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Partnership construction and value co-creation to address voids in rice production: The case of rice value chains in Uganda

Rugema Semaana Hilary^{1*}, Paul Kibwika¹ and Haroon Sseguya²

Abstract: Since the establishment of One Stop Center Farmer Associations (OSCA) in Uganda 13 years ago, no documentation of the work done had been carried out. This study was conducted on the partnership and value co-creation initiatives implemented by two OSCAs in the rice value chain in Luwero and Bugiri districts, Uganda. The methodology used involved use of semi structured interviews and check lists for focus group discussions as well as key informant interviews. Eight focus group interviews were conducted, with an average attendance of six members per group (48 members) in Bugiri and 48 members in Luwero district. Interviews were also conducted for 44 key informants. A total of 140 respondents were interviewed both in the focus group discussions and as key informants. The information was analyzed with NVIVO software. Findings indicate that partnership construction and value co-creation occurred in the OSCA value chains, but have not yet reached the ideal status, although they have advanced through the stages of development. There is an increased number of actors with vast interests interacting with the OSCAs for value co-creation. However, the cooperative co-creation of

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PUBLIC INTEREST STATEMENT

Partnerships and value co-creation in agricultural value chains have a positive financial impact on small holder farmers in Uganda. This has created interest on how local farmer organizations construct partnerships to enhance efforts for sustainable agricultural development. This article describes how the partnership construction process and value co-creation occur among farmer association value chains. This involves various categories of partners including: farmers, rural financial intermediaries, public officials, and development agents. Using a qualitative, exploratory case study approach, the findings revealed that partnerships and co-creation occurred in the study areas and had profound effect on the rural livelihoods. The rewards enhanced reputation, driving sustainable practices in rice value chains for value addition. However the partnerships leading to co-creation of value along the chain require focus on achieving both firm and stakeholder value propositions as well as optimal outcomes for all. The outcomes of this study have relevance for practitioners, and policy makers.

value along the chain requires a focus on achieving all actor value propositions as well as optimal outcomes for all. The study, therefore, recommends that in the process of constructing partnerships and co-creation, it is necessary to be aware of differences in each actor's views, motivations, and ways of working. This will lead to complementing each other through realizing and accepting differences to make the partnerships work.

Subjects: Agricultural Development; Agricultural Economics; Development Studies, Environment, Social Work, Urban Studies; Development Studies; Economics, Finance, Business & Industry

Keywords: partnership construction; co-creation; value chain; network; one stop center farmer associations

1. Background

The landscape in which agriculture operates is changing profoundly around the world, with new participants, challenges, alliances and risks. As agricultural markets are transformed and attract new entities and individuals, emerging configurations of power relations and development opportunities require establishment of new alliances and more effective ways of working together (International Fund for Agricultural development, 2013). This calls for new or improved forms of partnerships founded on core principles of equity and transparency. Establishing partnerships in the agricultural value chain is a strategy for improving performance (increased efficiency, effectiveness, competitiveness, access to technologies, inputs, markets, coordination, information and credit) in the value chain (African Development Bank, 2012). According to International Fund for Agricultural development (2013), partnerships entail an agreement to cooperate in order to advance partners' mutual interests, mobilizing their strengths and resources in a transparent and equitable manner. Whether formal or informal, value chain partnerships are guided by the parties involved taking into account mutual interests. Partnerships leverage collective action including resource mobilisation. Over the last one decade, value chain partnerships have become a pervasive element in studies on the organization of social and economic activities at both national and international levels. From an economic angle, insights on value (or supply) chains were popularized in the 1980s by Porter (1986) who used the concept of the value chain and the value system to describe a company's activities. Value chain partnerships typically aim at improving the production and delivery of products and services of small scale producers (Bäckstrand, 2006; Glasbergen, Biermann, & Mol, 2007; O'Rourke, 2006).

In Uganda, the national development plan (2010/11–2014/15) emphasizes the importance of partnerships at all levels for sustainability (NDP, 2010) especially in strategic value chains like rice (Ministry of Agriculture Animal Industry & Fisheries, 2010) in line with the Uganda National Rice Development Strategy (NRDS). In recent years, co-creation, an organization change method where by multiple actors come together to develop new practices that cause change at every stage of the value chain from selling seeds to retailing packaged foods has spread rapidly in the value chain business sector. New forms of interaction that turn into a transactional process follow the path of co-creation (Dahan, Doh, Oetzel, & Yaziji, 2010). For smallholder farmers to participate in the value chains, actors along the co-creation path must partner with them in their associations and cooperatives to pursue a common goal. Among other things, creating the right conditions to connect smallholder farmers to dynamic markets requires effective partnership facilitation (Berdegue, Biénabe, and Peppelenbos, 2008).

Some of the benefits of partnerships and value co-creation include cost reductions and a higher level of products and services through knowledge sharing and returns to scale. The success of value chain partnerships and co-creation is dependent on hard side relationship management, which includes the structural characteristics of organizational design, control and management of conflicts, and the soft side which includes behavioral characteristics such as trust, commitment, coordination,

interdependence and communication. To develop effective partnerships and co-creation, it is necessary to create an environment where diversity is both acknowledged and valued as each partner is different and will bring different traits to the table (De Waal, 2006). This study on partnership construction and co-creation was designed, to address voids in the rice sector in the context of the One Stop Center farmers' association model to draw an understanding of the processes of partnership construction.

1.1. The concept of the one stop center farmer's association

One stop center farmer's association approach (OSCA) presents an interesting setting for exploring the value chain partnership and co-creation development process. In 2001, Sasakawa Global 2000, an international non-governmental organization, undertook the innovation of establishing farmer-based organizations to provide members with a range of services, from supplying inputs and agro-processing enterprises to improving market linkages. Twelve One-Stop Center Associations (OSCAs), each made up of 30–40 village-based groups within service catchment areas of about 5,000 farmers, were established in Uganda and are engaged in different crop value chains (Maize, Rice, Cassava). Innovation in the OSCAs is driven by new knowledge, practices, and technologies, and involves engaging different actors along the value chain. The OSCA approach involves various categories of multi-sectoral actors—farmers, rural financial intermediaries, development agents, commercial based entities, local leaders, NGOs, and the National Agricultural Research Organization (NARO) (SG2000, 2006). Value chain partnerships and co-creation are implemented within the OSCAs, from production of the commodities to marketing final products including all the economic activities undertaken by different actors between the phases (agro input sales, extension, processing, delivery, wholesaling and retailing).

Researchers and practitioners of the OSCA business model concept incorporate cross-actor partnerships, arguing that such partnerships and co-creation create and deliver both social and economic value, which is mutually reinforcing. Scholars increasingly explain various levels of partnerships and co-creation evidenced in differing social and political environments (Meixell & Luoma, 2015; Nenonen & Storbacka, 2010), but less is discussed about these elements using the OSCA model. This research addresses the fundamental question of the partnership and co-creation processes and how they occur in the OSCA rice value chains.

2. Theoretical framework

This study is guided by the actor network theory (ANT), originally created by French scholars Latour (1992) and Callon (1986). The theory posits that no one acts alone (Latour, 2005). In this study, ANT focuses on the infrastructure of the OSCA networks—how they are formed and the concrete mechanisms that hold them together. Partnerships and value co-creation in the OSCA model bring competencies, resources, innovations and knowledge through interaction among actors in the network. The OSCA rice value chain networks tie together systems of alliances. These alliances have “actants”—everyone who is involved in the invention, construction, distribution, and usage of the technologies and services in the rice value chain. This leads to a “sociogram”—these are the relationships and behaviours including all the pieces that were already on stage and those that were brought into place in the rice value chain, connecting the actants leading to a “technogram”—the systems including the synergy, interdependence, and interconnections standing in interaction. The systems in the OSCA rice value chain network are highly interconnected. A change at one level simultaneously changes the other and each modification in one system of alliances or partnership is visible in the other. “Each alteration in the technogram, overcomes a limitation in the sociogram and vice versa” (Latour, 1987, pp. 138–139). The networks in the rice value chains of Bugiri and Luwero districts are composed of a series of heterogeneous elements, animate and inanimate, and have been linked to one another for a certain period of time. In the OSCA value chains, the size and importance of the actors are dependent on the size of the network they command and the size of the networks depend on the number of actors they align through partnerships and the value they bring. There is no structural difference between large and small actors (Latour, 2005). The main differences is the size of the network they bring into place for a particular goal.

3. Methodology

A qualitative case study design (Weick, 2007) was used to gain in-depth understanding (Yin, 2014) of the partnership processes and dynamics in two cases (OSCs) namely Bugiri Agribusiness Institutional Development Association (BAIDA) in Bugiri district and Zirowe Agali Awamu Agribusiness Training Association (ZAABTA) in Luwero district. The study was conducted in February and March 2015, 13 years after the establishment of these OSCs. The two cases were selected based on their functionality and period they have been engaged in rice value chain activities. The OSCs are seen as a vehicle by which new forms of production, technologies, logistics, labour processes and organizational relations and networks occur (African Development Bank, 2012). Luwero and Bugiri districts are major rice growing districts of Eastern and Central Uganda; where government and non-state agencies targeted rice production interventions among smallholder farmers. The non-state agencies include Sasakawa Global 2000 (SG 2000) and the Japan International Cooperation Development Agency (JICA) (Lusiba, Kibwika, & Kyazze, 2017). Luwero and Bugiri districts account for 60% of the rice produced in Uganda (Haneishi et al., 2013). BAIDA and ZAABTA OSCs are involved in fostering new rice value chain partnerships that hinge on the principle of interdependence efforts between production to the consumer (Hailey, 2000). The OSCs in the aforementioned districts were appropriate for conducting this study. Focus group discussions (FGD) were conducted with representatives from each of the OSCs. Eight FGDs were conducted, each one attended by six participants on average (48 members) at BAIDA and eight FGDs each attended by six participants (48 members) at ZAABTA in Luwero district, hence a participation of 96 members in the FGDs. The FGDs focused on investigating the partnership formation process, innovations, and value co-creation, actor interactions, and linkages. In addition, 44 key informants comprising of leaders of the farmers' associations, and representatives of development partners were also interviewed to complement and validate information obtained through the FGDs. A total of 140 respondents were interviewed both in the focus group discussions and the key informant interviews. Additional data on partnership formation, value co-creation and mode of operation of the rice value chains were obtained through reviewing of documents and records of the OSCs.

Regarding analysis, a multi-stage coding process was used, to understand important common issues (Charmaz, 2006). Data was coded at three successive stages out of which themes relating to the study objectives emerged.

Stage 1: Open coding of the data was done from each focus group discussion word by word and line by line.

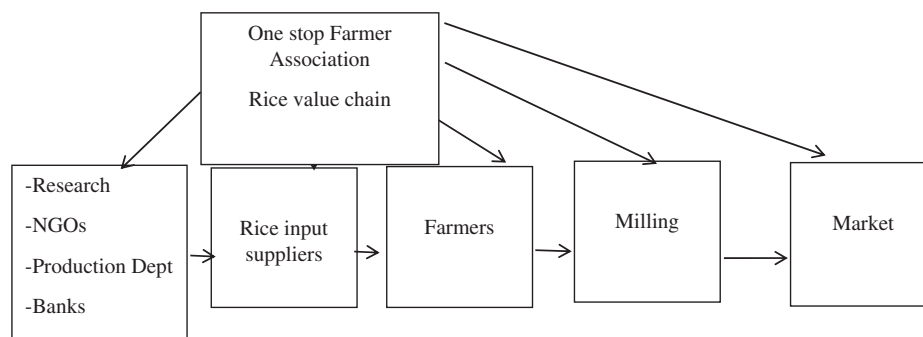
Stage 2: Focused coding was done to generate common categories relevant to the study objectives across the actors, generating a total of 70 focused codes.

Stage 3: Axial coding was done with the aim of developing categories and linking them to each other. Twenty (20) axial categories were developed: Actor shared vision, value creation, leadership role, shared experience, available networks, social relations, expected benefits, quality services, capacity building, resource access, actor characteristics, common problem(s), incentives, concerns, agreements, role definition, interpersonal relations, material benefits, sustainability, diverse knowledge and skills.

A review of the transcripts was done once more, explanatory quotations were highlighted and coded using the 20 axial categories. Some of these quotations have been used in the results and discussion section. The emergent themes were again contemplated and the 20 categories were found to be connected with one another; these were further condensed, culminating in five major themes: (1) actor shared vision, (2) leadership role, (3) value co-creation, (4) emergence of new services, and (5) capacity building.

These themes were then linked to objectives of the study whereby a particular category could apply to more than one major theme. NVIVO 10 for windows software was used to organize the data. The process allowed to reflect on the data in detail, but also more broadly. As a means to check for validity and to counter potential biases in the study, the preliminary findings were discussed with some actors

Figure 1. The actors in the rice value chain and co-creation.



who had played a key role in the partnerships at Sasakawa Global 2000, NARO and JICA. The validity of the findings was further assured by identifying appropriate quotations for the issues under discussion and cross checking with members of the research team, and with secondary literature.

4. Results and discussion

The findings of the study depict that partnership construction and value co-creation occurred in the OSCA rice value chains of BAIDA and ZAABTA. The findings further indicate that the development of the OSCA rice value chain partnerships and co-creation represent a forward-looking growth process with increasing co-creation activities resulting from interactions among the actors (Figure 1). Development of the partnerships and co-creation manifest themselves through five distinct processes: (1) actor shared vision and common objectives; (2) the role played by leadership; (3) value co-creation and role redefinition; (4) emergence of new services; and (5) capacity building.

4.1. Shared vision and common objectives

During the interviews with the study respondents it was established that actors select partners for strategic purposes. These were categorized in dyads and in each dyad, actors sought the “right” strategic partner. Whether the partnerships had been preceded by a transactional exchange or not, partners articulated a strategic motivation and negotiated shared vision for co-creating value. For three of the studied dyads (district production department, NARO and OSCAs), the cross-sector partnership was the very first collaboration between them; the partners had no prior contracts or relationships (collaborative). The decision to go it together was rooted in a shared purpose for value creation, and partner history. For the other two dyads (NGOs and banks), partnership grew out of prior transactional relationships (i.e. a marketer–supplier contract (the NGOs pushed for enterprise development, putting the market first, while the banks looked at financing the commercial rice enterprises). The choice of partner, type and intensity of engagement were deliberate (see Table 1).

At BAIDA and ZAABTA OSCAs, several actors came together after encountering problems which they felt they could not approach on their own—poor methods of farming, poor quality grain that would fetch low prices and low market opportunities. The Non-governmental organizations, Sasakawa Global 2000 and—JICA, that were operating in the two districts, together with the district production offices and the OSCAs, brought together the rice value chain actors. This led to building a foundation for partnerships, based on a common problem and a common vision. Action plans on how to achieve the objectives were developed. This guided the process of setting up of agreements. At BAIDA, for instance, stating the intended roles and contributions of the potential partner was very important, as reiterated by one of the leaders:

You have to have a good reason for getting into a partnership. The whole idea is to come up with a shared vision, from the point of view of partners like Sasakawa, the production department and ourselves, coming to the conclusion that we wanted to provide the best of the rice value chain, to serve our farmers better. We wanted to look at a partner who had a reputation in being innovative using the most recent methods, ideas, and equipment along the rice value chain and had the same vision as ours. (Center manager, BAIDA, 20 February 2015)

Table 1. Description of one stop center farmer association partnerships and co-creation

Dyad	Data	Shared purpose	Time line
Production department	Interviews (2014), director crop resources MAAIF (KI) Sasakawa Global 2000 desk officer (KI)	The production department dyad constituted a new relationship between a publicly-traded institutions and farmer based associations BAIDA in Bugiri district and ZAABTA in Luwero district To address efficiencies in the delivery of agricultural services	2013: ZAABTA approached MAAIF and Luwero district production department with a need for a rice Mill through JICA : MAAIF approved the value proposition; moving to next level
	District production officer Luwero (KI) District production officer Bugiri (KI)	The partnership initiated a radical commitment to training, inputs availability and value addition, which consisted of installation and maintenance of new a rice mill at Zirabwe and a bulking site in Bugiri Nankoma sub county . and guided on policy issues	2012: BAIDA approached the District head quarter team for electricity installation request approved in partnership with the district added value to the milling services; moving to next level
	Archival materials (2003–2015) Unpublished case studies of ZAABTA & BAIDA respectively Annual & activity reports Media releases		
National Agricultural Research Organization (NARO)	Interviews (2014) with Head of cereals program (KI) And rice breeder (KI)	The Research dyad brought together a large, publicly-traded corporate partner It envisioned a shift from a prior supplier of technologies and services to a multiyear learning partnership. The partnership benefits accrued to the organizations involved	Longstanding involvement in the community Strong effort to go after the business that was not competitive. partnership agreement concluded between 2012 to 2014: major lines of service improved to Successful competition bringing additional value to the table through work at the level of government and understanding of the industry new technologies in terms of improved drought tolerant varieties and crop production management methods
	Archival materials (2003–2015) Unpublished case studies of ZAABTA & BAIDA respectively Annual & activity reports at NARO-NaCRRRI Media releases		

(Continued)

Table 1. (Continued)

Dyad	Data	Shared purpose	Time line
OSCA's members	<p>Interviews (2014) with OSCA chairperson BAIDA (FGD)</p> <p>OSCA chairperson ZAABTA-(FGD) Center manager</p> <p>BAIDA-(FGD) Center manager ZAABTA-(FGD)</p> <p>4 Members BAIDA-(FGD)</p> <p>4 Members ZAABTA-(FGD)</p> <p>2 Local leaders-(FGD)</p> <p>2 local leaders-(FGD)</p>	<p>The dyad brought together a the OSCA chairpersons, Center managers and local leaders in both Bugiri and Luwero district. It is a multiyear learning partnership. The partnership benefits accrued to the organizations involved these included lobbying for roads and electricity as well as the reinvestment of the OSCA's savings in marketing and sales for the co-development of innovative rice value chain solutions</p>	<p>Longstanding involvement in the community. Strong effort to go after the business between</p> <p>2012 to 2014; additional value to the table brought in through electricity installation improving on the milling services, roads tarmacked to easy transportation to markets in Kampala and beyond</p>
NGOs	<p>Interviews (2014), Deputy country director Sasakawa Global 2000 (KI)</p> <p>JICA expert NaCRRI (KI)</p> <p>Deputy chief of party USAID feed the future-(KI)</p>	<p>The dyad brought together leaders of NGOs. It is a multiyear learning partnership. The partnership benefits accrued to the OSCAs and organizations involved these included training in crop production and value addition as well as construction of warehouses and installation of equipment for value addition as well as co-creation and co-development of innovative rice value chain solutions</p>	<p>Organizations already involved; relationship evolved over time</p> <p>Longstanding involvement in the community. Strong effort to go after the business between</p> <p>2012 to 2014; additional value to the table brought in through electricity installation improving on the milling services, roads tarmacked to easy transportation to markets in Kampala and beyond</p>
Banks	<p>Archival materials (2003–2015) Unpublished case studies of ZAABTA & BAIDA respectively</p> <p>Annual & activity reports</p> <p>Media releases</p> <p>Interviews (2014), 2 Loans officers (KI)</p>	<p>The dyad brought together loans officers from centenary bank and opportunity bank with OSCA leaders in Bugiri and Luwero. The partnership benefits accrued to the OSCAs and organizations involved these included training on saves and credit as well as offering farmer friendly loans for purchase of inputs for production and co-creation of innovative rice value chain solutions</p>	<p>Longstanding involvement in the community. Strong effort to go after the business partnership agreement concluded</p> <p>With ZAABTA 2012</p> <p>And with BAIDA 2014</p> <p>2012 to 2014; additional value to the table brought in through enabling access to finance</p>

Notes: MAAIF- Ministry of Agriculture Animal Industry and Fisheries; BAIDA- Bugiri Agribusiness Institutional Development Agency; ZAABTA- Zirabwe Agali Awamu Agri-business Training Association; JICA- Japan International Cooperation Agency; NARO- National Agricultural Research Organization; OSCAs -One stop center farmer associations; KI- Key Informant; FDG -Focus group discussion; NGO- Non Government Organization.

Similarly, the Center manager for ZAABTA and the association chairperson took the initiative to establish partnerships through networking with actors of a similar vision, though the partnerships were more transactional in nature, as elaborated by one of the OSCA leaders:

... ZAABTA approached different actors to talk to them about partnerships and value creation propositions, and that is how the relationships started. We started out by talking about what the partners could offer and what we as ZAABTA could offer...We decided to go for a partnership, so that we could use the very best of what they had to offer. We aligned our goals with theirs so that we would be a model site for them, with a common vision. (Chairperson, ZAABTA, 21 March 2015)

These study findings indicate that both ZAABTA and BAIDA identified partners to work with, following a shared vision on what each of the parties in the partnerships could offer. They aligned their goals with the goals of the partners and a common purpose for relationship development. They used the very best practices of what they had to offer, turning the OSCAs into model sites. This corroborates with Kolk, van Tulder, and Kostwinder (2008, p. 4), who states that “since interests of stakeholders in multi-actor collaborations often differ, (formalised) goal alignment forms an important part of the collaboration process”. This leads to high embeddedness and highly involved partners, generating “proto-institutions”: new rules, technologies and practices (Lawrence, Hardy, & Phillips, 2002, p. 283), thus increase in performance.

4.2. The role of the leadership in addressing challenges

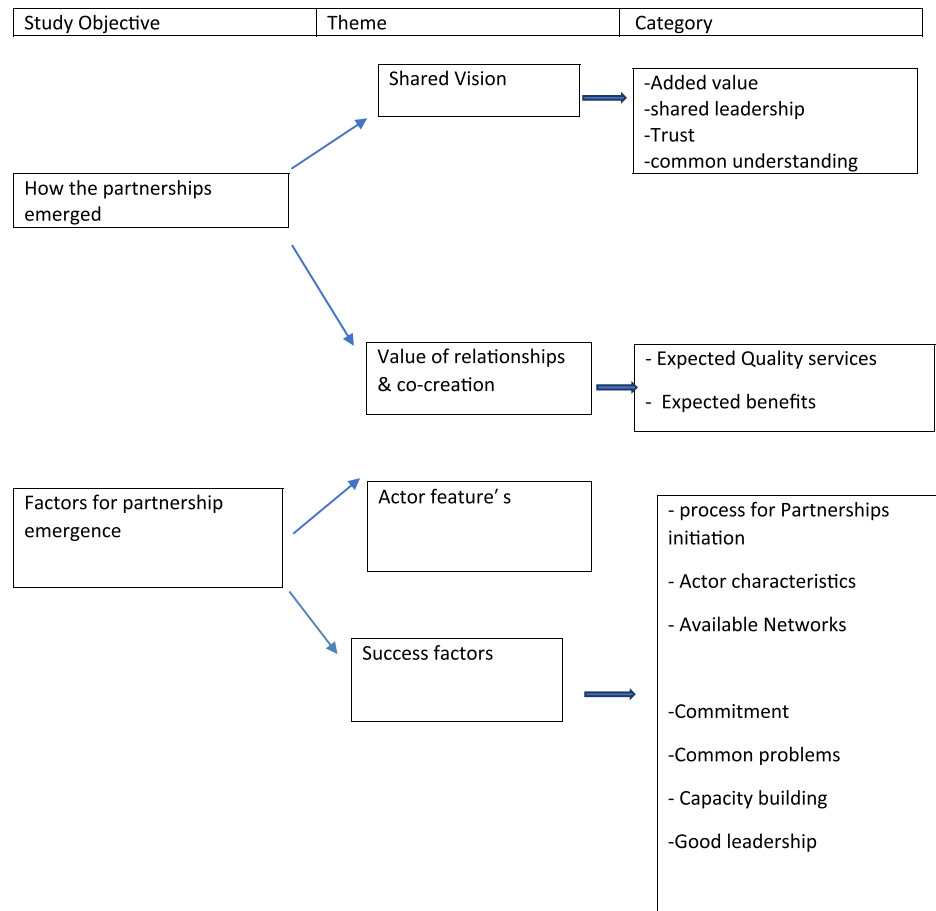
A primary and consistent theme in the study findings was that of the role played by the OSCA leadership. The study revealed that BAIDA and ZAABTA had similar challenges which were addressed by a common set of actors hence adding value. At ZAABTA for instance, there were challenges in rice agronomy, sourcing of high-quality rice seed and grain products for the new packaged-rice business. However, the quality of farmers’ production was not up to the level demanded on the local markets. Productivity was too low to support ZAABTA’s growth. The main causes of these problems were: (i) the plethora of small, inefficient rice farms that dominated the Luwero district’s agricultural sector and (ii) the opaque rice markets. ZAABTA leaders saw that the best way to raise the farms’ productivity and quality was to change strategy and operations along the rice value chain so as to help the rice farmers implement better farming methods and practices. It was further established from the study that partnerships between ZAABTA and the National Agricultural Research Organization (NARO) were developed to access improved rice seed and planting methods. Improvement of the individual farmer’s experience was a primary goal at the outset. Partnerships were also developed with other actors that shared this goal, these included Sasakawa Global 2000, JICA and the Ministry of Agriculture Animal Industry and Fisheries. National Agricultural Research Organization provided training to the farmers and taught them how to improve yields and upgrade crop quality. The farmers also expressed interest in learning how to store their crops. Sasakawa Global 2000 took on the role of training on improved post-harvest handling and marketing to maximize the price received. Partners such as JICA and MAAIF installed a rice mill to ease milling and processing of rice so that the farmers could have milled and packed rice for the market (see Figure 2).

4.2.1. The role of leadership in exploring new opportunities

The ZAABTA leadership enhanced the farmers power by increasing the likelihood that their marketing challenges are solved. Exploring new market opportunities for farmers to market their products was one major role the ZAABTA leadership played to effectively generate higher incomes for farmers. Makerere University was contacted by the ZAABTA leadership as a partner to provide market and buy the rice to feed the student community at the university. The OSCA is now engaged in various services, as indicated by the ZAABTA center manager:

In addition to expanding the rice market to Makerere University, we provide information to farmers in the local dialect on the daily weather forecast, crop prices, and other agricultural news. Advice on farming methods, an e-mail service that let farmers interact with scientists at NARO, and on latest developments regarding crop seeds. We also communicate with

Figure 2. Objectives themes axial categories.



fellow farmers who may have dealt with challenges similar to ours. (ZAABTA Center manager, 20 March 2015)

The study further revealed, that the ZAABTA OSCA identified lead farmers also known as Community association traders (CATs), to manage the rice enterprises, as explained by the chairperson ZAABTA:

We selected lead farmers known as CATs who were trained by the Zirobwe sub county extension technical team. These were trained to operate the rice mill as well as sell inputs to fellow farmers. They also lead the group education process. They remain farmers and publicly take allegiance to serve their fellow farmers. Their compensation is a commission on farmers' sales to ZAABTA and an increase in prestige in the community. (Chairperson ZAABTA, 20 March 2015)

The ZAABTA OSCA has proved to be an effective means for farmers to improve their livelihoods. Farmers are able to compare notes and discuss with each other and with ZAABTA leaders, on ways to overcome their frustrations and issues to do with the traditional local government-run market-places where the farmers sell their rice crop. This statement corroborates with Rwelamira (2015, p. 4), statement that through free interaction between members and their leaders, farmer- based institutions empower members through strengthening their voice for articulating their needs, to demand for services, facilitate service delivery, mobilization of local resources, and collective marketing.

4.2.2. Role of leadership in determining partnerships

Participation of OSCAs in market-oriented agriculture spear-headed by the OSCA leaders is a good initiative. However, this study revealed that much as the ZAABTA leadership strengthened the power of farmers through overcoming challenges such as marketing of produce, the ZAABTA members had a minimal role in determining who to partner with. All respondents expressed that the leadership did not involve them in decisions regarding partner selection. The partnership process was determined by the OSCA leaders and the new partners, as indicated by a member:

We participate in OSCA activities that are seen by our leadership, such as us being good business associates with our partners. Our leaders pressure us so as to get an understanding of what it is that is important to the partners. We do not focus on what is important to us and what types of things we need to involve ourselves in, so that we can understand what makes an impact. (ZAABTA member, 21 March 2015)

Ideally the leadership of the OSCAs is expected to consult and jointly work with the members. The OSCA members' views should influence the final decisions on who to partner with and the roles to perform in the partnership. The likelihood of participating in a partnership is strongly influenced by the culture, and leadership strategy. This helps to develop expectations confidence and trust that moves partnerships forward as confirmed by Hardwick (2013, p. 3), who states that making choices about the sharing of purpose, investment, benefits and risk is a result of trust and confidence, because confidence arises through trust by reducing perceptions of vulnerability risk. Trust is a continuum in which both the leaders, OSCA members and partners depend on. It is therefore important for the leaders to involve OSCA members at every stage of partnership development. This has an effect on the kind of partnerships that develop and value that is added.

4.3. The need for value co-creation and role redefinition

Literature emphasizes the importance of real-time adaptation of partners' roles and responsibilities (Rondinelli & London, 2003; Seitanidi, Koufopoulos, & Palmer, 2003). Findings of this study complement this argument by showing that partners engaged in ongoing iterative processes redefined their roles as the partnerships unfolded. Notably, role redefinition is seen as distinct from the overarching shared purpose of the partnership which shows remarkable resilience. Role redefinition to create value was seen in this study as a driver of success.

At BAIDA, when the partnerships progressed, role redefinition was projected forward along a collaboration continuum. The partnerships were described as flexible and dynamic. They involved active engagement and testing to ensure that all actors gained value. The BAIDA leadership looked at potential partners based on certain criteria: the potential partners must add value to the OSCA and its members; they must have interests similar to BAIDA; and they must have the ability to commit in fulfilling the expectations of the OSCA members as explained by one of the BAIDA leaders:

If the expectations of the interested partner are not in line with or beyond BAIDA, then they as a farmer association will not be able to work with such partners. But if their expectations are manageable and they are bringing value, then BAIDA goes on and partners with the interested party. This leads to partnership formation and redefinition of roles and responsibilities to suit the partnership. (Centre Manager BAIDA, 20 February 2015)

At BAIDA, value creation was achieved when roles and responsibilities of the different actors were redefined and the new partnerships led to identification of convenient and comfortable markets enabling OSCA members to get fairer prices on the market. The OSCAs were able to buy high-quality products from the suppliers directly while reducing their handling costs. The upshot was the creation of a partnership network of OSCA -owned marketplaces.

Positive events in the partnerships at BAIDA stimulated role redefinition for value co-creation, this increased financial gains to the OSCAs. Roles provide a new impetus for value renewal, thus creating

financial gains and enable beneficiaries access financial gains depending on their (perceived) role in the value creation process (Austin, 2000). The study findings confirm this known fact.

4.4. Emergence of new services to the communities

Partnership arrangements between the OSCAs and the different partners have increased the efficiency of the rice value chain, because partners pool their resources, knowledge and capabilities (Kolk et al., 2008), and offer new services to the communities. The study established that there were new services that emerged that were provided by the OSCAs. At ZAABTA, a mobile phone service was rolled out to allow the remote villages to obtain agricultural information and other consumer services at a monthly fee of about 3,400 UGX(US\$ 1). The ZAABTA chairperson attests that engaging in partnerships has enabled building a good business model for ZAABTA:

In taking the value chain innovation and co-creation approach, ZAABTA has built a profitable business model and has achieved its initial business objectives. The farmers have seen their productivity dramatically increase. The quality of their crops has significantly improved, and their incomes have raised. They now have access to new products and services that have enhanced the quality of their lives. (ZAABTA Chairperson, 20 March 2015)

Similarly at BAIDA, due to its importance in producing and distributing rice products, both for the domestic and export market, the OSCA is one of the most important rice centers in Bugiri district. In the past, rice farmers only had limited information on markets and prices. Besides, the farmers did not have proper access to structured markets, and only dealt with intermediaries or brokers to sell their rice products. By developing a partnership and co-creation model in this OSCA, farmers were able to access additional services such as availability of market information. This helped overcome constraints of price fluctuations in rice products due to uncertain supplies and demands, confirming Bair (2005), and Giuliani, Pietrobelli, and Rabellotti (2005)'s arguments in Van Wijk and Kwakkenbos (2011) that any farm or firm that wants to adjust itself to the ever changing market requirements needs to upgrade its products, production processes or organization. The upgrading enables acquisition of new technologies, services and management techniques to increase competitiveness and resilience to overcome challenges including constraints of price fluctuation.

4.4.1. Product branding

Product branding to give a unique identity of the farmers' rice in the marketplace is an innovation the BAIDA OSCA undertook. BAIDA rice brands have now moved beyond imitation, and are at the leading edge. Value co-creation with the partners took place to improve post-harvest handling and storage systems to ensure the quality of the rice product. The BAIDA OSCA through partnerships with NARO and other actors, developed the ability to cultivate quality rice products for fulfilling required specifications by the structured market. The farmers were trained to grow specific new rice varieties in accordance with proven production techniques. These would produce expected yields to meet market demands. Cultivation and harvest scheduling were well planned by the farmers. The BAIDA farmers were trained on value creation, through having rice products at the right time and the right quantity. Marketing value at BAIDA is done through product branding using information provided by supermarkets, such as the development of process or product standards confirmed by a certification process. Buyers from Kenya and from supermarkets in Bugiri and Busia districts gave information to BAIDA about the requirement of distribution scheduling. Identifying and exploring markets and market opportunities through partnerships is an important foundation for partnership commitment by partner actors as indicated by a member of the BAIDA OSCA:

Exploring markets and market requirements is very important, farmers are made aware in advance of the market requirements. Farmer groups are given information by BADIA about exporter and supermarket requirements of rice and rice products. The Supermarkets and farmers groups, co-brand the rice products to suit the market requirements. (Member BAIDA OSCA, 21 March 2015)

From the statements above, broad-based and small-scale farmer inclusive market arrangements have taken place through collaborative arrangements between the trained and organized farmers; a receptive business sector; and conducive policies and programmes supported by partnership arrangements. This confirms Berdegué et al. (2008, p. 15), who remarks on dynamic markets that “Small scale farmer inclusive market arrangements are innovative arrangements built on public policies, business initiative, and collective action”. These are mechanisms that can be used by farmers organizations to create opportunities for poorer farmers, while not impairing the flexibility of the organization or its capacity to be competitive in its market.

4.4.2. Other additional services

E-Agriculture, is being used in developing and applying innovative ways to use ICTs in the rural domains of Bugiri district. The primary focus is on agriculture, focusing on offering a wide range of solutions to some agricultural challenges. This is done through improved information and communication processes. In this context, ICT encompasses all information and communication technologies including devices, networks, mobiles, services and applications; including the rural library (Uzezi, 2015). This study revealed that value co-creation at BAIDA was achieved through partnerships that enabled members access and utilize information communication technologies—ICT tools developed by Grameen Foundation and other mobile application providers to improve partners access and response to weather forecasts and information. This enabled them to adjust the rice production calendars for each agro-ecological area under BAIDA. Partnerships were also developed with private sector actors and a network of traders and village-based agricultural agents to promote farmers’ access to production support services such as spraying, and planting services. This increased farmers’ rice yields and consequently their incomes and livelihood, as indicated by a BAIDA member:

“I have been a rice farmer for a long time, but I was not getting much out of it, because, I didn’t know there was a better way of farming. Out of an acre of rice, I would only get 3 bags. I was struggling to look after my grandchildren and I wanted a bigger house”. “Our small house could not accommodate us.” As a result of the training I received from the BAIDA Village Agent in rice production, I decided to try the NERICA 4 rice variety and apply fertilizers. I also bought a rice thresher and tarpaulin. “I wanted my rice to be clean because BAIDA gives a higher price for clean rice. I have also stopped beating the rice to remove it from the stocks, because this reduces its quality, I now use a thresher which I access through the BAIDA Village Agent at a fee”. In 2013, “I harvested 15 bags from one acre in the first season and 11 bags the second season, earning over two million Uganda shillings. I am now able to pay fees for my children”. (Rice farmer and member of BAIDA, 21 March 2015)

These findings suggest that value is co-created in partnership relationships, through the success of the interaction itself. BAIDA members and leaders acted proactively through the strength of interactive collaboration in the partnerships. These study findings, affirm Berdegué et al. (2008)’s arguments about acting proactively to take advantage of new opportunities.

4.5. The need for capacity building and training

Building the skills of the OSCA members is a continuous improvement strategy toward the creation of sustainability of development programs. The study on partnership construction and value co creation revealed that partnerships were established with the extension workers to build the capacity of the village agents. This enabled the village agents to provide good agricultural practice (GAP) skills to smallholder farmers. At BAIDA, due to challenges of access to quality inputs and climate change, partnerships were developed with input dealers to coach and mentor middle actors in Good Agricultural Practices (GAP). This is combined with smart climate change adaptation measures, such as promotion of rice resilient varieties and conservation agriculture to meet market demands. The climate smart technologies promoted included: utilization of shade trees, soil and water conservation techniques, and mulching technologies. Consequently engagements with the middle actors enhanced cost sharing in hosting and managing of learning sites, farmer training, media promotion, farmer field days and exchange visits, with the aim of reaching smallholder farmers and other actors also as pointed out by Van Wijk and Kwakkenbos (2011) who states that focusing on engaging in

multi-stakeholder partnerships is a promising mechanism for including smallholder farmers to benefit from value chains.

Additional skills were also imparted to the farmers on integrated soil fertility management (ISFM), weed management and integrated pest management (IPM). The BAIDA trainers in partnership with the Bugiri district production department established farmer learning sites as emphasized by the district agriculture officer of Bugiri district:

A total of 917 learning sites were established for BAIDA exposing 1,500 smallholder farmers to improved rice production; proper combination of soil-based macro nutrient fertilizers and foliar fertilizers. Over 100 village agents adapted innovations from Akorion an agricultural NGO that trained on E-extension using animations. Village agents were equipped with content, they use to train smallholder farmers in rice agronomy, post-harvest handling, crop insurance, and soil testing. (District Agricultural Officer Bugiri, 21 March 2015)

The statements above give insight in the relation between the rice value chain partnership dynamics and value co-creation changes that facilitate key areas of the value chain business environment. These partnerships typically improve the production and delivery of products and services of the OSCA small scale producers (Bäckstrand, 2006; Glasbergen et al., 2007; O'Rourke, 2006).

In sum, the case studies of the BAIDA and ZAABTA OSCAs illustrate various initiatives undertaken to engage in partnerships and co-creation for value enhancement. Value was collaboratively created at the two OSCAs and various resources were combined to achieve this value as depicted by Vargo and Lusch (2004). At BAIDA and ZAABTA, partnership construction and value co-creation occurred through interaction between different actors along the rice value chain. The two cases provide a network view, meaning that partnerships and value co-creation occurred in a set of different business relationships, as a networked process and not as an individual business relationship. Actor value indicated a common intention for unifying purpose for all actors in the OSCA rice value chain. Furthermore, the structure of partnership construction involved the potential of both horizontal linkages (similarities of actors) and vertical linkages (complementarities of actors). In the BAIDA and ZAABTA OSCA partnership development and value co-creation processes, the actors interacted with each other to jointly create a valued service. They had an open opportunity in a co-creation exchange process to influence one another's value chain processes. The partnership and co-creation systems in the OSCA rice value chain network are highly interconnected. A change on one level simultaneously changes the other. Modifications in one system of partnership and co-creation activities are visible in the other (see Table 2).

However it is worth noting that the processes in partnership formation and co-creation at BAIDA and ZAABTA depended on the context and the partners involved. The partnering life cycle at the OSCAs provided an overview of the elements that made up the partnering process. There were a number of elements to address at the start, which eventually determined the route the partners took in forming the partnerships. The relevant actors and potential partners were identified much

Table 2. Summary of established partnerships and value co-creation activities

	Reasons for partnership initiative	Value co-creation activities
Farmer	Poor harvesting methods and tools	Better harvesting equipment and techniques for greater efficiencies
	Poor yields due to low soil fertility	Use farm yard manures and fertilizers
Processors	Poor milling services and low quality milling resulting into rice breakage	Sorting and grading rice for quality control. Cleaning of rice grains to ensure high quality rice
		More reliable equipment
Storage	Poor storage methods exposing the rice pests	Packaging, branding storage
		Labelling rice products with clear information

earlier and already knew each another. This facilitated joint definition of the problems they were to address and reaching a common understanding. Furthermore, the partners jointly identified the resources and core complementary competencies that were needed. It then became possible to properly assess whether there was a need to include other actors who possessed relevant or missing resources and competencies.

5. Conclusion

From a partnership and co-creation perspective, value creation has been the most important element for the advancement of the rice value chain at BAIDA and ZAABTA. Whereas partnership construction and co-creation have not yet reached the ideal status, they have advanced at different stages of development depicting a focus on partner identification, development of a common idea and vision. This is an indication on how the partnerships can achieve value creation based on aligned interests of the partners. There is an increased number of actors with vast interests through partnership construction and co-creation stages; to interacting with the OSCAs for value creation. However the cooperative co-creation of value along the chain requires a focus on achieving all actor value propositions as well as optimal outcomes for all. Trustworthy partnerships and co-creation in the rice value chains of BAIDA and ZAABTA present an enormous opportunity for the rice enterprises to include a wider range of experiences for old actors and the new partnership actors. At each stage, new economic benefits are realized, catalyzing the motivation to proceed with the process and explore more and more strategic applications of co-creation.

The study therefore recommends that in the process of constructing partnerships and co-creation, it is necessary to align goals and match best practices (between and among the actors) of each of the dominant success factors identified, as a fundamental to the co-creation of mutual value. Complementing each other is only possible through realizing and accepting differences and finding a way to make it work. A balancing act is needed to discover what type of working culture best fits the partnerships and the type of resources at the table that facilitate the co-creation process. Furthermore, leaders should always consult and jointly work with their members in construction of partnerships. The members' views are important in determining who to partner with and the roles to perform in the partnership. This study makes a contribution to the literature on value chain partnerships and co-creation by elaborating on how partnerships are formed and how mutual value can be co-created in an OSCA rice value chain context.

It would be worthwhile replicating this research in the context of other types of farmer organization value chains and strategic partnerships, any differences that emerge could then be identified and analyzed. Finally, it would be valuable for a larger scale study to be carried out in order to quantify the results outlined in this qualitative study.

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Competing Interest

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Cover image

Bugiri Agribusiness and Institutional Development Association (BAIDA) One Stop Center, Bugiri District, Uganda.
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