

## Determinants of Smallholder Farmers' Participation in Rice Value Chains in Uganda

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## Abstract

*This study explored the key determinants of smallholder farmers' participation in the One Stop Centre Farmer Association (OSCA) rice value chains in Uganda. Data were collected from 98 respondents in Luwero and Bugiri districts using focus group discussions and 20 key informant interviews, and analysed with NVIVO software. The findings indicated that style of leadership, trust, cohesive networks and support services were key determinants of participation. Minimal participation of some members occurred due to unrealistic expectations and incompetent leadership. Further, addressing OSCA objectives can mitigate ensuing expectations. Along with this, strengthening the OSCA leadership to entrench transparency and establishment of business models for integration of value chain interventions into the wider livelihood strategies is important in order to cater for interests of all the members.*

**Key words:** Participation, Smallholder farmers, Value chains, Networks.

## Introduction

Value chain development has been increasingly promoted by governments in Sub-Saharan Africa as one of the strategies for enhancing growth in the agricultural sector (Donovan, Franzel, Cunha, Gyau, & Mithöfer, 2015) and to reduce rural poverty (Stoian, Donovan, Fisk & Mouldoon, 2012). A number of non-governmental organizations (NGOs) and private sector actors are engaged, jointly with government, in value chain approaches intended to increase efficiency and benefits especially to the smallholder farmers (Rwelamira, 2016). The approach has been adopted basing on the assumptions that poor households have sufficient resources to effectively participate in value chain development, do not face substantial trade-offs when using these resources, and are able to assume higher risks when reinvesting capital and

labour (Stoian *et al*, 2012). This paves way for institutional innovations and also links rural supply to urban consumption (Poole & de Frece, 2010).

Small-scale institutional innovations require that smallholders be organized in groups and associations to benefit from input and output markets (Rugema, Kibwika & Sseguya, 2017). In Uganda, since colonial days, small holder farmers have been organized into groups and local farmers' organizations (Sseguya, 2009). Since the 1990s, participation mediated through groups gained prominence as an effective means of involvement of local people in development initiatives (FAO, 2003).

In this regard, in 2001, Sasakawa Global 2000 started farmer-based organisations called one stop centre farmers' associations (OSCA). The OSCA model builds upon the principles of participation for self-reliance and enhanced farmers' access to technologies and private entrepreneurial services. The OSCAs provide members with services ranging from agricultural inputs and agro-processing services to improving market linkages. Twelve OSCAs, each comprising of about 40 village-community-based groups were established in 12 districts of Uganda engaged in value chains of maize, rice, groundnuts and cassava (SG2000, 2006). The OSCA approach involves various categories of multi-sectoral actors including farmers, rural financial intermediaries, development agents, commercial based entities, local leaders, non-government organizations (NGOs) and the National Agricultural Research Organization (NARO) (SG2000, 2006).

Although the OSCAs provide space for smallholder farmers to participate in value chain activities, Rwelamira (2015) notes that the expected benefits of participation such as access to input and output markets, access to extension services and processing facilities have not been fully realized. There is therefore a need to ascertain whether farmers' participation in the OSCAs translates into tangible benefits. This study examines the key determinants of small holder farmers' participation in the OSCA rice value chains of Bugiri and Luwero Districts and how this influences their benefits.

## **Theoretical Framework**

This study was guided by the social exchange theory (Homans, 1961) which posits that human relationships are shaped by subjective cost-benefit analysis and the comparison of alternatives. This implies a two-sided, mutually contingent and rewarding process involving transactions or exchange. The theory shows how rewards and costs associated with interpersonal relationships corroborate with peoples' expectations from them. Blau (1964), states that individuals enter into and maintain a relationship as long as they can satisfy their self-interests and at the same time ensure that the benefits outweigh the costs. Supporting theoretical discourse on determinants of participation was given by Rwelamira (2015) who also notes that peoples' motivation to participate in collective action is a result of their expectations such as access to services and maximization of self-interest and benefits through interaction with others. Emerson (1972), states that exchanges which prove to be rewarding in relationships are maintained while those that are costly are broken off. The social exchange theory therefore is appropriate for analysing the key determinants of smallholder farmers' participation in the various stages of the value chains and how the nature of participation influences their benefits.

## **Methodology**

A qualitative case study design was used to gain an in-depth understanding (Yin, 2014) of the determinants of smallholder farmers' participation in OSCAs, focusing on two rice value chains: Bugiri Agribusiness Institutional Development Association (BAIDA) in Bugiri district and Zirobwe Agali Awamu Agri-business Training Association (ZAABTA) in Luwero district. The study was conducted in February and March 2015, 13 years after the establishment of these OSCAs. The two cases were selected based on their functionality and period they have been engaged in rice value chain activities. Luwero and Bugiri districts are major rice growing districts of Eastern and Central Uganda, respectively, where government and non-state agencies targeted rice production interventions among smallholder farmers.

Focus group discussions (FGDs) were conducted with representatives from each of the OSCAs, who were selected by their leaders depending on their frequency of involvement in rice value chain activities; those most frequently involved were selected. Seven FGDs were conducted, each attended by seven participants on average (49 members) at BAIDA and seven FGDs each attended by seven participants (49 members) at ZAABTA in Luwero district. In addition, 20 key informants namely; six leaders of the farmers' associations and 14 representatives of development partners were also interviewed to complement information obtained through the FGDs. Additional data were obtained through reviewing of documents and records of the OSCAs.

For analysis, multi- stage coding was used to tease out important common issues (Charmaz, 2006). Data were coded at three successive stages out of which themes relating to the study objectives emerged. Eleven axial categories were obtained. These were further condensed, culminating into two major themes: (1) Enablers of participation, and (2) factors that hinder participation (table 1). NVIVO 10 for windows software was used to sort and organize the data.

### **Table 1: Objectives, themes and categories of the study**

Study Objective	Theme	Axial Category
How participation occurs	→ Participation Enablers	➤ Networks Contracts Leadership support Trust Cooperation Cohesion
Factors that hinder participation	➔ Participation barriers	➤ Exclusion Status Leadership styles Misconceptions Self esteem

## Results and Discussion

### Enablers of Smallholder Farmers' Participation

Findings from the FGDs and key informant interviews revealed that smallholders' involvement in the rice value chain activities at BAIDA and ZAABTA was enabled by support from the leadership and engagement with the available networks. As noted by Hermans *et al* (2017), engagement enables the stakeholders to negotiate what type of innovations are technically feasible, economically viable, and socio-culturally and politically acceptable. The OSCA leadership plays a significant role in terms of setting direction and mobilizing members around common issues in order to realize the set objectives. For example, the OSCA leadership facilitates members to engage in activities that boost their incomes and livelihoods. At ZAABTA OSCA, farmers' participation was promoted by supporting them to access agricultural support services such as production inputs and markets for rice. Baloyi (2010), regards support services as prime movers that must be developed as a package to create opportunities for smallholder farmer participation.

The study also revealed that networking played a vital role in promoting participation of different actors in the rice value chain. For instance, the ZAABTA OSCA networked with different actors to improve farmers' rice production experience. Among the actors, were the National Agricultural Research Organization (NARO) for access to improved rice seeds and planting methods. Actors such as SG2000 were approached by the OSCA to provide training on post-harvest management and market linkages. The Japan International Cooperation Agency (JICA) and the Ministry of Agriculture, Animal Industry and Fisheries (MAAIF) collaborated with ZAABTA to install a rice mill so as to ease milling and processing of rice. A member of ZAABTA revealed that:

*"... We as smallholder farmers have a very strong voice at ZAABTA and this facilitates us to participate in decision making. Our ability to participate in decision making enables us to meet different partners such as the one we met recently (Makerere University). This helped us*

*to find better markets for our rice. We were also linked to JICA, where we get rice information on a daily basis. Networking has enabled us get information on the weather and crop prices on a daily basis from the sub-county extension worker and SG2000. We are able to interact with officers at NARO on latest developments on crops. We also interact with other farmers who face challenges similar to ours...". (ZAABTA member, 20<sup>th</sup> March 2015).*

This statement shows that new opportunities were created such as extended competencies, capabilities and capacities as result of interaction with research and NGOs. New information was also easily accessed. Networking therefore is an important source of innovation and co-creation of knowledge. This observation concurs with Chindeme *et al* (2016) who state that networking enhances actors' ability to co-influence and co-create knowledge as a spring board for innovation

Networking opportunity such as contracts were promoted by the OSCAs for their members. Bienabe and Vermeulen (2007), established that many commercial farmers are not interested in contracts as they are of the opinion that their 'profits are squeezed' and cannot afford the additional capital outlays to comply with the stringent quality standards. For example, in the district of Bugiri, the production officer revealed that

*"...The smallholder farmers lack access to assets, information and services. This is being overcome through contract farming arrangements that the district production office made with different partners. The partners provide services to BAIDA. Similarly, the processors and marketers are able to secure important gains from the contract arrangement. This opportunity induces active participation of members as a result of gains attained....". (District production officer Bugiri, 21<sup>st</sup> March 2015).*

This finding amplifies the observation of Chowdhury (2005), who notes that contract farming has potential to commercialize smallholder agriculture given its core attributes of straightforward procurement of the correct inputs, readily available high-quality extension services throughout the production and harvesting period and the ease with which delivery is made after harvest.

Trust and cooperation are also key enablers of participation of smallholders in the rice value chain activities. The study found that trust lubricates cooperation and cooperation breeds trust; both are interdependent in joint action. Rwelamira (2015), states that a trusting relationship encourages interaction among the value chain actors and further enhances participation. The BAIDA and ZAABTA OSCAs built trust through engaging in regular meetings which involved the district and sub-county officials, NARO, JICA, SG2000 and input dealers as well as engaging with potential avenues for market for rice such as Upland Rice Millers and Makerere University. Trust was built through learning, sharing and collectively undertaking actions as indicated by OSCA members:

*"...As we interact with the other partners at ZAABTA we begin to trust each other and we are more eager to participate and are more committed to collaborate with them so as to learn from them and share our experience with them..." (ZAABTA member, 20<sup>th</sup> February, 2015).*

*“...All rice value chain actors are involved in the activities as a result of trust. They participate and contribute largely to increase access to knowledge on technical issues, and markets through information exchange and training facilitated through the OSCAs...”* (BAIDA member March 21<sup>st</sup>, 2015).

The study also revealed that smallholder farmers who had trust in the OSCA leadership participated more in the value chain activities. Cooperation was high between the smallholder farmers and OSCA leaders as well as other actors in the value chain. Regular interaction with different partners along the value chain created openness, honesty and connectivity that enhanced trust and willingness to participate. The study further revealed that the OSCAs provided an important platform for farmer groups to organize themselves to access innovations in production, processing, markets and other services such as capacity building, and information. Findings also revealed that OSCA members knew each other better through regular interactions. Group membership was open to youth, women and men of low financial status. This boosted the level of inclusiveness, commitment and cohesion, all of which are characteristics of a well-coordinated value chain. This suggests that inclusiveness, commitment and cohesion are important for participation in collective action. This provides a clear testimony of Humphrey's (2005) observation that well-coordinated value chain activities enable smallholder farmers access lead firms and participate actively in the value chain.

### **Barriers to Participation**

Findings indicate that some smallholder farmers do not participate in the rice value chain due to some barriers. The geographic location of some members restricted their ability to buy inputs and sell produce. For instance, BAIDA focused mainly on the commercially-oriented smallholder farmer category. The size of land owned by a smallholder farmer qualified them to be eligible to become members of the OSCA. A well-to-do smallholder farmer owned between 1 to 5 acres of land. The majority of other smallholders who owned less than one acre of land was thus excluded from participating in OSCA activities. Owing to this, BAIDA OSCA had to cope with a relatively low farmer involvement because of focusing on commercially-oriented farmers. The exclusion of other smallholders in the OSCA activities resulted into lack of confidence between the smallholders and the OSCA. It was thus evident that there is reluctance among some smallholders to participate in the BAIDA activities as a result of exclusion. Narayanan *et al* (2014), notes that producers participating in supply chains may face different experiences in participating in value chains and not all benefit in the same way.

Some leaders were considerable barriers to participation. At ZAABTA, participants indicated that some leaders failed to coordinate the agreed upon activities. They also excluded members from participating in the value chain activities despite their willingness and preparedness to volunteer their skills, abilities and talents to the cause of the OSCA. The members in this category were not part and parcel of the decision-making process and so could not own the decisions arrived at, as well as the associated functions that took place. The OSCA leadership, for example, sometimes made the decisions to sell rice of premium quality in anticipation of high returns in

exclusion of the OSCA members. Joint decision making was only prevalent when the rice was of inferior grade. OSCA leaders were therefore sole decision makers on some sales decisions. At ZAABTA, leaders characterized, selected and actively involved only those smallholders they perceived as 'champion' representatives who were believed to be highly motivated to drive forward the ZAABTA leaders' agenda. This selective treatment lowered the confidence of some members. This testifies the observation of Baloyi (2010), that smallholder growers who are excluded from value chains develop lack of confidence in the lead firm's sourcing processes.

The OSCA is a collective action strategy taken by farmer groups that form associations to invest their time and energy to pursue shared objectives. The OSCAs are made up of subsistence and commercial smallholder farmers with a focus of achieving economic transformation through gaining skills, accessing inputs, forming enterprises in any agricultural value chain, processing and marketing. The most common form of collective action at BAIDA and ZAABTA was joint buying of inputs and marketing of products. The FGDs revealed that some of the farmers at the OSCAs did not participate in the OSCA collective action activities. This was attributed to the unrealistic high expectations, hence disappointments which in turn, made it harder to involve some members in some initiatives. At the OSCAs, some members did not participate in the collective action activities, because they had misconceptions that led to disappointment. For example, they had the impression that by being members of the OSCAs, one was entitled to accessing services without paying for them as stated by one of the members:

*"...When I joined ZAABTA, I thought that I would immediately get the benefits of being a member. I grow rice and I thought rice returns are high especially for ZAABTA members. I expected to get a loan from ZAABTA to meet my needs. But when I attended the ZAABTA meetings, the center manager explained that it was impossible for me to access the loan because I was not a fully paid up member of the OSCA. I gradually lost hope and interest..."* (Member ZAABTA, February 20<sup>th</sup> 2015).

*"...I joined BAIDA hoping to access milling services for free. I also expected the association to give me a rice thresher, but I was told to pay. I can afford but I preferred something I can pay for in instalments..."* (BAIDA member, 21<sup>st</sup> March 2015).

The statements above imply that attitude, self-interest and misconceptions of the OSCA members led to ambitious expectations. At BAIDA and ZAABTA, some members had the misconception about the role of the OSCAs which they confused with the services and the economic activities hence, resulting into their limited participation.

## **Conclusion and Recommendations**

The study has revealed that participation of the smallholder farmers is a 'derived' form of participation. The choice to join in the value chain activities is induced by the anticipated benefits and more so, those that have the potential of improving and sustaining their livelihoods. From the study findings, it was observed that smallholder

farmers wholesomely embrace any interventions as long as they are expectant of benefits arising from their active participation. Trusted and empowering leaders are critical in the value chain in order to maintain and sustain the strength of the bonding between the members to increase participation. They play a significant role for setting direction, mobilizing members around common concerns and realizing objectives. In addition, all actors are more likely to accept or support the implementation of innovations when they have been part of its development. New opportunities that enhance competencies, capabilities, capacities and produce new information as well as reduce transaction costs emerge. Cohesiveness of the smallholders and other actors enables them to benefit from all necessary services. The services determine their opportunities to produce and secure earnings. Following the major findings of the study, there is need for harmonizing the procedures for participation to enable all the actors be part and parcel of the value chain and associated activities. Formulation of such procedures would address the challenges of member exclusion. Further, as established by the study, many OSCA members had numerous misconceptions regarding the benefits that accrue to them. This suggests lack of systematic entry procedures for example on briefing the new members about operational scope of the OSCAs. It is thus recommended that efforts be made by management of the OSCAs to design standard guidelines for the new members. This would eliminate the misconceptions. On the aspect of micromanagement by some leaders, it is suggested that the bye-laws of the OSCAs be revised to include a provision for consultative decision making. This would enable members to consent to decisions made by the leadership of the OSCAs.

#### **Declaration of Conflicting Interest**

The author(s) declare no conflict of interests with respect to the research, authorship and or publication of this article.

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