfeldt, G, (2010), "Land speculation and the rights of the poor: the case of Sub-Saharan Africa." *In: Foreign Land investments in developing countries: Contribution or threat to sustainable development?* Swedish FAO Committee, Publication series No 7, pp 10-22.
- Donaldson, T and Preston, L. E, (1995) "The stakeholder theory of the corporation: concepts, evidence and implications. *The academy of Management Review*, vol 20, No.1 p65-91
- Edward, N. Tokar, M and Maxwell, J. (1997), *Agribusiness Development in Sub-Saharan Africa: Optimal Strategies and Structures*. Technical paper No. 63, United States Agency for International Development (USAID).
- Eisenhardt, K. M, (1989) "Building theories from case study research" *Academy of Management review*, Vol. 14, No. 4, pp532-550
- English, P. Jaffee, S. and Okello, J. (2006), Exporting out of Africa: The Kenyan Horticulture Success Story in Attacking Africa's Poverty: Experience from the Ground. World Bank, 2006
- Eskola, E, (2005) "Agricultural marketing and supply chain management in Tanzania: A case study." Working paper series No.16. ESRF study on Globalisation and East Africa Economies
- Ezumah ,N. N and DiDomenico,C.M, (1995) "Enhancing the role of women in crop production: A case study of Igbo women in Nugeria." *World Development*, Vol 23, No.10, p1731-1744

- Famar-Bowers, Q, (2010) "Understanding the stratgic decisions women make in farming families." *Journal of Rural Studies*, Vol. 26, pp 141-151
- FAO, 2003 "*Trade Reforms and Food Security: Conceptualizing the linkage*. Commodity Policy and Projections Service, Commodities and Trade Division, FAO, Rome (available at: ftp://ftp.fao.org/docrep/fao/005/y4671e/y4671e00.pdf)
- FAO, 2006 "Food Security and Agricultural Development in Sub-Saharan Africa: Building a case for more public support." Policy Brief No1, Policy Assistance Division, FAO, Rome (available at: http://www.fao.org/tc/tca/workshop2005_en.asp)
- FAO, (2010), " The State of Food insecurity in the world: Addressing food insecurity in protracted crises." Food and Agricultural Organisation, 2010
- FARM-Africa, (2007) Maendeleo Agricultural Technology Fund: *Improving livelihoods* through innovative partnerships. MATF/FARM-Africa, Nairobi, Kenya
- FARM-Africa, (2007a) "Scaling-up success" *FARM-Africa's new strategy for greater impact*. FARM-Africa, London
- FARM-Africa, (2009) "Unlocking the potential of Agriculture for African Farmers: Now and in the future." *Annual Review 2008/09*. FARM-Africa, London
- FARM-Africa, (2011) "The business of development: helping Africa's smallholders transform into rural entrepreneurs". *Annual Review* 2009/10, FARM-Africa, London
- Firmino, G. M. (2000), Analysis of Comparative Advantage and Agricultural Trade in Mozambique. Technical paper No. 107, SD Publication Series, United States Agency for International Development (USAID)
- Freeman, R.E, (1984) " Strategic management: A Stakeholder approach." Boston, Pitman
- Freeman, R.E and Evans, W.M, (1990) Corporate governance: A stakeholder interpretation. *Journal of Behavioral Economics*, Vol. 337-359
- Freeman, R. E and Reed, D., (1983) "Stockholders and stakeholders: A new perspective on corporate governance. Califonia management review, vol 25, no 3, p93-94.
- Gibson, A, (1993) "NGOs and income generating projects: Lessons from the joint funding scheme." *Development in Practice*, Vol 3, issue 3.
- Giel, T, (2010), "Resolving the challenges of collective marketing: incentives structures that reduce the tensions between members and their groups" Policy brief No.4, ESFIM
- Global Donor Platform for Rural Development, (2008), "The future of smallholder agriculture." Platform Policy Brief No.2
- Glover, D. (1990), "Contract Farming and Outgrower Schemes in East and Southern Africa." *Journal of Agricultural Economics*. Vol. 41, pp303-315
- Hallam, D, (2010) "International investment in developing country agriculture: issues and challenges." Foreign land investments in developing countries: Contribution or threat to sustainable development? Swedish FAO Committee, publication series No 7, pp 3-9, Sweden
- Hazell, P. Poulton, C. Wiggins, S and Dorward, A. (2007), *The Future of Small farms for Poverty Reduction and Growth*, IFPRI, 2020 Discussion paper 42, May 2007, Washington . D.C, USA
- Hedges, A, (1985), "Group interviewing" Applied Qualitative Research, Gower, Aldershot
- Henson, S. Jaffee, S. Cranfield, J. Blandon, J and Siegel, P. (2008), *Linking African Smallholders to High-value markets: Practitioner. Perspectives on Benefits, Constraints and Interventions.* Policy Research working paper, No. 4573, Agriculture and Rural Development Department, World Bank
- Holtzman, J. S, Abbot, R. D, Shaffer. D. C and Koskella. R, (1997), *Innovative Approaches to Agribusiness Development in Sub-Saharan Africa*. Final Report S. D Publication Series, Technical paper No. 79, Vol. 2, USIAD
- Humphrey, J, (2006) "Policy implications of trends in Agribusiness value chains." *The European journal of development research.* Vol. 8, No. 4, p572-592

- IFAD, (2001), "Rural poverty report 2001: The challenge of ending poverty." Oxford University Press, New York
- IFAD, (2010) "New realities, new challenges: New opportunities for tomorrow's generation." Rural poverty report 2011, International Fund for Agricultural Development
- IFPRI, (2006) " Agriculture and achieving the Millennium Development Goals" Report No 32729-GLB, International Food Policy Research Institute, Washington . D.C
- IFPRI, (2009), "Land grabbing by foreign investors in developing countries: Risk and opportunities" International Food Policy Research Institute, Washington .D.C
- Jaffee. S, (2005). "Transaction costs, risk and the organisation of private sector food commodity systems." In: Jaffee, S. and Morton, J. (eds). *Marketing Africa's High-value Food: Comparative Experiences of an Emergent Private sector*. Dubuque, Iowa. Kendall/Hunt publishing company
- Jaffee, S and John, M. (1995), Marketing Africa's High Value Foods: Comparative Experiences of an emergent private sector. Published for the World Bank by Kendall/Hunt Publishing Company, Dubuque, Iowa, USA
- Jayne, T. S., Chapoto, A. and Govereh, J. (2007), *Grain Marketing Policy at the crossroads: Challenges for eastern and southern Africa*. Paper prepared for the FAO workshop "Staple Food Trade and Market Policy options for promoting Development in Eastern and Southern Africa" FAO headquarters, Rome, Italy, March 1-2 2007
- Jayne, T. S. and Jones, S. (1997), "Food Marketing and Pricing Policy in Eastern and Southern Africa: A Survey." *World Development*. Vol. 25, No. 9, pp1505-1527
- Johnson, G, Scholes, K and Whittington, R, (2008), *Exploring corporate strategy*. 8th edition, Prentice Hall, England
- Kayobyo,G., Nakiganda, J. Magambo, R. Balaza, P. and Mwesigwa, V, (2010) "Facilitating Collective marketing best practices in Kenya and Uganda" Final technical report, December 2010
- Kaganzi, E., Ferris, S. Abenakyo, A. Sanginga, P. Nyuki, J, (2006) "Sustaining linkages to high value markets through collective action in Uganda: The case of the Nyabyumba Potato farmers." Research workshop on collective action and market access for smallholders, Cali, Colombia
- Kherallah, M and Kirsten, J, (2001) "The new institutional economics: Applications for agricultural policy research in developing countries" Paper No 41, Markets and Structural studies division, IFPRI, Washington. D.C
- Kherallah, M., Delgado, C. Gabre-Madhin, E. Minot, N. Johnson, M, (2002) "Reforming Agricultural markets in Africa." John Hopkins University Baltimore
- Kindness, H, (1994) "Household cash income sources and income generating activities in Wilaita, North Omo." FRP Technical pamphlet, No.7, FARM-Africa
- Kindness, H and Gordon, A. (2001), Agricultural Marketing in Developing countries: The role of NGOs and CBOs, Policy Series 13, Chatham, UK.
- Kolk, A. and van Tulder, R, (2006) "Poverty alleviation as business strategy: Evaluating commitments of frontrunner multinational corporations." *World Development*. Vol, 34, No.5, p789-801
- Larsson, R. Djurfeldt, G. Holmen, H and Jirstrom, M, (2005), "Crisis and Potential in smallholder food production: Evidence from micro-level." The Africa food crisis: Lessons from the Asian green revolution. CABI
- Lipton, M, (2005) "From policy aims and small-farm characteristics to farm science needs" Future of Small farms. International Food Policy Research Institute
- Magretta, J, (2002) "Why Business models matter" *Harvard Business Review*, Vol. 80, pp3-8 Makhura, M., Kirsten, J. and Delgado, C, (2001) " *Transaction costs and smallholder participation in the maize market in the northern province of South Africa*" seventh Eastern and Southern Africa regional maize conference, 11th-15th February2001,

pp463-467

- Markelova, H., Meinzen-Dick, R. Hellin, J. and Dohrn, S, (2009) "Collective action for smallholder market access" *Food policy*, vol 34, p1-7
- Matenga, C. R, (2001) "The changing orientation and practice of Northern NGOs: Implications for African Development." Conference paper for 22nd Biannual conference for Southern African Universities of Social Sciences. 1-5 December 2001, Windhoek, Namibia (available online at http://www.fiuc.org/esap/ZAMB/ZAMB7/General/ngos.pdf)
- Maxwell, J and Holtzman, J. (1997), *Innovative Approach to Agribusiness Development in Sub-Saharan Africa*. S. D Publication Series, USAID, Technical paper No. 79, Vol. 2
- Meinzen-Dick, R., Knox, A. Place, F. Swallow, B. (Eds). (2002), "Innovation in Natural Resource Management" John Hopkins University Press, Baltimore
- Milgrom, P and Roberts, J, (1992) "Economics organizations and management" Englewood Cliffs, Prentice Hall
- Mitchell, R. K., Agle, B. R. and Wood, D. J. (1997) "Towards a theory of stakeholder identification and salience: Defining the principle of who and what really counts. *The Academy of Management Review*, Vol.22, No.4, p853-886
- Nasi, J, (1995) "What is stakeholder thinking?" A snapshot of a social theory of the firm. In J. Nasi (Ed) *Understanding stakeholder thinking*. pp 19-32, Helsinki: LSR- Julkaisut Oy
- NEPAD. (2004), "Implementing the Comprehensive African Agriculture Development Program and Restoring Food Security in Africa." *The Roadmap*. New Economic Partnership for Africa's Development (NEPAD), Addis Ababa, Ethiopia.
- Neven, D and Reardon, T. (2004), "The Rise of Kenyan Supermarkets and the Evolution of their Horticulture Product Procurement Systems." *Development Policy Review*, Vol. 22, No. 6, pp669-699
- Nyberg, G, (2010), "Large-scale international land investment in developing countries." In: Foreign land investments in developing countries- Contribution or threat to sustainable development? Swedish FAO Committee, Publication Series No. 7, pp23-26
- Nyoro, J. K. (1993), *Production of Export Horticultural Crops in Kenya*. Policy Analysis Matrix Project/ Egerton University, Workshop on Kenyan Export Crops. KMDP/PAM, June 1993, Nairobi, Kenya
- Nzioki, A, (2010), "Emerging foreign investments in agriculture: Food security and land rights in Africa." In: *Foreign land investments in developing countries: Contribution or threat to sustainable development?* Swedish FAO Committee, Publication Series No. 7, pp35-45
- OECD Development Centre, (2008), Business for Development: Promoting Commercial Agriculture in Africa. OECD Development Centre, Paris, France
- Osterwalder, A. and Pigneur, Y, (2009), "Business model generation" Amsterdam, Netherlands
- Oxfam international, (2010) "Think big, go small: Adapting business models to incorporate smallholders into supply chains." *Briefings for Business*. No. 6, Oxfam international
- Perry, C, (1998), "Processes of case study methodology for postgraduate research in marketing" *European journal of marketing*, Vol. 32, No 9/10, pp 785-802
- Pingali, P, Khwaja, Y and Meijer, M, (2005) "Commercialising small farms: Reducing transaction costs." In *The future of small farms*. Proceedings of a research workshop. IFPRI. Washington. D.C
- Poole, T.E (2004) "*Operating a profitable small farm*" Fact Sheet 1, Frederick County Office. Maryland Cooperative Extension. USA
- Poulton, C, Dorward, A, and Kydd, J, (2006) "Overcoming market constraints on pro-poor agricultural growth in Sub-Saharan Africa." *Development Policy Review*. Vol. 2, issue 3, p.243- 277

- Quisumbing, A.R, (1994) "Gender differences in agricultural productivity: A survey of empirical evidence." ESP Discussion paper series No 36. Edication and Social Policy department. The World Bank, Washington D.C
- Rainey, D.L., (2006) " Sustainable business development" 1st ed, Cambridge University Press, UK Robson, C, 2002. Real World Research. 2nd ed Blackwell Publishing, Uk
- Reardon, T. and Barrett, C. B, (2000) "Agro-industralisation, globalisation and international development: An overview of issues, patterns and determinants. *Agricultural Economics*, Vol. 23, p195-205
- Reusse, E, (1982), "Somalia's normadic livestock economy" *World Animal Review*. Vol 43, p2-11
- Robbins, P, Bikande, F, Ferris, S, Hodges, R, Kleih, U, Okoboi, G and Wandschneider, T, (2004), "Advice manuel for the organization of collective marketing activities by smallscale farmers" Natural Resources Institute, Chatham, UK
- Rosergrant, M, Ringler, C, Benson, T, Diao, X, Resnick, D, Thurlow, J, Torero, M and Orden. D. (2006), *Agriculture and Achieving the Millennium Development Goals*. Report No. 32729-GLb, International Food Policy Research Institute- IFPRI, Washington .D. C
- Rotter, J. P and Ozbek, N, (2010) "Private-Public Partnerships: Collaborating for a sustainable business in Sweden" Masters thesis in Business Administration, Department of Economics, Swedish University of Agricultural Sciences, Uppsala, Sweden
- Samuel, N. S., Anderson, B. and Riggs, G, (1996), "Research funding for Australian Agribusiness: Some empirical evidence," *Agribusiness review*, Vol. 4, No. 6 ISSN 1442-6951
- Scanlan, S. J, (2004) "Women, food security and development in less-industralised societies: Contributions and challenges for the New century." *World Development*. Vol.32. No.11. p1807-1829
- SCC-Swedish Cooperative Centre, (2007a), "New steps in the right direction: Swedish Cooperative Centre's strategy for 2007-2011." Stockholm, Sweden
- SCC-Swedish Cooperative Centre, (2007b), "Swedish Cooperative Centre's strategy for Market based agricultural development." SCC, Sweden
- SCC-Swedish Cooperative Centre, (2009), "2006-2008 Report: Eastern Africa Region" Swedish Cooperative Centre, Stockholm
- SCC-Swedish Cooperative Centre, (2011), Annual Report 2010, Swedish Cooperative Centre, Stockholm, Sweden
- Shafer, S. M., Smith, H. J. and Linder, J. C, (2005), "The power of business models" *Business Horizons*, Vol. 48, pp199-207
- Simmons, P. Winters, P. and Patrick, I. (2005) "An analysis of contract farming in East Java, Bali and Lombok, Indonesia, *Agricultural Economics*, Vol.33, p513-525
- Singh, B. P (2002) "Non-traditional crop production in Africa for export." In: Janick, J. and Whipkey, A. (eds) *Trends in New crops and New uses*. ASMS, Alexandria, Egypt
- Singh,R. B., Kumar, P. and Woodhead, T, (2002) "Smallholder farmers in India" Food Security and Agricultural Policy . RAP Publication 2002/03, FAO Regional Office for Asia and Pacific
- Staatz, J. M and Dembele, N. N. (2008), "Agriculture for Development in Sub-Saharan Africa." Background paper. *World Development Report* 2008.
- Stringfellow, R. (1996), *Smallholder Outgrower Schemes in Zambia*. Natural Resource Institute, Chattam, England
- Stringfellow, R and Coulter, J. (1997)," Improving the access of Smallholders to Agricultural Services in Sub-Saharan Africa: Farmer Co-operation and the role of the donor community." *Natural Resource Perspectives* 20, Overseas Development Institute, London

- Stringfellow, R. Coulter, J. Lucey, T. McKone. and Hussain, A, (1997)," Improving the access of Smallholders to Agricultural Services in Sub-Saharan Africa." *Natural Resource Perspectives* 20, Overseas Development Institute, London
- Stockbridge, M. Dorward, A. Kydd, J, (2003) " Farmer Organisations for Market access: Learning from success." Briefing paper. Wye College, University of London, Uk
- Temu, A. E. and Temu, A. A. (2006), *High-Value Agricultural Products for Smallholder markets in Sub-Saharan Africa: Trends, Opportunities and Research Priorities*. International Centre for Tropical Agriculture, Cali, Colombia
- The American Heritage Dictionary of English Language, (2000), Fourth edition, updated in 2009, Houghton Mifflin Company
- Thorp, R, Stewart, F, Heyer, A, (2005) "When and how far is group formation a route out of chronic poverty?" *World Development* Vol 33, No. 6, pp 907-920
- Tollens, E. (1997), "Wholesale Markets in African Cities: Diagnosis, Role, Advantages and Elements for Further Study and Development." *Food into Cities Collection*, No .AC/05-97e. Food and Agriculture Organization of the UN, Rome, Italy
- Tollens, E. (2006), Market Information Systems in Sub-Saharan Africa: Challenges and Opportunities. Poster paper prepared for the Intervention Association of Agricultural Economists Conference, Gold Coast, Australia
- Tschirley, D. (2007), Supermarkets and Beyond: Literature Review on Farmer to Market Linkages in Sub-Saharan Africa and Asia, Michigan State University, July 2007
- Tsegaye, B, (1997)" The significance of biodiversity for sustaining agricultural production and role of women in the traditional sector: The Ethiopian experience." *Agriculture*, *Ecosystems and Environment*, Vol.62, p215-227
- Van der Meer, C, (2006) "Exclusion of small-scale farmers from coordinated supply chains: Market failure, policy failure or just economies of scale?" In: Reuben, R. Slingerland, M. and Nijhoff, H. (eds) *Agri-food chains and networks for development*. Wageningen., Netherlands
- Vorley, B., Fearne, A. Ray, B, (eds), (2007) "Regoverning markets: Aplace for small-scale producers in modern Agri-food chains." Gower publishing Ltd, Hamsphire, England
- Vorley, B., Ferris, S. Seville, D. and Lundy, M, (2009) "Linking Worlds: New business models for sustainable trading relations between smallholders and formalized markets. IIED
- Weatherspoon, D. and Reardon, T. (2003) "The rise of Supermarkets in Africa: Implications for Agrifood Systems and the rural poor" *Development Policy Review*. Vol. 21, No. 3, p333-355
- Wenar, L, (2006) "Accountability in international development aid." *Ethics and International Affairs*, Vol. 20, No. 1, p1-23
- Wandschneider, T and Yen, N. K, (2007), "Supporting collective action for market access: Guide to agricultural marketing extension with special reference to Vietnam. Module 2, Helvetas Vietnam
- Warner, M and Kahan, D, (2008) "Market-oriented agricultural infrastructure: Appraisal of public-private partnerships." Project briefing, No 9
- Winter-Nelson, A and Temu, A (2005) "Liquidity constraints, access to credit and pro-poor growth in rural Tanzania." *Journal of International Development*. Vol 17. pp. 867-882
- Winter, P. Simmons. P. and Patrick, I, (2005) "Evaluation of a hybrid seed contract between smallholders and a multinational company in East Java, Indonnesia." *Journal of Development Studies*. Vol. 41, issue. 1, pp 62-89
- Woolverton, M. W, Cramer, G. L and Hammonds, T. M, (1985), "Agribusiness: What is it all about?" *Agribusiness*, Vol. 1, issue. 1 pp1-3

- World Bank, (2001) "World Development 2000/2001: Attacking poverty. Oxford University Press, New York
- World Bank. (2002), From Action to Impact: The African Regions Rural Strategy. The World Bank, Washington .D.C
- World Bank, (2008), "Agriculture for Development." World Development Report 2008, World Bank, Washington D.C
- WEF-World Economic Forum, (2010), "Realizing a New Vision for Agriculture: A roadmap for stakeholders." Publication Ref 131210, World Economic Forum, Switzerland
- Willetts, P, (2002) "What is a Non-Governmental Organisation?" UNESCO Encyclopedia of Life Support systems. Eolss publishers, Oxford, UK
- Williamsson, O. E (1985), *The Economic Institutions of Capitalism*, New York, Free Press Williamson, O.E, (1996) "*The mechanisms of governance*" Oxford University Press, New York
- Wiggins. S (2008). "The future of smallholder agriculture." *Platform policy brief*, no 2, Global Donor Plateform for Rural Development.
- Yin, R. K, (1994), Case study research -design and methods, applied social research methods series. Vol.5, 2nd edition, Sage, Newbury Park, CA
- Zott, C., Amit, R. and Massa, L, (2010) " *The Business model: Theoretical roots, recent developments and future research.*" Working paper WP-862, IESE Business School, University of Navarra, Barcelona, Spain

Internet

FARM-Africa: www.farmafrica.org.uk

- 1- Our History: http://www.farmafrica.org.uk/about-us 18/06/2011
- 2- Vision: http://www.farmafrica.org.uk/about-us/vision-mission-strategy 18/06/2011
- 3- Mission: http://www.farmafrica.org.uk/about-us/vision-mission-strategy 18/06/2011
- 4- What we do: <a href="http://www.farmafrica.org.uk/what-we-do/wh
- 5- Type of work: http://www.farmafrica.org.uk/what-we-do/what-we-do 18/06/2011

The Global Development Research Center: http://www.gdrc.org

1- Types of NGOs: By orientation and level of operation : http://www.gdrc.org/ngo/ngo-types.html 30/03/2011

NGO Global Network: http://www.ngo.org

1- Definition of NGOs: http://www.ngo.org/ngoinfo/define.html 30/03/2011

Appendix 1: Guidelines for obtaining project information

Basic information of project

- Name of project
- Host Country
- Main partner organisation in host country
- Duration of project (start date and end date)
- Project objectives
- Key supporters (Donor organisations)
- Direct project participants (organisations, number of men and women)
- Gender issues (the role of women in the project)

1- Capacity building/training approach

- What production and marketing constraints were the farmers facing before the initiation of the project?
- Upgrades in available technology, financial capacity, record keeping and marketing capacity

2- Governance structure of famer groups

- Approach in group formation and organisation
- Indications of fair and transparent governance
- · Selection process and quality of leaders
- Cost sharing

3- Indicators of success

- Changes in production volumes
- Changes in farmer incomes
- Market access (linkages to high value markets)
- Contributions to poverty alleviation

4- Lessons learned

- What new opportunities were identified in new supply chains?
- Constraints faced during the project.
- Identified risks facing the farmers, smallholders and maybe NGO

5- Project sustainability

- How regular were assessments of progress of project during and after project period?
- What are the exit plans of NGO such that smallholder farmers are not affected when market forces change?

Thank you very much for your time and collaboration