

Exploring Social Relations of Smallholder Sugarcane Farmers in Mumias sub-County, Kenya

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Abstract

Social relationship is now one of the most significant trends in community organizing and development. Relationships are known to result to multiple networks; and when these networks work together they promote farmers' interests and add value to livelihoods. To promote sugarcane production and marketing, smallholders in Kenya are organized into different milling companies and out-grower associations. However, smallholders' inability to negotiate sector relations and lobby for their interests is linked to ineffective performance of these organizations in Mumias sub-County, Kenya. Studies show that smallholders' participation in attractive markets is determined by ability to reach relevant markets and adequately negotiate returns and pricing; but as markets change, a need to develop strategic alliances that consider those changes is a prerequisite. This paper explores relationships of smallholder sugarcane farmers in Mumias sub-County, Kenya, aimed at identifying opportunities to strengthen networks that promote smallholders' interests and participation in the value chain. Social network theory was employed to identify the nature and strength of relationships, and uncover the patterning of actors' interaction. A random sample of 261 farmers was selected from a population of 1,907 smallholder sugarcane farmers in Lureko Location, Mumias sub-County, Kenya to participate in the survey. In validating issues emerging from the survey, another sample of 9 farmer leaders and 15 smallholder sugarcane farmers were purposefully selected to participate in Key Informant Interview and Focus Group Discussions respectively. Analysis involved the use of descriptive statistics and Social Network Analysis. Out of the study subjects 70 percent reported a low level of relationships. Relational ties between actors though weak, were channels for accessing knowledge, inputs, markets and food, besides regulation of policy. This findings serve as input for evidence-based policy dialogue in developing strategic alliances that promote smallholder participation in agricultural value chains, consequently improve food security and livelihoods.

Keywords: Sugarcane, Smallholder, Farmers, Relationships, Participation, Livelihoods

1.0 Introduction

Introduction of sugarcane contract farming in Kenya increased smallholder participation in sugarcane production (Monroy, Mulinge & Witwer, 2012). However, the degree to which participating smallholders benefit remains somewhat uncertain especially in cases where new institutional arrangements leave smallholders exposed to risks of which they were not fully aware ex ante (Sivramkrishna & Jyotishi, 2008). In Mumias sub-County, Kenya, smallholder sugarcane farming is a dominant feature in the socio economic lives of households. However, institutions which regulate smallholder sugarcane farmers' relations have influenced the environment within which they operate, and consequently their participation in the value chain. Studies show that individual reputations and social connections play a major role in smallholder participation (Barrett, Bachke, Bellemare, Michelson, Narayanan & Walker, 2011); and farmers with more resources and social connections enjoy superior options outside the contract farming agreement. According to Scoones (1998), the ability of households to make use of the resources available to them, as well as the level of those resources, depends on the environment within which they operate and the specific forms of the institutions which regulate their relations. This means that farming households that are more socially networked are likely to have a wider range of livelihood strategies, greater levels of other forms of social capital, and greater overall capital (Cassidy & Barnes, 2012). In Pakistan for example, development of a tri partite relationship between the processor, the Micro Finance Institution (MFI) and smallholder sugarcane farmers, made smallholder farming as competitive as large scale farming (Bajwa, 2012). This paper therefore explores existing relationships of smallholder sugarcane farmers in Mumias sub-County, Kenya with an aim to identify and promote networks that enhance smallholders' livelihoods and participation in the value chain.

2.0 Background of the Study

Relationships are composed of an immense number of social, physical and verbal interactions that create a climate for the exchange of feelings and ideas. They are mechanisms for designing comprehensive strategies and give communities a structure for organizing, planning, and implementing their ideas (Smock, 1999). Sugarcane farming being the main economic activity and occupying the bulk of the surface area in Mumias sub-County Kenya, smallholders' relationships take the form of contract farming or out-grower scheme. However, the poor

performance of the institutions regulating smallholders have influenced the environment which they operate, hence their participation and ability to negotiate for sector relations. According to Jones, Lundi and Levine (2010) communities with effective social institutions are considered better placed to respond to changes in their environment compared to those that have less well-developed institutions. Further still, effective relationships between smallholders and other participants along agricultural value chains is vital to ensure that smallholders engage on equitable terms and receive a just reward for their work (IFAD, 2013). Relationships in agriculture create opportunities for market access, access to knowledge and general technology for production, and cooperation or organization. This means that strengthening social networks, membership in groups, social relations and access to wider institutions in society, is a powerful way to improve communities (Abenakyo, Sanginga, Njuki, Kaaria & Delve, 2008). It is on this basis that the study explores relationships of smallholder sugarcane farmers in Mumias sub-County, Kenya aimed at identifying opportunities to foster relationships and networks that strengthen smallholders' participation in the agricultural value chain.

3.0 Theoretical Framework

This study is premised on the Social Network Theory which views social relationships in terms of nodes (individual actors within the networks) and ties (relationships between actors). It theorizes that the ability for individuals to influence their success rests more within the structure (social, political, economic) of their network and that the attributes of individuals are less important than their relationships and ties with other actors within the network (Wasserman & Faust, 1994). Freeman (1991) emphasized that how an individual lives will depend in large part on how that individual is tied into the larger web of social connections, and that the success or failure of societies and organizations depend on the patterning of their internal structure. Social capital is created by a network in which people can broker connections between otherwise disconnected segments; and whether a relationship is strong or weak, it generates information benefits when it is a bridge over a structural-hole (Burt, 2000). According to Smock (1999) relationships in the agricultural value chain is key to leveraging resources, building power, strengthening the democratic process, and achieving meaningful neighborhood change. Social Network Theory was therefore applicable in examining the nature and strengths of smallholder sugarcane farmers' relationships; aimed at identifying opportunities to broker connections and foster relationships that provide an enabling environment for smallholder sugarcane farmers to participate in the value chain.

4.0 Literature Review

The sugar sub-Sector in Kenya's consists of more than 250,000 smallholder farmers, who supply over 92 percent of sugarcane processed by sugar companies (KSB, 2013). In Mumias sub-County, Kenya majority of smallholder sugarcane farmers engage in contract farming because they may not effectively participate in transacting business individually. The multipartite contract farming involves statutory bodies and private companies jointly participating with farmers; usually with contract commitment to provide services and management inputs to farmers, and market for produce (Little & Watts, 1994). However, inadequate participation of smallholders in Mumias sub-County, Kenya besides their inability to negotiate sector relations or lobby the government for their interest is associated with poor performance of contracting firms. Smallholders' participation in the value chain is influenced by challenges that result in breach of contract such as miller not showing up to collect contracted harvest as scheduled, inappropriately rejecting product, lowering the sales price after the supplier has incurred production costs, or further still delaying or defaulting on final payment (Barret, *et al.*, 2011). Smallholders respond by diverting some of the firm-provided inputs to non-contracted crops, by not adhering to the production schedule agreed upon with the firm, by side-selling, or by failing to deliver the agreed volume and quality on time. According to Salami, Kamara and Brixiova (2010) concerted efforts of all stakeholders is needed to remove existing bottlenecks to productivity growth in smallholder agriculture.

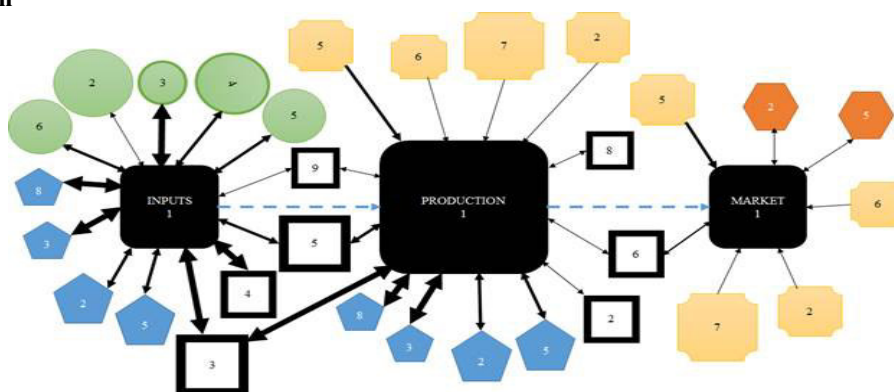
Studies show that engagement in organizations impact sustainable livelihoods by affecting access to assets and markets, as well as risk and vulnerability (Ruud, 2015); and that efficient market organization involves more and better linkages between different economic players (Poole & de Freece, 2010). According to Colihan and Chorney (2004) partnerships between any farmers' market and other organizations can provide significant advantages to a market in the form of funding, expertise, public support, and market space. It is evident that people use social networks to reduce risks, access services, protect themselves from deprivation and acquire information to lower transaction costs (Dose, 2007). Relationships are known to improve smallholders' access to credit, inputs, extension and markets (Hounkonnou *et al.*, 2012). According to Rondot and Collion (2001) smallholder farmers have been searching for new forms of relationships so as to increase their bargaining position in the value chain; but they are usually at a disadvantage since they have little capital to invest, and lack contact with market players (De Janvry & Sadoulet, 2005). This implies that specific investments in social capital and in business and sectoral organization will enable new ways of organizing people and markets to work for the poor (Poole & de Freece, 2010). This paper explores the relationships of smallholder sugarcane farmers in Mumias sub-County, Kenya, with an aim to identify opportunities for strengthening networks that promote

smallholders' participation in the sugar value chain.

5.0 Methodology

This study employed a mixed research design, that involved collection and analysis of quantitative data from a survey, followed by collection and analysis of qualitative data through Key informant interview (KII) and Focus Group Discussion (FGDs). Mumias sub-County was purposively selected for this study because both the milling and Out-grower institutions that regulate sugarcane farming had influenced smallholders' participation and capabilities to negotiate for sector relations. In collecting data from the survey, questionnaires were administered to 261 smallholder sugarcane farmers, randomly selected from a target population of 1,907 smallholder sugarcane farmers. KII and FGDs were conducted to validate issues emerging from the survey and gain insight into how respondents' represented issues as a whole and on a collective rather than an individual basis. A sample of 9 farmer leaders and 15 smallholder sugarcane farmers were purposively selected to participate in KII and FGDs respectively. Descriptive statistics using cross tabulation and frequency tables was used in analysis of quantitative data, while social network analysis was used to analyze qualitative data. Qualitative data produced helped to explore and describe the data in real life environment and create understanding from data as the analysis proceeded.

6.0 Discussion



Key

Actors	Relationships	Relationships
1 - Farmer	● Input Supply	↔ Weak
2 - Processor/ Sugarcane contract firm	◆ Knowledge flows & capabilities	↔ Moderate
3 - Non Governmental Organization (NGO)	⬠ Markets	↔ Strong
4 - Agro dealers	◐ Policy & Regulation	
5 - State Department of Agriculture	◑ Food Security	
6 - County Government	■ Value Chain processes	
7 - Regulatory body		
8 - Research Institute		
9 - Financial Institutions		

Figure 1: Mapping of Stakeholders' Relationships by Smallholder Sugarcane Farmers in Mumias sub-County

Figure 1 illustrates the relationships of smallholder sugarcane farmers in Lureko, Mumias sub-County, Kenya. Smallholders were observed to engage in different forms and level of relationships. In their engagements, relational ties (linkages) between actors were observed to be channels for transfer or flow of resources, such as supply of inputs, sharing of knowledge and building capabilities, as well as promoting access to markets and food, besides regulating policy. The study viewed social relationships in terms of individual actors within the networks (nodes) and networks were represented by different shapes; such that larger sized shapes represented wider networks and vice versa. Strength of actor relationships (ties) were represented by arrows of varying thickness, with thicker arrows depicting stronger relationships. The details of the relationships are outlined in the following sub-sections.

6.1 Relationships in Input supply

The sugarcane processing firm has extensive networks but weak ties with farmers in relation to input supply. Wider networks were associated with fact that sugarcane contract farming is the main economic activity in the sub County; and that due to contract farming agreements majority of farmers relied on the processor for supply

of sugarcane production inputs. This is in line with Poole and de Frece (2010) that contract farming allows farmers to benefit from services provided by the processing firms such as credit, seeds, fertilizer and technical assistance. However, failure of the parties to adequately adhere to the contract farming agreements led to weak relationships between the processor and smallholder farmers. A similar observation was made by Barret, *et al.* (2011) that the opportunities for breach of contract are many because of the multidimensional nature of contract terms and because of the time lags and the relationship-specific investments involved in contracting. Developing strategies and strategic alliance beyond contract farming agreements may be critical to strengthening smallholders' participation even the midst of contract farming.

Agro dealers and smallholder sugarcane farmers have a moderate relationship in input supply, trailing behind the sugar processor. This agrees with Mitchell (2001) that development of rural agro-dealers is critical for accelerating smallholders' access to quality agricultural inputs in Africa. Minimal networks between farmers and a participating Non-Governmental Organization (NGO) was associated with the fact that the NGO was a new entrant within the study area and could be in the process of establishing its networks within the locality. Despite inadequate networks, the NGO provides farmers with credit inputs adequate to grow an acre of maize, hence the strong relationships (ties) with its clients in relation to input supply. Smallholders reported that interaction with this organization enhanced client's engagement in alternative livelihood strategies, subsequently improving resilience and food security. A similar observation was made by Cassidy and Barnes (2012) that farming households that are more socially networked are more resilient and are likely to have a wider range of livelihood strategies, greater levels of other forms of social capital, and greater overall capital. This means that networking is critical to accessing opportunities for promoting smallholders' capabilities, hence participation in agricultural value chains.

The research institute has minimal networks with farmers in input supply, but strong relationships with farmers socially connected through sugar research groups. The research groups were key in transfer of technology and accessing productivity enhancing inputs and market information; thus farmers within the network reported achievement of higher productivity. This is in agreement with Markelova, *et al.* (2009) that collective action provides for greater accessibility of finance, technology and market information. IFAD (2011) adds that lack of access to productivity-enhancing inputs such as improved seed, fertilizers, water and information or to the credit needed to finance investment in these inputs, results to smallholder farmers being unable to deliver the volume and quality of produce that the market requires. Other partners involved in input supply included County Government and State department of agriculture, both having average relationships of moderate strength with farmers. At the time of study, Government subsidized fertilizer was available to smallholder farmers through County and National governments; but only a minimal percent of sugarcane farmers could afford direct purchase of the fertilizer due to limited access to financial capital. This agrees with Wanzala, *et al.* (2001) that there is a strong positive correlation between availability of credit and the volume of trade in fertilizers and other agricultural inputs in rural areas. The weak relationships observed between smallholder sugarcane farmers and financial institutions are likely contributors to smallholders' low financial status. Strengthening relationships between smallholder sugarcane farmers and financial institutions is critical to expanding their access to production inputs.

The study did not show any existing relationship between smallholder sugarcane farmers and their Out-growers organization, nor with the sugar regulatory organization in relation to input supply. The Out-growers organization which was previously the main input supplier for smallholders, had impacted negatively on smallholder sugarcane investment and livelihoods, following its failed relationship. This is in line with by Barrett (2008) that local organizations can be a vehicle for increasing investment among smallholders in technology and other productive assets. The regulatory organization on the other hand, plays a key role in supporting sugarcane development through funding its partners. But inadequate strategic relationships with smallholder farmers, besides inappropriate structures to support management of input supply, makes farmers fail to recognize the regulator's role in delivery of inputs. This finding agrees with Mitchell (2001) that successful input suppliers find strategic fits with their market environment and support their strategies with appropriately designed structures and management. Building relationships between smallholder farmers and agricultural input supply systems may be appropriate in distribution of affordable production inputs and minimizing situations where farmers are trapped in low productivity-low return farming activities. By exploring existing relationships of smallholder sugarcane farmers' in Mumias sub-County, Kenya this study sort to identify such networks that need strengthening, so as to promote smallholders' participation in the value chain.

6.2 Relationships in Knowledge Flow and Capability Building

In this study capabilities referred to the skills, competence and ability to access knowledge and information. Smallholder sugarcane farmers in the study area interact with the sugarcane processor, the State department of Agriculture, participating NGO and Research Institute in relation to exchange of knowledge and building their capabilities for innovation in food crop and sugarcane production. No ties were observed with agro dealers in

knowledge flow and capabilities. This agrees with Mitchell (2001) that Agro dealers businesses usually lack adequate training in basic agronomic practices, and the inputs they sell are normally packaged for commercial-scale operations rather than smallholder farmers. The research institute and NGO had a strong relationship with farmers within their networks. These networks were less expansive, but approaches to knowledge sharing used by the research institution and NGO enhanced knowledge acquisition and consequently adoption of technologies. A majority of the study subjects who were not members of these networks, were noted to have minimal skills, competency and information to make decisions in accessing knowledge. This finding agrees with Wasserman and Faust (1994) that new knowledge and capabilities is developed by individuals and organizations through their interactions. On the other hand, the processor and state department of Agriculture had extensive networks in knowledge and capability building but moderate ties with farmers. This means that by taking advantage of existing relationships between smallholders and partners, opportunities to strengthen ties in accessing new knowledge and building smallholders' capabilities may be created.

6.3 Relationships to Promote Access to Markets

Smallholder farmers' ability to reach relevant markets and adequately negotiate returns and pricing determines their participation in attractive markets. The study displayed a likelihood of high levels of food importation in the locality, considering the fact that majority of farmers depend on market for food, and yet a minimal number market their farm produce (See Figure 2).

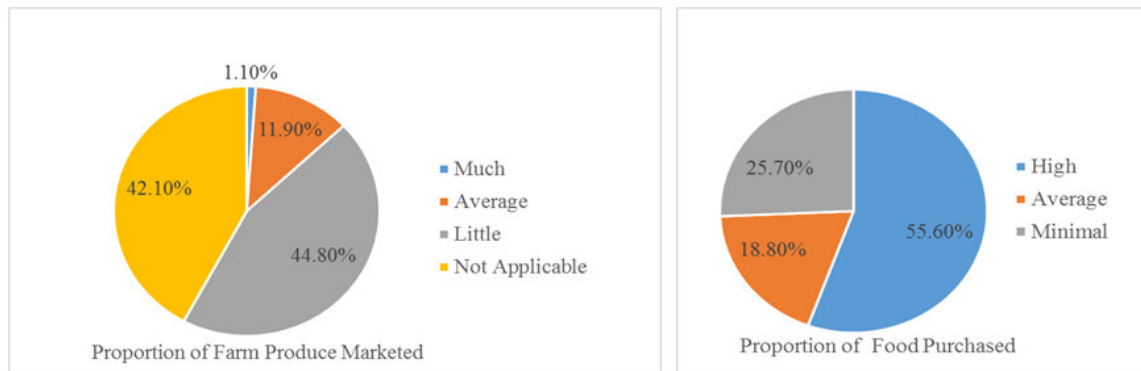


Figure 2: Food Marketed and Purchased by Smallholder Farmers' Households in Lureko, Mumias sub-County

Figure 2 illustrates that majority (86.9%) of the study subjects market none or minimal amounts of their farm produce, while 55.6 percent depend on the market to purchase a high proportion of food. In Figure 3, out of the sampled population 47 percent indicated that seasonal food price fluctuations is not predictable, while 38 percent was not aware of the fluctuations in food prices, attributed to their lack of market participation. These observations agree with Fairtrade (2013) that most smallholder farmers are net food buyers, buying more food than they sell, and that many are routinely manipulated by local traders and lack up-to-date market information to negotiate effectively.

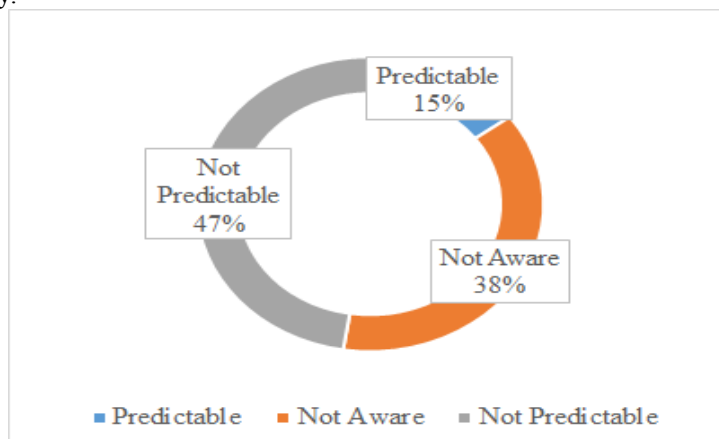


Figure 3: Farmers' Perception on Seasonal Fluctuation in Food Prices

Prevailing networks in the study area were found not to adequately address smallholders' market opportunities, suggesting a need to strengthen existing ones and also foster new relationships. The state department of agriculture and sugarcane processor were identified as the main partners relating with farmers in marketing their produce; with each having weak market relationships. To cope with this, farmers cultivate very strong market relationships with each other, receiving low returns from their produce in local markets due to

reliance on one another to consume their farm products. Inadequate physical and economic access to lucrative markets for their crops causes farmers to experience low returns in areas with surplus production, and high prices in areas with low production. Physical isolation therefore results especially when considering distance to and from the market, the poor roads, and access to only bicycles or motorbikes for crop transport. High transport costs for food and sugarcane, slow distribution from regions with production surpluses to those with deficit, making smallholders to sell crops underpriced to middlemen within their farming areas. A similar observation was made by Fairtrade (2013) that those farmers who sell their farm produce in the local markets do not gain from high food prices. However, partnerships offer a way for smallholder farmers to reduce transaction costs and overcome barriers to market participation by raising their bargaining power (Thorp *et al.*, 2005). By exploring relationships of smallholder sugarcane farmers in Mumias sub-County Kenya, this paper expected to identify opportunities to strengthen networking and link smallholders as economic actors to markets; consequently enable smallholders to know attractive markets and negotiate with buyers the terms for sale of different farm products.

6.4 Relationships in promoting Food Security

Food security exists when all people, at all times, have physical, social and economic access to sufficient, safe and nutritious food which meets their dietary needs and food preferences for an active and healthy life. Generally, contractual farming is known to limit smallholders' attainment of food security. Relationships in food security referred to smallholder farmers networking either to produce own food, get income to buy the food that they need, or receive food from their social networks. From the study, only 20.3 percent of the study subjects are able to meet a high proportion of their food needs from their own production (See Figure 4). This agrees with Kidula, *et al.* (2011) that minimal land is available to produce food since a large proportion of land is under sugarcane contract farming.

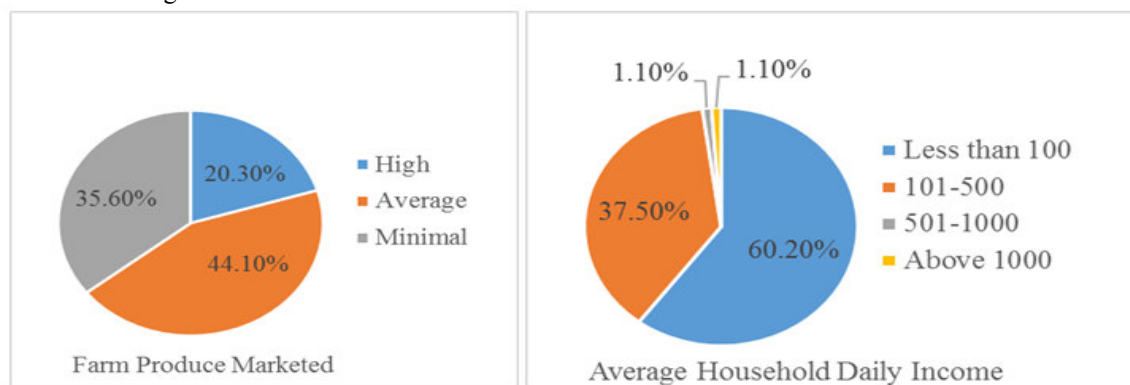


Figure 4: Household Food Production and Average Daily Income

Figure 4 further illustrates that, 60.2 percent of the sampled population receive an income of less than Kenya Shillings one hundred (one dollar) per day. This implies that smallholders can hardly sustain their food needs by purchasing from the market, due to inadequate financial capital. By understanding smallholders' relationship, this study may identify opportunities to strengthen relationships that improve smallholders' income and ensure stability and resilience in accessing quality food.

In promoting food security, the participating NGO showed extensive outreach and strong relationships with smallholder sugarcane farmers within its network. The NGO promotes food security by supporting smallholders to produce an acre of maize, in addition to supplying maize seed. FGDs revealed that partnering with this organization promoted innovative maize farming practices which increase productivity, and consequently financial and social capital. This is in line with Pretty (1994) that interactive involvement of multi stakeholders promotes innovation and ownership, with many variations in the way that systems of learning have been put together. Burt (2004) adds that that people connected across groups are more familiar with alternative way of thinking and behaving, thus giving more options in developing new ideas.

Agro chemical dealers, sugarcane processor, Research Institute, Financial institutions and County Government are other partners identified in promoting food security. The study observed that Agro dealers have a strong farmer relationship in promoting food security. This agrees with Mitchell (2001) that several local and multi-national seed, fertilizer, and agro-chemical companies now conduct demonstrations of new technologies with the agro-dealers in rural areas. While farmers have strong relationships with each other in promotion of food security, they have weak relationships with financial institutions. This weak relationship influence smallholder sugarcane farmers access to financial services, exposing them to risks, considering the fact that the out-growers' organization mandated to give smallholder sugarcane farmers financial support is not functional; and other financial institutions are yet to develop clear strategic alliances in providing funds and supporting farmers with principal food security goals. This is in line with Peacock, *et al.* (2004) that financial service has

failed to reach smallholder farmers whose livelihoods are characterized by highly seasonal investments, risks and returns. According to Farm Africa (2010), smallholder farmers can increase their production and incomes in economically and ecologically sustainable ways if they have appropriate financial, technical and social support. This paper therefore explored relationships of smallholder sugarcane farmers in Mumias sub-County Kenya, aimed at identifying opportunities to strengthen interactions that leverage smallholders' resources, hence promote their participation in attainment of food and nutrition security.

A moderate relationship between farmers and the state department of agriculture in relation to food security was associated with inadequate resources to forge strong relationships with farmers. Besides this, weak relationships were observed between smallholder sugarcane farmers and organizations such as research institute, County Government and sugarcane processor. Farmer- sugarcane processor weak relationships were attributed to challenges facing the sugar sub- Sector that had influenced proper functioning of the Mumias Sugar Company. Despite its weak relationships, the County government has an opportunity to strengthen relationships with farmers and promote food security through its agricultural pillar in the County investment plan. This means that existing relationships in Mumias sub-County, Kenya may serve as platforms for strengthening interactions in promoting food security.

6.5 Relationships in Policy and Regulation

Effective participation by smallholder farmers in agricultural development in general and/ or sub-sectors such as the sugar industry is heavily dependent on institutional and regulatory processes. Policies as guidelines of engagement and interaction with other players are the principle determinants of successful promotion of smallholder farmers' livelihoods. The sugar sub-Sector in Kenya is closely linked to the government and is strongly influenced by domestic and international policies, such as the Agriculture Fisheries and Food Authority Act 2013, Sugar regulations, Common Market for Eastern and Southern Africa (COMESA) agreements among others. These endeavor to identify the salient relationships and linkages between key stakeholders in the sub-sector, as well as provide a framework to guide specific policy actions and interventions in respect to the development of the Sugar industry. As per policy requirements, Kenya's sugarcane farmers are organized into several different companies and cooperatives; but their poor performance with resultant weak linkages puts farmers in a state where they are not able to lobby the government for support and negotiate sector relations.

The survey results presented in Table 1 captures perception of smallholder sugarcane farmers on influence of policy on their livelihoods.

Table 1: Farmers' Perception of Policies' Influence on Livelihoods

Farmers' Responses	% Level of agreement
Strongly Agree	91.6
Agree	4.6
Uncertain	1.9
Disagree	1.5
Strongly Disagree	0.4
Total	100

Table 1 illustrates that an enabling policy and institutional environment in sugarcane farming influences livelihood outcomes of smallholder sugarcane farmers as perceived by a high percentage of the study population. FGDs argued that the exclusive nature of the policy formulation process, results in inadequate participation of smallholders, hence prevailing policy environment is perceived to favor other actors at the expense of smallholder sugarcane farmers. A similar observation was made by Fairtrade (2013) that despite their potential power to drive poverty reduction and economic growth, too few smallholders can make their voice heard in national and international policy making. Weak relationships were observed between farmers and the main policy organs in the sub-sector, such as Sugar regulatory body, sugarcane processor and County government. These weak relationships challenge the capacity of farmers to promote livelihood resilience nor negotiate for their rights in the face of production challenges such as land rights, common in sugarcane farming. This is in line with a report by Women's Refugee Commission (2009) that lack of supportive policies severely restrict opportunities to develop sustainable livelihoods. AU (2009) adds that in acknowledging the legitimacy of indigenous land rights, land policy processes must also recognize the role of local and community-based land administration/management institutions and structures, alongside the state. The study expects that understanding existing relationships of smallholder sugarcane farmers may open up opportunities to strengthen networks that serve as a mechanism for achieving economic and political links, consequently encourage smallholders' participation in policy making.

The weak relationships between farmers and Sugar regulatory body, was associated with the organization's attempt to build stronger relationships with the millers, Out-grower and financial institutions with minimal consideration of the smallholder farmers. A similar observation was made by Christiansen (2010) that policy as a regulator, acting for the well-being of ordinary people and as a protector of the weak only comes in

third place after the political economy, and new forms of large-scale. A moderate relationship was observed between farmers and the state department of agriculture. It is worth noting that with the devolution of agriculture functions in the current constitutional dispensation in Kenya, understanding smallholder relationships may serve as input for evidence-based policy dialogue, and provide opportunity for County governments to solicit views from key partners for effective policy development. This agrees with International Union for Conservation of Nature (IUCN) (2010) that policies that emphasize ‘starting small’ and building on organizational capacities have more sustainable implications to people’s lives. This implies that exploring relationships of smallholder sugarcane farmers in Mumias sub-County, Kenya may likely promote holistic approaches in policy making processes, hence minimize tendency to pursue sector specific paths to policy development with little or no coordination or harmonization with other sectors.

7.0 Conclusion

Relationships are mechanisms for designing comprehensive strategies and give communities a structure for organizing, planning, and implementing their ideas. In many cases relationships result to multiple networks, which promote farmers’ interests and add value to livelihoods when the networks work together. Smallholder sugarcane farmers in Mumias sub-County, Kenya engage in different forms of relationships and at differing levels. In their engagements relational ties with partners are mainly channels for transfer or flow of knowledge, supply of inputs, access to markets, regulation of policy, and food security promotion. The existing weak relationships especially with key partners in the sub sector is an impediment to smallholders’ ability to negotiate sector relations and limit their participation in the value chain. New entrants with less extensive networks were observed to cultivate strong relationships and impact positively on livelihoods of farmers within their networks. This implies that if strengthened, relationship platforms may attract investment in initiatives that complement national sugar-sector strategies, besides facilitating knowledge exchange, and enabling stakeholder engagement. Companies and governments should therefore work together in developing relationships that reach a maximum possible number of smallholder farmers. Investing in relationships with smallholder farmers, is critical for agricultural organizations to secure and diversify their supply chains while ensuring smallholders’ participation, and consequently sustainable livelihoods.

Suggested works include studies on strengthening existing relationships and their implications on smallholder sugarcane farmers’ livelihoods.

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