

Business as UNUSUAL

Insights from the 2SCALE project

2SCALE consortium

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Contributors: Abalo Adodo, Grégoire Oniankitan Agai, Mathias Ahounou, Geneviève Audet-Bélanger, Tekalegn Ayano, Judith Chabari, Assefa Degefu, François Dossouhoui, Peter Gildemacher, Olugbenga Stephen Idowu, Alhassan Issahaku, Peter Kiriimi, Eric Lakoussan, Arnoldus Maatman, Janet Macharia, Douglas Magaja, Jacqueline Ndambuki, David Njenga, Irene Njogu, Francis Nthuku, Thompson Ogunsanmi, Gabriel Olengo, Kwame Pipim, Hiwot Shimeles, Faoussa Tadjou, Addis Teshome, Baba Togola, Mahamane Toure, Youssef Traore, Niek van Dijk, Ajay Varadachary, Raphael Vogelsperger, Allan Wayira and Bertus Wennink.

Design: Anita Simons, www.symsign.nl

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Contact: avaradachary@ifdc.org

Contents

Chapter 1	Partnering for inclusive growth: the 2SCALE approach	5
Chapter 2	BoP markets as a driver for inclusive value chain and agribusiness development	17
Chapter 3	A dairy processor's expansion ambitions set in motion dairy development in Kenya	33
Chapter 4	A secured market as a trigger for organizing the value chain	49
Chapter 5	Building inclusive agribusiness: going one step down the ladder makes a difference	67
Chapter 6	Seeds of growth	79
Chapter 7	Promo Fruits Benin: agricultural producers at the heart of agribusiness development	91
Chapter 8	Partnership governance	101
Chapter 9	Efficient BoP marketing and distribution strategies	117
Chapter 10	Getting plant nutrition solutions to scale requires more than technology promotion	129
Chapter 11	Access to finance for inclusive agribusiness development	139
Chapter 12	Local drivers of inclusive agribusiness development: cases from Ethiopia	155
Chapter 13	Attracting the youth to agribusiness	165
Chapter 14	Local network building for inclusive agribusiness development	177
Chapter 15	Facilitating inclusive agribusiness: lessons from 2SCALE and reflections for the future	189



GUTS Agro Likie women, Ethiopia

Photo by Joris Maatman

Partnering for inclusive growth: the 2SCALE approach

Arno Maatman

KEY MESSAGE

2SCALE makes use of public-private partnerships (PPPs) to facilitate inclusive growth. These partnerships are a means to an end. They are not static, but change over time. Some partnerships start as clearly grassroots led or firm led, but evolve into new or more complex, multi-layered partnerships to scale successes and address new challenges.

Introduction

Sub-Saharan Africa (SSA) is home to about 1 billion people, of whom the majority (about 60% on average) live in rural areas. Though poverty is not just a rural phenomenon, people in rural areas are more often struck by poverty than in cities. Despite the fact that agriculture accounts for only about 20-50% of gross domestic product (GDP) in most sub-Saharan African countries, the majority of the rural population depends predominantly on agriculture for food and income. In addition, a large number of city dwellers are also farmers and involved in a varied array of farming activities, alternating from purely subsistence farming to intensive (commercial) horticultural production. In many sub-Saharan African countries, the agricultural sector employs the majority (up to 90%) of the active population.

Agriculture and related (food) industries are not only an important economic base for both rural and urban economies in SSA, but their growth and transformation is also critical in order to meet increased demand for food, and adapt to shifting consumer patterns.

Fortunately there is a growing number of companies and entrepreneurs aspiring to make a difference in Africa, either by sourcing locally, or by offering affordable, high quality products to low-income communities. 2SCALE calls these companies and entrepreneurs ‘inclusive agribusiness champions’. An inclusive agribusiness is a commercially viable agribusiness that involves low-income communities, i.e. smallholder farmers and base of the pyramid (BoP) consumers, and vulnerable groups, e.g. women and youth, in a way that benefits them¹.

Inclusive agribusiness champions face many challenges: they often have difficulties sourcing sufficiently large volumes of raw materials; are competing in uncertain, often unfair, competitive playing fields with limited resources; they can only afford to go so far to realize their inclusive intentions; and, they may be confronted with resistance, even within their own organizations. 2SCALE’s objective is to support the realization of sustainable inclusive agribusiness which become inspirational examples for other entrepreneurs, civil society, and public agents to follow in their footsteps. Through demonstrating successful inclusive agribusiness partnerships, 2SCALE hopes to trigger institutional changes in favor of fairer competitive playing fields and inclusive growth.

This paper discusses the manner in which 2SCALE operates, putting partnerships at the fore. It shows that such partnerships are a means to an end, i.e. to develop agribusiness models promoting inclusiveness, having a (new) competitive edge, and potential for scale. By nature, partnerships come and go, but those that continue to exist evolve. No matter who is the initiator, from grassroots- or firm-led PPPs, transformation results into more complex, multi-layered partnerships to deepen and scale inclusive growth and address new challenges.

Partnership models

2SCALE facilitates PPPs to promote inclusiveness in agricultural value chains. These value chains are often complex networks involving many actors, segments, core and feeder supply chains, including those that provide access to agro-inputs, finance and other services. A partnership typically begins with the inclusive business champion (a private company or commercial cooperative) as the private partner, and 2SCALE, as the ‘manager’ of public development funds. However, gradually, partnerships will often involve other relevant private and public stakeholders. Two partnership categories can be distinguished:

Grassroots PPP – the inclusive agribusiness champion is a grassroots organization (cooperative, rural small- and medium-sized enterprise [SME]) which aims to strengthen market access by developing new marketing strategies or distribution channels to serve existing and new consumer segments, with a keen eye for the BoP market. 2SCALE’s role usually includes support to seek new market partners, optimize production processes and facilitate improved access to relevant services.

¹ Adapted from, but still in line with, the definition of the World Business Council for Sustainable Development, cited in Jenkins and Ishikawa (2010), who first coined the term ‘inclusive business’.

Lead firm PPP – the inclusive agribusiness champion is a medium or large-scale enterprise, which supplies to or sources agricultural produce from smallholder farmers. In lead firm PPPs, 2SCALE's initial role typically involves support to engage in stronger and equitable agribusiness relations between grassroots actors and the lead firm, promoting greater understanding between the parties involved. Several lead firm PPPs also have a component to strengthen marketing and distribution strategies to (BoP) markets.

BOX 1 | EXAMPLES OF GRASSROOTS AND LEAD FIRM PPPs

- Soybean in Benin: this partnership is part of a much longer and broader history of interventions. In the '90s and early '00s, several development programs (including some managed by the International Fertilizer Development Center (IFDC)) were focusing on soybeans as a rotational crop, mainly to improve soil fertility; the soybeans themselves found their way into the animal feed industry. However, gradually, soybeans became attractive as a food product and as a substitute for more expensive meat products. Before 2SCALE intervened, IFDC linked up with a Beninese company, which processed soybeans into flour products and sold these products on the regional market. 2SCALE, however, decided to partner with local (women) processor groups. Hence, this partnership is considered a **grassroots PPP**. From the start, this soybean PPP was driven by BoP market opportunities, with key interventions addressing the quality and marketing of soybean-based products (kebabs, goussi, milk, cheese) (Chapter 2).
- Sorghum in Kenya: this partnership started with Shalem, a medium-scale aggregator and trader, approaching 2SCALE staff for assistance. Shalem was working in a relatively large region, through a network of local agents, to collect sorghum which was sold to East African Breweries Ltd.. This partnership is considered a **lead-firm PPP**. Initial interventions were designed to improve productivity and resilience of sorghum farming systems, to develop the business strategy and financial capacity of Shalem, and to bolster the efficiency of the supply chain system (Chapter 5).

Partnership dynamics

All 2SCALE partnerships have evolved over time in response to emerging needs and opportunities. However, what generally remains constant is the central role for the inclusive agribusiness champion. Typically, partnerships progressively become more diverse. This is particularly true for lead firm partnerships, with representatives of smallholder farmers and other agribusiness cluster (ABC) actors gradually becoming part of the governance structure of such PPPs. Some PPPs develop into hybrids of grassroots and lead firm PPPs, i.e. with multiple inclusive agribusiness champions operating on different segments of the value chain. In other partnerships, because of new challenges or new opportunities in developing inclusive value chains, new champions emerge and become the actual driver of the PPP.

BOX 2 | EVOLUTION FROM A GRASSROOTS TO A HYBRID PARTNERSHIP MODEL

Soybean, Ghana The soybean partnership in Ghana started with producer groups in the lead. However, the focus has since shifted to the processing segment of the value chain, as this turned out to be the main opportunity, and includes local (women) soybean processors and Yedent (a medium-scale enterprise) processing soybeans into animal feed. At the time of partnerships negotiations, Yedent was also interested in producing soybean-based consumer goods. Since then, Yedent has not only started to produce soybean-based products, but is also establishing a facility to train local processors (Chapter 9; Box 29).

BOX 3 | EVOLUTION FROM A LEAD-FIRM TO A HYBRID PARTNERSHIP MODEL

Potato, Kenya AGRICO is an established seed potato producer and trader with headquarters in the Netherlands. The 2SCALE partnership started with AGRICO, which had just obtained a license to import seed potatoes of its commercial varieties to Kenya. 2SCALE raised potato producers' awareness on the benefit of using good quality seed through demonstrations, and provided training on sustainable intensification of production as well as high quality potato production for targeted markets. However, problems arose when a large number of trained farmers could not access AGRICO's seed potatoes. So when the next batch of seed potatoes for importation did not pass the certification body, 2SCALE decided to broaden its scope to include potato seed multiplication by involving seed houses and supply systems, and to focus more on producer groups and firms – both small (i.e. Molly Flowers) and large (i.e. KEVIAN) – to co-invest in inclusive potato value chains.

BOX 4 | ADJUSTMENTS OF THE PARTNERSHIP MODEL DUE TO CHALLENGES

Citrus fruit, Ghana When the lead firm in the partnership, Fruittiland, was experiencing severe (financial) challenges, to such an extent that it even had to temporarily close its factory, the 2SCALE program approached and included another citrus processor, Pinora, in the partnership. As a result, the citrus growers could continue to sell their high quality fruits at a remunerative price, through Pinora, to Fair Trade Original, the European buyer, who also entered the PPP (Chapter 8; Box 40).

Sorghum, Uganda The partnership with Shalem in Kenya inspired the 2SCALE team in Uganda to move from a focus on Nile Breweries, as the lead firm, to targeted intermediate aggregators and traders, who collected the sorghum for the breweries, and were more directly involved in developing inclusive relations with smallholder farmers.

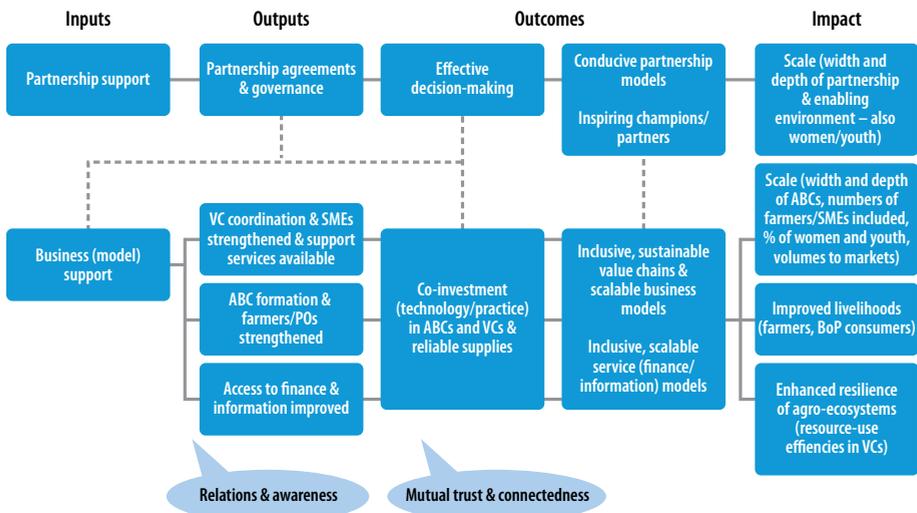
BOX 5 | ADJUSTMENTS OF THE PARTNERSHIP MODEL AS A RESULT OF SUCCESS

Vegetables, West Africa The partnership with East-West Seed International (EWIT) focused on creating demand for its quality vegetable seeds, and related inputs/technologies. With increasing productivity as a result of high quality seed use and associated good farming practices, the 2SCALE program is developing partnerships directly with vegetable producer groups to develop new marketing channels. In Nigeria, negotiations have started with SPAR supermarkets to source vegetables locally through the ABCs formed with the support of 2SCALE (Chapter 6).



Potato harvest, Kenya

Figure 1 | Schematic representation of 2SCALE's major impact pathways



2SCALE approach

PPPs are only a means and not an end; they are a vehicle to incubate and accelerate inclusive agribusiness. In the 2SCALE approach, it is important to make a distinction between the PPP (including its governance structure) and the agribusiness model(s) and operations related to the targeted value chain(s) (Figure 1).

The PPP is a temporary arrangement. At the partnership level, decisions are made about the priority interventions, the co-investments, results monitoring and risk mitigation measures needed to accelerate inclusive agribusiness development. By facilitating partnerships, 2SCALE offers a space to develop contextualized, firm level agribusiness models and value chain arrangements that effectively integrate smallholder farmers and BoP consumers. While the partnerships are meant to be ephemeral, the overarching agribusiness model underlying the entire value chain (i.e. that integrates firm level agribusiness models and the various arrangements along the value chain) is meant to be of a lasting nature. In sum, 2SCALE's role is to facilitate, through a temporary PPP, the development of innovative agribusiness models and value chain arrangements, that are more inclusive, yet maintain or even improve competitiveness in the sector with lasting results beyond the PPP.

To develop such agribusiness models, 2SCALE focuses on three areas in particular:

1 Facilitate ABCs

Much emphasis is often placed on contractual arrangements as the key element in developing more inclusive value chains. Contractual arrangements (formal or informal) between smallholder farmers and a good-willing off-taker are important, but not enough to realize sustainable inclusive agribusiness relations. It also requires the empowerment

of smallholder farmers, and addressing financial and information asymmetries in the value chain. This is where ABCs come into play. 2SCALE sees ABCs as localized networks that empower farmers to autonomously: access good-quality agro-inputs; access relevant services; solve (new) problems (i.e. to innovate); and bargain with services providers and buyers (e.g. by having access to information on alternative supplier and marketing channels).

An ABC typically involves smallholder farmers, input-dealers, microfinance institutions (MFIs), enterprises offering farm services (e.g. for tractor services, crop protection, post-harvest handling), extension and business support services (BSS), and any other relevant actor, as long as they are within close proximity to each other, and connected directly or indirectly to the same value chain. 2SCALE aims to ensure that farmers are well aware of their own competitive environment. Farmers need to know of promising alternative outlets for their produce, have the freedom and ability to serve different clients when they wish to do so, and possess the capacity to negotiate fair trade terms with their off-takers, including 2SCALE lead partners.

2 Facilitate innovative inclusive value chain relations

2SCALE facilitates inclusive value chain relations, i.e. from the (BoP) market upward to the smallholder farmers (the core supply chain), and including the traders and processors in between. This is referred to as the 'core' supply chain. Feeder supply chains provide inputs and services to farmers, and other actors of the core value chain; ranging from seeds and fertilizers for farmers, to fuel and packaging materials for processors. The foundation for inclusive agribusiness lies in the lasting agreements between economic actors to trade produce against terms which offer a fair reward for the efforts made. However, building fair trade relations is not enough. To ensure a lasting agribusiness relation, value chain actors need to grow a sense of connectedness and trust, enabling them to jointly overcome challenges, to co-invest, and seek continuous innovation in their relationship and their role in the value chain. This trust is developed during the phase of facilitated PPP development.

3 Support enabling environments, in particular access to finance and information

Professionals in value chain development will generally agree that, in addition to direct buying and selling arrangements of inputs and agricultural produce, support functions such as financial services and advisory services also need to be considered. 2SCALE makes specific effort in its PPPs to mobilize financial and other organizations to get involved and develop tailored services to address the needs of the specific value chain as effective services contribute to the durability of inclusive value chain relations. While the provision and payment of services can be considered as just another value chain, the system that enables the design and supply of tailored services to farmers and to other value chain actors is seen as part of the (enabling) business environment.

Rules, regulations, and business ethics along the value chain(s), as well as the processes to enforce them are of course an essential part of the enabling environment as well. Such 'institutions' can be specific to a target value chain, a sub-sector, an industry, or a region (and country).

BOX 6 | EXAMPLES OF THE THREE FOCUS AREAS IN 2SCALE PPPs

1 Soybean value chain development, Benin

The PPP around soybean in Benin aimed to develop alternative market outlets for soybean. It focused on: (1) building strong ABCs, involving producers, local processors and support services. The 2SCALE team strengthened women processors' capacity to apply hygienic/efficient processing techniques, as well as to strengthen financial literacy, business planning and distribution/retailing to local markets; (2) value chain innovation – new commercial products were developed and popularized, such as soybean-based kebabs, soybean goussi and soybean milk. Marketing strategies for these products, including consumer awareness creation, were implemented and farmers were assisted to liaise, as a group, with off-takers; and (3) improved service provision – smallholder farmers were assisted through better access to high quality seeds, bio-stimulants (inoculants), and other inputs/services to collect and store produce, while access to finance was improved through targeted loans to women processors (for equipment) (Chapter 2).

2 Dairy value chain development, Kenya

The dairy PPP in Kenya started while Eldoville, the lead partner, was busy relocating its factory to Oljororok in Nyandarua County. Its new factory would be in close proximity to its farmers and have a much larger capacity. The PPP focused on: (1) building a functioning network of dairy actors, including feed and fodder producers, milk producers, transporters, processors, research and extension; (2) strengthening supply chain relationships from fodder seed production and marketing, up to marketing of dairy products to consumers. Importantly, this included innovative supply systems offering possibilities to pay premium prices for better quality milk. New products for the BoP market, such as protein-rich soybean kebab and whey drinks, were also piloted; and (3) improving access to advisory services on fodder production and feeding strategies to improve milk production, as well as access to credit based on individual milk delivery track records (Chapter 3).

3 Pineapple chain development, Benin

Promo Fruits is a pineapple trading and processing company owned by the farmer cooperative, IRA. The Promo Fruits-led PPP works on scaling its agribusiness by: 1) involving more producer organizations as suppliers, through the organization of exchange visits and awareness raising campaigns, and by linking them to local SMEs and (financial) service suppliers; 2) product development (pineapple juice for BoP consumers), and last-mile distribution through young start-up micro-entrepreneurs selling pineapple juice from push-carts; and 3) professionalization and intensification of the Promo Fruits extension and training program to farmers, in order to improve productivity and access to agro-inputs (Chapter 7).

2SCALE offers no blueprint solutions but supports partnerships which develop their own tailored (i.e. context-specific) solutions in order to take advantage of market trends and opportunities, with the aim of achieving benefits for the largest possible number of grassroots actors. The partnership's focus may be on solving a variety of challenges, including production at the farm level; financial arrangements; supply chain logistics and related contractual arrangements; marketing and distribution strategies; market development, etc. Interventions will also change over time, addressing one critical bottleneck first before tackling others. Trust and connectedness within the partnership also evolves and deepens by working together, thereby progressively enabling more complex joint interventions. 2SCALE provides a partnership facilitator who plays a critical role to propose and facilitate agreement between partners on realistic priorities, and sequencing of key interventions.

Process

2SCALE believes that inclusive economic growth can only be achieved when barriers, risks and/or transaction costs of market integration for resource-poor farmers and firms are significantly reduced. PPPs are seen as an excellent means to support firms to develop an inclusive agribusiness agenda, while maintaining competitiveness. The process of building partnerships involves three stages:

1 Brokering of partnerships

2SCALE invites companies and producer groups to participate in PPPs, using targeted advertisements, pro-active networking/exploration, and by generating publicity through existing 'champions', in order to create awareness of the 2SCALE program and related opportunities – with the specific aim to strengthen their agribusiness, while at the same time improving the overall agribusiness climate in which they operate.



Photo by Joris Maatman

The PPPs aim to promote inclusive and more sustainable economic growth through interventions and innovations which are based on the country or region's comparative advantages, and build on the competencies and networks of both private (including civil society) and public sector actors. 2SCALE's PPPs cover part of the transaction costs to develop market linkages, partnerships and alliances; to establish confidence; to engage in collective action; and to coordinate and mitigate risks. In doing so, barriers to entry and expansion of trade are reduced and access to food through local and regional markets is enhanced. 2SCALE's PPPs are guided by three principles:

- 2SCALE's PPPs are implemented at ABC, value chain and (micro/meso) business environment levels, in line with the approach as developed by IFDC, the main implementer of 2SCALE, and its partners over the last ten years.
- 2SCALE's PPPs are additional to regular agribusiness operations and relations. The aim is to encourage ABC and value chain actors to take risks, by investing in new products and processes and by co-developing initiatives in which they otherwise would not have ventured (or at least with more uncertainty and risk).
- 2SCALE's PPPs leverage the resources (i.e. expand the resource base) of agribusiness cluster and value chain actors to develop inclusive business strategies, to gain a competitive edge and to expand trade on local and regional markets.

Farmer group receiving training on silaging dairy feed, Kenya



Photo by Joris Maatman

2 Screening of new partners (and corporate social responsibility [CSR] requirements)

The screening process normally comprises the following steps:

- 1 Review of the partner's agribusiness idea, including rapid assessments of: feasibility and leadership strategy; private and social (inclusiveness) benefits, including potential impact on food and nutrition security for BoP consumers, on smallholder farmers and resilience of their farming systems, gender roles/women's empowerment and youth employment; innovation, e.g. through climate-smart agricultural technologies/practices, in value addition, logistics, market organization and supply chain management; potential for Dutch value addition (through commercial firms, knowledge centers);
- 2 Due diligence on the lead partner: track record in commercial activities; accountability; ability to manage relations with suppliers/buyers and neighboring communities; labor conditions (e.g. safe working conditions; living wages); product stewardship and environmental awareness.

2SCALE requires all lead partners to either adhere to or develop convincing context-sensitive CSR guidelines. International companies are required to subscribe to international CSR guidelines (e.g. Organisation for Economic Co-operation and Development guidelines). Simpler guidelines have been proposed for African SMEs, and producer organizations; 2SCALE also offers support in case a lead partner (SME in particular) does not have a full CSR policy/management system in place, but has the willingness to develop this capacity.

3 Deepening (and preparation for scaling)

After a positive response to the first two steps, the following step will involve the inventory of other actual and potential stakeholders/partners. It also includes the organization of a workshop to analyze the current situation with value chain and ABC stakeholders, and discuss and design a strategy for the coming period.

The deepening phase specifically aims

- To bring together the major stakeholders required to further develop and sustain the competitive edge of the lead partner, the selected value chain and related agribusiness clusters;
- To build individual (organizational) and collective capacities to develop new or adapt existing products and services to target markets, to improve productivity – in targeted value chain segments – and overall value chain efficiency (business-to-business, and business-to-consumer).

Partnership and agribusiness models developed during the deepening phase set the stage for further scaling.

Results

Between 2012 and 2017, 2SCALE has implemented over 50 partnerships across Africa: eight in animal production (mainly dairy), 12 in oilseeds (soybeans in particular), 16 in staple crops, and 17 in vegetables and fresh produce.

Results, in terms of number of farmers and SMEs involved, and leverage by private partners, are:

- **Over 575,000 smallholder farmers** have benefitted (directly) from the interventions; almost 40% are women². Farmers have benefitted in various ways including: receiving training on improved (agronomic) practices and financial literacy; improved access to better seeds and other related agro-inputs; and enhanced access to farm services (e.g. for tractor services, crop protection, post-harvest handling). In addition, their capacity for co-innovation, access to informational and financial services, and their bargaining power will have been improved. Last, but not least, they will have been able to negotiate longer-term informal/formal contracts with reliable aggregators/buyers in target value chains.
- **Over 3,500 SMEs**, with about half being commercial farmer cooperatives or producer groups have been supported to participate in inclusive value chains, mainly targeting local markets. They have been supported to develop innovative agribusiness strategies and investment plans and many of them have taken up new activities (e.g. in storage, processing, trade, and value chain support services). About 30% of these SMEs are led by women.
- **Private sector contributions** to the PPPs from lead partners and grassroots actors exceeds **€50 million**. Documented private sector leverage will largely exceed the amount of public funds invested (of **€41.5 million**). Real private sector contribution is well above this documented amount, as only those contributions – that were relatively easy to capture, provide a monetary value and validate – have been included.

However, the results of the 2SCALE partnership portfolio go well beyond these numbers and figures. Managing directors of inclusive agribusiness champions are taking up leadership roles in innovation and sector/industry platforms to advocate for fairer competitive playing fields, and for more or better-targeted public investment in inclusive innovation. Some of the 2SCALE partnerships have become inspiring examples for public and private sectors to follow suit, and prototypes of inclusive agribusiness models have been developed ready for replication and/or scaling up.

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² To avoid double-counting only the farmer that is 'owning/controlling' the target commodity is counted as a 'farmer reached'; this also reduces the percentage of women for this indicator. Numerous others, including sons/daughters, husbands and/or wives can be involved in part of the production, post-harvest, or marketing effort; and as the examples will show, 2SCALE explicitly aims to involve and train the less powerful in the farm-household, ABCs and value chains.



Product sorting, GUTS Agro, Ethiopia

Photo by Joris Maatman

BoP markets as a driver for inclusive value chain and agribusiness development

The soybean partnerships in Ethiopia and Benin

Hiwot Shimeles, Tekalgn Ayano and Mathias Ahounou

KEY MESSAGE

Base of the pyramid (BoP) markets provide an exciting opportunity for commercially viable and inclusive business models. The market that the BoP represents can stimulate producer organizations to work with processing companies which serve these markets, and encourage smallholders to invest in their production for the supply of high-quality raw materials. Commercially driven distribution systems, which fit the local environment and employ people from the BoP, can also be used to reach targeted consumers with affordable and nutritious products.

The GUTS Agro Industry-2SCALE partnership in Ethiopia

Introduction

GUTS Agro Industry, a nutritious-food-processing company in Ethiopia, has been active in the food relief market. Producing a Corn Soy Blend (CSB) product, the company has depended on the World Food Programme (WFP) and other similar organizations that provide food relief and emergency aid as the sole off-takers and distributors of the product.

The main objective of the partnership between GUTS Agro Industry and 2SCALE was to develop and offer nutritious food products to urban, peri-urban and rural BoP markets which required the sustainable sourcing of soybean and maize from smallholder farmers' organizations in Ethiopia.

The partnership involved facilitation of value chain relations, skills development of chain actors, increasing access to agro-processing services, and development of a marketing and distribution strategy for the sale of 'Supermom'; a fortified food supplement targeting children from six months, and lactating and pregnant women.

Initial situation

Procurement by GUTS Agro Industry

Before the partnership began, GUTS Agro Industry bought raw materials on spot markets from traders and collectors, or directly from producer organizations, without any contractual or longer-term relations. Such a sourcing model led to poor quality and traceability of the raw materials; there were no mechanisms to ensure that the suppliers were held accountable for losses.

The sourcing strategy also proved to be rather expensive. The many and dispersed suppliers led to high procurement and logistical costs, impacting on the efficiency of the sourcing operations. In cases where farmers' organizations failed to directly provide the raw materials, the cost rose. For example, it was estimated that prices of raw materials for GUTS Agro Industry increased by 2% as a result of the involvement of brokers and/or middle men and that there was a 5% loss on the purchasing price due to product impurity.

Organization of the value chain

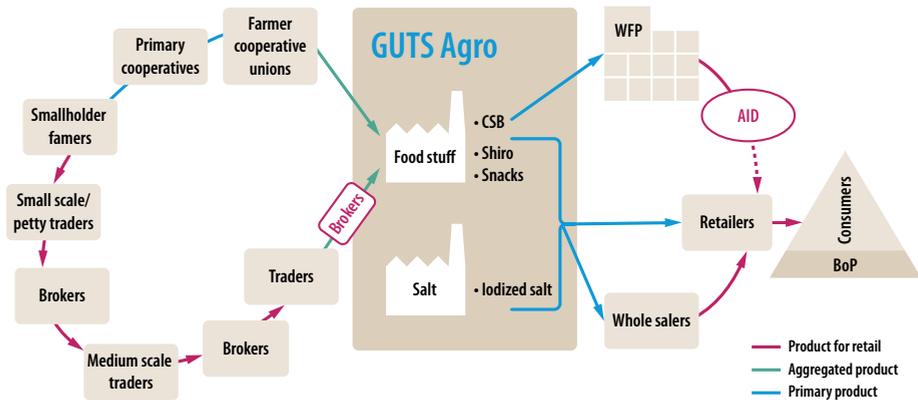
As a processing company, GUTS Agro Industry was supplied by smallholder farmers (either organized in cooperatives or not), brokers and traders. The main buyers were WFP, for food aid and a myriad of wholesalers and retailers for local markets (Figure 2).

2SCALE partnership interventions

Issues at stake

GUTS Agro Industry recognized the fragility and the dependency of its business model on relief and aid off-takers for CSB. For other products the company offered to commercial markets (Amole & Grip branded iodized salt, Lembo snacks and Yanet Shiro powder), it faced issues with product handling through its regular marketing channels which resulted in the quality of the product deteriorating. GUTS Agro Industry also struggled to control the final selling price due to inefficient distribution networks which

Figure 2 | Organization of the value chain before the 2SCALE intervention



likewise decreased the affordability of the products due to numerous intermediaries. As a result, the price and quality competitiveness of the company's products was challenged by other similar products available in Ethiopia.

GUTS Agro Industry also noticed a lack of access and affordability of locally-produced fortified food supplements for specific groups in society as a market gap. Most locally-processed products were sub-standard in quality, and the few high quality products were too expensive for most Ethiopians. While GUTS Agro Industry recognized the opportunities offered by working with BoP consumers, it required support in defining their product and marketing channels. The partnership with 2SCALE enabled the company to link its business vision (and ambition) to the realities of the Ethiopian BoP consumer.

Partnership with 2SCALE

By entering into a partnership agreement with 2SCALE, GUTS Agro Industry was able to reduce the risks of implementing a new strategy through a pilot. GUTS Agro Industry, in collaboration with 2SCALE, agreed on a last-mile distribution model that would enable the company to reach its targeted consumers. The pilot targeted BoP consumers, worked to improve sourcing of raw materials from smallholder farmers and their organizations, and tested a distribution model with product traceability and transparent price-setting mechanisms.

Sourcing of maize and soybean

To create stronger ties between the company and farmers, 2SCALE helped to improve the linkages between GUTS Agro Industry, the Sidama Elto farmers' cooperative union (maize supplier) and the Hunde Chewaka union (soybean supplier). The partnership officially began with a 'diagnosis and design' workshop where GUTS Agro Industry explained that it wanted to improve its sourcing strategy from farmers' organizations and the marketing of their CSB product. The farmers' organizations then presented their challenges, including on production and productivity, quality management, understanding buyers' requirements, bulking and storage, market linkages, management capacity, and relationships within primary cooperatives.



Maize threshing, Ethiopia

Photo by Joris Maatman

At a later stage, the Anger Abaya farmers union joined the partnership in an effort to mitigate issues with shortages of maize, which caused maize prices from Sidama Elto to spike. By adding a supply partner from a different geographical region, GUTS Agro Industry hoped to mitigate the risks of sourcing from a single supplier. As these partnerships developed, other cooperatives, interested in taking advantage of the reliable market and long-term relationship with GUTS Agro Industry, started to directly approach the company with offers to supply produce of a specific quantity and quality, at a specific time, for a specific price. By directly linking with these cooperatives GUTS Agro Industry also gained a supply of better quality raw materials that it could trace. Such dynamics created an incentive for cooperatives to coordinate and professionalize their activities. As a means to support this professionalization, 2SCALE offered the cooperatives and their unions training on cooperative leadership, cooperative financial management, and resource mobilization.

The 2SCALE and GUTS Agro Industry partnership also intervened to address the key challenges faced by smallholder farmers by improving farm management skills and post-harvest handling of their products. Such skills were core to delivering a high quality product to GUTS Agro Industry which was willing to pay a premium price. The absence of a reliable market that rewarded farmers for a high quality product was one of the main reasons that had discouraged farmers from producing high quality maize and soybean. The existing market favored volume over quality and little premium was paid for high quality grade maize and soybean. As a result, producers did not invest time and energy in improving the quality of their product. To ensure that GUTS Agro Industry would be able to source high quality raw materials it therefore rewarded farmers with a premium,

and training on agronomy and demonstrations on post-harvest handling. Moreover, 2SCALE facilitated the supply of seed, fertilizer, inoculum, small tools like threshers, moisture meters and Purdue Improved Crop Storage hermetic storage bags.

Hunde Chewaka, Sidama Elto and Anger Abaya farmer unions improved their governance and cooperative management, built relationships and trust with GUTS Agro Industry, and increased production (Table 1) as a result of the capacity building and coaching they received as part of the collaboration with the company. The partnership also provided farmers and their cooperatives with a secure and sustainable market for their product, while quality control measures and maize bulking storage facilities reduced transaction costs for the cooperatives.

Table 1 | Results from the farmer cooperative unions

Results	2015	2016
Soybean supplied (tonnes)	124	133
Maize supplied (tonnes)	0	183
Smallholder farmers involved	7,000	22,000

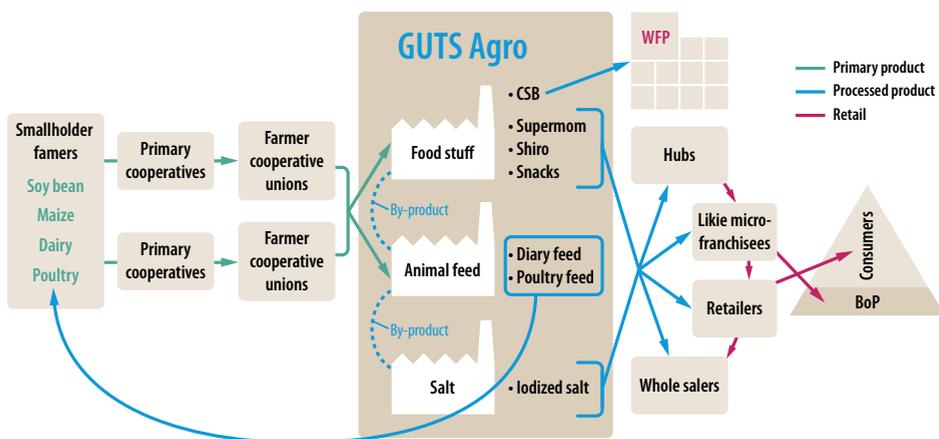
Improving trust among the actors also led to the creation of a credit system. Financial challenges faced by the Hunde Chewaka union were partly solved by a 30% advance payment on their contract by GUTS Agro Industry in 2015. In 2016, when GUTS Agro Industry faced a cash liquidity problem, the Anger Abeya union then supplied raw materials to GUTS Agro Industry on credit, with interest. Advance payments from contracts are used by the cooperatives to aggregate the products, while the product is offered on credit to the buying company.

The partnership with farmers' organizations helped GUTS Agro Industry secure a reliable and timely supply of high quality maize and soybean (Figure 3). This improved the company's efficiency in sourcing and transporting high quality raw materials, reduced the cost of producing CSB, and enabled GUTS Agro Industry to trace the product to its origin. In addition, the organized sourcing mechanisms enabled the company to maintain receipts for its transactions and claim tax benefits – something that was often a contentious issue with spot market traders, who often refused to issue sales receipts.

Product development and marketing

Market research was conducted to gain consumers' insights into the development of new products and the overall marketing and distribution strategy. Following that, 2SCALE facilitated workshops with GUTS Agro Industry's management team during which marketing and distribution strategies were developed, and branding and packaging briefs were formulated for a new product. Supermom, targets children from six months up to two years old, and nursing and expecting mothers from low income households, is different to CSB which is based on 'Corn Soya Blend plus'. Supermom is a supplementary food that is enriched with important nutrients to support the development of children

Figure 3 | Organization of the value chain after the 2SCALE intervention



and enhance the nutritional needs of mothers. Most complimentary food for babies in Ethiopia are imported products, which are expensive for the majority of Ethiopian families. Supermom is sold on average for ETB 12-14 for a 200 g bag, while similar alternative products cost between ETB 20-26. The product is enriched with Vitamin A, D, B1, B2, B6, B12, C, calcium, iodine, iron, zinc, and contains 16/100 mg of protein. Babies eat it as porridge and women as gruel.

The 2SCALE partnership also co-developed recruitment criteria for agents who are involved in the distribution and selling of Supermom, along with employment modalities and incentives for micro-entrepreneurs, or ‘Liki’ agents. The agents were also provided with a ‘business-in-a-box’ kit which included a training manual, sales support materials such as product brochures and carriage bags, branded uniforms, and custom-made tricycles for transportation of the product from the factory to retailers and household customers. GUTS Agro Industry further supported the training of the agents and market activations to create demand for the new product.

Liki micro-franchise distributors

The GUTS Agro Industry-2SCALE partnership also implemented two pilots: i) the commercialization of Supermom to target BoP consumers, specifically pregnant and nursing mothers, and children from six months old; and ii) a micro-franchise distribution model which involved sales to both retailers and consumers, with what has been branded ‘Liki’ micro-franchisees to sell the products door-to-door for end consumers.

When GUTS Agro Industry adopted the micro-franchise distribution model to reach BoP consumers, it created an opportunity for women to own small agribusinesses. As a result, women were able to gain business skills, increase their household income, improve their financial independence, increase their societal interaction and improve their image in society as economically active actors. For example, Sintayehu, a mother of two who is



Marketing of products by Likie women, Ethiopia

one of the Likie distributors in Hawassa, joined the agribusiness in July 2015. At the time she was unemployed. Now she makes an average of ETB 1,500 or more per month from her agribusiness.

To expand the product ranges Likies sell, and make the distribution model more sustainable, 2SCALE helped to link GUTS Agro Industry with other non-competing food and related product processors. This distribution model was launched and piloted in Hawasa town and other locations in July 2015 with 13 women. The pilot was considered a success and resulted in the model expanding to six other towns (Adama, Assela, Bishoftu, Butajira, Dessie, and Wolayita Sodo) with over 100 independent female micro-franchise distributors.



Soybean processing by women, Benin

Photo by Mahamane Toure

The soybean producers' organization-2SCALE partnership in Benin

Introduction

In the south of Benin, many smallholder farmers grow soybean as a substitute for cotton on impoverished soils. This legume is mainly sold to processing companies such as the FLUDOR company and *Société des Huileries du Bénin* (SHB) factories, located in the towns of Zogbodomey and Abomey respectively, which have the required equipment for the production of soybean oil. However, business relationships between these companies and smallholder producers of soybean was poor because the crop was purchased at very low prices.

Considering the potential of soybean products, soybean producer and processor organizations in three localities (the districts of Djakotomey, Glazoué and Zogbodomey) sought support from 2SCALE in 2012 for market development of soybean products, with the aim of developing soybean production and processing and hence improve incomes from these activities. The partnership further expanded to support women who, being confronted with the problems of marketing soybean in the Zogbodomey district, had started experimenting with processing soybean for products destined for the local market. Gradually soybean-based products have been integrated into the eating habits of local people. Soybean 'cheese' (tofu) in particular is replacing meat and fish in everyday dishes in many households. Women processors have also improved their processing techniques and produce a wider selection of products, including soybean milk, soybean skewers and soybean cheese.

Initial situation

In 2012 2SCALE facilitated the construction of agribusiness clusters (ABC) in three localities (Djakotomey, Glazoué and Zogbodomey) around the production and processing of soybean. The clusters are (informal) local networks of stakeholders involved in the same value chain or agribusiness. ABCs enable farmers and other local value chain actors to access relevant agro-inputs and agribusiness-related services, and strengthen capacity for collective action and innovation; in doing so, ABCs may also improve the bargaining power of local value chain actors. These clusters aimed to strengthen relationships between their members – actors in the soybean processing value chain – in order to supply (semi-) industrial processing units and hence improve incomes.

These ABCs gathered various stakeholders: soybean producer organizations; women soybean processing groups; semi-industrial processing units such as the *Coopérative de Transformation d'Approvisionnement et d'Écoulement de soja* (CTAE) in Allada and the *Centre Agroalimentaire Industriel de Développement* (CAID) in Zogbodomey; soybean seed suppliers; the University of Benin's (UAC) center for inoculum production; and microfinance institutions (MFIs) such as the *Association de Lutte pour la promotion des Initiatives de Développement* (ALIDé) and *Faîtière des Caisses d'Épargne et de Crédit Agricole Mutuel* (FECECAM). Each of the clusters received support from a service provider that was specialized in agribusiness development and contracted by 2SCALE. These service providers included non-governmental organizations (NGOs; *Réseau des Paysans Féminins pour le Développement* [REPFED] and *Centre Béninois pour le Développement des Initiatives à la Base* [CBDIBA]) and technical staff from a district producers' organization in Zogbodomey and a regional producers' organization in Atlantique region.

The initial objective of the ABCs was to enable members to coordinate and organize the competitive supply of soybean for the two industrial processing units (FLUDOR and SHB) in the south of Benin. However, this turned out to be hard to achieve: soybean was still purchased at very low prices and at one point production of soybean oil even stopped.

2SCALE partnership interventions

Targeting BoP markets

In 2013 a business idea was submitted to the 2SCALE program by the union of soybean producers in the Atlantique region to improve the production of soybean oil by CTAE and its sourcing from affiliated producer organizations. The idea was that CTAE's target market should be poor and malnourished BoP consumers. The soybean-based products identified as being most affordable and nutritious were soybean oil (lipids) and *goussi* (proteins) (Box 7).

The agribusiness idea was analyzed by 2SCALE and judged to be in line with 2SCALE's approach for the development of competitive and inclusive agribusinesses. Also in 2013, while assessing the performance of the three existing ABCs, it was concluded that they could improve their performance if they succeeded in taking advantage of BoP consumer markets. It was therefore decided to reorient the focus of the three clusters to focus on soybean processing by women's groups and sales of their products on local markets in order to transform the production of soybean cheese into a profitable agribusiness for women. A fourth cluster was created around CTAE to coordinate and organize the production of

BOX 7 | WHAT IS GOUSSI?

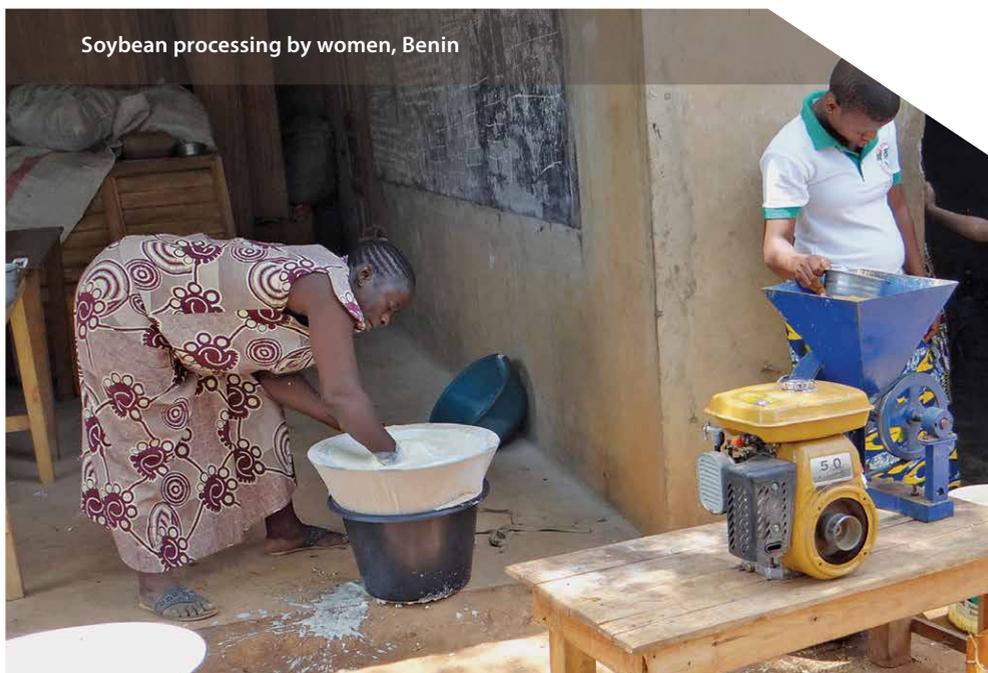
What has the nutritional value of 66 eggs, but costs the same as four eggs? Answer: 1 kg of soybean *goussi*. *Goussi* is a popular Beninese dish, traditionally made from squash seeds. Soybean *goussi* tastes almost the same as traditional *goussi* but is more nutritious (42% more protein), more affordable and far less labor-intensive to produce.

CTAE buys soybean from small-scale farmers. The oil is extracted and the remaining cake is processed into *goussi*, which is sold to wholesalers. The wholesalers – a group of about 20 traders – pack this into smaller quantities for sale to retailers. Women play an important role in this chain. “It is women who are really promoting *goussi*,” explains Raphaël Kokoun, production manager at CTAE. “At the factory, all key operations – sorting, cleaning, roasting – are done by women. All the retailers are women. As for the consumers, it is the mothers who know that soybean *goussi* is cheap but highly nutritious.”

soybean by producer organizations, the processing of soybean seeds into soybean oil and *goussi*, and the marketing of these products by CTAE.

ABC actions plans were elaborated and the following actions were undertaken by cluster members with facilitation by 2SCALE:

- Analysis of consumer markets;
- Marketing of soybean-based products through radio broadcasts and mass campaigns on the benefits of consuming soybean products;
- Organization of sessions where products derived from soybean were presented and could be tasted;
- Participation of women’s groups at fairs.



Expanding old markets and developing new markets

The result was an increase by 20-50% in demand by poor consumers for soybean products. In addition, new institutional markets such as hospitals and municipalities were also developed (Box 8).

BOX 8 | ANNUAL SALES (2015) BY THE WOMEN PROCESSORS GROUP 'ELAVAGNON' IN DJAKOTOMEY

According to a representative of the Elavagnon women's group in Djakotomey, radio broadcasts had a positive impact on the sales volume of soybean cheese in 2015. The group of women experienced an increase in sales volume by 49,700 pieces. Despite the significant increase in the quantity sold during the year (179,700 pieces compared with 130,000 the year before), demand still exceeded supply. This is an opportunity for women processors to produce substantially more to meet demand, however it will require the sourcing of a larger amount of soybean. Hence the need to continue and finalize the negotiation with producers for the drafting of contracts for the supply of soybean.

Type of market	Sales realized (number of pieces of soybean cheese at FCFA 50/piece)	Estimated demand (number of pieces of soybean cheese at FCFA 50/piece)
Djakotomey market	52,600	75,300
Dogbo market	26,520	58,170
Azovè market	19,750	47,490
Klouékanmè market	27,100	82,320
Toviklin market	19,620	50,070
Lalo market	24,550	53,376
Hospitals, schools, etc.	9,560	36,870
Total	179,700	403,596

The penetration of 'old markets' (individual consumers in local markets) and the development of 'new markets' encouraged smallholder producers and women's groups to integrate into the soybean ABCs. The involvement of producers and processors in ABCs – even if these clusters are not formal organizations – doubled between 2013 and 2015 (Table 2).

Table 2 | Evolution of member producers and processors of ABCs

Soybean ABCs	Number of women groups	Number of processing units	Number of producers		Number of processors	
			2013	2015	2013	2015
Zogbodomey district	9	0	150	482	12	92
Atlantique region	18	1 (CTAE)	201	462	160	342
Glazoué district	4	0	350	576	21	62
Djakotomey district	16	1 (CAIB)	458	616	55	148
Total	47	2	1,159	2,136	248	644

Growing markets as an incentive for improving production and supply

The growing market for soybean products motivated soybean producers to invest in agricultural intensification. 2SCALE facilitated activities in the soybean sector not only to improve agricultural productivity but also to professionalize management at various levels of the value chain: input supply, production (i.e. reduction of production costs) and processing by women's groups and CTAE (quality of products, marketing).

In order to improve input supply, 2SCALE facilitated the training of 12 seed producers from local organizations affiliated with the national umbrella organization, *Fédération des Unions des Producteurs du Bénin*, in seed production techniques, and distribution and sales of seeds of improved soybean varieties (rich in oil and protein). 2SCALE also helped to link UAC's inoculum producing unit with soybean producer organizations. Furthermore, demonstration plots were installed to illustrate the performance of improved soybean varieties and provide training on the use of inoculum. As a result, soybean yields increased from 700 to 1,200 kg/ha while production costs diminished by FCFA 60/kg when using inoculum. According to producers, this ultimately doubled their net income from soybean production.

In line with the initial business idea, women soybean processing groups and CTAE were at the center of activities facilitated by the partnership. In addition to receiving training on techniques for improving hygiene during the processing of soybean and enhancing the quality of the final products, these collective enterprises were also trained on cooperative management, elaboration of agribusiness development plans – which helped to access credit – sourcing from producer organizations and marketing of their products. Improved marketing included simple practices such as packaging and presentation of products.

By strengthening their relationships with producer groups, improving processing techniques and focusing on the production and marketing of soybean cheese, women processors strengthened their agribusinesses and boosted their income to FCFA 5,500 for every 20 kg of soybean processed into soybean cheese. Before, for every 20kg processed, they would only get between FCFA 1,000 and 1,500 and would often face slumps in sales.

As for CTAE, the cooperative sources soybean from 25 other cooperatives, covering a total of 225 smallholders, including 58 women producers. Sales of *goussi* increased from 115 tons in 2014 to 144 tons in 2015, and 154 tons in 2016. Seven new wholesalers and many more retailers have been involved and have seen their revenues increase by FCFA 35,000 (wholesalers) and FCFA 10,000 (retailers). CTAE has also succeeded in expanding its markets from Allada to other urban centers such as Agbangnizoun, Bohicon, Come and Porto-Novo, and reaching more BoP consumers (11,000 in 2014, 13,800 in 2015, and 14,700 in 2016).

Partnership development

Given the increasing demand for soybean products in the localities where the ABCs are operating, and the need to share experiences of how to expand markets, actions have been taken to link the clusters into one network. These include the establishment



Soybean cheese, Benin

of a governance structure for agribusiness development coordination at inter-ABC level, organizing exchange visits and sharing of experiences between the actors of the various clusters, and the development of inter- and intra-ABC business relations. This has resulted in the improved matching and coordination of supply (producers) and demand (processors) of soybean not only within a single ABC but also between clusters, and the development of mechanisms for the sale of soybean on credit to women processing groups by producer organizations. Strategies for disengagement by 2SCALE and sustaining learning are currently being developed (Box 9).

BOX 9 | A FIRST STEP IN SUSTAINING THE PARTNERSHIP

In May 2017, the soybean partnership gathered in Bohicon (Benin) to discuss their achievements and strategies for enhancing the sustainability of the partnership. Fifteen representatives of producers, processors and coaches took part in this workshop. All of the participants were unanimous about the importance of coordinating supply and demand of soybean through quarterly management committee meetings. In order to enhance the partnership's sustainability, the participants decided to finance the management committee through an annual budget consisting of 0.5% of the annual sales of the CTAE, supplemented by an annual subscription of FCFA 500 for each active member of the partnership.

Conclusions

GUTS Agro Industry, CTAE and women soybean processing groups were able to develop a commercially-viable business model while serving a BoP consumer segment. In the case of Ethiopia, GUTS Agro Industry is no longer dependent on the aid market. The affordable and nutritious soybean-based products proved to be well adapted to BoP consumers. These products have been made more easily available through the Likie micro-franchise distributors network. GUTS Agro Industry gained control over the distribution channel both in terms of product movement, handling, quality and pricing. This also gave the company access to a large consumer base and direct linkages with the BoP, which enabled GUTS Agro Industry to gain feedback and improve communication. As a result, the company was able to improve its product and marketing strategies. This is still a challenge for CTAE and women soybean processing groups in Benin which are using more informal distribution networks.

Another achievement has been the notable improvements in value chain relationships, building lasting interactions that have supported the professionalization of value chain actors. In both Benin and Ethiopia, from production to distribution, actors capitalized on the market opportunity provided by serving BoP consumers and were encouraged to invest in their activities.



Processing of crops, Ethiopia

Photo by Joris Maatman

Lessons learned

Focus on BoP markets

The different cases from Benin and Ethiopia highlight the success of agribusinesses that have BoP consumers as an integral part of their business models. The two cases in the soybean value chain include processors that operate at different scales; the processors in Benin (CTEA and women's groups) operate on a small-scale with basic facilities, while GUTS Agro Industry processes food products in a well-established factory. Yet despite the different scales, their focus on serving low income consumer groups is the same. Reaching out to BoP consumers is a challenging and demanding task for most processors in developing countries because of limited infrastructure and distribution networks. GUTS Agro Industry highlights the benefits of employing a commercially driven micro-franchise distribution system that fits the local environment. Both cases have also proved that using the right set of value propositions, and marketing and distribution strategies serving BoP markets can reward agribusinesses. Their examples are an eye-opener for agribusinesses that fail to see beyond the challenges of serving BoP markets and for development practitioners seeking ways to include low income consumers.

Gender

Ensuring inclusion and empowerment of women in agribusiness value chains appears difficult, yet the Benin case gives a good example of how to empower women entrepreneurs and help them grow their agribusinesses, thereby inspiring their peers. GUTS Agro Industry in Ethiopia also ensured that women benefitted from the value chain by adopting a micro-franchise distribution model, where all of the franchisees were women micro-entrepreneurs. Involving women as distributors in Ethiopia was helpful because women are often the ones who purchase food and cook for the family, especially for infants. Both cases therefore reveal how women can be integrated into an agribusiness value chain as strategic partners.

Loyalty and trust

In Ethiopia, agribusiness relations at grassroots levels improved because of a transparent pricing mechanism between GUTS Agro Industry and the unions, between the unions and their primary cooperatives, and primary cooperatives and their members. GUTS Agro Industry doesn't rely on ad-hoc traders anymore and is able to reward high quality and volumes by paying a higher price for the products at cooperative and union levels. This enables producers to make a better margin on their sales and provides farmer organizations with an incentive to nurture the business relationship established with the company.

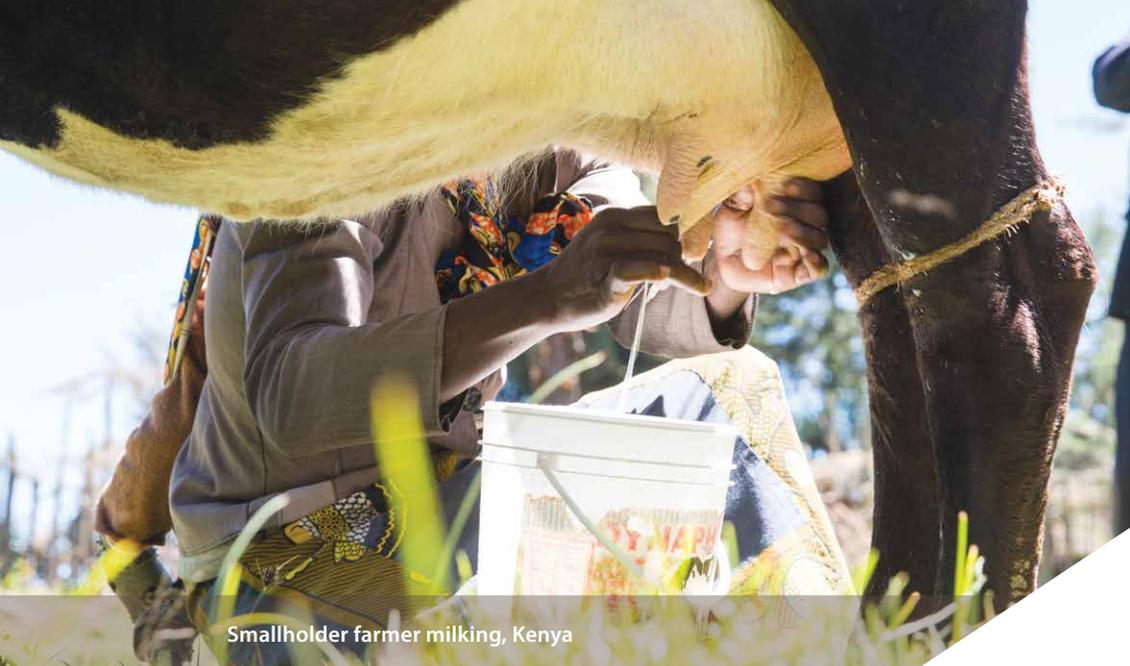
Replicability and scaling up

GUTS Agro Industry is now replicating the Likie micro-franchise distribution model in other towns in the southern region of Ethiopia, without the support of 2SCALE. The company is introducing new chickpea and sorghum-based snack products in Burtajira and Wolayita Sodo towns. Furthermore, the Likie model has been replicated in Benin for the distribution of pineapple juice to BoP markets (Chapter 7). In Benin, the partners of the soybean producers' organizations have created an overarching ABC platform to match and coordinate demand and supply in order to cover the increasing demand for soybean-based products.

Maize farmers in the target area in Ethiopia were offered the opportunity to benefit from the WFP Home Grown School Feeding (HGSF) program. They were asked to supply processed maize and soybean beans but they didn't yet have the required processing capacity. Therefore, farmer cooperatives came to an agreement with GUTS Agro Industry to provide a processing service to the organizations from whom they source their raw materials. As a result, the cooperatives will have the opportunity to add value to their product, supply it to WFP and benefit from the HGSF program. The farmers will only be required to pay for the direct processing cost (mainly energy cost); GUTS Agro Industry has no intention of making a profit from this service but rather wants to strengthen ties with the farmers as this will have a long-term benefit. This will also create another marketing outlet for the farmers and will therefore provide another income earning opportunity.

References

Soybeans for Goussi, 2SCALE, March 2015



Smallholder farmer milking, Kenya

Photo by Joris Maatman

A dairy processor's expansion ambitions set in motion dairy development in Kenya

David Njenga

KEY MESSAGE

A partnership model with a single lead firm can be the start of a larger-scale intervention. In a competitive sector with shifting alliances and business relations, such as the dairy sector in Kenya, a diversification of partnerships over time can be expected and should be encouraged.

Introduction

Before the 2SCALE intervention

The dairy sector in Kenya is characterized by a high level of organization and interdependence between stakeholders in the value chain and strong market competition between different actors. Different companies in dairy processing and retailing compete with each other for the supply of milk, a large proportion of which comes from smallholder producers. Over 80% of all cattle in Kenya is estimated to be owned by households who

own on average one to three cows each. Forty-five percent of all milk produced is for home consumption, while the remaining 55% is traded. Of the traded milk, 88% is traded as raw, untreated milk to neighbors and 12% is traded on the formal market. The formal retail market is nevertheless well developed and pasteurized milk reaches consumers through a range of retail outlets, from small roadside shops (*duka's*), to privately owned smaller supermarkets, to countrywide national and international supermarket chains. Different brands of fresh milk and processed dairy products are competing for customer preferences. Some dairy companies operate locally and others nationwide.

Eldoville Dairies is a family owned milk processing enterprise located 15 km from Nairobi city center. Eldoville was formally established in June 1985 by Lucy Karuga as a backyard cottage industry. She started by daily processing 20 l of milk from a single cow into 2 kg of cream using a hand cream separator. After she was introduced to Hotel Intercontinental in Nairobi by a friend, they agreed to buy her cream. The hotel needed 20 kg/day of cream, but Karuga was only able to produce 2 kg/day from her single cow, which encouraged her to add more dairy cows to her farm. The hotel was impressed by the high quality of



Photo by Joris Maatman

the cream and, therefore, requested other dairy products. She started preparing yoghurt in addition to cream to diversify her supply to the hotel. The hotel soon introduced her to four other five-star hotels. In just one year, demand increased to 500 l/day of yoghurt and 40 kg/day of cream, which meant she needed to start sourcing milk from other producers, in addition to the milk produced by her own cows.

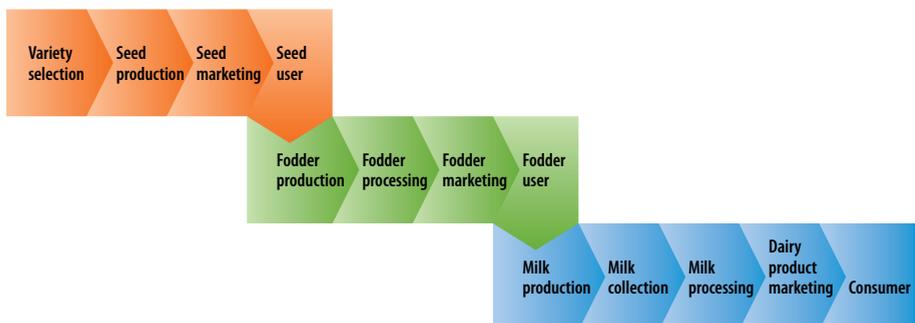
At the onset of the 2SCALE program, Eldoville Dairies was an established modest-sized dairy processing company that focused on the development of high quality products, including yoghurt, cream, cheese and whey. The company produced two types of cream (whipping cream and double cream) and several types of soft and hard cheese. At this point Eldoville was processing 5,000 l of milk per day from a total of 980 suppliers. The quality of the milk supplied to the processing factory was not to the satisfaction of Eldoville, especially regarding the fat content, and as a result 18 l of milk was needed for the production of just 1 kg of cheese. Eldoville's ambition was to improve the quality of milk purchased, and to drastically increase the volume of milk processed.

The 2SCALE partnership

Eldoville approached 2SCALE to support its ambition to grow the company further. Eldoville presented its plans to scale up from processing a daily volume of 5,000 l of milk by establishing a new plant with a processing capacity of up to 70,000 l per day, as well as adding pasteurized and UHT milk to its product portfolio. Support from 2SCALE was solicited to assist in the organization of dairy producers to help professionalize their production and handling, and thereby improve both the quantity and quality of milk produced and delivered to the processing plant.

Through 2SCALE a partnership was forged along the interlinked dairy chains (Figure 4). Three interlinked dairy chains can be distinguished. First there is the forage seed chain, which starts with variety selection and ends at the seed user. The seed user, or fodder producer, is the starting point of the fodder chain, which ends at the fodder user or client. This is the milk producer, who finds themselves at the start of the milk processing chain, which ends with the dairy product consumer.

Figure 4 | Three dairy chains: the forage seed chain, fodder production chain and milk processing chain



Initially in each of the chains a private company was identified with an ambition to grow its agribusiness in partnership with smallholders. Advanta Seeds was selected as the designated firm for the forage seed chain; Bunda Cake as the private company to produce animal feed; and Eldoville as the lead firm in the milk and dairy processing chain.

Interventions of 2SCALE

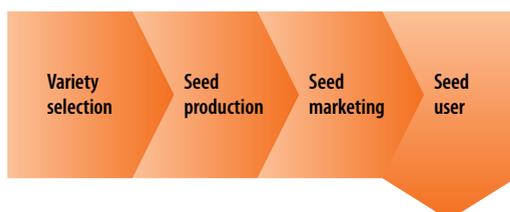
Interrelations between the different chains in the dairy sector are strong, and the actors in the sector are highly interdependent as a result. Value chain collaboration is particularly essential in the dairy chain because of the perishable nature of the product. Due to these interdependencies it was deemed appropriate to assess the constraints across the sector and intervene in the three associated chains, to improve efficiency in production and processing, as well as strengthen actor relations. 2SCALE's interventions were therefore characterized by a number of strategic interlinked activities, which simultaneously addressed the major bottlenecks identified in the dairy sector along the three interrelated chains.

The key challenges that 2SCALE identified in the dairy sector in Kenya were low productivity during the long dry spell from January to April, and the low quality of milk (especially the low fat content). These challenges relate back to sub-optimal feeding practices, poor silaging and the limited availability of high quality fodder, which are caused by the poor availability of improved varieties and seed for high quality fodder production and, more generally, inadequate agricultural practices in fodder production.

Seed chain

Access to high quality forage seed is a challenge for smallholder farmers in Kenya. The availability of appropriate high yielding varieties is limited, and the commercial availability of seed for these varieties is poor. Less than 20% of forage seed traded is certified and sold through the formal market in Kenya, while 80% of the traded seed does not get certified and is sold through the informal market. However, at the same time there are commercial seed companies active in Kenya with ambitions to explore the forage seed market and the potential to be the drivers of change in the forage seed chain.

Figure 5 | Forage seed chain



Partnership

The partnership facilitated by 2SCALE in the forage seed chain started with a seed company called Advanta. However, at the time, Advanta only had candidate varieties of forage seed on offer for testing and registration, and no ready-to-use varieties, nor did they have a complete portfolio of forage species and varieties. During the 2SCALE intervention

it became apparent that a wider partnership was required to tackle the limited availability of high quality forage seed. The partnership broadened and other private seed companies (Kenya Seed, Simlaw Seed, Coopers and Barenbrug) entered into it, along with the Kenya Agricultural and Livestock Research Organisation (KALRO), Aberystwyth University and the International Center for Tropical Agriculture (CIAT). This allowed for a broader portfolio of forage varieties and species to be tested and promoted by the forage seed producers. In addition, agro-chemical companies such as Osho Chemicals and Murphy Chemicals joined the partnership, to contribute to the intensification of fodder production.

Variety selection

The 2SCALE intervention coordinated the participatory variety selection of forage species. Farmer-managed trials were run concurrently with national performance trials necessary to register varieties and obtain a trade license. Participatory selection with farmers was conducted with 12 candidate varieties (Table 3), which were narrowed down to the four best performing varieties. The best performing commercial varieties of sorghum, oats and lucerne from Advanta, Aberystwyth University and Coopers were not immediately available as the variety registration took longer than anticipated. Already-available species and varieties were therefore selected initially to offer farmers the opportunity to start improving fodder production immediately.

Table 3 | Forage species and varieties of seed that companies and research organizations tested

Variety or number	Species	Status (registered variety and or candidate variety)	Seed company/breeder
Sugar graze ++	Sorghum	Candidate variety	Advanta Seed
Nutrifeed	Pearl millet	Candidate variety	Advanta Seed
Sorghum E1291; Sorghum E6518	Sorghum	E1291 registered; E6518 candidate variety	Kenya Seed
candidate variety	Kenya Seed	Registered variety	Kenya Seed
Columbus grass	Sorghum alnum	Registered variety	Kenya Seed
Oats S18	Oats	Registered variety	Kenya Seed
Conway++, Glamis, Balado, Mascani and Rhapsody	Oats	Candidate varieties	Aberystwyth
University, UK	Lucerne	Registered variety	Simlaw Seed.
Haymaker ++, Yamoï	Lucerne	Candidate varieties	Coopers and Barenburg
Lucerne Aurora	Lucerne	Registered variety	Simlaw Seed
Silverleaf desmodium	Desmodium	Registered variety	Simlaw Seed
Sweet Lupin	Lupin	Candidate variety	KALRO
Purple Vetch++	Vetch	Candidate variety	KALRO

++: indicates the four best performing varieties selected

Seed production

The best performing species and varieties, according to the participating farmers, were selected for further multiplication. In the production of forage seed, both production



Photo by David Njenga

Making business out of hay, Kenya

by specialized seed companies, as well as production by individual farmers and farmer cooperatives plays a role. The production capacity of commercial varieties of forage seed was increased by involving individual smallholders and cooperatives as outgrowers of lucerne, sorghum, desmodium, oats and Boma rhodes grass seed, to supply Kenya Seed, Simlaw and Coopers. This was necessary to respond to the increased demand for forage seed resulting from the demonstration and promotion of their use (see Seed distribution and marketing). Furthermore, the program supported the multiplication of Vetch and Lupin varieties originating from KALRO, which farmers were selling informally (farmer-to-farmer), as the varieties were still in the process of formal registration.

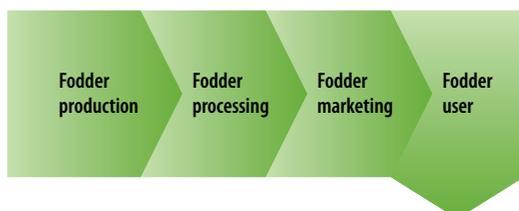
Seed distribution and marketing

An important component of 2SCALE's intervention focused on promoting the use of improved fodder species and varieties (see 'Fodder chain' below). Through field days and participation in trade fairs, marketing avenues for forage seeds were further explored. Workshops and business meetings were organized to link seed suppliers, agro-chemical dealers and input shops, and to facilitate the negotiation of prices. These promotional efforts increased the proportion of farmers in the participating dairy cooperatives using high quality forage seeds from 10% (at the time of the baseline) to over 60%.

Fodder chain

The vast majority of dairy farmers produce their own fodder that is fed to livestock fresh in a limited-grazing system. Very few smallholder farmers preserve fodder as silage or hay, therefore feeding in the dry season is a significant challenge. Dairy farmers supplement the feed they have available themselves by buying hay, silage and concentrates.

Figure 6 | Fodder chain



Partnership

In the fodder chain intervention, at the onset, the main partner was Bunda Cake; a producer, blender and trader of animal feed. Further into the intervention, however, more companies were included in the partnership, and additional collaboration was sought with two other feed producers: Digital Feeds and Total Feed.

Fodder production

Seed companies, agro-chemical companies and research organizations partnered in the training of trainers. The seed companies provided training on agronomic aspects of the new fodder species and varieties, provided seeds for demonstration and sold seeds at local input shops for easy access by dairy farmers and specialized fodder feed producers. The trainers were input dealers, selected farmers, milk graders, private service providers such as artificial insemination providers, animal health technicians, cooperative staff who deal with farmers on a daily basis, and government extension agents. Embedding the training in the daily routines of actors in the dairy chain minimized the cost of extension services.

The training showed the benefits of using improved forage seed to increase fodder productivity per hectare. Furthermore, improved feeding strategies were demonstrated to increase milk productivity. The cooperatives mobilized farmers to attend training and ensured that the trainers received a modest remuneration for their efforts. For each training and demonstration site, plots measuring 0.1 ha for each variety were planted. A total of 460 demonstration sites were established in 10 different counties and over 15,000 farmers were practically trained in the field. The trainees were generally dairy producers.

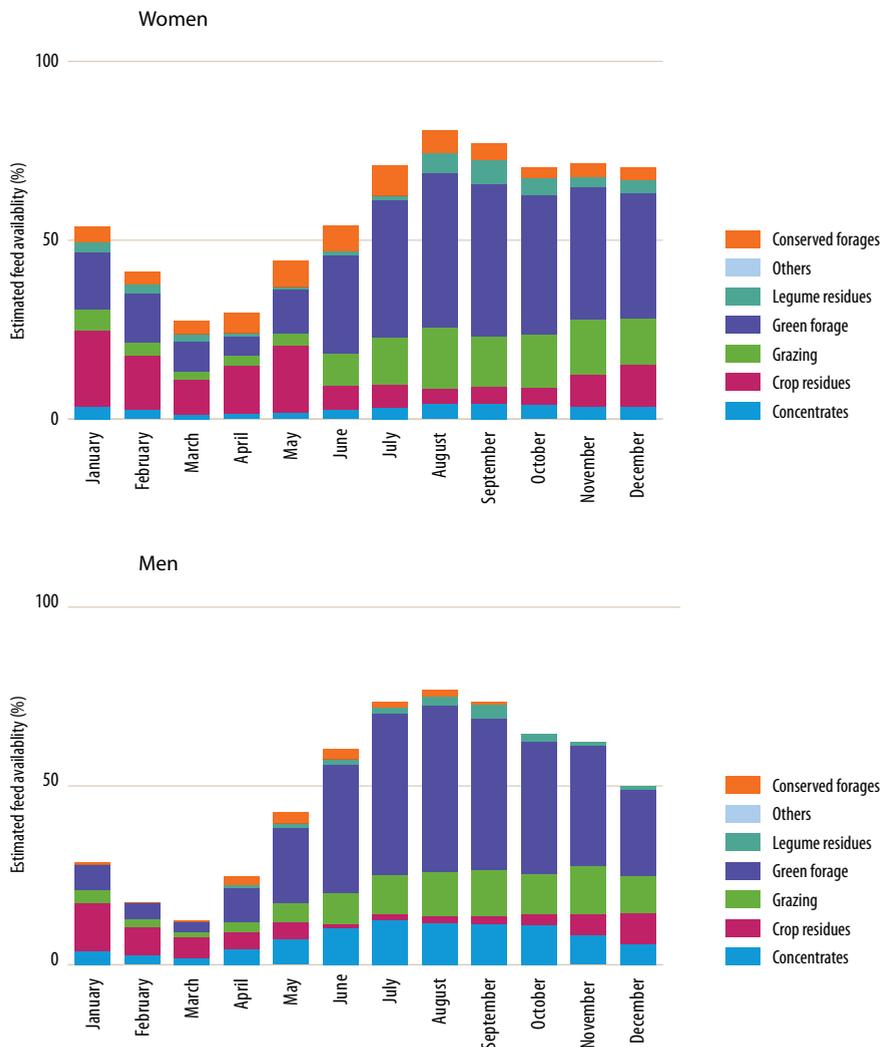
Traditional practice is to feed dairy cows with bulk home-grown feed and supplement this with concentrate. During the dry season the feed is inadequate, and does not get supplemented enough. 2SCALE training has improved fodder production of participating smallholder farmers by 45%, thus contributing to the reduction of the feeding gap during the dry season. In addition, some farmers set up agribusinesses in fodder production and are producing and selling surplus fodder.

Fodder processing

2SCALE, with the assistance of CIAT, assessed the seasonality of the availability of fodder in the dairy chain and were able to identify the main gaps during the year. During the most significant feed shortage from February to May, farmers can barely manage 25% of their animal nutrition requirements (Figure 7). To ensure the continuous season-long supply of fodder, even during the dry season, an improvement in fodder conservation practices was required as part of the improved feeding strategy.

The intervention focused on supporting dairy farmers to produce more fodder and to effectively process it into hay and silage for conservation. The improved production of fodder, and particularly its improved conservation, reduced the feeding gap significantly, from 75% during the worst month of April to less than 50%. The main feed sources in order of importance are: green forages, grazing, crop residues, and concentrates. Men reported a higher use of concentrates than women, while women reported a greater use of conserved forages than men. Women also seem more capable of achieving optimal feeding, by using less concentrates than men. Though the feed supply closely followed the rainfall pattern, it is noticeable that at no time was the feed supply considered adequate, with feed availability reaching an estimated maximum of about 75% of necessary demand (Figure 7).

Figure 7 | Feed availability for Eldoville suppliers prior to the 2SCALE partnership



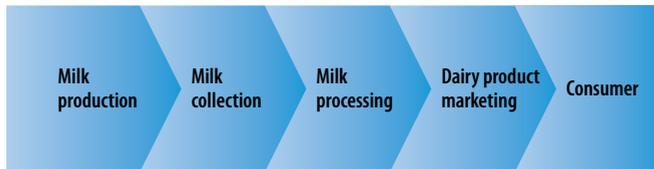
Fodder marketing

Excess fodder produced by dairy farmers and specialized fodder producers is marketed in the form of hay or silage and sold locally within farmer cooperatives or through input shops. Feed shortages are exacerbated by poor linkages and networking between the farmers facing fodder shortages and commercial fodder producers. 2SCALE has supported specialized fodder producers in exploring business relations with farmers in other regions that have a high demand for hay. Exchange visits were organized, a networking forum was established and local trade fairs organized, jointly with county governments.

Dairy chain

Fodder provides the first input into the dairy chain. The main challenge in the dairy chain is the sub-optimal feeding practices used by dairy farmers, which result in poor quality milk as well as a fluctuating supply throughout the year. The combination of these issues confronts the milk processing industry with difficulties and reduces profits for smallholder dairy farmers.

Figure 8 | Dairy chain



Partnership

At the onset of the 2SCALE intervention, the main partners were a dairy farmer cooperative, Nyamarura, and Eldoville. The success in improving the productivity of Nyamarura cooperative attracted the interest of nine other cooperatives and prompted 2SCALE to offer them similar support, thus increasing the scale of the intervention. Quickly it became apparent that the envisioned increase in processing capacity of Eldoville would take longer to realize. As milk production was increasing, the cooperatives started scouting for other market options for their milk and additional dairy processing enterprises were co-opted into the 2SCALE partnership. As a result the partnership began to grow organically.

Milk production

Through the 2SCALE intervention 15,000 dairy producers have been supported to improve their milk production. The main driver of their increased productivity was the use of an improved feeding strategy. Farmers received training on better balancing between different feed types and the efficient use of silage and supplementary concentrates.

The improved feeding strategy promoted through the training has proven to contribute considerably to reducing the feeding gap and improving milk productivity per cow. Detailed measurements of the effects of the improved feeding showed an average productivity increase for the dairy farms of 21% and 18% for morning and evening milk

respectively (Figure 9). In addition, a marked improvement in milk quality was reflected in the increase in fat content.

Figure 10 shows the average daily milk production of eight sample farms over the 42-day trial period. It demonstrates that the increase in milk productivity coincided with the 10-day period when the feeding intervention was implemented, after which there was a drop when reverting back to usual farmer practices.

Figure 9 | Milk production under common farmer practice compared to an improved feeding strategy, Oljoro Orok, Kenya, January 2017

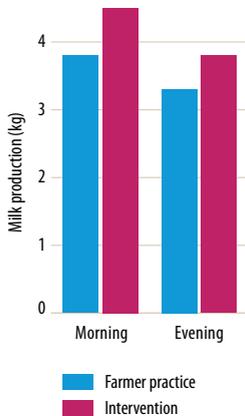
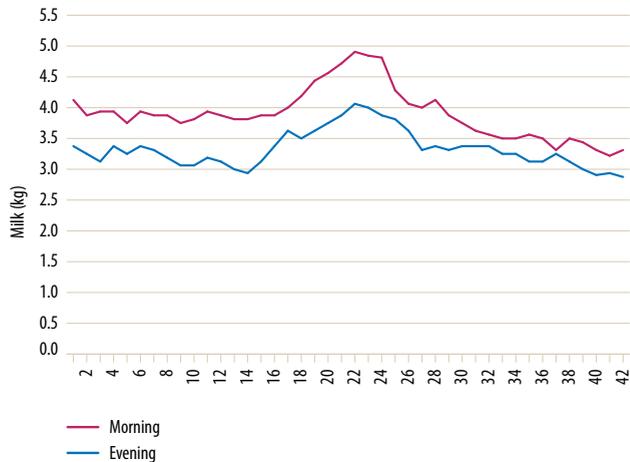


Figure 10 | Average milk production over a six week experimental period at Oljoro Orok, Nyandarua Kenya. The 10-day feeding intervention took place from week 15 till week 24



Milk collection and reception

To further improve the quality of the milk delivered by producers to processors, milk cooling technologies were introduced in the form of village level charcoal cooling (Box 10). In addition one of the cooperatives, Nyamarura, was introduced to solar operated milk cooling technology. Through brokering by 2SCALE they obtained a loan from a financial institution for a solar operated milk cooling unit with a capacity of 4,500 l. Access to a cooled collection and bulking site allows the farmers to negotiate better prices with buyers based on their larger volumes and better quality milk.

2SCALE also supported Eldoville with an automated milk reception system, which improved the logistics and administration of milk reception. The automated system assists in building confidence with suppliers as it provides them with accurate statements. The automated system supports full traceability of the milk from producer to processed product. The system also rewards the quality of milk – measured according to the fat content – of individual suppliers with a bonus of KSh 2/l for milk deemed to be of a high

BOX 10 | CHARCOAL IS COOL!

Milk collection logistics are a major challenge for both farmers and processors. Cows are milked twice a day, morning and evening. The milk is susceptible to spoilage and bacterial contamination. Dairy farmers in Nyandarua, Kenya, suffered substantial losses because they lacked refrigeration facilities.

A charcoal cooler is a simple structure of 2 x 2 x 2 m, made of a wooden frame and chicken wire walls filled with a six-inch thick layer of charcoal pieces held together by the wire mesh. The charcoal is kept moist. This keeps milk below 10 °C overnight, which is cool enough to ensure that no significant degradation occurs before the milk is transported the next morning.

A small cooler with a capacity to store 200 l of milk, enough for small-scale dairy farmers, costs about US \$130 to build. Farmer-managed testing shows spoilage of evening milk to reduce from over 50% to less than 5% when using the cooler. The investment in a cooler therefore pays for itself in less than three months.

Local artisans were trained on how to build coolers and Eldoville Dairies is promoting the new cooler among its suppliers.

Simple low-cost milk storage sheds made form charcoal, Nyandarua, Kenya



Photo by David Njenga



Photo by Joris Maatman

Milk delivery to a collection center

quality. In addition, it supports the suppliers by providing them with a quantitative and qualitative supply track record.

The automated milk reception system has also made it easier for farmers to access loans as the system assists in credit rating by providing them with an individual milk delivery track record. Furthermore repayment of credit is automatic, as installments to pay off loans are withheld by Eldoville and wired directly to UMATI capital, a microfinance provider. Up to 80% of the farmers requesting credit do so through mobile banking. The request is received by UMATI, which verifies their credit rating with Eldoville before sending mobile cash to the farmer. This system saves time and money on other transaction costs compared to conventional banking. The processor's supply is more reliable as a result of this system due to a reduction in side-selling – brought about by smallholders' need for immediate cash – which enables processors to collect more milk from suppliers. Dairy farmers are usually paid 30-45 days after supplying milk to the processor in Kenya. Over US \$1 million was advanced to farmers through this system between the start of 2014 and the end of 2016.

Milk processing

The high quality milk delivered by producers has allowed Eldoville to reduce the amount of milk used to make 1 kg of cheese from 18 kg to 10 kg, which has resulted in a major reduction in the production costs of cheese.

2SCALE supported Eldoville to further adapt its fruit flavored dairy drink, Whey Cool, made from the by-product of cheese production. A processing expert, sponsored by 2SCALE, supported Eldoville to develop the ability to stabilize the dairy drink so that it does not spoil for one month without refrigeration.

Marketing

Whey Cool is an affordable dairy drink, which is particularly suitable for promoting dietary diversification at the base of the pyramid (BoP); the large consumer segment that has a low income. A market assessment and pilot confirmed the potential of the drink in the BoP market. A marketing strategy for Whey Cool has since been developed and awaits implementation, once Eldoville gets its Whey Cool production and packaging line operating fully.

Lessons learned

2SCALE's experience with dairy sector development, which started as a partnership with Eldoville as the lead firm, demonstrates a number of lessons.

Innovation along different associated value chains

The dairy sector is characterized by the complexity and interdependence of three associated chains; the forage seed chain, the fodder chain, and the dairy chain. The latter is particularly important because of the highly perishable nature of milk. The 2SCALE intervention has shown effectively that parallel and coordinated intervention along the three associated chains in the dairy sector can provide improved efficiency, increased smallholder income and employment, and greater processor competitiveness.

The key to successful intervention was addressing the core constraint of the sub-optimal feeding strategies used by dairy producers. Even though the training and demonstration of improved feeding techniques were an essential component of the intervention, more input was required in the form of innovations along the associated seed, fodder and milk chains. To address feeding inefficiencies downstream, changes were necessary, which included increased access to and use of improved varieties of new forage species, as well as improved fodder production and handling practices. At the same time, upstream incentives were developed in the form of premiums for improved milk quality, as well as improved cooling techniques and innovative solutions for access to credit.

Productivity and quality improvements as drivers for development

Interventions that focus on improved productivity as the basis for livelihood improvement are sometimes frowned upon. However, this case of dairy sector development in Kenya demonstrates that an intervention based on increased productivity can be successful, and that productivity and quality improvement can be drivers of development.

The presence of a strong, competitive and growing market for milk and dairy products in Kenya can absorb the large-scale increase in productivity. The 2SCALE program had initially targeted Eldoville's plans to increase their processing capacity. However, the increase in dairy farmers' productivity exceeded the increase in processing capacity, and thus the demand for milk of Eldoville. Still, the producers who had been increasing their supply were able to find competing buyers, offering similar and, in some cases, even better prices than Eldoville. The increased quality of the milk, and its bulk availability, made it relatively easy to attract buyers for the increased volumes resulting from better feeding.

Diversification of partnerships for success

The dairy sector intervention demonstrates that to have success in complex value chains, in a market with existing competition between private companies, a strategy that works with multiple – possibly even competing – private companies, operating in different components of the sector, can be effective. It is even likely to better respond to the need of producers, and takes better advantage of the strength of the competitive market.

In a dynamic competitive market, different actors negotiate based on the quality of their services or produce. When there are competing buyers in the market, it is advantageous for producers to keep their options open and seek a business relationship that responds best to their demands, which may not always be the highest payer. Other advantages that buyers can offer may be in the form of service provision, timely collection, reliability, or quite importantly, the speed of payment. An important characteristic to consider in an agribusiness partner is a proven willingness to invest effort in co-innovation for the mutual benefit of the dairy producers and the processor, as in the case of Eldoville.

In the seed chain, several other companies became involved in addition to the private enterprise initially participating, which increased the number of options of forage crops and varieties available to farmers. This provided farmers with better services compared to the offer of the single company initially identified.



Demonstrating milk quality testing, Kenya

Importance of a facilitating value chain organization

The dairy case has realized improvements in efficiency in different segments of the interrelated dairy chains. At the same time, only existing technology and insights have been used. Key to the intervention's success has been the role of 2SCALE as an independent interlocutor or facilitator between different actors in the sector. This includes agricultural researchers (e.g. KALRO, CIAT), private seed companies and seed producers, feed companies, dairy processors, individual milk producers, milk producer groups and dairy farmer cooperatives. The 2SCALE facilitators have been instrumental in identifying opportunities along the associated chains, building relations, triggering pilots and linking actors with promising technologies.

Scaling through the organic growth of partnerships

The scale of the intervention in the dairy sector in Kenya is growing organically. The first successful partnership between Eldoville and dairy producers generated interest from a number of additional dairy cooperatives wishing to address the same issues within their own organizations. This provided the 2SCALE intervention with an organic way to scale up the intervention, and build on the experience with Eldoville. The successful intervention in the dairy sector in Kenya has also inspired interventions in Ethiopia, Mozambique and Uganda. Stakeholders in dairy sector development in these countries have visited Kenya to learn from its experiences, which assisted them in designing similar initiatives.

Strong interdependence among actors allows for smart finance innovations and embedded services

The dairy case in Kenya also demonstrates that, within the sector, innovation in financial service provision is possible. Because of the strong interdependence between market actors, and the traceability of the product, innovative ways of offering credit against low transactions could be piloted and showed great promise of success at scale.

Partnership can develop from a single lead firm into a diverse collection of partnerships

The main lesson from the dairy intervention is that a partnership model with a single lead firm can be the start of a larger-scale intervention. In a competitive sector with shifting alliances and business relations, such as the dairy sector in Kenya, a diversification of partnerships can be expected over time. This diversification is welcome as interrelated bottlenecks require different, sometimes competing, actors to find solutions.

It does, however, require facilitation and negotiation to ensure continuation with the initial partners is not harmed. Long-term collaboration and relationships are key to working on complex innovations.

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Sesame harvesting, Mali

Photo by Mahamane Toure

A secured market as a trigger for organizing the value chain

The case of the yellow maize and sesame partnerships in Mali

Faoussa Tadjou, Youssef Traore and Baba Togola

KEY MESSAGE

Large buyers such as exporters or industrial processors can facilitate the professionalization of smallholder suppliers by offering a secure market. A secure market provides the opportunity for smallholders to invest in their production capacity, against an acceptable risk. Associated financial services can further reduce smallholder investment bottlenecks. To realize this efforts are needed to organize producers and establish business relations between actors.

Introduction

In Mali, lead firms, targeting secure markets, were able to develop sustainable sourcing relations with producers by working with a system of collectors for yellow maize and sesame. Value chain coordination for these two commodities is relatively new and both commodities present particular challenges.



Sesame, Mali

Yellow maize has one main buyer (Nama & Sons [SONAF]) with a stable output market, however, the crop is not typically grown in Mali and changes were required for SONAF to be able to source the desired volume of the product. Meanwhile, sesame is in high demand on the international market, so buyers tend to purchase whatever comes their way as long as it is good enough quality, which means that it is difficult to establish lasting sourcing relations with producers.

In both cases, the lead firms – SONAF for maize and Promoting Sesame in Mali (PROSEMA) for sesame – had to develop a clear value proposition for farmers to trade with them. With the help of 2SCALE, strategies were developed to engage with stakeholders, particularly with producer organizations. The use of collectors to foster close relations with producers helped the two companies to secure their sourcing of products. 2SCALE's role was to support and build the capacity of both companies and producer organizations to benefit from a secure market, while also facilitating the development of relations with other stakeholders, such as input and finance providers.

Strengthening the organization of producer cooperatives and unions, as well as their relations with other agribusiness cluster (ABC) members, proved a successful way to aggregate a sufficient volume of products upstream in the value chain, while services were able to trickle down to farm level. Enhanced coordination among actors is an important result of the 2SCALE partnerships in Mali, despite the challenging, albeit favorable, market environment.

The sourcing of yellow maize by SONAF in Mali

Initial situation

SONAF, which was founded in November 2010, is a grain marketing company in Sikasso, Mali that mainly trades yellow maize, for which the company has a very high demand

from both Malian and foreign customers (30,000 tons per year). The company's Managing Director, Adama Dissa, has more than 35 years of experience in marketing large quantities of maize to national and sub-regional markets, particularly in Niger and Senegal. In order to satisfy the demands of Malian and foreign customers for yellow maize, SONAF was obliged to source in Côte d'Ivoire because sufficient quantities of yellow maize were not being produced in Sikasso – the main maize producing region in Mali. The company only managed to supply its customers with 8,000 tons of yellow maize, 80% of which was imported from Côte d'Ivoire. SONAF has guaranteed markets for the sale of yellow maize in Mali to large-scale processors such as the *Grands Moulins du Mali*, wholesale traders in urban centers, and poultry farmers, as well as to traders in Nigeria and poultry farmers in Senegal, but was not coming close to meeting demand.

The SONAF-2SCALE partnership

It was in the search for a solution to satisfy its customers that, at the end of 2013, SONAF sought the support of 2SCALE to strengthen and extend its yellow maize sourcing network in the Sikasso region, particularly in the districts of Sikasso and Kadiolo, in the south of Mali.

At the beginning of the partnership, the stakeholders involved were SONAF, which was responsible for the purchase of maize; collectors, who sourced maize from individual producers or producer organizations; and the National Bank for Agricultural Development (BNDA), which provided SONAF with a revolving fund of FCFA 30 million. Considering the high demand for yellow maize and the fact that this crop was not common in the farming practices of producers in southern Mali, partnership activities started in 2014 with the installation of demonstration plots on the cultivation of yellow maize. The plots demonstrated the differences in growing yellow maize compared to other local maize varieties and the use of a cane planter to reduce production costs. The purpose of these demonstration plots was to show producers the potential of yellow maize to produce high yields, the availability of innovations to improve productivity (e.g. cane planters), and the existence of a secured market for yellow maize.

Activities formally began in May 2015 with the signing of a partnership agreement between SONAF and the International Fertilizer Development Centre (IFDC), which implements the 2SCALE program, for three years. The ambition of the partnership over these three years was to enable 10,000 smallholder producers from the Sikasso and Kadiolo districts to annually sell a total of 30,000 tons of yellow maize to SONAF. To meet this demand, each producer would therefore need to deliver an average of 3 tons of yellow maize to SONAF per year.

Business model

SONAF's initial business model was based on sourcing yellow maize from smallholder farmers and their organizations, either directly (when quantities were large) or through collectors. Payments for the purchase of maize by SONAF from producers or their organizations were direct. The company also pre-financed some of its collectors to buy maize, but some collectors were stocking up maize at their own expense and delivering it to SONAF in bulk. In the latter case, the payment was made directly to collectors if SONAF had sufficient liquidity, otherwise it was made a few days after SONAF had received the stock. SONAF's business model was a typical Malian trader model: buying and (almost

immediately) selling. The trader only buys when they have a client and, hence, payment to farmers depends on the existence of clients.

This business model was problematic. The organization of the producers was poor, resulting in inadequate quality control. Supply agreements were verbal only, and non-compliance with these supply commitments limited SONAF's operations.

Interventions through the partnership

Mobilization of producers

In order to reach the targeted 10,000 smallholder producers, who could deliver an average of 3 tons of yellow maize, several actions have been undertaken. 2SCALE and SONAF have begun mobilizing producers for the partnership through the organization of meetings in the Sikasso and Kadiolo districts to outline the partnership, its vision and objectives and the market opportunities that exist for growing yellow maize. These producers – members of 183 farmer organizations – are linked through 10 yellow maize ABCs. These clusters are set up according to the geographical situation and common interests of the actors, or depend on administrative divisions. An ABC, by definition, is a network of grassroots actors (producers, input suppliers, microfinance institutions [MFIs], banks, etc.) working in synergy on an agricultural product in order to serve a specific market.

2SCALE facilitated the installation of demonstration plots of yellow maize during the 2015/16 agricultural season in the localities of Loulouni, Katiorni, Soucourani, Missirikoro, M'pègnesso, Siani and Kignan; and the organization of guided visits around the demonstration plots throughout the growing season, from the crop's vegetative development stage to the plants' maturity. The plot visits served as a forum for exchanging experiences between visitors and pilot producers. All of these partnership activities contributed to the mobilization of 14,206 producers, including 4,613 women, directly linked to SONAF between 2015 and 2017.

In order to facilitate the coordination of activities between the producers and other ABC actors, such as input suppliers, apex producer organizations have been set up within each ABC in order to coordinate input needs, monitor input distribution, organize the marketing of maize, and organize training sessions. An apex is the umbrella of all farmer organizations within an ABC, and is exclusively made up of producers. The establishment of yellow maize ABCs in the target areas of SONAF and the organization of farmer organizations in an apex is designed to better meet the demand for yellow maize by SONAF. ABC members have received various training and coaching from 2SCALE on traceability techniques, quality standards, contracting, etc. This training and coaching has made it possible to further strengthen the business relationships between SONAF and producer organizations.

With the objective of ensuring the continuity of the partnership's activities after the 2SCALE's support ends, the stakeholders of the yellow maize sector have set up a platform, which is composed of SONAF, financial institutions, input suppliers and leaders of apex producer organizations. The purpose of the platform is to ensure that stakeholder access to credit and inputs (seeds, fertilizers and pesticides) is facilitated on an ongoing basis,

and exchanges between stakeholders are organized according to new orientations of the partnership and new developments in the yellow maize sector.

Development of a mechanism for accessing high quality seeds

In some localities, there was limited use by farmers of improved yellow maize seed due to a lack of information on the seed and poor accessibility of high quality seeds. Despite the higher yields from the use of improved seeds, producers were reluctant to invest because they considered the price of the improved seed material too high. In order to find a solution, 2SCALE organized meetings with the Regional Direction of Agriculture (DRA) to obtain a list of yellow maize varieties available for extension and information on seed producers' organizations in the region of Sikasso.

Subsequently, 2SCALE facilitated the linking of seed cooperatives – including the Sikasso Seed Producers Cooperative (COPROSA) and the Sikasso Seed Producers' Company (SOPROSA) – and other suppliers of agricultural inputs, with ABC producer organizations for the purchase of improved inputs. 2SCALE has also organized training courses for grassroots seed organizations, members of COPROSA and SOPROSA and other seed suppliers, on seed conservation techniques to ensure their high quality and availability. This relationship enabled the actors in the seed value chain and the yellow grain value chain to interact and coordinate their activities. More than 70 tons of improved seeds have



Yellow maize harvest, Mali

Photo by Mahamane Toure

been purchased by producer organizations since. It not only allows yellow maize farmers to make gains through higher productivity, but seed producers are also assured of an important market for their seeds.

Establishment of a system for input credits

One of the constraints for producers was the difficulty of accessing inputs at the beginning of the rainy season due to a lack of funds. In order to find a solution to this problem, the SONAF-2SCALE partnership, together with the United States Agency for International Development-funded West Africa Fertilizer Program (WAFP, 2012-2017), organized meetings with banks such as the BNDA and MFIs, such as Sôrôyiriwaso, Nyèsigiso and Kafo Jiginew, to explain the objective of the partnership and the producers' problem of access to inputs. At the same time, 2SCALE and SONAF also exchanged views on the subject to find a solution. These exchanges made it possible to set up a mechanism for producers to access input credits backed by SONAF contracts with producer organizations.

The mechanism works as follows: the producer organization assesses its need for inputs (seeds, pesticides and fertilizers), and a credit request is submitted at the financial institute where the organization has opened an account. A forward purchase agreement for grain is made between SONAF and the producer organization, which serves as proof of a guaranteed market. The financial institute pays the input supplier once the input delivery to the farmer organization has been verified. After the harvest, the producer organization aggregates the stock of maize for collection by SONAF. SONAF pays its dues, not to the producer organization directly, but to the financial institute which deducts its part for repayment of the input credit, before transferring the remainder to the account of the producer organization. Thanks to this system, several financial institutions (BNDA, Sôrôyiriwaso and Nyèsigiso) granted FCFA 146.8 million as input credit to 1,625 producers, including 277 women, during the 2015/16 and 2016/17 agricultural seasons.

Capacity strengthening of producers to increase agricultural productivity

One of the major concerns of producers is their low yields of yellow maize, which is due to several factors, such as access to and use of inputs, and the lack of up-to-date knowledge on good agricultural practices. 2SCALE organized several training sessions for producers on new technologies, such as the use of hand-held planters, anti-erosion techniques, composting and fertilizer spreading techniques, which are new for young farmers, and quality and traceability standards. 2SCALE also set up demonstration plots on the cultivation of yellow maize and organized guided tours to the plots.

Professionalization of SONAF

2SCALE advised SONAF's Managing Director on the importance of formalizing business relationships and the commitment of collectors to the company in order to reduce its dependence on external suppliers. As a result, a contract template was developed and validated by SONAF. Thereafter, between 2015 and 2017, more than 100 contracts were signed between SONAF, producer organizations and collectors. Training sessions on quality and traceability standards were initiated by 2SCALE and given to the company's staff so that they could monitor these standards.



Yellow maize, Mali

2SCALE also facilitated the design of a logo for SONAF and gave advice on the bagging of the maize collected in order to improve its brand visibility to producers and buyers. SONAF has scheduled other activities such as the development of newsletters, brochures and the creation of a website for the company.

Results

The mobilization of a growing number of producers has led to an increased formalization of the business relationship between SONAF and producer organizations, and between SONAF and collectors, through maize purchase contracts. Many contracts are also used as collateral for input credit. Linking maize grain producer organizations with seed producer organizations, coupled with improved access to inputs, contributed to yield increases of 2-3 tons/ha, in addition to the production of the best quality maize.

The partnership also contributed to the strengthening of collaboration between SONAF and BNDA, which increased the ceiling of the company's line of credit from FCFA 30 to 300 million because the bank has been reassured by SONAF's guaranteed market. A link, initiated by 2SCALE, has also been established between SONAF and Root Capital, which is a financing institution for small and medium-sized enterprises (SMEs) for the provision of a credit line of FCFA150 million. This credit will serve to meet SONAF's additional liquidity needs and offer a better interest rate than that of BNDA.

The collaboration between input suppliers, producer organizations and BNDA is becoming increasingly robust with better governance and increased aggregation capacity of producer organizations, which has resulted in an increase in the volume of input credits granted to producers (from FCFA 7.9 million in 2015/16 to FCFA 19 million in 2016/17). Improved relations between actors are now reflected in the supply of inputs (fertilizers) to localities, often even before the bank makes the funds available to producers, due to an established level of trust.

SONAF, through the mobilization of more than 14,000 producers and its offer of a secure market, has been able to increase the volume of yellow maize it markets from 8,000 to 27,898 tons per year, which is almost in line with demand. However, the inclusion of women and youth, through a more tailor-made approach for these groups remains a challenge (Box 11).

The partnership's activities have enabled the company to professionalize and better organize the collection of produce. A logbook was introduced to record the maize collected per supply area, which helps to better manage supply and update the company's financial statements.

The volume of maize imported from Côte d'Ivoire also fell sharply, from 6,400 to 400 tons per year, despite the significant increase in the volume of maize marketed by SONAF. Consequently, the company's transaction costs have been reduced, while the local economy in the Sikasso region has been stimulated.

BOX 11 | MINDSET CHANGES IN THE YELLOW MAIZE PARTNERSHIP

“Arouna, on va manger?” (Arouna, let’s eat!) The president, who must have had a name, but everyone calls him le president, of the producer organization of M’pègnèso invites me cordially for dinner. The president is enjoying the company anyway and starts a long story in Bambara; a good one, apparently. I am quietly sitting back to observe the crowd. There is Adama Dissa, the Managing Director of SONAF, the agribusiness champion of our yellow maize partnership in Mali, and another major story teller, visibly at ease in this environment; and then there is Daouda Bamba, Boureima Bamba, Drissa Sylla, and a few other members of the producer group, who joined later. Dissa, the mayor of the village, and the coach of the ABC, who facilitates linkages within the ABC, coordinates local level capacity strengthening activities and encourages bottom-up innovation, is there as well, looking around to see if all goes well. And then there is 2SCALE: Baba Togola, our team leader in Mali, Youssouf Traore, the partnership facilitator, and me. The village was being visited at the onset of 2SCALE’s annual strategic partnership meeting in Sikasso. It had been raining and we were sitting just outside the president’s warehouse.

We were discussing the results so far of our yellow maize partnership. Much progress has been made, and some major foundations for a yellow maize supply chain put in place. Traore, our partnership facilitator, gets a lot of praise for this.

However, when the president showed us his fields (at least 6 ha of yellow maize, 3 ha of white maize, certainly a large area of cotton somewhere, closed areas with vegetables and papaya), I got this troubling feeling that we might also be too nice, too much with the elders, and the already powerful. Where were the women, the youth? I see change, but where are the transformative changes? Traore and Togola appear to be conscious of these challenges. They have only just started. The farmers they are working with are the front-runners, the most motivated; farmers that can drive the supply chain. Traore also stressed that you need to have the elders on your side to get anywhere. In the next months and year(s), more emphasis will be given on the inclusion of smallholders, and of women and youth wherever there are real opportunities. We should not use the concept of inclusive agribusiness too easily. Inclusive agribusiness is more than economic growth; nor can we just assume so-called trickle down effects. Inclusive agribusiness requires a dedicated pro-active approach to empower and support the inclusion of vulnerable groups, i.e. smallholder farmers, women and youth. Their ‘voice’ must be heard and taken into account.

The next day, I ask my question again and the president takes the floor. He asserts that the partnership is not exclusive; many women however have other priorities, including collecting sheanuts, which generates significant income. They also have smaller plots, and thus limited space for and probably less interest in growing yellow maize. Some of these things are changing however, and the president stated that he would welcome women and youth on board in the partnership, in whatever kind of roles. That is good and comforting to hear; as it was good to see the two women, and some younger coaches as well during the meeting. We’ll meet again.

Arno Maatman, Project Director 2SCALE

The organization of apex producer organizations at the ABC level and the establishment of the platform, by all actors in the partnership, to ensure the continuity of activities after the support of 2SCALE ceases, demonstrate that the actors have a shared interest in continuing to work together. A mechanism for the internal recovery of financial resources has been set up by the platform members to ensure, among other things, that meetings are organized.

Lessons learned

Replication

The guaranteed market that SONAF has for its products, translates into a secured market for yellow maize producers. The company developed a clear vision of the type, quantity and quality of produce it wanted. It was also committed to work with producers and had an open mind, which allowed it to fully understand the dynamics at the producer level. SONAF, with the help of 2SCALE, provided technical support to producer organizations to further consolidate their business relationships, which made it possible to mobilize more producers around its sourcing system.

SONAF's secured market is also an important guarantee for financial institutions to facilitate access to credit for producers. Together with the technical support provided, producers have become more professional and better able to invest in agricultural production.

It became apparent that when a contract between two parties is signed, it is necessary to be flexible in relation to the proposed prices and even to mention in the contract the conditions for price changes in the event that market prices change when the maize is purchased. This can avoid unpleasant surprises that may affect the business relationship between producer organizations and SONAF.

Even before the partnership is established, it is necessary to identify whether partners are committed. An investigation into the morality of farmer leaders has proved to be very important for the development of a lasting relationship between SONAF and producer organizations and avoids unpleasant surprises. In the future SONAF will favor working with small or medium-sized producer organizations (50 to 150 members) for the facilitation of

BOX 12 | REPAYMENTS OF LOANS BY SMALL AND LARGE COOPERATIVES

"With access to the input credits system initiated by 2SCALE, more than FCFA 127 million was mobilized to purchase inputs for four producer organizations within the partnership. At the time of the repayment (in kind), the two small organizations paid their debt before the due date, while the two large organizations, receiving large sums (FCFA 60 million for one cooperative and FCFA 30 million for the other one) have not been able to repay the total amount of their credit so far. Surveys have shown, for the most part, that the two leaders of both organizations have diverted the amounts reimbursed by their members for other purposes. Actions are still in progress for the total recovery of input credits from 2015/16."

A 2SCALE facilitator

access to inputs. Experience has shown that governance within these smaller producer organizations is much more transparent and effective than that of a large producer organization with more than 1,000 members (Box 12).

Scaling up

Regarding the scaling up of operations, it is possible to foresee the expansion of SONAF's activities. On the one hand, SONAF faces liquidity problems when its own clients are late in paying their due, and therefore, a fairly consistent working capital would be necessary to secure operations. On the other hand, it will be necessary to ensure the dynamism of the producer organizations and the ABCs. Although they have been trained to be autonomous from the 2SCALE program, the fact remains that the actors' meetings are often limited to coaching activities in some ABCs.

Ongoing work to strengthen producers' capacities in terms of quality standards, business relationships, input credit management and maize production techniques remains essential. These activities are vital for the continuity of the partnership's activities and an increase in the number of producers in the sourcing system.

So far little attention has been given to the business environment. The company is still awaiting approval to develop the site chosen for its new processing unit to transform the yellow maize into maize-based flours for human consumption. With the installation of the unit, SONAF will need more yellow maize, thus creating new market opportunities for smallholder producers in the Sikasso and Kadiolo districts. The factory however will require a longer-term vision, and related planning: nothing short of a mindset change. This goes together with stronger (formal or informal) contractual arrangements with farmers, indicating things like target (minimum) quantities, quality criteria, incentives and pricing mechanisms.

The sourcing of sesame by PROSEMA in Mali

Initial situation

The price of sesame fluctuates greatly and depends on the global market price. The sesame market is characterized by the presence of many buyers with different capacities and statuses. While some buyers in the sector are more specialized in trading sesame, others wait for the right moment to launch into the business of trading the commodity. Such traders are totally unaware of the evolution of market prices and often offer irrational prices to producers. Nationals, as well as foreigners (mainly those working with traders located in Burkina Faso), flood the market at the time of the buying of sesame. During the last decade, the price per kilogram of sesame increased from FCFA 150-200 to 500-600, with a peak period during the 2014/15 season when sesame was sold at FCFA 1,000/kg in some localities in Mali.

PROSEMA was created in 2006 for the valorization of Mali's sesame, in a context where buyers were snatching sesame and causing price instability. The company works exclusively with sesame, primarily exporting both conventional and organic husked and unshelled sesame. In the future, PROSEMA plans to convert sesame into oil and livestock

feed. The company's headquarters are based in Bamako and there is a cleaning and processing unit in Fana (120 km from Bamako, on the Bamako-Ségou road). The company has gradually developed a network to source sesame from producers in the regions of Ségou, Sikasso, Koulikoro, Kayes and Mopti.

Despite this diversity of sources, PROSEMA had difficulties mobilizing the amount of sesame needed to satisfy its customers. In fact, the annual requirement of the company's clients is more than 20,000 tons, but it was only managing to mobilize about 500 tons per year. Initiatives have been taken by PROSEMA to retain producers by providing services such as training, input credits and agricultural equipment (directly or through its collaborators). Training was provided with support from development projects, while input credits and small equipment were awarded by PROSEMA to be reimbursed by producers as they supply of sesame. Despite this support, producers still made significant parallel sales, attracted by the best prices offered by other buyers, but most importantly, by the earlier collection and payment of sesame by these buyers. This is important as early collection and payment allows producers to use the revenue from sesame to cope with labor costs of cotton harvesting.

Sesame, Mali



Photo by Mahamane Toure

PROSEMA struggled to retain supplier-buyer relations with the farmers it was supporting as a result of insufficient financial capital at the moment of sesame collection and it was suffering losses as a result of its lack of professionalism in the management of input credits.

The PROSEMA-2SCALE partnership

PROSEMA was already a partner in a previous project with IFDC, called Economic Development at the Base by the Agricultural Business Clusters (DEB-PEA). These clusters aimed to improve production and marketing of sesame, based on value propositions by producer organizations. 2SCALE inherited the previous project's ABCs and a partnership agreement was signed between 2SCALE and PROSEMA in September 2014. Through the partnership with 2SCALE the company intended to develop inclusive business relationships that are profitable and sustainable for all partners (producers, intermediaries, input suppliers, financial institutions). PROSEMA's final aim was to secure a supply of increasing quantities of sesame from producers, especially from smallholders that are excluded from cotton production.

Business model

PROSEMA sources sesame from producers in the regions of Ségou, Sikasso, Koulikoro, Kayes and Mopti through various intermediaries:

- Service providers, either sesame producers or traders who have good relationships with producers in their areas. During each marketing campaign, these traders receive a fund from PROSEMA to buy the maximum possible amount of sesame produced in their zone on behalf of the company. Their service is remunerated by PROSEMA on the basis of a set price per kilogram of collected sesame.
- Company delegates, who are agents engaged by PROSEMA for the technical supervision of producers. Delegates work under the responsibility of the company to oversee the purchase of sesame.
- Agricultural extension services which collaborate with PROSEMA for the supply of sesame. These include, the Office of the Upper Niger Valley (OHVN), the Office for Rice of Ségou (ORS) and the DRA of Ségou, Koulikoro, Sikasso and Kayes.
- Non-governmental organizations (NGOs) that supervise producers and their organizations in the development of the sesame value chains (conventional or organic).
- Farmers' unions, made up of several farmers' organizations, which collaborate with PROSEMA to improve the production, supply and marketing of sesame.

PROSEMA, for its part, sells its sesame on the international market to buyers in China, Europe, India, Israel, Japan and Turkey.

Interventions through the partnership

Given the competitive environment in which PROSEMA operates and its ambition to increase its sourcing capacity from 500 to 20,000 tons of quality sesame, at a competitive price from 40,000 small sesame producers, the main challenge for the partnership was to identify measures that would lead producers to sell to PROSEMA rather than to its competitors. With the support of 2SCALE, a series of diagnoses with stakeholders in the sesame value chain were carried out during various governance meetings of the



Sesame processing at the PROSEMA facility

partnership, as well as during planning and review meetings with PROSEMA staff. On the basis of the results, a strategy was developed to meet this challenge.

An important conclusion was that the different sourcing channels did not have the same efficiency. PROSEMA delegates and local service providers have been more productive compared to agricultural extension services, NGOs and farmers' organizations. By way of illustration, during the 2015/16 campaign, the four delegates and the nine service providers collected over 78% of the total volume of sesame collected (3,303 tons). Service providers and delegates function as local entrepreneurs. They have their own producers' networks from which they mobilize the sesame for PROSEMA, while granting themselves strong profit margins. Therefore, PROSEMA opted to prioritize these channels at the cost of others that revealed to be less effective.

In combination with the support for the most effective sourcing channels, there has been a gradual development of a business model that is more attractive to other players in the value chain. With the support of 2SCALE, PROSEMA facilitated the process of setting

up 14 new sesame producer cooperatives, involving intermediaries such as company delegates and local service providers. Using delegates as entry points at the cooperative level is beneficial for the following reasons: they are familiar with the field; they continue to operate within the value chain (they are not eliminated at the benefit of a direct relationship between the producers and the company); and they have a relationship of trust with both producers and the company. The organization of the sesame cooperatives was supported by training and coaching, carried out by 2SCALE, focusing on the importance of well managed and functioning producer organizations.

In order to motivate producers as sourcing partners and increase their capacity to conduct production and post-harvest operations, a Farmer Field School (FFS) facility was set up in collaboration with the Integrated Production and Pest Management (GIPD) program of the National Direction of Agriculture (DNA). As a result, 14 FFSs were set up for four ABCs. Five FFS facilitators and five PROSEMA delegates were trained as farmer facilitators. A total of 333 producers, 68 of them women, attended training sessions at the FFS. In addition to sesame production (land preparation, seed selection, fertilization, pest control), FFSs also deal with issues related to post-harvest operations and the quality of sesame.

With regard to increasing the loyalty of producers and thus increasing the supply of sesame, PROSEMA tried to provide producers with the inputs (fertilizers, herbicides) they needed, in the form of input credits. However, it should be noted that the company did not have the necessary resources or the expertise required to assume this function. In most cases, this resulted in a situation of non-repayment of the input credits granted. Training and information was provided to ABC members on the cluster approach and exchanges were facilitated by 2SCALE in order to find a local solution to the problem of access to input credits. Most producer organizations lacked sufficient credibility with financial institutions and input suppliers because of their low level of organization and limited understanding of entrepreneurship. As a result they were not able to build reliable relationships with input suppliers and financial institutions. As a response 2SCALE facilitated closer business relations between producer organizations, input suppliers, financial institutes and PROSEMA. Based on the secured market for sesame offered by PROSEMA, financial institutes were willing to provide input credit to producer organizations to purchase inputs from reputed agro-dealers.

An important aspect of the partnership between PROSEMA and 2SCALE is the relationship between the grassroots actors at the ABC level. The clusters that had already been created by the previous project were reinforced by ongoing support for networking and capacity building of member actors. ABCs are close partnerships between all the local actors in a sector (agricultural producers and their organizations, input suppliers, financial institutions, etc.), who share a common ambition to satisfy a market segment. Networking facilitates the building of relationships of trust between actors enabling them to work together, and PROSEMA, through its purchasing power and the motivation this offers, acts as a catalyst for ABC collaboration and facilitates the building of relationship of trusts between cluster members.



Women with sesame, Mali

During training and coaching, the types and content of contracts offered by PROSEMA to the sesame cooperatives were analyzed. This analysis made it possible to identify how best to motivate actors to sell their produce to PROSEMA rather than to other buyers.

It was agreed that a motivational system for intermediaries is necessary to ensure the efficient aggregation of sesame for PROSEMA. This system was put in place with the introduction of performance bonuses to be paid to intermediaries depending on the volume of sesame collected. Similarly, a mechanism for the capturing and retrocession of financial resources to producer organizations, also based on the volume of sesame collected, has been set up to encourage improvements in the technical and organizational skills of members (trainings), as well as improvements in the organization's performance, in terms of production and sales of sesame.

Producers take advantage of the PROSEMA relationship through two motivational systems. One fixes the farm-gate price; based on a standardized cost-benefit analysis of sesame production at farm level, coupled with the introduction of a mechanism for managing price changes during the marketing period. The other one is a bonus-malus system linked to the quality of sesame.

In order to have sufficient funds for the collection of sesame, PROSEMA had to be very active in the mobilization of financial resources. The Dutch firm, SCOPEinsight, carried out an audit of the company through 2SCALE, and the results were used in negotiations with banks. During the 2016/17 season, a line of credit totaling FCFA 1.2 billion was mobilized.

The partners in the sesame value chain face the challenge of optimizing loyalty among themselves, especially in a context of recurring fluctuations in market prices, tensions around sourcing of sesame and questions surrounding contractual commitments. 2SCALE facilitated a business development forum that brought together PROSEMA's networks of collectors, leaders of 120 producer organizations undergoing a restructuring phase, agricultural services, and the Mali Company for Crop Protection – one of the largest input suppliers in Mali. This forum made it possible to diagnose the key problem areas with regards to loyalty and to strengthen the capacity of actors to formulate and implement strategies related to resolving these issues. On the key issue of parallel sales, stakeholders identified a series of measures such as: the certification of sesame for more rewarding segments of the international market – PROSEMA is already engaged in ISO certification procedures for environmental and food safety standards – which involves improving the quality of sesame and the related quality control mechanisms; the development of internal capitalization strategies by producer organizations for reimbursing input credits; and attracting social investors for the development of the sesame value chain.

Results

Presently, PROSEMA is linked to 14 sesame cooperatives that form the basis of its sesame sourcing system. The partnership with 2SCALE enabled PROSEMA to increase its total source of sesame from 500 tons to more than 3,000 tons per year by the end of the 2016/17 season. Following the positive impact of these 14 organizations on the quantities and quality of mobilized sesame, PROSEMA has begun to establish new cooperatives of sesame producers in other ABCs.

Thanks to training on good agricultural practices and PROSEMA's focus on sourcing from producer organizations that provide internal quality control, the level of impurity of the sesame supplied to PROSEMA has also decreased from 11% to 8% in 2016.

There has also been a certain evolution in the nature of relations between PROSEMA and sesame producers. They are no longer merely beneficiaries of PROSEMA initiatives; they have become agribusiness partners who negotiate and establish contracts with the company. A similar dynamic can be observed between producers and suppliers of inputs.

It is the nature of the relationships established by PROSEMA with various players in the sesame sector that have enabled the company to improve its position in the market. Its business model, which favors sourcing from grassroots producer organizations (sesame cooperatives) by integrating intermediaries (local service providers, company delegates), allows different stakeholders to benefit from their activities.

Lessons learned

Replication

Despite a highly competitive environment, a company such as PROSEMA succeeded in developing sustainable and profitable business relationships with producers and other players in the sesame value chain. However, certain conditions are necessary for this type of development. First, actors need a good mutual understanding of the value proposition of the company. Secondly, the value proposition must provide for accompanying measures that meet the needs of producers. Thirdly, the fact that PROSEMA has a network of intermediaries in charge of sourcing, and linking PROSEMA and the other actors on the ground, is a great asset.

Scaling up

The partnership between PROSEMA and 2SCALE in synergy with the ABCs has laid the groundwork for better coordination of the activities of stakeholders in the value chain. This coordination not only allows PROSEMA to aggregate larger volumes of sesame using its intermediaries, but also facilitates the acquisition of important knowledge by actors to promote their development. In addition, the intermediaries ensure close communication between producers and the company, which results in better information sharing and increases transparency in the transactions between them. Finally, through networking and linking at the ABC level, producers can access services, such as input credit, that PROSEMA cannot provide. Following this model, PROSEMA can continue the establishment of producer cooperatives in other areas of sesame production. To this end, the partnership plans to organize exchange visits between producers in new areas and members of cooperatives already in place.



Shalem quality control; measuring sorghum moisture level in an outgrower field, Kenya

Photo by IFDC

Building inclusive agribusiness: going one step down the ladder makes a difference

Judith Chabari and Olugbenga Stephen Idowu

KEY MESSAGE

Rather than forging inclusive agribusiness partnerships with the large industrial final buyers of agricultural produce, it can be more effective to develop partnerships with intermediate aggregators, traders and processors who supply these large industrial buyers, as they operate closer to producers.

Introduction

Interventions for market inclusiveness of smallholder farmers have the tendency to focus on the large industrial-scale firms or companies, or rather, the end users of agricultural produce. This is a logical approach considering the purchasing power and large produce turn-over of these companies. It is assumed that large companies or firms are more likely to be well-resourced as drivers of agribusiness interventions than intermediate aggregators.

The 2SCALE experience with two locally based agribusiness enterprises – Psaltry International Limited in Nigeria and Shalem in Kenya – do however illustrate that it can be more efficient to partner with intermediary companies, which operate in between large off-takers (in these cases breweries) and smallholder farmers. The experiences show that, if locally based intermediate companies are appropriately facilitated, highly effective collaboration for inclusive agribusiness can develop to the benefit of smallholder farmers supplying the companies.

The large industrial end-user remains important as the final buyer, driving the supply chain, by providing a relatively stable bulk market for large volumes of produce, and as a result, for potentially large numbers of smallholder farmers. The purchasing power and access to finance of these large buyers provide for a strong backbone of the value chain, and their involvement and commitment to inclusive agribusiness can provide strong incentives for value chain innovation. For example, Nigerian Breweries (NB) wanted to increase its local sourcing, and to realize this ambition supported Psaltry with a credit facility to finance the upgrading and expansion of its processing facility. Through this expansion more cassava producers could enter the cassava starch value chain, and enter into cassava supply arrangements with Psaltry. The large firms have the ability to navigate the strongly competitive national and international business environments, which small- and medium-sized enterprises (SMEs) and smallholder farmers have no leverage on.

Case description

Psaltry

Psaltry is a locally based trader and processor. The company was founded by Yemisi Iranloye and its main operation is buying and processing cassava into edible starch for industrial buyers. Its most important client is NB, of which Heineken Breweries is the majority shareholder. NB started using cassava starch in its brewing process in 2014. Psaltry's processing facility is strategically sited in Ado-Awaye, a major cassava producing area in Oyo State, Nigeria. From here it supplies the NB factories in Ibadan and Lagos, roughly 100 and 200 km away respectively.

Psaltry was established in 2005, and started with cassava production. In 2013, Psaltry established a factory in Alayide-Wasimi village, to process cassava into starch for the food and beverage industry. Once it had established the processing factory, Psaltry gained a supply contract with NB. It has also recently begun diversifying into the processing of cassava-based food products.

Before entering into partnership with 2SCALE in 2014, Psaltry was already running a fledgling out-growers scheme made up of cassava farmers within the locality. Psaltry sources its cassava raw materials from these out-growers (40% of its demand), through traders (50% of its demand), from its own farm (4%) and from the open market (6% of its demand). As a locally based SME, Psaltry has built synergetic business relationships over the years with local cassava producers, as well as tractor services, input suppliers, transporters and traders/marketers.



Cassava truck at the Psaltry factory weigh bridge

In 2014 NB started to discuss collaboration with 2SCALE and Psaltry was identified as a potential partner. Ultimately it was Psaltry rather than NB that became the lead firm in the 2SCALE facilitated public-private partnership (PPP) for inclusive agribusiness development. The objective of the partnership was to improve the efficiency and inclusiveness of the cassava supply chain for the brewery.

The interest of NB in the partnership is first and foremost to reduce its supply risk by improving the organization of bulking and delivery to the brewery, through Psaltry. Furthermore the brewery does have an interest in sourcing from smallholders and contributing to the improvement of rural livelihoods, as long as NB can acquire the right volume and quality of produce, reliably. As such, the brewery has an interest in the successful expansion and strengthening of Psaltry's outgrower scheme into an efficient and cost-competitive supplier of cassava starch. The interest of Psaltry is to secure its supply by strengthening its contract farming system, and to provide economic opportunity to smallholder farmers. The interest of the farmers is to get embedded into a remunerating and secure market for their cassava. The farmers realize that if Psaltry could access good markets for its processed products, it would directly impact their agribusinesses since they are working closely together. This realization has meant that farmers and community leaders gave Iranloye, the CEO of Psaltry, all the support she needed to get the factory positioned in their locality. With the factory in place, farmers are hopeful for better days ahead for cassava farming, which is the main occupation of people in the area.

Shalem

Shalem is a locally based trader that mainly aggregates sorghum to supply to East African Breweries Limited (EABL). In addition, Shalem aggregates other products such as maize, beans and green grams to supply to the local market.

By 2013, when Shalem came into partnership with 2SCALE, its aggregation business was facing various challenges. The quality of sorghum purchased from farmers could not be relied upon due to poor harvesting and post-harvest practices. In addition, the price of the commodity was, at best, erratic. This was making it difficult for Shalem to plan or budget for its buying activities and as a result, it would always fail to deliver on the quantities and quality agreed upon with EABL. Shalem also faced issues with farmers and village agents who were selling their produce to other, more competitive buyers.

Through the 2SCALE intervention, Shalem has been aiming to improve the reliability and performance, both in volume and quality, of its sorghum sourcing system, to remain competitive with other sorghum buyers. In addition, Shalem expressed an interest in developing a sourcing system that offered fair value to its growers to build loyalty and thus, further increase security of its supply.

The 2SCALE partnership with Shalem initially focused on capacity strengthening of the producers so that they would be able to supply good quality sorghum. Over the last four years, more interventions have been included to address key business issues affecting the competitiveness of Shalem and the other sorghum agribusiness cluster (ABC) actors within the coverage area of the partnership. Shalem has, with support from 2SCALE, ventured into piloting more diversified products by processing sorghum into nutritional household products such as fortified sorghum flour for general domestic use and sorghum-based baby porridge.



Photo by Olugbenga Stephen Idowu

2SCALE interventions and impacts

Shalem and Pсалtry are both locally based SMEs building inclusive agribusiness with grassroots actors. It is therefore to be expected that the 2SCALE interventions and impacts for the two SMEs are similar. The 2SCALE interventions for both Shalem and Pсалtry focused on the details of supply chain management, mobilization of more farmers, and pricing and logistics/transportation issues that were weakening the relationships between smallholder farmers, the SMEs and other support actors. Other areas of the 2SCALE intervention consisted of capacity strengthening of farmers' organizations and addressing issues that limited the market competitiveness of the smallholder farmers and SMEs, i.e. farm level efficiency (cost/kg), productivity issues (kg/ha) and quality issues, e.g. starch content in mcg/kg of the cassava types planted and varieties of sorghum.

These interventions have brought about significant improvements in farm level efficiency. For Pсалtry, yields have increased by up to 70%, from less than 10 to more than 15 tons/ha, and an associated drop by 30% in production costs, from Naira 10,000 to 7,000, was recorded per ton of cassava. This was achieved within two production seasons. For Shalem, farm productivity increased from 1.35 tons/ha to between 1.6 and 1.8 tons/ha.

With 2SCALE's facilitation, Shalem developed a business plan in 2014. This has led to improvements and attracted the attention of financial institutions, insurance companies and development agencies seeking to partner with Shalem. Farmers have been able to receive close to KSh 2,500,000 in compensation for crop failure because of the support they receive from insurance companies through Shalem. In 2015, Shalem received an initial US \$500,000 from Root Capital, allowing it to expand from grain trading into processing and is in line to receive another US \$610,000 from the Common Fund for Commodities, which will go towards finalizing the development of marketing and distribution strategies to get Shalem-processed products into the market.

Smallholder farmers and transporters working with Pсалtry have achieved win-win pricing so that transport rates are now based on the weight (kg) of cassava, the conditions of the roads and the distances (km) covered from the farms to the factory. This has reduced transportation costs by up to 20%. In accepting the new terms, transporters have demanded cash on delivery, to which the farmers acceded. Farmers working with Pсалtry have also been able to reduce costs of tractor services by negotiating for accurate farm size measurements and paying accordingly, and through aggregation of demands, making logistics more efficient for tractor operators, resulting in a 30% cost reduction of mechanized land preparation.

The specific interventions of 2SCALE within the Shalem and Pсалtry partnerships can be summarized as follows:

Supply chain management: Both Shalem and Pсалtry were supported to improve their outgrower schemes through training and coaching activities on group dynamics and coordination of supply. This aimed at reducing the supply risk of sorghum and cassava by increasing the performance of producer groups in meeting targets of quality, volumes and timeliness. In addition, better planning of input supply, transportation and tractor services

was facilitated as well as mapping of farm locations to make for more efficient collection and aggregation. 2SCALE supported Psaltry in the acquisition of Farmforce®; a mobile app for farm management record keeping and supply chain management. Shalem was also supported with E-Prod®; a data management system that has helped in maintaining real time records of volumes, quality, payments, credit recoveries, performance history and other parameters, and to share this information with farmers in a transparent manner.

Enhancing farm level efficiency: 2SCALE supported the mobilization of more producers to supply Shalem and Psaltry through contracts. New and existing farmers received training on production technology, production cost reduction strategies and cost-benefit analyses. The combination of assuring output markets through contracts and training in intensification of production and financial management, proved effective in increasing productivity and profitability.

Improving efficiency of other chain actors: For both Shalem and Psaltry, the focus was not exclusively on the challenges smallholder farmers are facing, but also those of other actors like transporters and village agents or traders. The partnership also facilitated joint purchases and other coordination actions among these other actors to achieve, among others, cost reduction and access to good quality inputs. These capacity strengthening activities were carried out by coaches with support from 2SCALE trainers and partnership facilitators.

Empowerment of negotiation skills of farmer organizations: 2SCALE capacity strengthening of farmer organizations with training and coaching on business skills for negotiating contracts, has led to the achievement of a win-win pricing mechanism at Psaltry. The same has been achieved between Psaltry and large buyers. Farmer organizations supplying Psaltry were able to access a government agricultural finance facility worth Naira 500,000 each for 500 farmers, at an acceptable interest rate along with insurance covers.

Addressing prohibitive transport costs for farmers: 2SCALE capacity strengthening activities with farmer organizations, and their facilitation of business relationships between the outgrowers and local transporters and Psaltry enabled the negotiation of better business terms between these important agribusiness actors in the local environment. Farmer organizations were able to negotiate better prices for cassava transport, in exchange for on-the-spot payment of transporters. Furthermore the cassava farmers and transporters have negotiated fixed road levies, rather than the prior system of road-side negotiation with traffic police.

Development of a loyalty program: This program involved soft skills training and coaching to help actors realize the importance of their partnership and the need to cooperate for the survival of their collective agribusinesses. The training also highlighted to farmers the need to ensure the delivery of adequate volumes of their produce on time and at competitive prices, compared to other supply sources. For Shalem, 2SCALE supported the practical training of its staff and farmer organization representatives on how to design reward systems to encourage loyalty among the various actors (agents, coaches, smallholder farmers, finance institutions). The system was implemented successfully and played a major role in Shalem's continued profitability in a highly competitive environment.



Planting a farmer demonstration trial, Nigeria

Lessons learned

'Going one step down the ladder', and work with intermediate trading and processing companies, such as Pсалtry and Shalem offers advantages for inclusive agribusiness development, as opposed to partnering only with the larger, industrial-scale processors.

Advantages of partnering with intermediate trading and processing companies

Closeness to the grassroots: The core advantage of locally-based intermediate aggregators and processors is their proximity to smallholder farmers. Sometimes the farms are within walking distance of the factory premises or collection centers. The proximity to the smallholder farmers presents a unique opportunity for the entrepreneurs to quickly respond to changes and events. For example, if weather conditions are not conducive during the harvesting period for sorghum to be properly dried on the farms, Shalem can drive a thresher to farmers' fields and transport the produce back to its aggregation site for further drying. Because of Shalem's close proximity to farmers it is able to understand farmer realities and constraints and can easily adapt to address emerging challenges. Pсалtry has to process its cassava within 24 hours. The short distance from the factory to the farms therefore ensures that in the case of any logistical issues (e.g. breakdown of a truck), alternative means can easily be arranged within a short period to save the produce.

Fewer language or cultural barriers: Locally based SMEs face fewer barriers in terms of language and culture. In both Pсалtry and Shalem, many of the farmers and suppliers/traders come from within the same locality, speak the same language and have the same cultural affiliations. Business terms and conditions can therefore be easily communicated; targets and measurements (e.g. of land areas or volumes) can easily be explained in local and understandable terms. This speeds up the integration of local actors and contributes to a more rapid achievement of the objectives of agribusiness

interventions. Most importantly, the locally-based intermediary aggregators, traders or processors are better equipped to build trust with local suppliers over time compared to the large end-buyers in the chain.

More direct interest in improved business relations with local actors: The intermediary companies are, much more so than the final buyer, highly dependent on the success of their sourcing strategy for their business prosperity. As a consequence, they are also more interested in investing the time and effort required to make it work, and to build sustainable business relationships with their suppliers. Locally based SMEs greatly benefit from their interdependent business relationships with other grassroots actors. For example, in Nigeria, people in the local communities take pride in the fact that they have the Psaltry factory in their area and recognize that the success of the agribusiness directly impacts their own farm enterprises since they are working closely together. This provides a variety of social and psychological benefits for Psaltry.

The ability to trade based on social capital and trust: Shalem works through village traders/brokers who aggregate the produce initially so that Shalem can buy it when quantities have reached a certain economic level. Some of the village traders are farmers themselves and have some level of interaction with other farmers. Village agents/suppliers are sometimes able to pay the farmers in cash at the point of produce collection so the farmers are more willing to deliver their produce to them. In other cases farmers are willing to deliver their produce to the village agents and to the local SMEs without immediate payment, based on the trust that they will be paid in due course. This gives local SMEs an advantage over large enterprises running less locally rooted contract based supply schemes.

Positive reputation of local SMEs: Even though they act as intermediaries, locally based SMEs using inclusive agribusiness approaches suffer less from the usual negative perceptions that smallholder farmers have of brokers or middlemen. Unlike middlemen or brokers, SMEs doing inclusive agribusiness with local actors are not freelance or opportunistic buyers. As inclusive agribusiness champions, SMEs put a lot of commitment into building business relationships with smallholder farmers and other suppliers. For Shalem, the brokers/buying agents not only participate in the capacity strengthening activities of smallholder farmers (e.g. they participate in trainings on harvest and post-harvest handling to ensure good quality produce), they are also involved in the distribution of inputs to smallholder farmers. This reduces the perception of them by smallholder farmers as middlemen. The stronger the commitment of buyers and sellers to one another's agribusiness, the weaker the negative perceptions of each other. This is a great lesson for aggregation agribusinesses.

More flexible as champions of inclusive agribusiness: There is less bureaucracy within SMEs as well as less deep seated organizational culture and management hurdles to cross when taking inclusive business e.g. decisions to invest in farmer organization capacity strengthening as surety to facilitate access to finance and high quality inputs and services for smallholder farmers. It is also easier for SMEs to finalize on and disseminate inclusive agribusiness decisions and share ideas and information with local actors.

Ability to give 'voice' to and empower smallholder farmers:

Farmer organization leaders and other major grassroots actors are included in the governance structure of the Psaltry partnership. This has helped to bridge the gap between the partners and has empowered the grassroots actors. The farmer organizations have been able to leverage their 'voice' in the partnership. With the backing of Psaltry and NB they have been able to negotiate favorable supply contracts for inputs and obtain access to government backed loans with modest interest rates.

Challenges

The case for inclusive agribusiness interventions through locally based SMEs is not without its challenges and hard lessons learnt include:

Selection of partners: Selection of inclusive agribusiness partners at any level, including at the level of locally based SMEs is not an easy task. At times, partnerships were initiated that weren't successful. What can we look for in prospective partners to predict the chances of success of an inclusive agribusiness model? This is not an easy question to answer. Assessing a potential partner based on financial, material and human resources is not sufficient. Only once collaboration has begun with a company is it possible to judge the level of motivation and drive to invest in the realization of inclusive agribusiness.

Partners themselves need to be committed to an inclusive agribusiness partnership without being manipulated to do so. In Psaltry and Shalem, organizational attitude towards inclusive agribusiness principles varied depending on who you were working with in the company. The intention to engage in business with the goal of addressing the issues that face grassroots actors, such as smallholder farmers as well as marginalized groups such as women and youth, should be owned by partners. Self-motivated willingness of the partners to participate in the identification and improvement of business relationships with or among the other value chain actors is very important.

Low profit margins of intermediate aggregators, traders and processors offer little opportunity to invest in inclusive agribusiness models: Locally based SMEs are suitable as drivers of inclusive agribusiness with grassroots actors. They may also have the clear goals and honest ambition to develop inclusive and durable supply chains. Ensuring the equitable distribution of benefits accrued within the chain however, can be difficult to follow through. Offering a fair price to suppliers can have uncomfortable impacts on margins and price competitiveness in the market. For Shalem and Psaltry, their investments in inclusive agribusiness principles and service provision to farmers meant that, at times, they had to settle for lower margins compared to other buyers. In a market with competing buyers, companies will seek to recoup the investment in service provision to farmers, such as training in intensification of production, by offering a lower price. This is affecting Psaltry's outgrowers' scheme because the price Psaltry is willing to pay for products from its outgrowers is lower than that offered in alternative markets. Psaltry's rationale for this is that the outgrowers have first received support services through Psaltry e.g. credit, input and tractor service pre-finance. The outgrowers argue however that the services provided through Psaltry are being paid back at an interest rate, making it unjustifiable to pay less for the outgrowers' supplies.



Photo by IFDC

Recruitment of new sorghum contract farmers by Shalem, Kenya

The low prices offered by EABL for sorghum mean that Shalem’s margin is small. Having invested in inclusive arrangements and paying the same prices as other buyers for the sorghum means that the SME makes little profit (and sometimes none). These examples illustrate the dilemma that drivers of inclusive agribusinesses may face in a competitive buying market. Companies investing in credit, training and other types of support for smallholder producers run the risk of not satisfying their supply once they try to recuperate their investments by offering a lower price.

In the Psaltry case, 2SCALE is facilitating communication between the actors to help producers realize that they are in partnership to maintain one another in business, and that the farmers must nurture their joint business relationship with the large off-takers. This means that they need to understand that Psaltry needs to ensure delivery of adequate volumes of starch to NB at competitive prices, to remain competitive. So far, Psaltry’s outgrowers have agreed to give price discounts for the agribusiness as compensation for its investments in technical and business support for them. There are however clear disadvantages in terms of the competitiveness of an intermediate aggregation business when investing in producer support services.

Level of skills and competence in inclusive business management: Becoming drivers of inclusive agribusiness often requires companies to go beyond their core set of skills. Intentional learning and re-learning is required in order to imbibe the mindset that it is possible to win without the other person losing! The knowledge and skills to carry through inclusive agribusiness from the grassroots is still a challenge for Psaltry and Shalem.

Tendency to expect free handouts: Engaging in agribusiness with grassroots actors who are used to receiving subsidies and handouts can be difficult. Managing their expectations of free support is often at odds with inclusive agribusiness ideology. Transforming the mindsets of smallholder farmers to 'think business' can be a challenge. Even though 2SCALE is very clear and strictly demands co-investment by agribusiness partners, at times this issue still comes up in the partnerships with Shalem and Psaltry. To assure significant co-investment in 2SCALE activities by the smallholder farmers as well as the SMEs, 2SCALE invested much effort in the development of appropriate credit mechanisms as local SMEs have to cope with cash flow constraints, and smallholder farmers are perpetually short of cash.

Conclusions

In spite of the challenges mentioned above, 2SCALE is already seeing the replication of this inclusive agribusiness model with locally based SMEs elsewhere. For example, Acila Enterprises, another 2SCALE partner based in Uganda that also aggregates sorghum for the country's breweries, is planning to adopt some of Shalem's strategies for gaining loyal business relationships with smallholder farmers. Experience sharing and exchange programs between different 2SCALE partners and others using this model will encourage replication of the successes (and management of the pitfalls) experienced with Psaltry and Shalem.

2SCALE has supported Shalem to develop workplans which will enable it to access further financing to expand the agribusiness, creating more demand for sorghum. This is expected to increase the number of smallholder farmers supplying sorghum to Shalem, and also to expand the agribusinesses for other actors such as finance institutions and input suppliers. The first steps for increasing the number of smallholder farmers have been made by expanding sourcing to other parts of the country. With support from 2SCALE, Shalem has now expanded to three other counties (Homabay, Kisii and Kati) in Kenya. This will not only involve more smallholder farmers but also other agribusiness actors in those counties. 2SCALE has supported Shalem to carry out mobilization of smallholder farmers in these new regions and also to set up demonstration and training sites for producers.

From the 2SCALE experience it can be concluded that aggregators, be it intermediate traders or processors, are suitable partners in inclusive agribusiness arrangements. In comparison to the large end buyers, such as breweries or other large-scale users, such SMEs have a number of advantages as agribusiness partners with local agribusiness actors. Aggregators are closer to producers and as a result have a better ability to understand and effectively communicate with smallholder suppliers. The intermediate buyers are also fully dependent on the effective and sustainable supply of smallholder farmers for their agribusiness success, and as a result, are obliged to invest in sustaining business relations with them. Finally, the intermediate buyers, by being closer to the smallholder farmers, are better able to build a relationship of trust and business loyalty, which is the foundation of a successful inclusive agribusiness.



Photo by Joris Maatman

Sorghum, Uganda

Building inclusive agribusiness: going one step down the ladder makes a difference



Vegetable production in Ghana

Photo by Joris Maatman

Seeds of growth

The 2SCALE partnership with East-West Seed International

Abalo Adodo

KEY MESSAGE

The partnership with East-West Seed International (EWIT) is an example where a pre-competitive intervention resulted in linking actors of a value chain to one another. As relations were strengthened, the partnership emerged, centred around new business models which contributed to an increase in demand for improved varieties of high quality seed, generating impact on the fresh vegetable sector and paving the way for the sector's growth in Africa.

Introduction

Improved varieties of vegetable seeds are commonly available from input dealer shops in West Africa. However, it is unusual to find a seed breeder company based in the region. Large quantities of vegetable seeds sold in West Africa are imported from Europe and Japan, which are adapted for the climate conditions of the origin country, but not specifically to African conditions. This situation has hindered growth of the vegetable sector in West Africa for some time. With the exception of the dry season in Sahelian countries, which offers climatic conditions more similar to the conditions in the seeds'

country of origin, the situation largely explains the poor performance of vegetable production in the region. Despite this, the vegetable industry in Africa is growing with some interesting examples from Machakos in Kenya to Kumasi in Ghana. In addition, onions and tomatoes grown in Niger and Burkina Faso find their way to coastal city markets, such as Lomé (Togo) and Accra (Ghana). However, vegetable crops from countries along the coast of West Africa and those produced during the rainy season have continued to perform poorly. The performance of the varieties is low and are unable to fulfil the quality and quantity requirements from the (high) end produce markets. This is one of the reasons why actors are not enthusiastic to invest in the development of the vegetable sector. Farmers, in particular, do not invest in adopting innovations and new practices because of the poor return on investments.

At the country level, as well as at the regional (Economic Community of West African States, ECOWAS) level, there are regulations on the import and marketing of certified seeds, including vegetable seeds. The main principle of the policies is to regulate the import and use of improved varieties. However, the introduction of improved varieties at country and ECOWAS level is only allowed following approval. In fact, public services in charge of approving improved varieties should organize, with the seed companies and local input importers, to test and engage in demonstrations proving the suitability of varieties. Theoretically, registration is authorized only when varieties are proven fit for the local climate and bio-physical conditions. However, it is noticed that the variety registration process is not fulfilled by the majority of seed importers. Public regulators tend not to intervene and the policy is not enforced which has paved the way for importing seed of doubtful quality. As a result, improved variety seeds available in input supply shops are often inappropriate for local conditions and have little resistance to local pests.



Photo by Joris Maatman

As a result, when farmers buy these seeds in local shops, they often receive limited information and technical advice on how to use the seeds. Sometimes, minor advice on cultivation practices is provided, but these are often insufficient for farmers to obtain good results in terms of yields and quality of their output (vegetable products). In addition, there is little or no opportunity for farmers to provide feedback to agro-dealers, when they face difficulties using the proposed varieties, and agro-dealers will often put the blame on the farmers and their poor agronomic practices. However, occasionally, it is possible for producers to engage in participatory variety development with breeders to develop varieties truly adapted to the region's conditions.

Some major challenges, but also opportunities to diversify remain as the vegetable sector is still very much focused on tomatoes and onions and much less on other vegetables. In addition, limited priority is given to consumption of fresh vegetables because of consumer concerns on food safety and the lack of differentiated markets with much of the vegetables in supermarkets being imported.

Start of the partnership

Prospective lead partners normally approach 2SCALE with a proposal or a business idea. In this case, East-West Seed International (EWIT) had already expressed an interest in developing varieties suitable for Africa before the launching of the 2SCALE program during a series of round table meetings with the private sector in the Netherlands organized by the Netherlands Ministry of Foreign Affairs and 2SCALE consortium partners. 2SCALE expressed a willingness to leverage funds and approaches from private sector actors interested in investing in food security and agribusiness in Africa. EWIT is a Dutch breeding company with its headquarters in Thailand, which specializes in developing improved varieties of tropical vegetables. In 2012, 2SCALE and EWIT signed a memorandum of understanding to develop successful vegetable agribusiness value chains in selected countries in West Africa. This agreement outlined their roles in developing the partnership, resources (technical and finance) mobilization, and the governance principles of their collaboration. Subsequently, 2SCALE introduced EWIT to the vegetable value chain actors in Benin, Ghana, Mali, Nigeria (since 2012), and more recently, in Côte d'Ivoire (2016) with the goal of developing the vegetable seed market.

Incentives for partners

By entering the partnership, EWIT intended to penetrate the West African vegetable market by expanding a market for its improved varieties of vegetable seeds and developing a network of input dealers who would distribute the seeds to small-scale producers. Banks and microfinance institutions (MFIs) were attracted by the lower risks of crop failure created by high quality seeds used by smallholder farmers from well-known sources. Prior to the introduction of EWIT seeds, farmers bought seeds that were not bred for their specific environment so, when they sowed the seed, it would not germinate and there was no recourse for the farmer as input dealers decline all responsibility.

While every company guarantees germination rate, with the use of EWIT's high quality seed bred specifically for African conditions, expectations were high. Producers were motivated by the possibility of accessing high quality seed which would result in

higher returns on investments, while reducing losses caused by maladapted varieties from unknown sources. Farmers were also trained by EWIT and 2SCALE on the use of the EWIT seed and related inputs, something EWIT has put a lot of effort into. Traders and processors were also attracted by the increased productivity and quality of the vegetables grown from EWIT seed, a strong basis to develop new market options for fresh and processed vegetables. Overall, all actors had the potential to increase their revenues by engaging in the partnership as well as developing activities (e.g. processing, marketing, services) along the value chain.

Partnership at the start

The partnership design took into account what EWIT could offer to the sector. EWIT's value proposition is to develop improved varieties adapted to the climate and pest pressure, with expectations from end consumers (size, shape, etc.) also taken into account. In addition, organized by 2SCALE, EWIT would facilitate training on production techniques and disease control for the actors involved in using improved varieties. Finally, EWIT would support the development of the seed distribution network through business contacts with local importers. It is worth mentioning that EWIT usually works with a few distributors (often just one) per country to control quality and avoid opportunism from dealers who could be tempted to mix the seeds with lower quality stocks. The downside of relying on a single distributor is that seed availability may be a constraint.

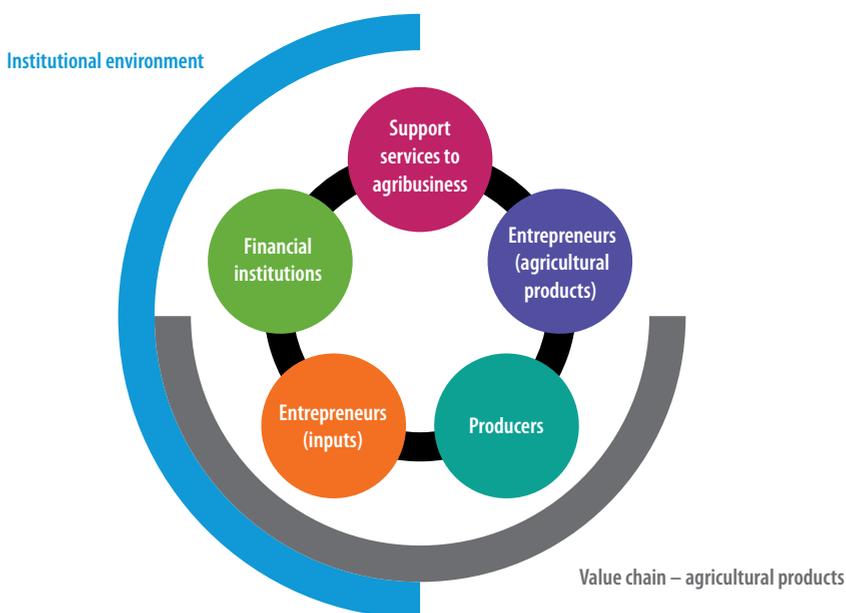
Some of the first activities of the partnership included training on vegetable production techniques and pest management for 2SCALE staff and some of the agribusiness cluster (ABC) actors, such as farmers and business support services (BSS)/coaches, by EWIT staff in Accra (Ghana) and Ouagadougou (Burkina Faso) in 2012. After the training, EWIT/2SCALE organized demonstrations of several EWIT developed varieties in order to select specific well-performing and adapted varieties of different crops for each country and agro-ecological zone.

Table 4 | Examples of countries and selected crops

Country	Crop
Benin	Onion
	Cabbage
	Tomato
	Chili pepper
	Leafy vegetables
Mali	Onion
	Fresh vegetable
Nigeria	Pepper
	Ginger
	Fresh vegetables

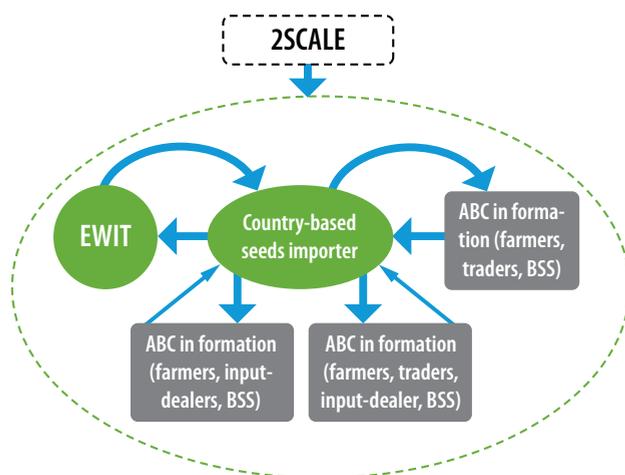
After a number of demonstrations, the selection of priority varieties was completed. Subsequently, EWIT identified and selected one main importer of the selected varieties per country. These importers, who are also distributors with their own distribution networks, were linked by 2SCALE to ABC actors. In addition, relations to BSS/coaches, farmers, locally based input dealers and sometimes traders were fostered through the implementation of the ABC formation model (Chapter 13). The Competitive Agricultural Systems and Enterprises (CASE) approach was used, which promotes agribusiness development focused on three pillars: i) linking actors needed to develop agribusinesses around crops; ii) value chain development around the adopted crop; and iii) the improvement of the enabling environment for this value chain (Figure 11). The rationale is as follows: for farmers to experiment with and potentially adopt new vegetable varieties, a local network at proximity (linking them to fellow farmers, to input-dealers and financial and other service providers) that helps farmers to design and implement collective actions and develop bargaining power, is needed.

Figure 11 | CASE approach



In all countries, it was necessary to get the new varieties tested in a context where the existing vegetable industries had little product specialization and did not seek market differentiation. It was also important to identify a reliable distributor and provide intensive training to the actors to enable them to appreciate the potential of the new varieties (Figure 12).

Figure 12 | Partnership at the beginning of the EWIT-2SCALE collaboration



Business model at the start

EWIT developed improved vegetable varieties suited to tropical production, taking into account climate, seasonality and biophysical conditions. For example, EWIT developed an onion variety apt for the rainy season; a first when it comes to giving the opportunity to producers to use season specific varieties. Before this selected onion variety (Prema) was made available, vegetable farmers generally did not succeed in growing onion during the rainy season. In order for producers to maximize their success, and for EWIT to create market demand in the rainy season, EWIT brought farmers together for training on the varieties, demonstrations on production techniques and pest management. In a bid to sustain this support of technical improvement of the seed users, EWIT set up its own technical staff in the region (one in Ghana and one in Nigeria) who are in charge of providing continuous technical advice to seed users. In addition, EWIT supported the improved availability of seed by identifying and linking users to selected seed importers based in the target countries. The 2SCALE BSS/coaches supported producers beyond the demonstration phase during the production season.

Partnership development over time

Vegetable producers are usually located in rural areas while EWIT seed importers are based in urban areas. 2SCALE felt that having actors close to the farmers would be best – hence the decision to develop rural distributors’ network linked to the importers. The idea was that distributors of rural inputs are generally closer to farmers (than the company or the importer). Theoretically, the distributors and farmers could organize the exchange, order and delivery of specific varieties. However, this has proven to be a challenge because the selected importers were not always best positioned to serve the needs of small producers and distributors’ network that should have been developed are still not functional. For example, distribution has remained largely dependent on the location of the importer and its relation to producers. In Nigeria, the importer was said to mostly target large producers, unable to adapt its strategy to small producers wishing to buy small quantities of seeds. In Benin, the importer was based in the south of the country, with limited access to the

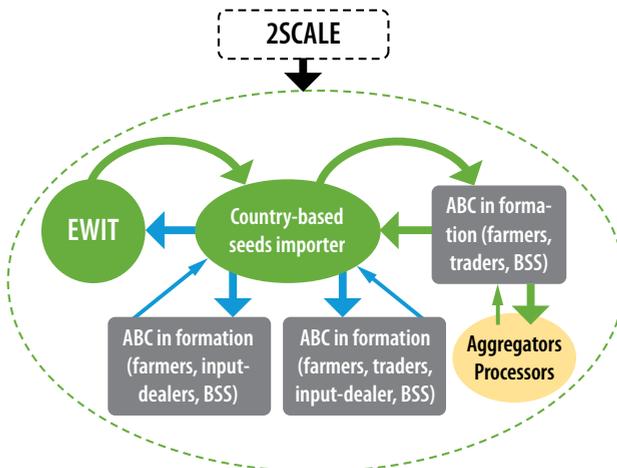
northern market. In Mali, access to improved varieties was more successful because the importer was smaller and more dedicated to serve small producers.

The 2SCALE partnership facilitators integrated other complementary innovations into the demonstration activities in order to increase vegetable productivity and product quality. Drip irrigation, plastic mulch, urea deep placement, integrated soil fertility management, insect nets, trellising, heating of the soil prior to setting up the nurseries and line sowing were among the innovations used in the demonstrations.

Fresh vegetable traders and processors were attracted to locally based agribusinesses and started expressing demands for vegetables because of the notable improvements in quality and productivity of the vegetable producers involved in the EWIT partnership. The increase in fresh vegetable orders created financial needs for some players because of the higher volume of business. Essentially, producers with limited financial capacity needed credit to be able to purchase the necessary volume of seed or equipment. To solve these new constraints, 2SCALE facilitated the integration of financial services (banks or MFIs) within the ABCs. In Benin, a guarantee fund supported by *Association de Lutte pour la promotion des Initiatives de Développement* (ALIDe) and the *Fédération des Caisses d'Epargne et de Crédit Agricole Mutuel* (FECECAM) was set up to enable vegetable producers to access microfinance for their production.

Relations with other actors and service providers in the sector were also actively developed. In Ghana, vegetable traders are attracted by the high quality of the products and especially the possibility of sourcing off-season onions (variety Prema) and tomatoes (Padma variety). The partnership is gradually developing seven ABCs, and has sought relation with Rijk Zwaan (another Dutch vegetable seed supplier) from 2012 to 2014 and is now establishing contacts with a new partner since 2016, SafiSana, specialized in the production of organic fertilizers. In Mali and Nigeria, 2SCALE facilitated new relations with large off-takers, Madougou Sarl and AACE Foods, respectively.

Figure 13 | Development of the EWIT-2SCALE partnership over time



Description of the 2SCALE interventions

2SCALE contributed to the evolution of the EWIT-led partnership through the mobilization and facilitation of interactions between ABC actors: farmers, traders, and BSS for training and demonstration activities. 2SCALE supported farmers and traders to analyze the results of demonstration activities, and to give feedback to EWIT. It linked the identified country-based seed importers to cluster actors, including farmers and other input suppliers.

In Benin, Ghana and Nigeria, the seed importer (which was not a seed sector professional) did not engage in much efforts to reach the north of the country. The 2SCALE program supported EWIT to select additional seed importers in the North of both countries. This resulted in selection of two seed importers for Benin, each specialized for their respective region.

Generally speaking, 2SCALE facilitated the development and formalization of business relationships between actors. Through interactions between banks, MFIs and cluster actors, the program tackled problems related to seed accessibility by developing strategies, such as input credit (including seed), saving-schemes, group orders, and planning seed supplying mechanisms to support farmers. Furthermore, 2SCALE linked and supported the development of business relationships between vegetable farmers and large vegetable aggregators and processors.

Diving deeper into 2SCALE interventions

Market innovation

Improved varieties of vegetable seed acted as the driver for the development of the agribusiness sector. The partnership intervention resulted in higher quality products which, in turn, opened the door for producers to brand their products on the market. In turn, this high quality product is highly sought by the fresh product market actors. Another key aspect of improved varieties is vegetable characteristics, and the possibilities for product differentiation; specific varieties will cater for different consumers offering specific, distinctive and appreciated traits, such as color, size, taste and seasonal availability.

In Benin, 2SCALE conducted tests on the farmer and consumer acceptance of a new leafy vegetable variety, named Kangkong, originally from Asia. The tests proved to be a success with Kangkong seeds growing very well in the targeted zones, which would provide poor Beninese consumers the opportunity to access another nutritious leafy vegetable.

Business relations

The sustainability and strength of the vegetable output market opened opportunities for farmer organizations, but also necessitated improving relations between actors. Capacity building of producers and their organizations was necessary in order to deal with bulk orders from buyers and negotiate advantageous conditions for all.

An important factor in improving producer-buyer relations was the ability of buyers to offer a secure market to producers, which was used as a credit guarantee at banks. The high quality of the seed offered by EWIT, via agro-dealers, also fostered trust with producers who felt that they had accessed a good product.



Vegetable farmer taking care of his field, Ghana

Partnership now and beyond

While the agribusiness partnership driver was, at the beginning, a large international seed company, the partnership created favorable conditions for development of other partnerships around the vegetable ABCs. In some cases, the processors and traders started supporting value chain public-private partnerships (PPPs) under the umbrella of 2SCALE (e.g. AACE foods in Nigeria, and Madougou and Baramousou in Mali) driven by specific market segments. For example, in Mali and Benin, the Prema onion variety results in high quality onions with a long shelf life and good bulb size but, more importantly, it can be

grown in the rainy season and sold between September and December when prices are high. Another example is the tomato traders of Calavi, a commune of Benin, who were able to resume buying tomatoes from commune producers when they began using the 'Padma' tomato variety developed by EWIT. This tomato variety is developed to be naturally resistant to Ralstonia bacteria, which previously prevented any tomato production in Calavi.

While vegetable producers' appetite has grown for these new varieties, there has been important shortcomings in securing access to seeds of the new varieties. EWIT's efforts to develop distribution networks could not keep pace with demand, and their internal re-structuring did not help. In future, it will be important to focus more on local distributors (who often sell different brands and can switch to another supplier if one is not performing and provide alternatives to producers), and less on seed breeders.

Thanks to the Partnership Resource Center (PrC), 2SCALE has launched an action research program in all of the targeted countries, enabling the development of partnership-specific theories of change (ToC). While ToCs were developed from the beginning of the partnerships, with PrC, it was possible to make the changes and impact foreseen at partnership level more explicit. This strategy allowed all partnership actors at country level to harmonize their views on strategic issues, such as the inclusion of vulnerable groups in business, partnership governance, and sustainability of business relationships.

In Benin, Ghana, Mali and Nigeria, the partnerships have developed platforms which are composed of key players in agribusiness development. These are often producers, the main importer connected to EWIT, local input suppliers, vegetable producers, and sometimes banks. The platforms mobilize capital from the partners, and sometimes extend it to players in the value chain for their activities. Beyond 2SCALE, it would be desirable that such platforms continue to exist under the efforts of the sector stakeholders in order to continue coordination efforts and the development of the sector. Developing leadership and ownership among participating stakeholders is key to ensure sustainability.

Conclusions

The 2SCALE strategy for the partnership, in combination with the value proposition of EWIT, contributed to creating the appropriate conditions for a seed market driving vegetable partnerships. **Scale** is achieved through spin-off partnerships, which emerges on the basis of the fresh vegetable produce markets. In essence, the initial focus of the partnership on inputs serves as a starting point for new partnerships to emerge around the fresh vegetable product market and value chain actors.

2SCALE ensured the **sustainability** of partnership activities by designing and executing a training of trainers program. The adopted methodology was the training of the coaches and the improvement of the relationship with embedded input suppliers on seed availability and access. The coaches were also embedded in the clusters as BSS staff, or selected members of farmer groups, or staff of vegetable products buyers. The reason for this is that clusters need to mobilize higher volumes, which led to the involvement of more farmers who need to be trained.

In Mali, BEJO, a Dutch company, has started marketing vegetable varieties appropriate in tropical conditions. Farmers revealed that these varieties were becoming an alternative solution for producers. Through the *Jege ni Jaba* project, funded by the Dutch embassy, BEJO leveraged 2SCALE's PPP and they capitalized on the investment made by EWIT and the 2SCALE partnership. This has fostered complementarity between the interventions and proved that such a PPP really capitalized on the investment to conduct training, demonstrations and building relation with actors, enabling the sector to take off and is now paving the way for other seed companies to become established.

The combination of willingness to develop good performance vegetable varieties, users' interest in the product, combined with capacity building, relationship management and access to services supported solid grounds for market development. It turned out to be an **opportunity** for public actors (national or regional: ECOWAS) to develop a close relationship and strategy with EWIT to start the production of improved varieties of vegetable seed in West Africa, like in Asia and East Africa. The lack of good quality seed was certainly hampering the growth of the vegetable industry; but what made this partnership distinctive is the complementarity of actions between EWIT and 2SCALE. Introducing varieties can be done by seed companies on their own. However, introduction can only be successful when varieties are appreciated and used by farmers. This requires intensive activities (ABC formation, market development), which is costly and may be difficult for a company to do on their own. This why the **complementarity** of actions between 2SCALE and EWIT yielded results. EWIT continues to be committed to developing varieties suited to African conditions. EWIT's commitment to reaching farmers with improved varieties was evident from the result that EWIT scored best in the vegetable seed company category in the Access to Seed Index 2016, which measures and compares the efforts of the world's leading seed companies to enhance the productivity of smallholder farmers. Such a **commitment** was evident and constant from the beginning of the partnership, and has always resonated with 2SCALE's focus of improving small producers' livelihoods and agribusiness in Africa.



Photo by Joris Maatman

Women selling onions at the market, Ghana



Harvesting pineapple, Benin

Photo by Mahamane Toure

Promo Fruits Benin: agricultural producers at the heart of agribusiness development

Eric Lakoussan

KEY MESSAGE

The inclusive development of agribusinesses should put producers at the heart of an initiative. Economic initiatives become competitive and inclusive through the effective integration of producers into the supply chain of processing units. A sourcing system that retains the loyalty of producers must ensure their access to financial services (input credit) and maintain competitive and attractive prices for producers.

Introduction

Pineapple is a widely grown crop in southern Benin thanks to favorable agro-climatic conditions. This demanding, but fairly profitable crop is grown by smallholder farmers, often on plots less than 1 ha.



Photo by Mahamane Toure

Harvesting pineapple, Benin

Confronted with sales problems, in 2000 a group of pineapple producers under the leadership of Dieudonné Alladjodjo started negotiations with the Beninese Brewery Company (SOBEBRA) for the use of pineapple as a raw material in the manufacturing of their drinks. Since the negotiations were unsuccessful, these producers explored other avenues such as the export of fresh pineapple to the European Union (EU). However, the requirements in quality standards did not allow them to enter this market. Moreover, Nigeria, a major producer of pineapples, had a great influence in setting fruit prices in sub-regional and international markets. It was then that the option of processing pineapple juice for the local market appeared to be the most interesting.

In 2001 the group created the Pineapple Recovery Initiative (IRA) cooperative, with a starting capital of US \$5,000, which was mobilized by the producers, and a processing capacity of 200 kg of pineapple per day. Two functions were fulfilled by this cooperative: the production of pineapple fruit and the processing of pineapples into juice.

Promo Fruits

History

With the progressive development of its markets, IRA gradually increased its processing capacity to 5,000 kg per day in 2009. At the same time, it had also expanded its raw material sourcing network beyond members of the cooperative. New pineapple production cooperatives were formed and became suppliers to the cooperative's processing unit.

In 2011, in order to mobilize its financial counterpart from a bank in order to bid for a call of the US-funded Millennium Challenge Account (MCA), IRA was transformed into a company with limited liability (SARL) and 100% of its shares distributed among IRA member producers. The IRA processing unit was transferred to the company, known as Promo

Fruits, for more professional management. The pineapple production component was maintained within the cooperative. With support of the MCA and bank loans, Promo Fruits, still headed by Alladjodjo, was able to install a modern processing line with an automatic fruit processing unit, which produces pineapple juice in cans. With this increase in the company's processing capacity (from 5 to 45 tons per day), the sourcing network also expanded to eight new producer cooperatives, which supply the raw material together with IRA producer members.

The new processing line was designed to target consumers outside Benin because cans are easier to transport than glass bottles, which local natural juices are usually packaged in. In addition, cans are more acceptable for Muslim consumers, who are reluctant to use reconditioned bottles of beer. In 2012, Promo Fruits obtained certification from the West African Economic and Monetary Union (UEMOA) for the sale of its products in the sub-region. It allowed Promo Fruits to penetrate the sub-regional market and double its turnover in 2013.

Business model

The business model of Promo Fruits is based on four pillars:

- 1** The company sources from small-scale pineapple producers in Benin, including 2,580 producers grouped into nine professional organizations (situation in 2014).
- 2** Promo Fruits produces 100% natural juice (with no additives), for which the company has been able to develop a national and sub-regional market. Benefiting from sales prices that are more attractive than other juices in the same quality range, Promo Fruits is able to pay a fair share to smallholder pineapple producers, which improves their income and enhances their participation in the local economy.
- 3** The company offers producers a competitive and incentivizing price, which motivates and retains producers and allows the factory to guarantee its supply.
- 4** Promo Fruits intervenes upstream of the value chain by facilitating the access of producers, who are members of the sourcing network, to an input credit system. A local microfinance institution (MFI) – *Faîtière des Caisses d'Epargne et de Crédit Agricole Mutuel* (FECECAM) – offers a credit facility for the purchase of inputs, which is guaranteed by Promo Fruits' equipment. The company reimburses the credit through a levy when paying producers for the raw material they provide.

Entrepreneurial leadership

Alladjodjo plays a key role in the development of Promo Fruits. In 1994 he created his first agricultural enterprise, specializing in the production and marketing of pineapple, at the age of 17 years, whilst still at high school. Because of the exceptional results, he was selected in 1999 as one of the four best farmers in a national competition. With the award of FCFA 2 million he earned, he grew his farm from 1 to 3 ha of pineapple production.

This self-taught leader, who is closely linked to farmers and knows their realities, has always advocated for producers' best interests. For him, the sustainable development of agribusiness must place producers at the heart of the initiative. All parties must benefit from growth, therefore smallholder producers must be involved in local economic development.

Organization of the sourcing system

The opportunity to process pineapple into juice was seized by the smallholder shareholders of Promo Fruits. Unlike some initiatives that start out like this and end up disintegrating or dying out, here the actors have used group discipline and professional management to expand the initiative. In addition, the company's positioning in a niche market (100% natural juices without additives) and the setting up of a new production line for consumers outside Benin opens the way for more profitability. This has motivated other producers to integrate into the supply chain and benefit from an incentivizing purchase price.

Services to producers embedded in the value chain

In a competitive export environment to the EU, with Nigerian traders selling pineapple and many other small local pineapple processing units, it is crucial for a processing company to strengthen its relations with producers, not only by offering competitive prices, but also by providing services upstream of the value chain. With support of the Non-Cotton Inputs Project (PINC, 2009-2012; funded by the Netherlands Government and implemented by the International Fertilizer Development Center [IFDC]), a tripartite contract was signed between a local financial institution (FECECAM), a fertilizer supplier and Promo Fruits. Promo Fruits organizes the expression of the input requirements of producers in its sourcing network and submits a related request for credit to the financial institution. FECECAM pays the fertilizer supplier, which provides the fertilizer to Promo Fruits, which then distributes it to the producers. Promo Fruits then reimburses FECECAM by levying on pineapple purchases from producers.

Women and youth in pineapple Promo Fruits PPP, Benin



Photo by Mahamane Toure

Promo Fruits and 2SCALE partnership

Origin

Promo Fruits was interested in working with IFDC through 2SCALE as it relied on a business model that integrates smallholder pineapple producers and ensures their participation in the local economy. In 2013, 2SCALE supported Promo Fruits to refine its business plan and facilitated the company's attainment of an equipment loan (US \$800,000) from Oikocredit International. 2SCALE also supported 2,580 small-scale pineapple producers in the Atlantique region in the south of Benin, who are members of the company's sourcing network, to improve their productivity and access input credits.

On the basis of these collaborations, Promo Fruits contacted 2SCALE again in late 2014, by which time it was producing about 5.2 million l of pineapple juice per year that it marketed throughout the West African sub-region (market shares in 2013: Benin: 10%, Burkina Faso: 12%, Côte d'Ivoire: 6%, Ghana: 18%, Mali: 23%, Niger: 15%, Senegal: 11% and Togo: 5%). Commercial relations with new customers were also developing, notably in Nigeria and France (in the latter case for pineapple juice concentrate).

Promo Fruits entered into a partnership with 2SCALE with the aim of expanding regular sourcing of good quality raw material from pineapple producers, who would benefit from an improved income. While expanding its activities, the company also intended to integrate consumers at the base of the pyramid (BoP) into its clientele.

Key actors

All value chain stakeholders (producer organizations, input suppliers, Promo Fruits, packaging suppliers, transporters, microfinance institutions [MFIs], agricultural services, etc.) have joined forces in the IRA Pineapple Juice Innovation Platform. Created in June 2014, this platform is a multi-stakeholder consultation framework, which aims to strengthen the coordination of activities and improve the performance of the pineapple juice value chain. The platform is registered with the relevant authorities and its chairmanship is provided by IRA. The innovation platform also recruited specialized technicians, including agribusiness coaches, to support the technical supervision of pineapple producers.

Ambitions

The shared ambition of Promo Fruits and 2SCALE is to increase the income and living standards of 10,000 smallholder pineapple producers and their workers by increasing agricultural productivity by 30% and improving access to markets. Another ambition is to improve the nutrition status of poor consumers by providing a product that is affordable for them.

Considering the increase in market demand and new market opportunities, particularly in France and Nigeria, Promo Fruits plans to triple its processing capacity by purchasing new equipment, which will reduce processing costs. As part of this expansion, the company also plans to diversify its products. As well as producing juice in cans, it wants to produce juice in different packaging (aseptic bags or carton packs) for various categories of clients (aseptic bags for repacking and filling by other processors; carton packs for BoP consumers).



Photo by Mahamane Toure

Women and youth in Promo Fruits-PPP, Benin

Therefore, the company must guarantee a regular supply of high quality pineapples from smallholders. At the beginning of the partnership, pineapple producers obtained relatively low yields (35 t/ha compared to a potential 75 t/ha). They were unable to supply fruits according to the required quality standards because they did not master some key technical operations. The fact that the producers do not properly select quality ratoons prevents them from growing big fruit. Poor fruit harvesting techniques, as well as transport conditions, also affect fruit quality.

Finally, the lack of mastery of floral induction techniques (TIF) by producers and farm laborers distorts the plant's programming and lowers its processing efficiency. It should be noted that the company communicates sourcing schemes to producers. Producers are then able to start TIF operations to provide the requested quantity at the required time. The non-application of TIF causes the producer to deliver below the company's forecasts.

2SCALE interventions

Upgrading of the Promo Fruits processing facilities

In upgrading the processing facilities of Promo Fruits, 2SCALE facilitated the development of a business plan and connected the company with Oikocredit International to negotiate an investment loan (US \$2,000,000) on favorable terms (i.e. with an interest rate of 8%). The company also obtained support from other partners, such as the West African Economic and Monetary Union's Office for restructuring and upgrading enterprises (BRMN – US \$200,000 for material support and US \$100,000 for technical support) and the EU (US \$60,000 for the implementation of the Hazard Analysis Critical Control Points system [HACCP]). The total investment made by the company was US \$3,470,000 (including its own financial resources).

This funding allowed for the improvement of the Promo Fruits' processing equipment (e.g. for the production of juice concentrate and carton packaging) and core processes, according to HACCP requirements. The processing capacity increased from 45 to 100 tons per day and processing costs were reduced by 20% and losses by 3-10%. The new equipment has also reduced the manual work involved in processing and packaging the juice, and working conditions for employees have been improved with the construction of dormitories and separate bathrooms. Finally, with this increase in processing capacity, the regular supply of raw material and the diversification of its products and distribution network, the company almost doubled the volume of juice marketed from 5.2 to 11.5 million l of juice per year.

The alignment of producer organizations with the Promo Fruits business model

In order to allow pineapple producers to meet the quality standards demanded by Promo Fruits the IRA innovation platform recruited 27 technical specialists who were assigned to the nine producer organizations. These technicians ensure the technical support of producers and farm laborers for the success of technical operations, such as varietal purification, TIF and harvesting techniques, which impact the yield and quality of the pineapple fruit. 2SCALE also facilitated the development and implementation of a training and coaching plan for pineapple producers, and funded the development of demonstration plots. These activities have resulted in yield increases of more than 57% (from 35 to 55 t/ha) and improved pineapple quality (63% of pineapple delivered to the company now meets the quality requirements).

2SCALE also supported the innovation platform to organize awareness campaigns to identify and mobilize other pineapple producers, including vulnerable producers (such as women and youth). Field meetings with old and new producers were facilitated by the technicians and the leaders of the Platform to (re-)explain the sourcing system, the expectations of Promo Fruits and the benefits for the producers. Thereafter, more than 12,000 farmers and agricultural workers joined the value chain, of which 3,715 were producers, which consequently increased the volume of pineapples delivered to the plant from 11,200 to 21,500 tons per year.

Promo Fruits also continued cooperation with producers for access to input credit. In 2016, the platform carried out a diagnosis on the inclusiveness of the credit system. The diagnosis revealed that the credit system only touched about 1,000 producers, 10% of whom were women, while the number of producers and agricultural workers represented by the innovation platform was about 12,000. Thus, the majority remained excluded from this financing scheme because they did not meet the conditions and criteria of the financial institutions currently involved. In order to overcome this situation and allow for enhanced financial inclusion, 2SCALE has supported the creation of a financial structure, managed and supported by platform members, which respects regional and national regulations on decentralized financial services. Producers have already subscribed to shares in the savings of the credit cooperative (*Coopérative d'Epargne et de Crédit pour la Relance Agricole*, COOPEC-RA), whose statutes and internal rules as well as its business plan were adopted in May 2017 at its constitutive general assembly.

Capacity strengthening for leadership and multi-stakeholder coordination

Technical support to pineapple producers is a service provided by the IRA innovation platform, which recruits specialist technicians and manages them. The financing of these services is guaranteed through a levy system operated by Promo Fruits on the purchase price paid to the producers. This system will replace the current wage subsidy by 2SCALE. The flat-rate levy system (FCFA 2.91/kg) is co-managed by Promo Fruits and the producers' organizations. The acceptance of this levy was made possible by the increase in pineapple yields. Input market surveys were also organized and led to the collective purchase of agricultural inputs with the financial support of Oikocredit International.

Management of the platform and its member producer organizations has been professionalized with support from 2SCALE. For example, through the compliance of agricultural cooperatives with the Organization for the Harmonization of Business Law Standards in Africa rules, the updating of administrative and financial management tools, and organizational self-assessments. At present, the platform and member cooperatives regularly hold statutory meetings and general assemblies.

The leadership of the platform is confirmed, among other things, by negotiating affordable interest rates for credit to producer members (which has resulted in decreases of 24% to 12% with FECECAM and 10% to 8.75% with Oikocredit); as well as through the platform's facilitation of a smoother transport and delivery process for pineapple fruits (i.e. the harmonization of transport prices, invoicing of transport prices per ton and use of a weighbridge at the processing plant).

Diversification of consumer-friendly products the BoP

In 2015, Promo Fruits, with the support of 2SCALE, conducted a rapid market study to identify major trends in fruit juice consumption among low-income consumers. These consumers are found in various sectors, such as primary and secondary education (students), the army (soldiers) and craft centers. People tend to buy drinks on the street, in open markets and at schools. They prefer pineapple juice with the following characteristics: packed in cartons, bags or bottles of 200 to 500 ml, natural and cooled juice, costing between FCFA 100 and 200 per unit. As a result of this study, three proposals for selling the juice were developed and tested for four months to assess which options were the most effective for propelling sales in this market segment: 1) in pushcarts with sandwiches; 2) in pushcarts without sandwiches and 3) with cargo bicycles.

It was found that pushcarts with or without sandwiches were most suitable for the sale of juice in urban areas and that tricycles were more efficient in the more distant rural areas for reaching low-income consumers. The test also showed that juices in bio-degradable bags (150 ml), cartons (200 ml) and cans (250 ml) can be properly marketed through these channels.

In view of these results and with the commitment of Promo Fruits to conquering this market segment, 2SCALE is currently supporting the company to obtain financing for the scaling up of the pilot.

Opportunities to improve competitiveness

Promo Fruits bases its competitiveness on solid business relationships with producer organizations, which are the basis of the value chain. However, with the arrival of a new pineapple processing unit, competition for sufficient supply is increasing and requires innovations by all the actors of the IRA Pineapple Juice Innovation Platform. Opportunities to innovate and improve competitiveness include:

- The producer payment system. Payment is currently done through the only bank in the town of Allada and involves the risk of carrying large sums of money over long distances. Mobile payment systems, offer a more secure alternative with local terminals located near producers.
- Tailored fertilizers and other inputs. The inputs currently used for pineapple cultivation are not crop specific. The platform could take the lead in the research and development of specific inputs, and facilitate access to and the distribution of these inputs.
- Use of post-harvest pineapple waste. This could be used for the production of biogas to supply the boiler in the processing plant and, thus, reduce processing costs.

Lessons learned

The leadership of Alladjodjo is considered to be one of the keys to the success of the Promo Fruits business model. The creation of a pineapple fruit processing company – with producers as shareholders – which is managed professionally by Alladjodjo, has facilitated the implementation of an inclusive agenda through the development of a sourcing system from smallholders. However, this leadership model raises risks associated with over-reliance on a single individual.

In the pineapple sector in Benin, where processors and traders compete for sourcing from smallholders in a relatively small area that is suitable for pineapple cultivation, sourcing



Photo by Mahamane Toure

systems need to embed services for smallholders in order to enhance loyalty. Promo Fruits has played a decisive role in the services provided to producers upstream of the value chain (e.g. via access to input credit). It also incited the company to expand the market for pineapple juice, lower processing costs and reducing losses during processing, in order to offer a competitive purchase price to producers.

The creation of a multi-stakeholder innovation platform has not only helped to make the management of the value chain more transparent, and highlight the converging and divergent interests of various stakeholders, but also stimulated technical and organizational co-innovation in the value chain in order to maintain the competitiveness of the value chain end products.

Transport of pineapple, Benin



Photo by Mahamane Toure



A vegetable farmer representative who is on the management committee of the vegetable PPP in Mali

Photo by 2SCALE

Partnership governance

Raphaël Vogelsperger, Eric Lakoussan and Addis Teshome

KEY MESSAGE

Public-private partnerships (PPP) have proved to be a useful means to foster inclusive agribusiness. However, the way these partnerships are governed is critical for their success in strengthening inclusiveness as well as the competitiveness of the agrifood value chains. Partnership governance arrangements must be explicit, adapted to each partnership setting, systematically implemented, adjusted whenever needed, and progressively embedded in local networks.

Introduction

Practitioners in agrifood value chains tend to focus on field level interventions to reduce constraints such as low farm productivity, farmers' weak linkages to markets and the limited access to finance of farmers and local entrepreneurs. The 2SCALE program supports such interventions through partnerships with private actors, as a means to strengthen inclusive agrifood value chains. Besides field level interventions, the way partnerships are governed is critical for their success in strengthening inclusiveness as well as the competitiveness of the value chain.

Partnership governance raises several questions that will be addressed in this paper. Why are explicit governance arrangements so important? How do governance mechanisms

work? How are they implemented? How can the partnership governance contribute to inclusiveness? What are the requirements for an effective inclusive partnership governance? And, how can this evolve?

Why did 2SCALE introduce governance arrangements in its PPPs?

A PPP supported by 2SCALE always involves a private lead partner (a local agribusiness champion or a lead firm) and 2SCALE. Others, including farmer organizations, may also be included in the formal partnership agreement, provided they also adhere to the mission of the partnership and leverage resources.

Partnership governance refers to more than the traditional scope of a steering committee. While both relate to the processes for making and implementing decisions, partnership governance also includes relationship building between those directly involved in the partnership and the other value chain stakeholders and it includes mechanisms to balance the powers of all stakeholders involved in a partnership. As stated in early human history: “The poor man who enters into a partnership with one who is rich makes a risky venture” (Plautus, Roman tragicomedy writer, 254-184 BC).

In most partnerships supported by 2SCALE, power asymmetries due to different levels of access to information, finance, networks and expertise are initially strong. For a smallholder farmer representative, sitting in a board room with executives of a multinational company may be intimidating. But with fair governance arrangements in place smallholder farmers and other vulnerable groups can voice their concerns, share ideas and contribute to the ability of agrifood enterprises, and other key actors who drive the value chain, to make sound decisions.

Through its portfolio of PPPs, 2SCALE has learnt the importance of governance arrangements in agreeing on priority interventions to strengthen an inclusive business model, track progress, ensure a steady flow of information among partners with effective feedback loops, make operational decisions, and adjust partnership strategies when needed.

Without explicit arrangements, misunderstandings and tacit divergences may accumulate over-time and, at some point, emerge and create bottlenecks in the partnership. If the lead firm makes decisions alone, specific interventions, such as the technical training of farmers, will most likely be given priority at the expense of other interventions, such as those focusing on soft skills. As a consequence, the whole partnership may shift away from its inclusive agribusiness ambition. The lead firm might also change its business model to exploit new opportunities and restructure staff or operations; or it might have difficulty managing the growing expectations of local actors or sudden changes which affect the relations in the value chain. More broadly, short-term agribusiness requirements may overtake the longer-term societal impacts expected from the partnership.

While a PPP must allow each private actor to deliver bottom line results, 2SCALE's role is also to ensure the terms of inclusion of vulnerable actors (e.g. smallholders, women, youth) are effective and fair and that the interests of all stakeholders are pulled in the same direction, aligned with the partnership's theory of change (ToC). Therefore, 2SCALE introduced governance arrangements in the PPPs it supports to foster inclusiveness in

decision-making and the management processes of partnerships. Effective governance is all the more important at the beginning of a partnership, when actors do not yet automatically think in terms of finding a balance between competitiveness and inclusiveness, and when stakeholders are not yet used to working together. In the beginning 2SCALE also often plays a pro-active role in 'voicing' interests of the 'excluded'. Later on, also for reasons of sustainability, it becomes essential that these stakeholders also get on board, and effectively participate in decision-making. But how are these governance arrangements built and implemented?

How do partnership governance arrangements work?

From screening to partnership agreements

The initial proposal for a partnership with 2SCALE comes from a private agent: a local *champion*, like a farmer cooperative engaged in input provision; or a *lead firm*, like a national African processing company or a multinational subsidiary. The partnerships aim to support champions or lead firms to mainstream an agenda to strengthen inclusiveness, while at the same time develop more efficient value chain relations. The PPPs are additional to regular business operations and allow agribusiness cluster (ABC) and value chain actors to take risks by investing in new products and processes, or by co-developing initiatives, in which they otherwise would not have ventured.



Photo by 2SCALE

BOX 13 | THE 2SCALE PPP PROTOCOL

The 2SCALE PPP Protocol briefly describes the two archetypes of PPPs that 2SCALE distinguishes: agribusiness cluster PPPs (ABC-PPPs) and value chain PPPs (VC-PPPs).

ABC-PPPs are partnerships at the ABC level, with smallholder farmer groups or cooperatives and other rural enterprises, as well as business support and financial services providers. ABC-PPPs are initiated by a local agribusiness champion (i.e. a farmer group/cooperative, processor, trader or retailer), in collaboration with relevant other actors that actively participate in the cluster, and with 2SCALE.

VC-PPPs are partnerships at the value chain level, with so-called lead firms directly or indirectly serving or sourcing from smallholder farmers. These lead firms operate at international, regional or national levels and have no direct physical presence at the grassroots level (i.e. where the ABCs are). Often these lead firms are large-scale enterprises. VC-PPPs are initiated by the lead firms and co-developed with 2SCALE. Grassroots actors may or may not be involved in the initial stages.

For each of these archetypes, the PPP Protocol proposes a roadmap that leads to its formation and documentation. The document also provides guidelines on the monitoring of PPPs, and more specifically discusses how contributions from private sector partners and public funding sources are measured and monitored.

The partnerships are not the end goal per se, but rather a means to foster inclusive agribusiness, through an emphasis on two principles:

- **Leadership** – private partners are the owners of the interventions and in the driving seat of partnerships;
- **Collaboration** – 2SCALE doesn't handout a subsidy, but actively participates by providing brokering, networking and capacity strengthening expertise for a temporary period.

Partnerships are most often forged between one private lead partner and 2SCALE. In some cases they can involve several key partners from the start. This was, for instance, the case in the cassava partnership in Nigeria established between Psaltry (a local processor of cassava tubers into starch), Nigerian Breweries/Heineken (the end buyers of cassava starch) and 2SCALE; or in the citrus partnership in Ghana established between Fruittiland (a local fruit juice processor), Verbruggen Juice Trading Sustainable Products (a Dutch juice concentrate importer), Fair Trade Original (a Dutch foundation marketing fair-trade products) and 2SCALE. Whatever the number of parties, screening partnership proposals and assessing their inclusive business agenda is a complex process that follows steps and criteria developed by 2SCALE in a so-called 'PPP Protocol' (Box 13).

2SCALE aims to only partner with lead firms and local champions that strive to develop long-term relations with smallholder farmers, rural entrepreneurs and/or base of the pyramid (BoP) consumers. The lead firms and local champions must also intend to co-design and develop inclusive business models and there must be engagement by such private partners.

This engagement is formalized by 2SCALE either through a multi-year partnership agreement with a lead firm (and its co-partners in the case of multi-partite agreements), or through annual cluster action plans and related sub-grant agreements in the case of partnerships driven by local champions, like women cooperatives or local farmer organizations.

Governance arrangements in partnership agreements

Governance arrangements do not emerge spontaneously and specific efforts are needed to make them explicit from the start in written agreements. No single governance model is prescribed; rather, the arrangements are adapted to each partnership depending on specific circumstances, such as the level of organizational development already achieved (e.g. presence of an umbrella association representing farmers), or the presence of other key actors in the value chain (e.g. aggregators).

Although there is no blueprint, a regular arrangement for partnerships with large companies comprises of three structures as explained below:

- **A field team**, composed of technical field staff from the lead firm and 2SCALE, who implement field activities as agreed in a joint annual value chain development plan. This team is in daily contact with grassroots actors, such as farmers (men and women) and their professional organizations, local processors, transporters, local financial institutions, agro-input dealers, and business service providers which form ABCs. The field team prepares a monthly activity report covering the objectives, activities undertaken, achievements made and challenges faced. The monthly activity report is circulated among all members of the management committee and the strategic oversight committee.
- **A management committee**, composed of medium level managers of the lead firm and 2SCALE. Depending on the partnership, representatives of farmer organizations, aggregators or other key actors in the value chain may also be members. The management committee meets quarterly with the field team and farmer representatives from different clusters. During these meetings, participants review the progress and challenges of the joint value chain development plan, share relevant information from the field and in the industry, and take operational decisions as needed. One of the members writes minutes and shares them with all participants and with the strategic oversight committee. The minutes include up-to-date data on key performance indicators of the partnership, e.g. the volume of produce supplied, quality criteria, prices paid to farmers and the number of farmers (men/women) reached. The management committee also prepares: i) the annual value chain development plan; ii) the annual cost-shared budget; and iii) the annual evaluation note, which are submitted and approved by the strategic oversight committee each year.
- **A strategic oversight committee (SOC)**, composed of senior managers of the lead firm and 2SCALE, and most often, an executive of the farmer organizations. The SOC meets face-to-face once or twice a year. The meeting includes the management committee and the field team. Participants review the overall progress of the partnership, discuss strategic points and make strategic decisions for the partnership. The SOC reviews and approves the annual value chain development plan and budget, as well as the annual

evaluation note. These structured meetings are complemented by *ad hoc* meetings (face-to-face and phone/Skype calls) whenever needed, to address specific challenges pertaining to the partnership.

For partnerships that do not involve large companies and are led by African small and medium-sized enterprises, the management committee and the SOC are sometimes merged, but formal and structured meetings with written minutes remain essential to facilitate joint decision-making processes.

Unless a partner faces financing difficulties (e.g. in the case of important transport costs) and requires 2SCALE's exceptional sponsorship, each partner pays for its own costs to participate in governance meetings, and the hosting rotates, so that each party contributes equally and takes the lead in the organization of meetings.

Governance mechanisms are also put in place in partnerships that are built around local business champions, such as farmer organizations. In such cases governance takes place mainly at the ABC level (farmers, local traders and processors, agro-input dealers, business support service (BSS) providers, local financial institutions) to reach agreement on a long-term strategy for a joint cluster action plan and to monitor the progress of its implementation. Additional governance structures can progressively emerge, which regroup several ABCs, or at a value chain platform level.

Whether a partnership is driven by a lead firm or by local business champions, writing governance mechanisms into agreements is just a first step: they must then be implemented. In ABCs, strategies and related interventions are discussed and validated during governance meetings that lead to the development of a cluster action plan. In the case of the Liben Farmers' Cooperative Union (FCU), the restructuring of the partnership and a revision of the governance structure enabled actors to benefit more from the partnership interventions (Box 14).

In partnerships with lead firms, while the joint objectives set in the partnership agreement are most often ambitious, the partners are always eager to begin concrete field activities

BOX 14 | RESTRUCTURING THE POTATO PPP WITH THE LIBEN FARMERS' COOPERATIVE UNION IN ETHIOPIA

The partnership with Liben FCU and 2SCALE was established in 2014. However, the key cluster actors did not show the level of commitment expected to realize the partnership's targets. In 2016, the partnership was restructured in order to set up an appropriate functioning governance system. Among other things, this involved setting a fixed time and place to conduct governance meetings with a constant group of members. In addition, formal minutes of the meetings were recorded and each participant had to sign their attendance at the meeting. The formalization of the governance systems created a greater sense of ownership and accountability among participants in regards to the successes and failures of the partnership. As a result, the partnership has brought more success in one year than it did in the previous two years.

very quickly to help them get to know each other in actual situations, build trust, and learn by doing. This 'think big, start small' approach is also often reflected in decision-making processes: at first, deliberations are made jointly between the lead firm and 2SCALE and initial governance meetings usually take place during the first joint field visits, with a flexible agenda. Farmers are most often not fully involved from the very beginning. This pragmatic approach is okay as a start, as in a competitive business environment decisions must be taken quickly and should give a kick-start to the partnership interventions. 2SCALE's role, however, is to ensure that efficiency doesn't come at the cost of equity and inclusiveness.

How inclusive are PPP governance arrangements?

Smallholder farmers

Partnership interventions involve and affect numerous other actors at local level (ABC) and at regional level (value chain), all with different ambitions, strategies, business models and interests. Not all stakeholders can be involved in governance structures, but the primary beneficiaries (smallholder farmers) must be represented, and the sooner the better. Therefore, as a partnership develops, governance arrangements are refined (if needed) to ensure the inclusion of smallholder farmers and other key stakeholders.

One example that illustrates this orientation towards better inclusiveness comes from the cassava partnership in Nigeria (Chapter 5). The local processing company Psaltry, and Heineken's subsidiary, NB, partner to source cassava tubers in south-west Nigeria. Psaltry processes the tubers into starch, which is further processed into maltose syrup by NB before being incorporated into some of its drinks. To develop an inclusive supply chain with thousands of smallholder cassava farmers, Psaltry and NB/Heineken partnered with 2SCALE. When field activities started in 2014, the partners organized several meetings, mainly in the field with cassava farmers, to kick-off interventions. During their first fully indoor meeting, at NB facilities in Lagos in February 2016, the partners decided to re-organize their governance mechanisms to improve and structure the flow of information among them, to shorten feedback and decision-making processes, and to ensure farmers have a formal channel to provide feedback, make suggestions and contribute to decisions. Since then, the management committee involves the field team and at least three farmers from three different cassava clusters. In addition, a cassava outgrower representative sits as a full member in the SOC of the partnership, along with representatives from Psaltry, NB, Heineken and 2SCALE. The contributions of these farmer representatives allow farmers' viewpoints to be taken into account at the management committee- and SOC level, and also serve as an interface between these partnership structures and farmers at the grassroots. Formal integration, in this case of smallholder farmers, doesn't come only with rights but it also involves responsibilities including willingness to leverage resources for joint actions.

The inclusion of grassroots actors in partnership governance structures with lead firms can be slowed down when a lead firm is not at ease with the growing expectations that these actors express and their influence on its business model. This concern progressively lessens as trust develops. Also in some cases (e.g. with some multinational companies), different departments of the same company may have different levels of commitment to the inclusiveness agenda, which in turn affects the level of engagement in the partnership governance.

But even when the formal integration of farmers in governance structures with lead firms takes more time to be accepted or implemented than hoped, alternative mechanisms are possible to ensure the viewpoints of farmers are taken into account during deliberations around the strategies and tactics of the partnership (Box 15).

Some partnership governance structures are inclusive from the start thanks to the background of the lead partner. The processing company Promo Fruits built its business model on a pineapple farmer cooperative in Benin, with a former young farmer as a general manager (Chapter 7). Its value proposition consists of offering cooperative members another market than the uncompetitive export of fresh fruit. Instead of being exported the fruits are now processed into juice and exported and consumed on the domestic market. By processing the fruits into juice and through a strong marketing strategy (from packaging to branding, targeting different market segments and distribution within and outside Benin), Promo Fruits offered pineapple farmers a new market. Over time the farmer base grew to 3,700 cooperative members, supported by about 8,300 farm laborers and organized in nine cooperatives. Due to this strong initial relationship between Promo Fruits and small-scale pineapple farmers, the governance arrangements set in the partnership agreement included, from the start, a multi-stakeholder platform. This platform acts like an inter-professional body affiliated to Promo Fruits, advising a management committee on the development of the partnership. It includes not only representatives of the nine farmer cooperatives, but also transporters, financial institutions and other value chain actors. The multi-stakeholder structure has proved to be critical in some decisions by the partners, such as the setup of a levy system on each kilogram of pineapple purchased from farmers by Promo Fruits to establish a fund for financing the training and coaching services provided to the farmer cooperatives.

BOX 15 | INCLUSION OF FULANI MILK PRODUCERS IN GOVERNANCE ARRANGEMENTS IN NIGERIA

The so-called 'core partners' of the Nigeria Dairy Development Program – Royal FrieslandCampina, its Nigerian subsidiary FrieslandCampina WAMCO (FCW), the Nigerian Federal Ministry of Agriculture and Rural Development (FMARD), and 2SCALE – meet face-to-face twice a year to review the program's progress and validate the following year's joint value chain development plan. 2SCALE's focus on inclusiveness helped engage Fulani milk producers in the planning process. Prior to May 2014, 2SCALE organized pre-meetings with Fulani communities in dairy clusters. Feedback from these pre-meetings was shared and discussed during the core partners' meeting, helping to inform decisions. The inclusion of feedback in the decision-making process was much appreciated and the core partners, therefore, decided to systematically organize such exchanges with farmers the day prior to the formal meeting. All core partners spend one full day in the field, with farmers and other stakeholders (vet service providers, transporters, feed suppliers, community livestock workers, etc.) to interact with them and get their inputs on the program's progress. In 2016, this went a step further, with the organization of separate meetings with Fulani men on the one hand and Fulani women on the other hand, to give women more opportunities to speak up – which they were reluctant to do in the presence of men due to social pressures.



Interactions with Fulani during a core-partners governance meeting in the dairy partnership, Nigeria

Women

In all value chains, although to varying extents, women face challenges to becoming fully integrated and access the same opportunities and benefits as men. As an incubator for inclusive agribusiness, 2SCALE encourages its partners to take extra measures to ensure women are well represented in governance arrangements (Box 11). Including women in governance allows the partnership to be more effective and equitable: it diversifies and enriches reflections and points of view in the partnership planning and decision-making processes, but it also gives a voice to female stakeholders (e.g. as farmers and farm laborers, as local processors and micro-entrepreneurs, as traders, as buyers of foodstuff and as decision-makers of household diets), who face specific gender-related challenges in the value chain. Although 2SCALE works with successful women entrepreneurs and women farmer groups that are assertive and vocal, they remain the exception. Affirmative action measures, like participation quotas, need to be taken to guarantee women's participation in partnership decision-making processes. In the vegetable partnership in Mali (Chapter 6), where women represent about half of registered farmers and drive key elements in the value chain, 2SCALE recommended to the actors involved, that each cluster be represented in the management committee by a duo composed of either a man and a woman, or two women. As a result, 70% of the current members of the management committee are women. The strong representation and participation of women in 2SCALE-supported PPPs has attracted attention from various stakeholders, including of the Ethiopian Minister of Agriculture and the Federal Cooperative Agency, which awarded 2SCALE/International Fertilizer Development Center (IFDC) for their capacity building efforts (Box 16).

BOX 16 | FACILITATING THE INCLUSION OF WOMEN IN AGRIBUSINESS IN ETHIOPIA

Yirgalem Aniyew, Director of the Federal Cooperative Agency in Ethiopia, noted that substantial progress had been made in 2016 in 2SCALE-supported partnerships, largely thanks to the partnerships' emphasis on farmer empowerment. She particularly commended the project partners for ensuring that women participated in governance meetings. "There is no other NGO project like this. . . we must use this project to improve the situation in our country," Aniyew said. In 2017, the Ethiopian Minister of Agriculture and the Federal Cooperative Agency awarded 2SCALE/IFDC a prize as the best capacity builder/project of the year. The Head of the Cooperative Agency noted that, "2SCALE is awarded the trophy not for the amount of money it has put into [the project], but rather it is for the fact that it has shown the government and development partners a better way of promoting market-oriented inclusive agribusiness with relatively limited funding."

The role of public authorities

Local and national public authorities can also be involved in partnership governance processes. Public authorities play a specific role in Ethiopia from the start of a partnership, and contribute to pushing forward the partnerships' gender agenda, as well as their alignment with other public intervention priorities. Every year public authorities 'validate' action plans and other outcomes of partnership level governance meetings. For instance, 10 partnership review meetings were held in November 2016, organized by farmers' cooperative unions and attended by farmers' representatives (e.g. leaders of primary cooperatives), ABC actors and lead firms. The meetings reviewed the progress made in 2016 and elaborated plans for 2017, with farmers providing the key inputs. These meetings were followed by regional level meetings, chaired by government decision-makers (federal and regional government cooperative agencies), and again involving lead firms, farmers' representatives and ABC actors.

In Nigeria the Federal Ministry of Agriculture and Rural Development (FMARD) is a party in the dairy partnership and as such a member of each governance structure. This allows FMARD to ensure the partnership is aligned with the government's strategy and policies for transforming the dairy sector (Box 15). In addition, this participation leads to a better understanding by the government of the challenges faced by the partners and makes requests for support to public agencies easier.

What capacities of partners are required for effective PPP governance?

Trust is key to effective and efficient value chains. Trust is also important in partnership governance, and builds on transparency and open communication on topics relevant to the inclusive business model strengthened through the partnership. Like in the case of the dairy partnership in Ethiopia, 2SCALE has facilitated a mutual understanding of actors' individual and joint interests, and contributed to building trust between partners (Box 17).

All participants in governance meetings are also expected to have a constructive business mindset and be capable of empathizing to understand each other's situation. This condition is necessary for the mutual appreciation of the different partners' capacities and for the

BOX 17 | TRUST IN THE DAIRY VALUE CHAIN IN ETHIOPIA

The level of trust among the lead firms, Alema Koudjis Feed (feed supplier) and Family Milk (dairy processor), and dairy farmers was the critical factor during the brokering stage of the partnership's business relations within the dairy value chain. Alema Koudjis Feed needs to trust Family Milk since the processor distributes its feed to farmers on a credit basis, and Family Milk must trust the farmer organizations to repay the credit for this feed. In turn, farmers need to rely on the processor's ability to off-take the surplus milk, especially during the fasting periods. Initially Alema Koudjis Feed pushed for large volumes of feed to be distributed, while Family Milk preferred to distribute feed little by little in order to reduce credit default risks. This created some tension between the agribusiness partners, but after mediation by 2SCALE, both firms understand the need to operate with an agreed volume of feed without harming each other's business.

co-creation of innovative and context-sensitive solutions. For instance, it is important that farmer representatives have access to market information (prices, trends, etc.) and understand the alternative sourcing options of an off-taker. It's similarly important for an off-taker to know and understand the detailed production costs of farmers, not only to negotiate fair prices, but also to agree on appropriate interventions that can improve farm productivity in the specific context of the partnering farmers. The combination of access to information, a business mindset and trust reduces conflict and allows for constructive deliberations during partnership governance meetings. For this to happen, another requirement is that the environment of meetings is conducive to all parties (especially women and young smallholders) so that they are able to speak up confidently.

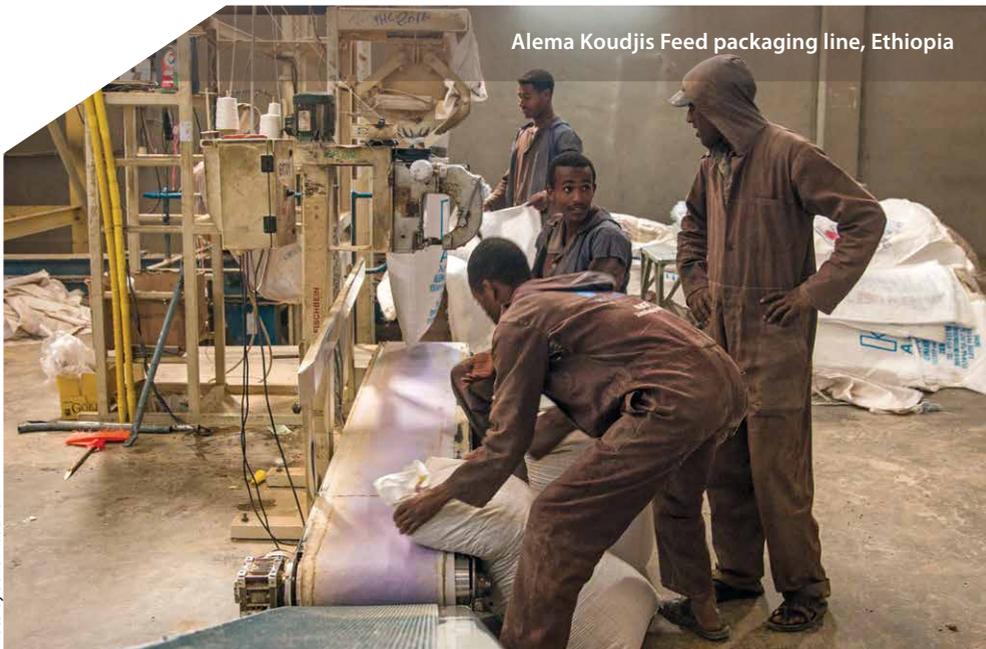


Photo by Joris Maatman



Photo by Mahamane Toure

Sesame PPP partners, Mali

Partners do not have all of the expertise to make appropriate decisions. Therefore, they must remain flexible and open enough to invite new stakeholders (e.g. a new major financial institution) to become resource providers or full members of the partnership as it develops.

Moreover, it is essential that representatives of the farmers and other grassroots actors really have the mandate and the capacity to represent them, which in turn requires that local organizations are professional (i.e. democratically structured with active leadership and feedback loops). In some cases, this requirement has triggered a re-structuring of grassroots organizations, for instance in Nigeria, where the lack of coordination among actors of the soybean partnership hindered their participation in partnership governance. As a consequence, young farmers established state level associations, such as the Kwara State Youth Farmers' Cooperative Union. In Kenya over 11,000 farmers in the rice partnership set up the Kisumu Rice Stakeholders Forum, to which the county government (also a member of the partnership management team) has pledged support and co-funding. In addition, 2SCALE partnership facilitators encourage smallholders, especially women, to communicate regularly with each other so that priorities can be agreed and a collective voice articulated. In many partnerships in Benin, Kenya and Mali local actors have formed WhatsApp groups, sharing information quickly, frequently and at low cost. Through better access to information and well-structured and active professional organizations, farmers and other grassroots actors improve their deliberative capacity in partnership governance.

Private partners must also be capable of progressively taking on leadership, not just in the value chain, but also in the governance of the partnership. After a few years of partnership, it is expected that the lead firm or one of the other private partners will be the party to

call the governance meetings, develop the agenda and write the minutes, as 2SCALE's facilitation role narrows down to ensuring inclusive agribusiness remains a priority of the private partners once the partnership's activities are fully established.

How do PPP governance arrangements evolve and become sustainable?

Linking with sectoral institutions

Once partnership governance mechanisms are set up, 2SCALE pursues its facilitation role by balancing the power and interests of key partners during governance meetings. Decisions on strategies and operations must align with the partnership's changing ambition and be in the mutual interest of all parties. Over time, as the lead firm and other stakeholders take increasing ownership of the partnership, they may decide on adjustments to governance arrangements to bring structures closer to stakeholders and/or sectoral institutions, and to make them financially sustainable.

For example, in early 2017 the management committee of the maize partnership in Mali, which groups the lead firm SONAF (grain trading company), the main BSS provider *Centre de Réflexion Appui en Développement Rural*, farmer representatives from 10 ABCs and 2SCALE, decided to set up a value chain platform with the other stakeholders and to prepare it to take over the roles of the management committee once 2SCALE exits the partnership. Since mid-2017 platform meetings have been organized at a village level, hosted by a farmer organization on a rotational basis, in order to strengthen interactions with grassroots actors, reinforce trust in the value chain and reduce meeting costs.

In Benin, the parboiled rice partnership went a step further. Its governance structures consist of ABC level coordination committees, complemented by a management committee at the partnership level. This management committee anchored the ABCs to the Benin rice sector by including not only representatives of rice farmer organizations and women parboiling processors, but also a representative of the *Conseil de Concertation des Riziculteurs du Benin*, the national rice farmer apex body for the rice sector.

Embedding partnerships in sectoral institutions allows smallholder farmers and processors not only to influence decisions within the partnership, but also to provide inputs for sector level policy-making, and to link the partnership governance structure to a strong institution in the sector.

From clusters to hubs

Through many partnerships 2SCALE has facilitated the creation or strengthening of platforms that link stakeholders involved in the same value chain, as well as agribusiness hubs that link clusters involved in the same partnership. Such platforms and hubs have also strengthened the governance of partnerships and ensured their sustainability once 2SCALE phases out. For instance, after three years of activity, vegetable clusters in Benin decided to create vegetable hubs to improve inclusive aggregation systems and empower cluster actors active in the same commodity (e.g. cabbage) to work together and build collective agribusinesses (Box 18).

BOX 18 | GOVERNANCE BY VEGETABLE HUBS IN BENIN

In Benin, the initial situation of the vegetable partnership was characterized by rare meetings of cooperatives and communal unions of vegetable growers. Furthermore, farmers lacked the appropriate skills to facilitate meetings and report on outcomes.

The first step to improve governance was the mobilization of farmers for working sessions centered on access to input finance. Access to credit was the primary concern as it was required to organize meetings in order to agree on how to identify key beneficiaries of credit, how to negotiate with the MFIs, how to manage credit and how to repay it. Once access to credit had become a reality and business relationships were strengthened between farmers, their organizations and MFIs, cluster stakeholders began improving their organization by aggregating input orders, planning vegetable production and the collective sale of outputs.

Vegetable growers of the Grand-Popo cluster meet every Wednesday during the planting season. These meetings are also extended periodically to other members of the cluster (traders, financial institutions, input dealers, etc.). At the Calavi cluster, a meeting with input distributors is held at the launch of the production campaign. Meetings are also organized with traders before the campaign to plan production and align it with traders' projected needs, and again at harvest time to ensure coordination of sales.

A second level of governance has emerged over time, in which several clusters with similar products have been able to strengthen their cooperation and coordination. This level of governance began with exchange visits to compare production systems, internal organization, marketing systems, credit management, production planning to avoid falling prices, etc.

Costs of governance meetings

While face-to-face meetings are important, especially to discuss and validate strategies and priority interventions, they can also be costly for actors. Therefore, 2SCALE encourages grassroots actors to set up mechanisms for long distance communication, for instance, through WhatsApp groups or other instant messaging systems. Such practices are already in use in partnerships in Benin, Kenya and Mali, and are being introduced in others. Through instant messaging, in addition to sharing business opportunities and information, stakeholders can also track the progress of field interventions and follow-up on the outcomes of decisions made during a previous face-to-face governance meeting. Levy systems (taking a small deduction on each kilogram of commodity supplied) have also been put in place by some value chain platforms in partnerships, such as pineapple, maize and soybeans in Benin or sesame in Mali; funds obtained from the levy are used to support training and coaching activities, but also to pay governance meeting costs.

Conclusions

In one of his well-known quotes, Henry Ford (American industrialist, 1863-1947) states that, "Coming together is a beginning; keeping together is progress; working together is success." To 'work together' with its private partners once they are selected and the partnerships are formalized, 2SCALE made extra efforts to ensure governance mechanisms were explicit and implemented in a systematic, yet flexible way. Beyond business-focused decision-making processes, partnership governance arrangements contributed to improving the inclusiveness of partnerships by involving in the decision-making and monitoring processes smallholder farmers and other key stakeholders, who would otherwise be considered mere beneficiaries. Having inclusive governance mechanisms in place is not a guarantee of success for a partnership, which may be hampered by many other challenges, but without clear and inclusive governance a partnership is not likely to thrive. In its portfolio of 53 partnerships, 2SCALE's strongest 10-15 partnerships all had inclusive governance arrangements implemented.



Photo by Joris Maatman

Alema Koudjjs Feed processing factory, Ethiopia



Inganci Tom Brown market activation, Nigeria

Photo by IFDC

Efficient BoP marketing and distribution strategies

Janet Macharia and Kwame Pipim

KEY MESSAGE

Reaching base of the pyramid (BoP) consumers requires the adaptation of marketing and distribution strategies to fit the needs and requirements of this market segment. 2SCALE partners have experience in targeting higher-end markets with their products rather than BoP consumers. However, the 2SCALE program supported its partners to establish BoP marketing and distribution pilots, which offered a good opportunity to experiment with new products and strategies and resulted in interesting business opportunities.

What is marketing and distribution for BoP?

BoP marketing and distribution strategies provide agribusiness opportunities to firms, while also improving the food and nutrition security of an important population segment. Companies do not usually perceive this market segment as an opportunity for generating profit due to their relatively low purchasing power. Marketing for the BoP is significantly different from conventional marketing; BoP consumers have unique characteristics and markets largely operate informally. A typical BoP marketing approach requires a conscious

effort to reduce the cost of the final product, while ensuring proximity and convenience to consumers. This means tailoring solutions to the specific needs of the BoP market: 'Awareness' – making the product known; 'Acceptability' – convincing the consumer to adopt the product; 'Availability' – taking the product to the consumer; and 'Affordability' – increasing the purchase ability of the consumer.

Figure 14 | 2SCALE BoP model for marketing and distribution strategy implementation – the 4As



Why marketing and distributing to the BoP is important

BoP consumers, characterized by their low income, form the largest consumer segment – they are also the most difficult to access. They represent an important market for food products. According to the International Finance Corporation report, *The Next 4 Billion Market Size and Business Strategy at the Base of the Pyramid*, the BoP food market size in Africa is US \$215 billion* (Hammond *et al.*, 2007). This means there is huge untapped potential to provide nutritious food products to BoP consumers.

2SCALE BoP value chain approach

A common driver across all 2SCALE value chain development approaches is the market, whether it is input value chains with thousands of smallholder farmers as end-buyers, or food value chains targeting rural and urban food consumers. Value chain development with specific attention to BoP consumers is no different and must be market driven to be successful. The difference is that the market opportunity offered by the BoP is not always (fully) recognized by value chain actors. Many of 2SCALE's partners have been serving higher-end markets and do not necessarily know how to reach BoP consumers. BoP marketing and distribution makes use of a large number of potential consumers. While consumers may be buying small quantities of products, the number of consumers and their market share is what drives economies of scale and profits for value chain actors, and this is where the tailored solutions to the 4As come into play.

Initiating BoP marketing with companies/processors

For 2SCALE, partnerships with a BoP component mostly revolve around firms (medium and large), or cooperatives and processing groups, but BoP marketing is not usually their main reason for seeking a partnership in the first place. The agribusinesses currently engaged in BoP marketing were existing partners of 2SCALE, involved in established public-private partnerships (PPPs) that then decided to undertake BoP marketing.

* Estimates may vary according to studies and definition used

BOX 19 | PAMPAIDA GROUNDNUT PARTNERSHIP NEEDS ASSESSMENT RESULTS

The Pampaida Groundnut partnership is driven by small, mostly women-headed, processing firms producing unbranded groundnut oil and cake. The partnership started by focusing on linkages between processors and groundnut farmers, and between farmers and seed producers.

The needs assessment for Pampaida (Kaduna, Nigeria) groundnut processors showed that they had significant capacity (technical know-how) to produce Tom Brown (blended cereal/legume porridge flour). However, it also revealed that the processor group lacked the knowledge and marketing strategy to reach BoP consumers with the Tom Brown product.

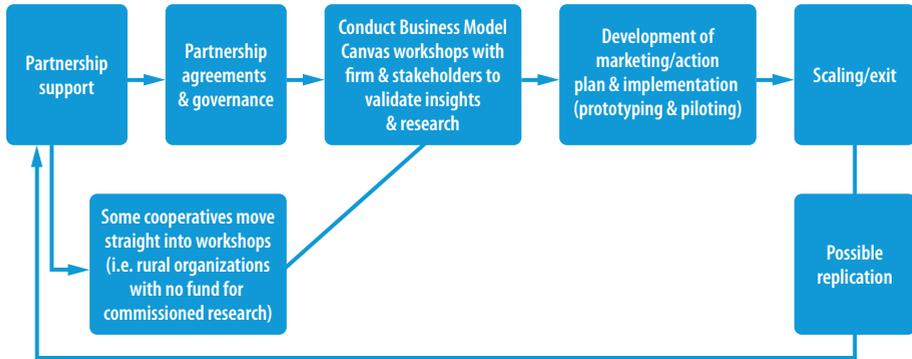
The assessment concluded that there was a clear opportunity to offer this product to low income consumers. The targeted area had a large population of farmers and vulnerable children, for whom Tom Brown is an attractive product with the potential to improve health and nutrition. As a result, the partners developed a marketing and distribution strategy for the Inganci Tom Brown product.

Interest in the BoP as food consumers either originates as a result of the partner's initiative (the proactive approach of firms, cooperatives or processors), or is triggered by a needs assessment performed by 2SCALE, which presents product and market options. Needs assessments are undertaken to judge and determine the firms' suitability to operate in the BoP market, and their capacity to handle the necessary investments this entails. The assessment is initiated by 2SCALE with the cooperation of the agribusiness partner. It examines the partner's products, target market, human capacity, interest in social – as well as economic – impact and the collective effect of its business operations on the environment. Box 19 presents the results of the Pampaida Groundnut Partnership needs assessment as an example. To move forward, it is essential that the outcomes of the needs assessment answer the needs of both the firm and the market. Moreover, the firm has to be prepared to invest in the implementation of BoP marketing activities, which is one of the basic requirements of 2SCALE partnerships.

Sometimes, firms or cooperatives proactively seek support in developing a marketing and distribution strategy for a nutritious product to BoP consumers (Figure 15). This requires an assessment of whether targeting BoP consumers would be a sensible business decision, considering market suitability, product acceptance and profitability, among other factors. An example of a firm proactively seeking support is the Yedent Agro Group of Companies from Ghana (Box 2). The company was under contract from the Ministry of Health to supply a fortified maize and cereal blend product called Maisoyforte Tombrown and also sold to consumers on the conventional market. However, with limited attention given to the conventional market and with a strong reliance on a single buyer this was a risky business model, since sales under such a contract could stop unexpectedly. The company therefore decided to explore the BoP market for its Maisoyforte product.

Figure 15 | Process for the BoP marketing and distribution approach pilots

Flow Diagram on 2SCALE's BoP working approach with firms/cooperatives is captured broadly under research, strategy, implementation and scaling/exit



2SCALE BoP marketing and distribution strategies are first conducted as pilots prior to being scaled up. BoP pilots involve gathering consumer insights, including an analysis of competitors, the location, economic status (purchasing power) and population of consumers, the level of malnutrition in the area and mitigation measures in place, and finally, perceptions, preferences and attitudes towards the potential product. These insights are then processed and developed into marketing and distribution strategies. The pilot nature of the approach means that partnership actors are able to identify and select possible strategies through a process of ideation, conceptualization, implementation, experimentation and evaluation.

The approach is geared towards attending to the needs of an underserved market of low income earners through cost-effective means that translate into positive impacts, both in terms of the profits generated for the agribusiness and the nutritious, affordable products developed for consumers. To gain clear insights to create innovative marketing and distribution strategies, the pilot phase offers the opportunity for trial and error, where experimentation is key to the development of an effective strategy. Through this iterative process the pilot serves as a learning experience.

The pilot process

The market research aims to identify opportunities for new markets and products and acts as an aid to understanding the BoP market's characteristics, in terms of the core values and risk adversity of consumers. In addition, it reveals BoP consumers' habits, attitudes, beliefs and aspirations related to food consumption and food acquisition. 2SCALE involves a researcher to conduct the market research and confirm that the BoP would work as consumer segment for the company. For example, the research looks at whether there are taboos related to particular products or ingredients; and whether the food product is deemed acceptable. Maybe it is seen as only appropriate for sick people, or inappropriate

for women and children? It also assesses how consumers buy their food, including location, frequency, packaging, their quality/quantity expectations and budget, among other things. This helps frame the possibilities for products and distribution strategies.

Figure 16 | The Business Model Canvas (BMC)

The Business Model Canvas Designed for: _____ Designed by: _____ One: _____ Iteration: _____

<p>Key Partners</p> <p>What are our Key Partners? Who are our suppliers? Which Key Resources are we acquiring from partners? Which Key Activities are we outsourcing?</p>	<p>Key Activities</p> <p>What Key Activities do our Value Propositions require? Our Customers' Channel? Customer Relationships? Revenue Model?</p>	<p>Value Propositions</p> <p>What value do we deliver to the customer? What need of the customer population are we targeting to solve? What bundles of products and services are we offering to each Customer Segment? Which customer needs are we addressing?</p>	<p>Customer Relationships</p> <p>What type of relationship does each of our Customer Segments expect us to establish and maintain with them? How are we acquiring them? How are we retaining them? How are we engaging with the rest of our business model? How costly are they?</p>	<p>Customer Segments</p> <p>For whom are we creating value? Who are our most important customers?</p>
<p>Key Resources</p> <p>What Key Resources do our Value Propositions require? Our Customers' Channel? Customer Relationships? Revenue Model?</p>			<p>Channels</p> <p>Through which Channels do our Customer Segments want to be reached? How are we acquiring them? How are we retaining them? How are we engaging with the rest of our business model? How costly are they?</p>	
<p>Cost Structure</p> <p>What are the most important costs inherent in our business model? Which Key Resources are most expensive? Which Key Activities are most expensive? Which Key Channels are most expensive?</p>			<p>Revenue Streams</p> <p>For what value are our customers really willing to pay? For what do they currently pay? How are they currently paying? How would they prefer to pay? Which revenue model suits best? How can we create a successful revenue model?</p>	

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The next step **involves strategy development of the agribusiness** with its staff, especially the management, and sometimes board members. 2SCALE typically facilitates a workshop bringing these actors together to define the strategy based on the agribusiness' core activities. The BMC, developed by Alexander Osterwalder (Figure 16) and other strategy tools act as a guide for the strategy development of the agribusiness. The outcomes of the strategy development workshop are clear descriptions of the customer, the value proposition of the product, consumer segments identification, and revenue channels, as well as the identification of the activities, resources and partners required for impact. The BMC offers a quick and straightforward tool to discuss and describe a new business model. It provides a snapshot of a agribusiness that can easily be presented to stakeholders without providing a full business plan. It is an entry point for framing necessary discussions at the company level. It builds on the results of the market research and takes into consideration the partner's capacities and existing business model.

The implementation of the BoP pilot is initiated building on the outcomes of the market strategy workshop and the market research. The pilot usually involves engaging in cost-effective activities according to a set timeline, with defined roles and responsibilities



Photo by Joris Maatman

Mushroom-based drink, Ghana

shared between 2SCALE and the partner agribusiness (e.g. product development, recruitment, training). 2SCALE has developed the 'ATEAR' model to frame BoP marketing strategies: attention, trust, experience, action and retention. The model seeks to define the process for BoP pilots, starting with the creation of customer awareness and building customer trust. It also explores consumers' decision-making processes, to understand the underlying motives that cause consumers to purchase products or not. Based on this model, activities such as market activations (promotion/awareness raising), product development and the adoption of innovative distribution channels are undertaken by the agribusiness and its partners, under the guidance of 2SCALE facilitators. The pilots are aimed at trying out different strategies to reach consumers with the identified product. BoP pilots make use of different innovative distribution channels for which examples are provided below; including door-to-door selling, piggybacking on existing distribution channels and using retail agents, as well as micro-franchises.

Agribusiness partners of BoP pilots are generally interested in analyzing the volume of sales and the number of customers reached (Table 5). Each agribusiness has its own definition of success. At the end of a pilot, it is necessary to assess and outline what worked and what did not. This process informs the exit or scaling strategy of the partnership. An exit from the partnership can be the result of one of two factors: unsuccessful activities which cannot be continued, or the full autonomy of the partner who does not require further support and has demonstrated ownership of the strategy and process. The agribusiness partner can also adopt a replication or scaling strategy to expand its activities. For example, following the success of its pilot, GUTS Agro Industry replicated their marketing and distribution

strategies to five new geographical locations (Chapter 2) and the approach was used by Promo Fruits in Benin for the distribution of pineapple juice (Chapter 7).

Table 5 | Some BoP pilots in West and East Africa

BoP pilot	Sales	Jobs created (social/economic impact)
New products		
Pampaida Groundnut Processors, Nigeria (Tom Brown)	367 units x 400 g 837 units x 200 g 633 units x 100 g	18 retailers and one micro-distributor
Stawi Foods and Fruits Limited (fortified porridge)	21,226 units (500 g)- Ksh 968,480	17 women retailers
Marketing and distribution strategies of existing products		
Yedent Agro Company, Ghana (Fortified Cereal Blends)	>1,400 cartons (>8,400 kg) since intervention began in January, 2017	40 smallholders and Koko Sellers (10 prior to intervention)
Banda Boraе Women Processors, Ghana (soybean kebab)	Over 500 sticks sold per woman each day, compared to 200 sticks prior to intervention	Six women permanently employed by some of the processors
Novos Horizontes	Volumes not yet know	40 retailers

The failure of a BoP pilot is usually attributed to the lack of ownership and/or commitment of the agribusiness partner or triggered by unforeseen circumstances, such as insufficient processing capacity or shocks preventing access to raw materials.

Examples of implementation strategies

A number of strategies were developed around serving BoP consumers, which considered affordability, availability, accessibility and the appeal of branding, as well as efficient ways to distribute the product to BoP consumers. A few examples are detailed below.

Processing and coordination: ‘tasty mushrooms’

2SCALE partnered with the Mushroom Grower’s and Exporters Association of Ghana (MUGREAG) to mobilize, train and upgrade the operations of 200 mushroom growers. 2SCALE helped the association to identify agro-dealers and set up a distribution system that would deliver inputs at affordable prices. The cooperative is based in Accra and initially focused on fresh mushroom production and marketing. However, market research insights found that processed mushroom products (in the form of a drink, kebab, powder, hot sauce [Shito] and simply dried) were more interesting to BoP consumers. Only a few MUGREAG members offered processed mushroom products, but with support from 2SCALE the association established a multi-purpose mushroom marketing hub where processed products were brought under the association label. This effort improved co-ordination within the group, enabling members to specialize their production and marketing roles. The pilot contributed to improving coordination of members’ activities, a goal which was initiated under the partnership.



The Banda Boraie women processor group, Ghana

Small packages for small wallets: Novos Horizontes

Novos Horizontes is a private company, based in Rapale district in Nampula province, Mozambique, dedicated to poultry feed processing, and chicken production and processing. The company manages an out-grower scheme of 190 smallholder chicken producers, as well as breeders and laborers in the hatchery and abattoir at Novos Horizontes' farm. Retailers used to buy whole chickens from resellers under the Novos Horizontes brand to sell to consumers. Market research showed that resellers were, in fact, cutting the chicken into pieces before selling the pieces to their consumers because buying a whole chicken is too expensive. This intermediary step by resellers resulted in the loss of brand recognition among end-consumers and potential hygienic/food safety hazards.

2SCALE partnered with Novos Horizontes to produce smaller chicken portions packaged in quantities of 300 g and 500 g for the BoP consumers of Nampula under the company's brand. The partnership resulted in increased access to the product by BoP consumers via a network of 40 retailers, who sell small chicken packages to consumers in the local markets. Through this network, the chicken is made accessible in appropriate locations and at affordable prices. Novos Horizontes has also benefited from improved brand recognition among this market segment and increased sales.

BOX 20 | LEARNING FROM ONE PILOT TO THE OTHER

The BoP marketing and distribution pilot with Promo Fruits (Chapter 7) was launched after the GUTS Agro Industry micro-franchise distribution pilot was concluded in Ethiopia for the distribution of a fortified food product (Chapter 2). Hence, it was possible to share some of the lessons learned from GUTS Agro Industry's experience as the distribution strategy for Promo Fruits was being developed. Specifically, learning from the mobile distribution model and the tricycles used with the 'Likie' (women distributors) helped in selecting the push-carts that are now being used with the mobile distribution of Promo Fruits products targeting BoP consumers. The push-carts offer greater mobility than fixed stands and the distributors can be branded to attract customers and give the product legitimacy and status as high quality, while tricycles are difficult to maneuver.

Last-mile distribution: Promo Fruits

Promo Fruits produces natural pineapple juice sold through wholesalers to national and regional clients (Chapter 7). With 2SCALE's support, Promo Fruits developed a new distribution model for selling fresh pineapple juice directly to BoP consumers in the south of Benin. Initially the activities started as a pilot with fresh juice sold alongside sandwiches by seven agents that used push-carts and cargo bikes (as inspired by the experience of GUTS Agro in Ethiopia; Chapter 2, Box 20). During the pilot, sales figures were carefully recorded and analyzed. The positive figures have encouraged Promo Fruits to build a business plan to attract investments to enable them to grow the network to 100 agents and expand to new locations. By using push-carts and cargo bikes the retailers are able to move close to their consumers and ensure access to the product.

Marketing channel development: making tasty *daadi* soybean kebabs available to schools

Banda Bora Cooperative is a processing group of 20 women, which processes and sells soybean kebabs as part of the soybean partnership based in Kpandai, rural northern Ghana. The cooperative initially marketed their soybean kebabs at the local village market, without branding or a retail strategy. Sales were seemingly effective, especially on market days in Kpandai, when all the other villages came together to buy and sell goods. 2SCALE managed to expand the cooperative's route to market by introducing a branded container as a sales outlet near a number of schools. This innovative solution came about during the BMC workshop and discussion on marketing issues. The strategy was supported by stakeholder engagement with school authorities (school heads and teachers). The partnership also developed a mobile channel (containers) to enable women to sell soybean kebabs in branded containers and attire in various locations to enhance their appeal and visibility, which turned out to be the most effective distribution strategy.

These two marketing channels increased sales of the kebabs on a daily basis, from an initial average of 150 sticks to 500 sticks per retailer. The cost of a stick of kebab is GH¢ 0.10.

Marketing activation: Stawi Foods and Fruits Limited

Stawi Foods and Fruits Limited is a Kenyan-based social agro-processing enterprise that specializes in the milling of cereals to produce nutritious pre-cooked and fortified porridge flours for household consumption, particularly targeting children. The company, which

started its operations in 2012 is located in Nairobi's Roysambu area, from where it mills, packages and distributes its porridge flour products. Stawi Foods and Fruits and 2SCALE, developed a new product of fortified porridge in quantities of 500 g to specifically target the densely populated Githurai area of Nairobi. The partnership worked on creating demand for the product through a so-called marketing activation campaign, starting in February 2017 in one half of Githurai (Githurai 45).

The marketing and distribution approach adopted in the campaign was threefold: 1) Involving 40 women as product advocates campaigning and marketing the product. The women received a *sufuria* (cooking pot) and *mwiko* (cooking stick) as an incentive and 100 g sachet for dry sampling as they sold door-to-door. 2) Word of mouth through *chama* (informal meetings of groups of women/men). 3) Product promotion during market days, including product sampling and testing by consumers.

Two months of marketing activation resulted in the sale of 21,226 units (1 unit = 500 g) of the new porridge, generating revenues of Ksh 968,480. This additional income attracted the company to scale out the product and marketing strategy to five other regions. These new steps in the company's venture will be undertaken without the support of 2SCALE.

Lessons learned

The role of 2SCALE, or any other program targeting the BoP market, is not to impose ideas, but rather to facilitate and support agribusinesses in developing their strategies to reach the BoP market. In this role, 2SCALE facilitators have recognized that a few key points are important to consider in order to avoid pitfalls and drive sustainable success.

The engagement and commitment of firms and cooperatives as leaders in the implementation of the BoP marketing strategy is key to creating ownership over business activities. The role of 2SCALE should only be mere facilitation of the pilot as opposed to taking the lead in the initiative. For example, Novos Horizontes in Mozambique has taken the lead in implementing its branding and marketing strategy. They have identified local painters to paint shops (15 reseller and retailer shop outlets) with their brand colors and promoted branded packaging for their 500 g chicken products. 2SCALE supports the endeavor by bringing actors together and co-financing activities.

In a few cases the implementation of BoP pilots has been delayed while partners engaged in major capital expenditure for plant expansion and machinery acquisition, which affected their day-to-day operations. This created serious tension between stakeholders and pressure on the companies' cash flow. Consequently, serious consideration is now given to the financial stability of a company and its capacity to cope with expansion prior to engaging in BoP marketing and distribution strategies.

Finding the right **balance between cost and quality**: maintaining low marketing and distribution costs whilst making no compromises on product quality is what keeps consumers interested. This sometimes means that existing marketing channels need to be revisited rather than requiring the creation of completely new ones. An example is Yedent Agro Company, which is testing a cheaper route to market by way of partnering

with traditional 'KoKo' sellers (porridge sellers) (Box 2). These 'Koko' sellers build credibility by getting themselves known in the neighborhood where they have been selling porridge for years.

Brand recognition is something that was often forgotten by agribusinesses. What they missed is that without brand recognition, the **sustainability** of their marketing efforts was jeopardized. Most had no activities related to brand and product awareness. A recognized brand can attract consumers and serve as a 'quality seal' for products. It allows a product to distinguish itself on the market and compete with other similar products. Appealing branding and packages should not only be for high-end products as BoP consumers are also more interested in branded products.

Most importantly, it is rare that one strategy works in single-handedly reaching BoP consumers. This usually requires a **combination** of product, brand and distribution strategies that encompass a good understanding of the consumers.

Building sustainability in BoP activities

The 2SCALE approach partners with firms and cooperatives to support them in realizing their business vision. Coordination between the agribusiness, financial institutions and the 2SCALE facilitator is necessary. In some cases, demand for the product requires agribusinesses to expand their facilities and pilot activities require capital injection from the agribusinesses to ensure constant supply. The BoP pilots of the 2SCALE program allowed agribusinesses to test the viability of their business models and make appropriate improvements to their business plans before scaling up their activities. Beyond supporting the sourcing strategy for Shalem Investments Limited – a sorghum aggregator for Nile Breweries and Uganda Breweries in Uganda – 2SCALE assisted the company to develop a bankable business plan for the expansion of facilities to produce fortified porridge flour (Box 4).

The success of the agribusinesses in developing their BoP strategies have, for some, justified the replication of the strategy in other geographical locations. GUTS Agro Industry replicated its marketing and distribution strategy, which involved the use of a micro-franchising model, to five regions in Ethiopia and the approach has been replicated by other projects (Chapter 2; Box 21).

BOX 21 | REPLICATION BY OTHERS

The Likie distribution model developed by GUTS Agro and 2SCALE has been replicated by other development partners in different geographic locations in the Southern Nation Nationalities and Peoples Region. A project called 'scaling up pulses innovation in the southern parts of Ethiopia,' which is the result of a collaboration between the University of Saskatchewan, Hawasa University and the International Development Research Centre, has the dual objective of: i) empowering women; and ii) improving the nutritional status of the community. Among other approaches, the project has used the Likie distribution model and market activation systems to achieve its objective and scale up its own activities to Butajira and Wolayita Sodo towns.

Recommendations

Agribusinesses wishing to engage in BoP marketing should conduct a market analysis prior to the intervention, including a baseline survey. Most of the baseline surveys carried out by 2SCALE partners focused on the upstream productivity of the firms/cooperatives while the marketing performance was not captured. Assessing the downstream marketing performance can help to capture a product's market impact and inform future business decisions. 2SCALE could have better captured the performance of BoP pilots; there was an absence of baseline data on sales volumes and the firm's performance in most of the BoP pilots.

The BoP market is at times unpredictable; successfully tapping into this market requires a trial and error process. Organizations that want to venture into this space should be prepared for this, but also have the ability to adapt quickly and learn from their mistakes to make a positive turnaround.

From a business point of view, top management in firms and cooperative leaders should manage their expectations, as quick results are not guaranteed. Though the results of BoP pilots can be very rewarding, they may take some time to materialize and require important investments. Despite this, BoP markets remain an important business opportunity and represent a consumer group who deserves to be catered for with attractive, quality, nutritious and affordable products.

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Rice collection after harvest, Kenya

Photo by Joris Maatman

Getting plant nutrition solutions to scale requires more than technology promotion

Peter Kimiri

KEY MESSAGE:

Technical solutions for plant nutrition problems are available in abundance. To effectively promote their large-scale use, local adaptation, business relationships for effective input supply and advisory services are required.

Introduction

The ambition of the 2SCALE program is to develop inclusive agribusiness arrangements which enable firms to sustain their operations, to innovate and to remain competitive in local, regional and international markets. At the same time, these business arrangements need to be based on inclusive opportunity to participate, and fair reward for effort and performance by small producers, workers and traders, men and women, young and old, alike.

In the debate about improving business relationships and value chain functioning, at times the element of improving the primary production process gets less attention. In growing food markets however, supporting large-scale improvement in agricultural productivity and quality of produce can be a highly effective manner to improve the revenue of smallholder producers.

Invariably soil fertility management and plant nutrition are a core ingredient in sustainable intensification efforts. There is no lack of soil nutrition technologies and knowledge on how to apply them to improve productivity. Getting these solutions into large-scale and inclusive use remains a major challenge. 2SCALE has gained valuable experience with adapting and bringing to scale plant nutrition solutions; insights and the keys to success are presented here.

Examples of plant nutrition solutions

2SCALE has in its different agribusiness development efforts included activities focused on productivity improvement by smallholder producers. Several technologies for improving nutrient use efficiency have been promoted by 2SCALE partnerships (Table 6). None of the solutions are new inventions; they are known and proven beneficial technologies, which for some reason had not found mainstream use.

Table 6 | Plant nutrient solutions promoted by 2SCALE

	Urea Deep Placement (UDP)	Inoculants	Adapted fertilizer blends	Stick planter
Technology description	Placement of urea briquettes in the sub-soil, in between four transplanted rice plants. Alternative for broadcasting, maximizing nutrient use efficiency	Specific Rhizobium application to soybean plantings, to stimulate biological nitrogen fixation	Area specific fertilizer (mainly NPK-based) blends, including micro-nutrients, better responding to specific crop needs and thus increasing nutrient use efficiency	Simple device allowing for fast micro-dosing of fertilizer when planting a crop, improving nutrient use efficiency and reducing labor requirements
Crops	Rice	Soybean	Rice and potato	Maize and soybean
Countries	Benin, Ghana, Kenya, Mali, Nigeria	Benin, Côte d'Ivoire, Ghana, Nigeria	Côte d'Ivoire, Ghana, Kenya, Nigeria	Benin, Mali, Nigeria
Associated services needed	Specialized laborers applying the briquettes; financial services	Fast delivery services to keep the product alive		Specialized laborers providing sowing-fertilization services
Product innovation required	Briquette production; briquette applicator	Commercial Rhizobia formulation production and retailing through a cold chain	Production and packaging of specific blends by local fertilizer industry	Local production of manual stick planters
Farmer capacity building and promotion required	Understanding the added value of UDP; package of good agricultural practices	Demonstrate the value of inoculants	Advocacy to use the most appropriate blend	Demonstrate added value and economic benefit of the stick planter



Urea Deep Placement (UDP) is an alternative for broadcasting urea in paddy rice production. It has an advantage that the nutrients are released more slowly, immediately within the root zone of the rice plants. This reduces high losses occurring, mainly through volatilization of ammonia, when broadcasting the fertilizer, which is the most common practice. UDP reduces fertilizer need, while increasing productivity, thus providing farmers with a higher return on their investment in fertilizer.

UDP also reduces weed growth compared to fertilizer broadcasting since short season annual weeds find it difficult to utilize nitrogen deeply placed 7-10 cm below the soil surface. The less vigorously germinating weeds are easily controlled using a push weeder, shredding them *in situ* and incorporating their organic matter within the paddy fields to improve fertility.

Inoculation of soybean fields with specific Rhizobium species is known to improve productivity under most circumstances of sub-optimal soil nutrient or soil moisture status. The inoculation improves the efficiency of the biological nitrogen fixation by the soybean crop. Inoculation was however not being applied by soybean farmers, even though the technology was proven effective.



Photo by Absalo Adodo

Stick planter in use, Benin

Getting plant nutrition solutions to scale requires more than technology promotion

BOX 22 | INTENSIFICATION OF RICE PRODUCTION IN KENYA: A CONCERTED EFFORT REQUIRING COMPLEX BUSINESS NETWORKS

Kenyan rice producers have been noticing declining yield levels since 2000, but demand is growing, stirring price increases, which raises government concerns. 2SCALE facilitated agribusiness relationships to intensify rice production to increase productivity in Kenyan irrigated rice schemes. A combination of measures, consisting of the use of good quality seed, a specific fertilizer blend, including essential micro-nutrients as basal fertilizer upon transplanting, UDP as top dressing and general good agricultural practices was found to increase rice productivity and profitability substantially.

To make a success of this intensification of production however, the input supply system required changes. A specific blend of fertilizer for irrigated rice was developed by Toyota Tsusho, which contained, in addition to NPK, micro-nutrients: boron, silica, zinc and copper. The Athi River Mining Company invested in production capacity, promotion and development of a distribution network of urea briquettes, complemented with local briquetting capacity. For efficient briquette placement, applicator design was adapted to allow for its local production. Local youth groups specialized in offering UDP services (Box 25).

In most sub-Saharan African countries, compound fertilizer is usually only available as a single NPK blend. Almost invariably the available blend does not correspond well with crop requirements. Through understanding specific crop macro- and micronutrient requirements in specific soils, blends which better fit the demand of specific crops in specific regions of a country can be formulated.

A stick planter allows seeding and fertilizer application in a single go through the field (Box 23). This saves labor, provides a precise amount of fertilizer next to the seed, and reduces the soil disturbance. A relatively simple device supports this labor saving and nutrient use efficiency improving technique. It was well known in Brazil, but not in sub-Saharan Africa.

The four examples (Table 6) are proven effective technologies in the hand of smallholder producers. There is a potential economic benefit of technology adoption, and there is ample understanding of how the technology functions. Still, the technologies are not finding a large audience of adopters. Obviously more is required than a technically proven sound technology.

Lessons learned

Based on the 2SCALE experience three main requirements for successful promotion of the proven effective technologies were identified:

- Local testing and adaptation of technical solutions.
- Sustainable business networks to support the availability and use of the technologies.
- Effective methods of training and communication to accompany the technologies.

Local testing and adaptation of technical solutions

Obviously technologies need to be tested for local relevance and if relevant, adapted to

BOX 23 | STICK-PLANTER FOR MAIZE IN BENIN AND NIGERIA

Photo by Abalo Adodo



Stick planter,
Benin

Maize producers in Benin and Nigeria are confronted with the limited availability of manual labour, as a direct result of youth migration. This creates difficulties for maize sowing and fertilizer application. The labour requirement for sowing and fertilization following common practice requires an estimated minimum of 16 man-days for 1 ha.

A technical solution emerged through the collaboration between national agricultural research in Togo and Brazil in the form of zero-tillage techniques and a hand-operated stick-planter. The stick-planter applies in one go seed and a well-placed micro-dose of fertilizer. For a field of 1 ha a farmer needs 1.5 day of his own or hired labour using the stick planter.

As a result of the changed practices farmers are better able to plant timely, which is essential in their strategies for coping with shorter and less reliable rainy seasons as a result of climate change.

To make the technology locally available and adopted, local blacksmiths were trained in the production of the stick-planters, and jointly with farmer organizations and the blacksmiths, a farmer demonstration program was developed to promote the use of the stick planter.

the local context. In the case of the blended fertilizer, this is intrinsic in the solution itself. The key is an adapted blend, as well as a locally relevant advice of use. Producing fertilizer blends for each crop in each locality is not possible. The key to successful fertilizer blends is in the compromise between the desire to be highly specific and the reality of the fertilizer market which dictates that scale is essential to keep the cost low, and the profit margins of interest for fertilizer importers, blenders and retailers.

UDP technology and the accompanying agronomic practices were adapted to the Kenyan circumstances through the involvement of farmer cooperatives, the rice research institute (Mwea Irrigation Agricultural Development Center) and the national irrigation board (Box 22). Farmer-managed trials were run for evaluation of the technology (plant vigor, tillering intensity, panicle grain setting and filling). This provided for the opportunity to understand the potential of the technology in Kenya, adapt where necessary and design strategies for wider promotion.

Sustainable business networks to support the availability and use of the technologies

Almost invariably soil nutrition solutions require external inputs, be it organic as in the

case of inoculants, or inorganic as in the case of the different fertilizer related technologies. For the sustainable production and retailing of these inputs, private entrepreneurs need to see a business case, and make the effort to develop and sustain the for-profit service of producing and distributing the inputs. In most of the cases however, there initially was limited private agribusiness interest in plant nutrition solutions. For the private enterprises a promising technology is not the same as a realistic business opportunity. The efforts needed to identify, test and promote the plant nutrition solutions are such that it is beyond the investment capacity, or at least beyond the investment willingness, of the private enterprises to embrace the technical solution as a business opportunity.

Involvement of larger companies

In all the cases of promoting nutrition solutions 2SCALE had to invest efforts in facilitating business relationships and networks. In most African countries, fertilizer is an imported commodity, and when it is not imported, it is produced by a single large company. As such the interest of a larger company is essential for triggering change in plant nutrient solutions. The role of the larger company can be limited to assuring the availability of desired inputs, but ideally the larger company can be a partner in technology promotion, with the motivation of market development as driver of its efforts.

In Kenya, in addition to promoting UDP, 2SCALE partnered with Toyota Tsusho to improve the base fertilizer application which is usually done by applying NPK (Box 22). Together 2SCALE and Toyota Tsusho developed a blended fertilizer, specifically tailored to the needs of rice farmers. The fertilizer blend contains NPK in a ratio of 11:23:23 to respond to the specific need of Kenyan irrigated rice crops. In addition the fertilizer was enriched with boron, silica, zinc and copper. Toyota Tsusho came on board early on, and partnered from the moment of soil analysis until the distribution and promotion of the specific fertilizer blend.

Complex agribusiness partnerships at different levels

The involvement of a larger company was in most cases not enough to make the plant nutrient solutions a success. Additional service provision was often required to assure the success of the technologies.

In the case of UDP, briquettes are required, which are produced under high pressure from granular urea fertilizer. This can be done centrally, or decentralized. In Kenya it was found to be more efficient to prepare the briquettes locally, as transport costs of briquettes are higher than for granular urea, because of the increase in bulk volume. For local briquette production, Mwea Rice Growers Multipurpose co-operative society (MRGM) bought a briquetting machine, with co-funding by 2SCALE, and trained its staff to operate the machine. MRGM is producing briquettes on demand for members and out-growers at a fee of Ksh 150 for each 50 kg bag of urea. In Kisumu, demand for briquettes emerged after UDP training of 2,871 rice farmers in the Ahero irrigation scheme through 2SCALE. A private enterprise, Nyabon, purchased a briquetting machine with co-funding from 2SCALE, and is producing, stocking and retailing briquettes at a margin of Ksh 200 per 50 kg bag. Initially the briquettes were sold to the 12 rice producing cooperatives of the Ahero irrigation scheme, but demand for the briquettes increased with the spreading of UDP to the neighboring counties of Migori, Homa Bay and Busia.

BOX 24 | INTEGRATED SERVICE DELIVERY IN SOYBEAN PRODUCTION IN GHANA

Fertiliser recommendations in Ghana are not based on a specific analysis of the availability of nutrients in the soil and the specific demands of particular crops. Recommendations have been based on long-established soil conditions, most of which are out of touch with reality due to the rapidly changing soil environment.

2SCALE has supported Green-EF, an agricultural input importer and distributor, to engage in the supply of inoculants to soybean producers. The Agriculture Technology Transfer (ATT) project (an International Fertilizer Development Center [IFDC] project 2SCALE collaborates with) has supported Green-EF with a soil testing laboratory to offer services to producers. Through the laboratory, producers can, for a modest fee, determine the suitability of their soils for inoculation and receive a tailored fertiliser recommendation. The recommendation includes advice in liming to improve soil pH, a major and often underestimated factor in the effect of inoculants and nutrient use efficiency in general (Box 2; Box 29; Chapter 9).

In addition to the production and retailing of the briquettes, the application of the briquettes needs specific attention. It can be done completely manually, but this has shown to be cumbersome. It is more efficient to apply the briquettes using a mechanical applicator, which places the briquettes into the sub-soil faster and with less effort. Rather than expecting each rice farmer to do this individually, service provision teams of youth specialized in this service developed, making the technology more accessible. To assure the availability of affordable applicators, NMC Ltd., a Kenyan firm, has found a business opportunity and is molding applicators locally from recycled plastic.

Finally, specific financial services were developed for rice farmers, to assure easier access to land preparation, the package of good quality seed, specific fertilizer, crop protection and briquette application. All members of the MRGM cooperative have access to these services through the credit mechanism, disregarding age, gender, size of landholding or collateral.

In the case of the stick-planter, similar additional efforts in business network building had to be made. Local producers of stick planters had to be trained, and service provision teams of specialized laborers were developed to provide the service against a modest fee, rather than individual farmers each having to buy their own device.

In the case of soybean inoculants in Ghana, the technology was first promoted by 2SCALE with producers, using inoculant imported from Benin. Only after the successful adoption by farmers 2SCALE identified Green-EF, a small private enterprise, which was interested in the commercial importation and distribution of the inoculant, and recently has started co-investing in the local production and distribution of inoculant (Box 24). The involvement of Green-EF has been essential in the development of a functioning cold-chain distribution system, which assures the delivery of fresh and alive rhizobium at field level.

Effective methods of training and communication to accompany technology

In all the plant nutrient solutions that were promoted, investments were made in

agricultural advisory services. All of the solutions require behavior change by farmers, and additional investments, be it in the inputs, or in the service provision to apply the inputs. Smallholder producers are forced to be conservative and risk averse in changing their practices, as they are cash short, and cannot gamble with their household food security. As a result the promotion of plant nutrition solutions first requires adaptation and testing under farmer control. Next particular efforts are needed to convincingly demonstrate the added value compared to current practice. The 2SCALE program integrated these activities as part of the agribusiness partnerships.

In the case of UDP of rice, the technology promotion was part of a larger training curriculum on the intensification of rice production, which encompassed nursery management, seedling rate, row planting, fertilizer application, improving weeding and machine harvesting as topics. The farmer training curriculum was developed through a joint effort of 2SCALE partners. The training of farmers was done by 2SCALE coaches; mainly staff of farmer cooperatives who are dedicating part of their time to facilitating 2SCALE activities. In addition public extension staff were trained as trainers, to be able to increase the number of farmers that could be trained. During field days input suppliers would also provide training services.

In all efforts, 2SCALE focused on making advisory services economically sustainable. Either by assuring that individual or organized farmers would start paying for training services, or by embedding the training services in the business model of the input suppliers (Box 25). The main strategy of 2SCALE was to select coaches from within farmer organizations and companies. Through the program, these coaches received small field allowances and reimbursement of expenses to support them in the implementation of training and coaching activities. Throughout the program the coaches have been steered towards seeking opportunities for sustaining these costs in a different manner, either through direct payment by beneficiaries, or by absorption of the costs by their employers.

Carrying the harvest from the field to the collection point, Kenya



Photo by Joris Maatman

BOX 25 | INPUT DEALERS AS TRAINERS

Agro-input dealers at grassroots level often informally provide advice on the use of different inputs. Input supply companies recognise the role of input dealers as promoters of their products and their proper use. Not only do they provide input dealers with printed information to issue to farmers, they nowadays invest in offering training to agro-input dealers on agronomy, post-harvest handling and plant protection, to assure they can advise farmers properly on the effective use of their products. Input supply companies offering training to agro-input dealers are Bayer, Syngenta, Yara, Athi River Mining Company, Toyota Tsusho, Osho and Twiga. The provision of training is has really improved the competencies of the agro-input dealers, who are now assuming the role of agricultural advisors on effective use of inputs to the farming population. 2SCALE is partnering with input suppliers to improve the training programs and include elements of good agricultural practices (Box 22).

The involvement of industry partners, intermediary input dealers and organized producers in the development of training programs is essential. The collaboration between these partners provides a feedback mechanism with regard to the technology on offer. It will help the industry understand what does and does not work, to allow for the adaptation of their offer to better serve the demands of their customers.

Conclusions

There are many soil fertility solutions and technologies, which are currently not being applied. In commercially oriented farming, where the incentives for intensification are in place, potentially sound solutions for soil fertility management can be adopted. In practice however, sustainable innovation in soil fertility management practices requires more than the availability of a proven effective technology.

A first requirement for the adoption of soil fertility solutions is technology testing, adaptation and promotion at farmer level. This requires joint effort from farmer organizations, public advisory services and private enterprises who have an interest through marketing inputs.

A second requirement for the successful adoption of soil fertility management solutions, are sustainable business networks. These business networks are needed to assure that the inputs required are effectively retailed up to village and farmer level. At times additional processing steps are required, specific equipment is needed or special farm services are necessary to make the soil fertility solutions a success. Moreover, access to capital is required for many soil fertility solutions, requiring adapted credit mechanisms.

These business networks do not develop automatically, they need to be facilitated. 2SCALE has worked successfully in brokering these business networks. In some instances developing these business networks requires convincing users and suppliers through co-innovation. If it succeeds however, economically self-sustaining soil fertility management solutions can emerge, which assist farmers in creating added value through intensification of production, and in the process, employment and profits are created in input production, processing, retailing and application.



Cassava transport to the Psaltry factory, Nigeria

Photo by Mahamane Toure

Access to finance for inclusive agribusiness development

Douglas Magaja and Oniankitan Grégoire Agai

KEY MESSAGE

Access to finance is key in developing entrepreneurial activities and enhancing inclusive agribusiness. Value chain-based financing mechanisms, whereby 'ready markets' act as collateral, are viable options for input credit, working capital for produce collection, and investments in infrastructure and equipment.

Introduction

2SCALE public-private partnerships (PPPs) are strengthening local and value chain networks and are building capacity for collective action, including co-investment in developing and scaling up inclusive business models. Partnering smallholder farmers, processors, input dealers, traders and large off-takers require financial services for access to inputs, working capital, purchase and aggregation of products, extension of processing lines, and acquisition of new equipment. The financial sector, however, lacks the knowledge, incentives and skills to effectively target and service the agricultural sector, leading to severe financing constraints; high interest rates are the most common constraint in rural and agricultural finance.

A mismatch between the repayment schedules set by financial institutions, and the cash inflow of smallholders and small- and medium-sized enterprises (SMEs) in the agrifood sector, presents another major constraint. Financial service providers remain largely unaware of the often seasonal nature of activities which influence cashflow in the agricultural sector. Rigid repayment schedules therefore limit the possibility of offering tailored-to-purpose credit conditions.

Despite some progress in recent years, financial institutions' poor outreach remains a handicap, specifically for smallholder farmers living and operating in rural areas, with little or no transport and communication infrastructure. The multiplication of rural banks and financial cooperatives is certainly a sign of hope for smallholder farmers and SMEs. However, the services and products offered by financial institutions remain insufficient. This limits the opportunities for smallholder farmers and SMEs to buy quality inputs, to adopt efficient technologies, to store products in appropriate conditions, or to bulk produce.

The challenges in achieving financial inclusion can be summarized with three key questions. (Box 26)

- 1** How can financial institutions' knowledge of the agricultural sector be improved, such that the services they offer can be adapted and tailored to the requirements of smallholder farmers and SMEs?
- 2** How can value chain actors, particularly women and youth, improve their knowledge and use of financial services?
- 3** How can loan defaults be better managed, with the aim of strengthening smallholder farmers' financial assets?

This chapter highlights 2SCALE interventions that provide answers to these questions.



Meeting of a Village Savings and Loans Association, Uganda

Photo by Joris Maatman

BOX 26 | WHAT IS FINANCIAL INCLUSION?

Financial inclusion – as an aim – means that formal financial services, such as deposit and savings accounts, payment services, loans, and insurance, are readily available to all consumers, and that they are actively and effectively accessing and using these services to meet their specific needs (definition adapted from the Global Partnership for Financial Inclusion <https://www.gpfi.org/>). As a process, financial inclusion seeks to address the specific constraints that exclude people – such as women and youth – from accessing, using and benefiting from financial services.

The reality for smallholder farmers and SMEs

The 2SCALE program saw a large variety of funding requirements in its agribusiness partnerships. In the vegetable partnership in Benin, for example, lack of funding for improved seeds and fertilizers had, in the past, substantially diminished smallholders' (particularly women and youth) capacity to increase their production for meeting market demands, and thus to increase their revenues. This was also observed in the cassava partnership in Nigeria, where farmers needed financing to acquire improved stems, fertilizers and agrochemicals in order to increase their production and supply cassava to Pсалtry, a local cassava processing company. Smallholder farmers and processors of rice and soybean in Benin and Ghana, respectively, continuously struggle to access funding to reinvest in their agribusinesses. They need finance to acquire raw material and to improve facilities for storage, processing and packaging in order to meet market demands and standards.

However, banks and microfinance institutions (MFIs) collaborating with 2SCALE remained conservative about financing agribusiness. Either the agricultural sector is not included in their policy priorities, or they deem smallholders and SMEs ineligible for finance due to the sector's perceived high level of risk. This situation is exacerbated by poor knowledge of the agricultural sector. In particular, financial institutions lack information about actors along agricultural value chains – the inability to trace credit history or creditworthiness remains a major sticking point – and the institutions' capacity for outreach to farmers is underdeveloped, with a limited network of offices and agents unable to reach farmers residing in remote areas.

The 2SCALE approach for enhancing financial inclusion

The 2SCALE program has been instrumental in ensuring that SMEs and smallholder farmers are in a position to scale up their activities by accessing affordable financial solutions from financial service providers. This situation has been made possible by ensuring access to, and use of, existing financial products and services, on the one hand; and – where necessary and possible – by improving existing services, or developing new financial services designed to meet the specific needs of farmers and SMEs.

In order to enhance access to finance within the 2SCALE program, finance specialists from 2SCALE implementing partners – together with local 2SCALE staff and agribusiness cluster (ABC) coaches – have developed interventions that follow a structured approach:

- **Needs assessments and inventory of available financial services and products.** This step focuses on value chain actors' financial needs, and the financial services and products available. Assessing financial needs gives a comprehensive understanding of the current business models and flow of funds in the value chain. Specific attention is paid to women's needs.
- **Matching demand and supply.** This step links clients who need finance with financial service providers. If no appropriate services exist, 2SCALE seeks to facilitate the design of new financial services tailor-made for the specific crop or value chain activity. Dedicated business or finance forums are organized by 2SCALE, where value chain actors, financial service providers and other stakeholders in the value chain are invited to exchange information, and to agree collectively on the need to design financial services. Such events create mutual understanding and trust between actors across the entire value chain.
- **Implementation of the financial instruments.** Newly developed financial instruments, tailored to the business cycles and financial requirements of targeted value chain actors, are piloted within a manageable timeframe and scope. It is essential that financial service providers believe in the services and products that have been developed, and are willing to roll out the new services (when they are successful) to a larger audience.
- **Evaluation and up scaling.** Based on successful pilots, clients and financial service providers agree on how to scale up the financial services and products. This process involves: rolling out capacity-building approaches in order to reach a large number of actors; the development of local skills and the training and deployment of trainers; enlarging financial networks; and setting up of a monitoring and evaluation system which is coordinated by 2SCALE financial specialists.

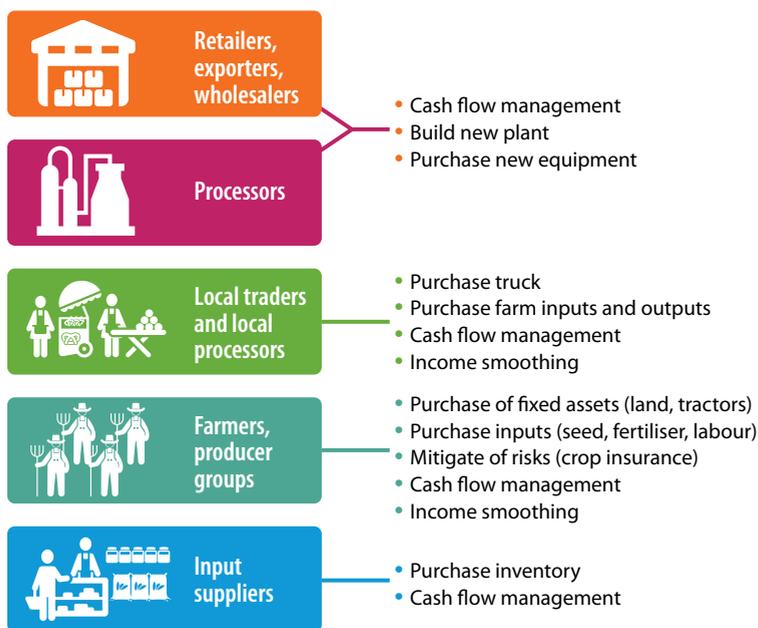
In light of the emphasis placed on reforming financial institutions and the services they offer, it should be noted that strengthening the financial literacy of smallholders and SMEs is also a key condition for the approach to be successfully implemented.

Financial arrangements in 2SCALE partnerships

Various needs for finance

2SCALE staff work closely with value chain actors and financial service providers to provide a wide range of financing options (Figure 17).

Figure 17 | Demands for finance by various value chain actors



icons from freepik.com

Arrangements for accessing agricultural inputs

2SCALE supports farmers to develop a production or farm business plan to estimate their financial needs. Such a plan describes all production activities, and specifies the actual financial needs for input supply (Box 27). Sales contracts between farmers and product off-takers serve as a guarantee for loan repayment after harvest. Farmers' organizations then issue purchase orders to input supplier, collect the inputs, and distribute to farmers. Upon receiving the inputs, individual farmers sign a credit, with another member of the organization signing as a witness, to reduce the risk of loan defaulting. The farmers' organization provides a delivery acknowledgment to the input supplier which then submits this to the financial service provider, who then pays to the input supplier.

After harvest, the farmers' organization delivers the produce to the off-taker according to the sales agreement. Then the off-taker pays the financial service provider for the produce, which deducts the input credit and interest before paying out to the account of the producers.

BOX 27 | TRIPARTITE ARRANGEMENT FOR INPUT SUPPLY IN THE PINEAPPLE PARTNERSHIP IN BENIN

Nine farmers' cooperatives are involved in the pineapple partnership in Benin led by the processing company, Promo Fruits. With the support of 2SCALE, Promo Fruits was connected to the financial institution, *Faîtière des Caisses d'Épargne et de Crédit Agricole et Mutuel* (FECECAM) and two input dealers, *Institut de Formation de Jeunes et de Développement de la Dynamique des Engrais dans l'Agriculture* (FOJEDEA) and *Société Nationale pour la Promotion Agricole* (SONAPRA), with which a tripartite agreement was concluded. 2SCALE facilitated the negotiations, which led to the reduction of interest rates for input credits from 24% to 15% per year. Based on this, business plans were drawn up for each farmers' cooperative and submitted to FECECAM. Installment and repayment periods were defined for a period of 24 months, with a moratorium of 18 months corresponding to the pineapple production cycle. After loan approval by FECECAM, the input dealers delivered the required inputs to the cooperatives, and FECECAM paid the input dealers. After 18 months of the pineapple production cycle, farmers delivered their fruits to Promo Fruits, who paid them directly into their bank accounts. FECECAM then deducted the loan amounts and charged the agreed interest rate, and the remaining amount was remitted to farmers' bank accounts which are held by FECECAM (Chapter 7).

Advancing working capital

Working capital are funds used to finance the daily operational costs of a farm or SME. Farmers and entrepreneurs need access to finance on an ongoing basis in order to successfully manage their agribusiness and develop their operations. Financing capital for SMEs – particularly collectors, aggregators and small and medium processors – is key to their success, as it allows them to buy and immediately pay for the product delivered by the farmers.

Smallholder farmers and small entrepreneurs often rely on external financing for working capital from various sources, such as deposits in MFIs and credit unions, Village Savings and Loans Associations (VSLAs; Box 31), family donations and grants. In addition, medium-sized enterprises may turn to commercial and development banks in order to access working capital. However, there are some challenges to getting a bank loan – for example, banks may require extensive documentation demonstrating the applicant's ability to pay back the loan. Decisions may therefore take several months, and as a result, applications are often declined. Even when loans are approved, banks may restrict the use of funds, or require collateral as repayment guarantees.

Therefore entrepreneurs should weigh their financing options based on: the speed of access to finance; the ease and flexibility for repayment; and the ability to utilize the capital as they see fit. Before applying for any source of capital, entrepreneurs should inform themselves about the financial service providers that are available, and gain a thorough grasp of the funding terms and conditions.

2SCALE has been at the forefront of aiding smallholders and SMEs in formulating viable business plans and bankable proposals, and linking them to financial institutions for the

provision of working capital. For example, in the 2SCALE cheese partnership in Benin, Merry a cheese processor, was linked to Vital Finance in Parakou in order to increase her trade capital to purchase white cheese from Fulani women. Similarly, the yellow maize partnership in Benin linked OLAPI – a women-led SME – with MFI *Association de Lutte pour la promotion des Initiatives de Développement* (ALIDé), to finance the production of flour.

Increasing financial institutions' risk taking capacity

Risks related to loan defaults

When compared with other sectors, higher default rates are recorded in agriculture financing. Frequent non-compliance with supply contracts and accompanying high loan default rates have been observed in sesame, maize, and soybean value chains. 2SCALE experiences in the field highlight the following situations as major contributing factors in loan defaulting:

- **Crop and market failure.** Harsh weather conditions affect expected yields, producing lower returns from the proceeds than expected. Similarly, bumper harvests can cause a glut in the market, and falling prices push farmers' incomes down.
- **Side-selling.** This occurs frequently in contract farming and collective sales through farmers' organizations. Often, supply contracts stipulate that all or part of the produce will be collected and delivered to an off-taker at a given price. Such agreements however are frequently not respected by farmers and their organizations, for various reasons. Non-compliance with a supply contract becomes particularly troublesome if the supply contract is connected to a credit facility, where the credit is to be paid off by the off-taker, before paying the remainder of the buying price to the supplying farmer or farmer organization.

Rises in market-prices are an important trigger for side selling. When the spot-market price rises above the contractually agreed price, farmers are tempted to disregard their sales contract, and sell their product in the spot market. Delayed collection by off-takers holding the buying contract also triggers side selling. A third cause is urgent immediate cash needs by smallholder farmers. The spot market provides cash upon collection, while farmers usually have to wait some time before payments are processed in supply contracts.

- **Buyers failure to honor the contract.** The buyer may also fail to honor the contract with farmers, either by refusing to take the product, or by delaying the payment so much that farmers and their organizations are unable to meet their loan reimbursement installments and deadlines. In some cases, often when there is not a written contract, the buyer can look for other sources of produce. This situation provokes farmers to sell their product in an open market at a lower price, and they are therefore no longer able to repay the loan.
- **Loan diversion.** Loans may be diverted to other activities, for which related risks are not well assessed and which might prove unsuccessful for smallholder farmers. The loan may also be diverted to other, non-farm purposes, such as family emergencies, schooling, ceremonies and festivals, which affects the farmer's capacity for repayment.

A lack of clarity or up-to-date information on loan disbursement conditions may also confront smallholders with unexpected costs, and therefore limit investments. As a consequence, they may not be able to pay back the loan. On the other hand, farmers' organizations often do not provide accurate information to financial service providers, notably failing to provide farmers' credit histories, the purpose of the loan or the real group size. When information is inaccurate, loan officers can make incorrect decisions and confirm a loan amount which surpasses the repayment ability of the farmers' organization.

- **Flaws in the selection process of beneficiaries.** In some cases, inappropriate selection of loan beneficiaries by leaders of farmers' organizations can be a source of default. This can happen when there is incorrect profiling of farmer group members. Worse are cases in which fictitious group members are proposed for access to credit, to increase the total sum that can be borrowed.

Management of loan defaults

2SCALE was critical in enabling most financial institutions to provide financial services to smallholders, farmers' organizations and SMEs, by not only facilitating linkages with these clients, but also assisting the recipients to make good use of the loans. 2SCALE has a number of ways for helping to prevent delays or failures in loan repayment:

- **Developing and strengthening financial literacy.** This is the ability to understand 'how money works': how someone manages to earn an income, how to manage that income (whether as an individual or as an organization), and how to invest it. A lack of financial literacy can lead to poor financial decision-making, and heavy levels of debt. For example, if one possesses financial literacy skills, the advantages or disadvantages of fixed and variable interest rates are concepts that are easier to understand, and therefore to make informed decisions about (Box 28).
- **Profiling of beneficiaries.** This involves setting up and keeping a database of loan beneficiaries and their repayment status, which helps to identify defaulting beneficiaries, who are excluded from future loans.

BOX 28 | DEVELOPING FINANCIAL LITERACY IN THE CASSAVA PARTNERSHIP IN NIGERIA

In the cassava partnership in Nigeria, financial literacy meetings brought together cassava smallholder farmers, financial institutions (First Monument Bank and Excel Microfinance Bank) and Psaltry, the processor sourcing cassava from farmers, and helped to improve communication between them. The meeting allowed the financial institutions to identify farmers eligible for finance to be invested in mechanization and input supply (for example, improved cassava stems, fertilizers and herbicides). At the same time, financial literacy sessions educated farmers about the preconditions to acquire a loan, such as required documentation, interest rates, loan duration and maximum amounts for individuals. Through cost-benefit analysis and simulations of profit-loss scenarios, farmers came to realize that they could not afford to apply for any loan charging more than 22% annual interest (Chapter 5).

BOX 29 | PARTICIPATION OF FARMERS' COOPERATIVES IN CREDIT RECOVERY IN THE SOYBEAN PARTNERSHIP IN GHANA

Diversion of funds, lack of due diligence in loan applications, crop failure and debtors' unwillingness to repay their loans are common causes for loan default in Ghana. In most cases, post-disbursement monitoring of loans has been inadequate, opening a consistent gap between loan disbursement and recovery. Farmer involvement in the loan application process is usually low. However, the case is different in the Saboba soybean cluster. The Bileegnan farmers' cooperative has a strong relationship with their financial service provider, Bonzali Rural Bank. The cooperative leadership negotiates with the bank on access to production credit for its members, including terms and conditions of the loan. Loan requests are collated from the primary cooperatives and submitted to Bonzali Rural Bank for processing. During disbursement, the cooperative provides monitoring to ensure that all members who apply for a loan have access to land before disbursements are made to them. Monitoring visits during the production cycle and recovery of the credit are also carried out jointly between the bank and the farmers' cooperative. To be able to conduct these monitoring visits, the cooperative raises funds from a levy charged on the marketed product. This strategy by Bileegnan has strengthened their relationship with Bonzali Rural Bank and has ensured transparency and inclusion in the credit management process. Recovery has always been high, averaging between 80% and 90%, for this cooperative in the soybean cluster.

- **Assessing financial needs.** It is always essential to carry out due diligence processes, in order to understand the actual financial needs of smallholder farmers and SMEs. This helps to avoid both overfunding and underfunding.
- **Reviewing financial products.** It is essential to review existing financial products and identify their weaknesses, which might be a hindrance for reimbursements by smallholders and SMEs. 2SCALE has assisted financial institutions in refining existing products or developing new financial services based on the needs of smallholders and SMEs.
- **Agreeing on group guarantees.** In the case of group-guaranteed loans, all members in a group or a network need to agree to commit to guarantee the total group loan. In addition each individual loan is guaranteed by one or more other group members. In case of individual default, the guarantors will be responsible for reimbursement of the loan. A limit to the amount of credit is agreed, based on the amount the guarantors are willing and able to cover (Box 29).

BOX 30 | GUARANTEE FUND IN THE VEGETABLE PARTNERSHIP IN BENIN

Vegetable farmers in southern Benin faced numerous barriers to the growth of their agribusinesses, including low investment capacity for irrigation system development and maintenance, a lack of labor, and impeded access to inputs. Furthermore, the farmers were not eager to contract loans with financial institutions in the area because of the high interest rates charged, the rigidity of the loan repayment conditions, and the required collateral. Most financial services were tailored to product collection and marketing and were not designed for investments in production capacity. This hampered the competitiveness of vegetable producers' associations, who decided to partner with 2SCALE. A guarantee fund was provided by the Dutch Embassy in Benin, and fund use agreement concluded between 2SCALE and the MFI ALIDé. The fund offered flexible repayment conditions, presenting vegetable producers' associations with a unique opportunity to access finance. Loans for input finance and farm maintenance are provided with a one-year tenor and bullet repayments (lump sum payment for the whole loan) upon product sales. The Sèmè Kpodji vegetable producers were able to access investment loans to acquire a drip irrigation system with a tenor of three years, including one year of grace with annual instalments (Chapter 6).

Guarantee funds

Guarantee funds are an overarching institutional arrangement involving a public funder (e.g. the Dutch Embassy through 2SCALE), and that aims to address the barriers faced by smallholders and SMEs to provide the required collateral for accessing finance.

In many rural areas, owned land is often not secured with a title, and so cannot be used as a loan guarantee. One way to address this issue is to support farmers to build trust with a financial service provider by setting up a guarantee fund. A guarantee fund is a specified sum of funds set aside by a project. The fund acts as a financial fall back, enabling financial institutions to offer flexible credit facilities to identified groups of smallholder farmers and SMEs (Box 30).

A guarantee fund is different from a credit line. It is a fund to leverage a financial institution's investment in the agricultural sector and significantly improve loan conditions, which, in this context, could take a number of forms: low interest rates; reduction of loan screening fees and loan disbursement procedures; no requirement for tangible collateral, including upfront savings; flexibility of loan repayments (in line with the cash flow cycle of activities); and possibilities for both group and individual loans. Furthermore, with the guarantee funds, credit risks are co-supported between the guarantee fund and the financial institution, and hence reinforce the accountability of the financial institution in its loan processing.



Harvesting Swiss chard, Kenya

BOX 31 | WHAT IS A VSLA?

A VSLA is a group of people who save together and take small loans from the pooled savings. The group activities run in cycles of one year, after which the accumulated savings and the loan profits are distributed back to members. The purpose of a VSLA is to provide simple savings and loan facilities in a community that does not have easy access to formal financial services.

In West Africa, the concept of VSLA is currently transitioning from VSLA to Community Saving and Loan Associations (CSLAs), which target different communities in the same village. Those communities might be formed based on the professional status, gender, people having similar economics or financial needs, or working in the same sector. A CSLA operates in the same way as a VSLA.

Re-inventing savings culture for resource mobilization

Savings are essential for granting loans to value chain actors, especially for smallholder farmers. On the one hand, it allows farmers to anticipate loan repayments, especially for voluntary term deposits. When an unlikely event occurs, which may disturb the loan repayment schedule, farmers can use part of their savings to meet their repayment commitments. Savings can also help to overcome the challenge of meeting collateral requirements, and give farmers an opportunity to obtain credit, without hard collateral, on the basis of their regular deposits as proof of a regular cash flow. Alternately, savings and other capitalization strategies can reduce the need for external finance in the first place; a particularly useful strategy given the costs of external finance (e.g. currency devaluations, high interest rates).

Savings thus appear to be a good method for mitigating defaulting risk; indeed, financial institutions encourage savings while repaying loans. Moreover, a clear savings plan helps to increase farmers' own resources that can be invested to expand value chain activities. 2SCALE encourages farmers to save in different ways, but typically with financial institutions. Therefore, 2SCALE has supported the implementation of VSLAs (Box 31 and 32) in West and East Africa. A VSLA is a more formal, structured and democratic version of the informal savings groups found in villages. The main difference is that the VSLA method provides a more organized and more accountable system – one that is comprehensible even for the financially illiterate.

Key to the successful promotion of VSLAs has been the accompanying training activities – in financial literacy and credit management – which will help to raise farmers' awareness of the importance of savings.

A VSLA is composed of 15 to 25 self-selected individuals who agree to save money as a group, and who meet weekly to deposit money in a fund. A management committee, elected by the group, is responsible for managing the funds. In a VSLA, savings are flexible between members and over time; this means that members do not have to save the same amount as each other, nor do they have to save the same amount at each meeting. By

BOX 32 | VSLAs IN THE RICE AND SOYBEAN PARTNERSHIPS IN GHANA

In a country where 70% of the population are not involved in the formal banking sector, it is expected that savings and other investment opportunities are not fully utilized by the majority of people. This is very common among smallholder farmers and other grassroots actors. 2SCALE in Ghana has facilitated access to finance for producers and SMEs in the rice and soybean partnerships through VSLAs. These associations have improved access to low-interest credit for producers and SMEs, and have also encouraged savings. So far, a total of GH¢ 1.3 million has been mobilized in savings, out of which GH¢ 1 million has been disbursed as loans to members. About 4,563 producers and SMEs (including 3,485 women) are benefitting from this scheme. These associations have received training on financial literacy and business management skills, and are also linked to financial institutions where they deposit their funds. From a non-bankable position, the VSLA participants have now become attractive to a number of financial institutions due to their ability to mobilize these savings.

saving more frequently in small amounts, the poor can build their savings more easily, which contributes to improving household security.

Savings are kept in a fund from which members can borrow in small amounts, in a quantity of up to three times their individual savings. Loans are for a maximum period of three months in the first year and may be repaid in flexible instalments, at a monthly service charge determined by the group. Each group may also have a social fund, which provides members with a basic form of insurance. The social fund serves as a community safety net and may serve the entire community, including group members and non-members, for emergency assistance, festivals or funeral expenses, for example.

In order to track individual savings and loan liabilities of its members, a VSLA uses a simple passbook that is appropriate for groups with limited literacy and numeracy skills. The VSLA passbooks and funds are held in a lock-box, which is safeguarded by the group box-keeper between meetings. The lock-box has three padlocks and the keys are held by three group members, who are not management committee members. The system is robust and ensures that there can be no manipulation of the group's passbooks or funds outside of group meetings. Once the VLSA fulfills its functions, attracts more members and is well managed, it can 'graduate' to become a Savings and Credit Cooperative Organization (SACCO; Box 33).

Innovative ICT-based solutions in agricultural finance

Widespread internet availability via smartphones – which are increasingly affordable for smallholders and small-scale entrepreneurs – provides opportunities for innovative financial service provision. ICT-based innovations have the potential to speed up financial operations, reduce transaction costs and enhance transparency.

Reduced transaction costs through ICT-based solutions enabled farmers to access more convenient financial services, resulting in more efficient farming. 2SCALE has been at the forefront of this movement, having collaborated with telecom firms to

BOX 33 | FROM VSLAs TO A FARMER-BASED SACCO IN UGANDA

The emergence of strong VSLAs meant that the risks associated with large amounts of savings was real. 2SCALE supported the Masindi District Farmers' Association (MADFA) in the west of Uganda by providing training on business skills and strategic planning for 15 well-organized VSLAs. Out of the 15 VSLAs, three emerged with a business idea of converting into a SACCO. 2SCALE provided further assistance in training, registration and the development of credit and savings manuals to assist in operational work. To date, the three converted VSLAs have become fully-fledged SACCOs and membership has grown from 30 to 130 members on average for each. This has boosted the 'savings culture', and has built confidence among the organization members.

MADFA provides three interlinked services: 1) financial services to farmers to ensure they can finance inputs and other required purchases for the production of maize, beans, soybean and sunflower; 2) agriculture extension services to its members before they access financing from the SACCO to ensure that loans are put to productive use; 3) MADFA has also entered into a partnership with Masindi Seed and Grain Growers Ltd., one of the three licensed warehouse operators in Uganda, to facilitate farmers to aggregate their produce during harvest time and deliver to Masindi Seed and Grain Growers.

foster innovative ICT-based technologies in agriculture finance. The following gives two examples of this work:

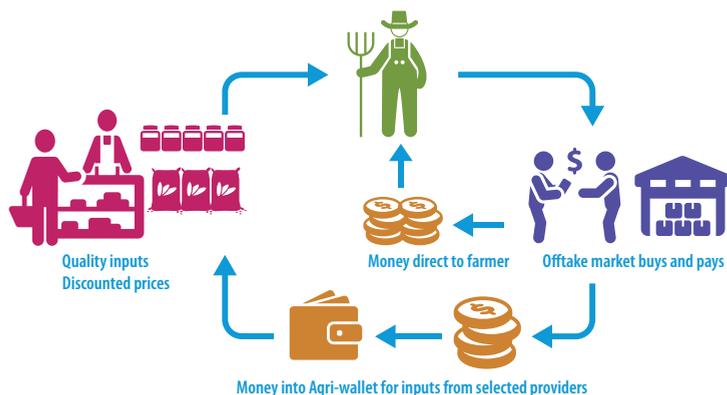
- **Mobile money disbursal.** Umati Capital in Kenya advances payments to dairy farmers, who deliver milk to the processing enterprise, Eldoville Dairies, through a mobile-based application. Farmers apply for the payment by Umati Capital based on deliveries made. Umati Capital receives farmers' requests and, in turn, asks for approval from Eldoville Dairies before disbursing the approved amount to the farmer via M-PESA, the mobile money transfer system that is operated by Safaricom. Umati Capital then contacts Eldoville Dairies directly for the payment made to the farmer (Chapter 3).
- **Mobile agri-wallet.** Through an agri-wallet mobile phone application, potato farmers are able to save money for the procurement of next seasons' agricultural inputs (Figure 18). Dodore Kenya – the financial institution responsible for developing the platform – then locks an agreed amount (usually 10-20%) of the farmer's savings in a savings account, which then remains inaccessible to the farmer until the start of the following farming season.

The Dodore Kenya application is an ongoing pilot of an ICT-based savings system for anticipating the purchase of inputs, which helps farmers to avoid using their savings for other purposes between the harvest and the start of the next farming season. Eventually, the farmers find that they do not have to over rely on debt financing to secure inputs. Farmers, off-takers and input suppliers all need to agree on using the savings system. First of all, farmers have to agree with the off-taker to channel all of their payments through the platform. Secondly, farmers, the off-taker and Dodore Kenya decide on a percentage of proceeds that will be locked in the savings account, which is managed by Dodore Kenya

for a specified period of time. Thirdly, an input supplier is selected by farmers from whom the inputs will be sourced. Both parties agree on pricing for the inputs.

Input suppliers are allocated telephone numbers, which farmers use for transactions. When a farmer is in need of inputs, they visit the input supplier and make a withdrawal of an amount equivalent to the inputs purchased. This amount is credited to the input supplier electronically and the farmer picks up the inputs without handling any cash.

Figure 18 | Flow of funds and products in the agri-wallet system



Lessons learned

In all institutional arrangements for inclusive financial service provision, record-keeping by smallholder farmers and other entrepreneurs in the agrifood sector remains essential; not only for themselves (in order to make well-informed decisions) but also for financial service providers, who need to be informed about cash flows, financial assets and management skills. Therefore, financially literacy training and the development of financial management skills merits continuous attention, particularly through adapted training methods and material for smallholders and small-scale entrepreneurs. While many may have the required entrepreneurial mindset, a large proportion are also illiterate.

In order to receive credit from financial institutions, submitting business development plans often remains a condition, particularly for SMEs and farmers' organizations. A business development plan, therefore, guides entrepreneurs when managing their enterprises, and forms the basis on which a financial institution makes decisions about providing credit. Some entrepreneurs and staff from farmers' organizations confessed that they could not interpret the business plans that were drawn up by consultants on their behalf, and so continued to lack the ability to negotiate loans and subsequently navigate their business activities. The scope of many business plans means that it is important that support continues to be offered, not only during the design of a business plan, but also throughout its implementation.

Financial service providers still expect collateral security from loan applicants for reasons of risk mitigation, and they often require formally registered assets, such as land, for use as collateral. Value chain-based financing mechanisms, whereby 'ready markets' act as collateral, are viable alternatives. This also implies that farmers' organizations in particular need to follow this path and undertake the necessary organizational reforms to become viable enterprises, i.e. genuine cooperatives with qualified and skilled staff.

Winnowing soybean, Uganda



Photo by Joris Maatman



ጥራትና አስተማማኝ አቅርቦት በተመጣጣኝ ዋጋ!
 "Dhiyeessa Amansiisaa fi Qulqulina Qabu Gatii Madallawaan"

Meki Batu vegetable brand

Photo by IFDC

Local drivers of inclusive agribusiness development: cases from Ethiopia

Addis Teshome and Assefa Degefu

KEY MESSAGE

Agro-input dealers usually play a key role in distributing important farm inputs like seeds, agro-chemicals and fertilizer to farmers in rural areas. Off-takers perform a similar role, while also directly aggregating the surplus produced by smallholder farmers. The role of these local actors is critical in inclusive development. In situations where there are no such actors in the agricultural sector, as is the case in Ethiopia, market linkages are mediated through farmer cooperatives and unions. However, weaknesses in these organizations not only limit growth, but also inclusiveness. This can be overcome by developing and applying tailor-made solutions while cooperatives and unions remain in the driver's seat.

Introduction

In Ethiopia, 2SCALE has focused on cooperative unions and their members, the primary cooperatives, as the main drivers of inclusive development. Such organizations offer

opportunities for economic development at scale and facilitate vertical integration in the value chain. Two Ethiopian partnerships established through 2SCALE, in the sorghum and vegetable sectors, demonstrate the potential of farmers' organizations as hubs for innovative technologies (improved seeds, agro-chemicals, farm technologies and fertilizer). With quality control mechanisms linked with farmers' production activities, farmers' organizations also offer potential as points of primary and secondary aggregation to generate the volume of produce needed to attract companies and big buyers. Both partnerships show how cooperatives and unions can be suitable agribusiness partners for large companies and enhance inclusive agribusiness development. In the Ethiopian context, inclusive agribusiness development can be viewed as the extent to which companies, cooperatives and unions are able to tailor their offerings to smallholder farmers, i.e. access to specific cost-effective technologies, an increased share of the final commodity price, and, most importantly, the empowerment of farmers to make informed decisions.

Cooperatives as local drivers for inclusive agribusiness

In Ethiopia, it made sense for 2SCALE to focus on farmers' organizations as local drivers because the country's agricultural development policy and strategies explicitly favor cooperatives as a means for input distribution and access to markets. Cooperative membership is usually open for anyone in the village as long as they are farmers. However, membership of women in the organizations remains relatively low. The fact that the primary cooperatives are owned by the individual member farmers and these cooperatives are the shareholders of the unions, offers an opportunity for any benefits to trickle down (generated from the sale of inputs and the marketing of outputs) to smallholder farmers in a transparent manner. In addition it is often a challenge to find small- and medium-sized enterprises (SMEs) with a strong presence at the grassroots level and a clear inclusive agribusiness perspective. This is equally true for primary cooperatives and unions, which in practice also face the challenge to be or to become inclusive; e.g. the low membership of women.

Partnerships

The partnership in the sorghum sector deals with four farmers' cooperative unions (Setite Humera, Dansha Auraro, Selam and Metema, including 60 primary cooperatives with a total of 25,495 smallholder farmer members), which were confronted with the challenge of an appropriate rotation crop for sesame (Box 42). Once sorghum was identified as a suitable rotation crop, the multinational company, Diageo, entered into an agreement with the unions for the sourcing of white sorghum. Diageo is a leading premium drinks company, globally trading in over 180 countries. The company entered Ethiopia by acquiring Meta Abo Brewery SC in 2012 and immediately embarked on local sourcing, which is a key business goal for Diageo. Meta Abo Brewery SC supports barley value chain development in partnership with the Government of Ethiopia, and private and non-governmental organizations. The company has started to use sorghum for the first time to produce a beer branded 'Azemera'. Diageo already works through the unions – even though many of them are not well-organized – and buys relatively large volumes from each of these unions; it thereby delegates a large part of the collection and aggregation to the unions and their cooperatives.

In the vegetable sector, organizations like the Meki Batu Fruits and Vegetables Growers Cooperative Union (FVGCU) (made up of 69 cooperatives involving 6,835 smallholders)

and their members, the clusters include other actors involved in the commodity value chain, such as agricultural extension offices (advice), the Cooperative Promotion Agency (CPA) – which supports farmers to organize into cooperatives – microfinance institutions (MFIs), transporters, etc.

Sorghum

Prior to the 2SCALE intervention, there were no organized white sorghum marketing activities by the unions. The partnership emerged as an answer to the outstanding issue around sustainable sesame farming, given the decline in soil fertility due to monocropping and the high level of price fluctuation in the sesame market. All cluster actors understood the importance of crop rotation, i.e. with sorghum, but farmers were unable to sell their sorghum and hence develop a competitive market-driven cropping system. Since Diageo already intended to source sorghum from the unions, it was a challenge for the unions to maintain this multinational company as a buyer. Therefore understanding the standards required to keep the buyer on board was critical.

Together with 2SCALE, the Sesame Business Network (SBN) of Wageningen University and Research, Gondar and Humera Agricultural Research Centers (ARCs), the CPAs and agricultural extension offices, the four unions initiated research on crop rotation. The trials of the different potential rotational crops were led by SBN, the ARCs and the agricultural extension offices. Once sorghum was identified as a potential rotational crop, 2SCALE took the lead in identifying large-scale buyers of sorghum, while the unions, the primary cooperatives and the CPAs created awareness among farmers on the use of sorghum as a rotation crop. Sorghum for brewing was a non-existent market in Ethiopia since all beers in the country were made exclusively from malt barley. The unions collected different varieties of sorghum for analysis by Diageo and in the end two varieties were selected. The whole process – the selection of varieties, the different lab analyses and ‘designing’ the cropping system – took two and a half years.

The unions and primary cooperatives were committed to meeting the quality standards of the brewery. In partnership with 2SCALE, the ARCs, and SBN, the four unions have rolled out a cascading training program on sorghum. Training was provided for 20 experts who then trained 150 agents of the agricultural extension system. These agents trained 2,545 farmers on good agricultural practices and the marketing of sorghum. In addition 2,793 demonstration plots were established across the 29 ABCs. On these plots, 8,591 farmers were trained.

In the agreement with Diageo, the unions and cooperatives distribute the required inputs for growing sorghum and organize farmers for training and demonstrations. At the time of harvest, primary cooperatives collect produce from their members and supply it to the unions, who are responsible for most of the value additions in terms of sorting, cleaning and re-bagging, after which the sorghum is supplied to the company.

In 2016, all four farmers’ cooperative unions were able to have a white sorghum supply agreement with Diageo. The contract brokered offered a significant advantage to the smallholder sorghum farmers as the price was based on pre-selected reference markets



Soil preparation, Ethiopia

and set by a joint price determination committee (including Diageo, the farmers' union and CPA, with 2SCALE as a facilitator). Farmers were able to get an additional 7% as an incentive for meeting the quality standard. Other add-ons for the primary cooperatives and unions were also agreed in a transparent manner. Since there was no advance payment by Diageo to the unions for pre-financing the aggregation from the cooperatives and farmers, an arrangement was made to cover the cost of credit by the unions. Hence Diageo paid an additional four-month commercial interest rate that allowed the unions to cover the cost incurred in the aggregation process.

The unions have all successfully supplied the contracted amount with the agreed quality, within the required time of delivery. This improved the income of smallholder farmers from the sale of sorghum as the cooperative members have received 77% of the final price of sorghum, while non-member farmers were only getting 60%.

Though Diageo became the main off-taker of white sorghum, there was another opportunity to further develop the sorghum partnership. Each year almost half a million laborers travel to the area for sesame farming, which demands labor for planting, weeding, thinning and harvesting. Most of the laborers consume sorghum-based meals with very low nutritional value. To support better nutrition, create an additional market for producers and generate an employment opportunity for women groups the idea of using nutritive recipes, such as '*genfo*', '*injera*', '*ambasha*' and '*atmite*', to feed laborers was developed. Together with the four unions involved, 2SCALE supported the development of four small women-led enterprises, involving some 120 women, that produce different nutritive dishes.

Vegetables

In the case of the Meki Batu FVGCU, the business model aimed to enhance competitiveness in the wholesale market for vegetables and offer clear value propositions for different customer segments. The Meki Batu union and its member cooperative, Bekelle Gerrisa,



Photo by IFDC

developed the business idea. They were aware that the cost of vegetable production within the primary cooperatives had risen significantly and affected its competitiveness. The market study had also confirmed this and further analysis indicated that the main contributors to high production costs were unsuitable pest and disease management, inappropriate fertilizer application and poor water and irrigation management.

Accordingly, locally adapted extension manuals were developed on appropriate fertilizer and irrigation management. The union was able to train 3,491 farmers and extension agents on the extension package and also set up 156 demonstration plots for the training of 1,176 additional farmers. In parallel, 2SCALE partnered with CropLife Africa Middle East (www.croplifeafrica.org/) to set up a spray service providers system within the clusters for phytosanitary treatments of crops. CropLife Africa Middle East is a professional organization representing the plant science industry. It is an association for international companies that manufacture pesticides and sell their products in Africa and the Middle East. From 14 primary cooperatives, 25 spray service providers were trained and fully equipped to provide a spraying service to control diseases and pests. These three activities have reduced the cost of production by 28% and hence given the farmers a competitive edge in the market.

With support from 2SCALE, Meki Batu FVGCU identified three customer segments in the vegetable market, characterized market actors and developed marketing strategies accordingly. The three customer segments selected were: i) wholesalers as the main market for farmers produce to match the vast production capacity; ii) institutions as a secondary target segment to secure consistent market for outputs; and iii) consumers to support the brand building effort while also giving better margins for the union and the producers.

The study outcomes were presented and discussed in a workshop, which resulted in a draft marketing strategy. The union's management team refined the strategy, which was then endorsed by the board. Each customer segment now had its own value proposition and the union marketing team was trained on the different marketing strategies for each segment.

The business strategy proposed for the Meki Batu FVGCU focused on redefining the value of vegetables in Ethiopia. This was to be achieved by empowering smallholders to drive loyalty from brokers to the union, through the development of trust and transparency in the vegetable sector by facilitating access to free market and production information and ensuring consumers pay only for actual value delivered through the chain.

Before this, the union did not have specific strategies for particular customer segments; rather they employed one approach across the board. Part of the strategy to increase the union's capacity in facilitating market linkages was to give products more visibility through branding. A branding strategy was developed, involving the development of a logo and upgrading the union's retail outlets which connect them directly with consumers. This meant developing visual merchandising guidelines for banners, uniforms, signs, modern outlet shelves and billboards.

Meki Batu FVGCU has six retailer outlets in the towns of Adama (one outlet), Addis Ababa (three outlets) and Dire Dawa (two outlets). The outlets, however, did not have the facilities

required for product display and storage. The exterior appearance of the outlets gave no indication of ownership and product offering. The outlets were known and frequented during the holidays by nearby urban dwellers to purchase onions, but remained closed most of the year. After the intervention of 2SCALE, the union added other vegetables and fruits to the assortment sold through the shops. Additionally, four of the outlets are now branded to help maintain the quality and appeal of produce offered.

In addition, the union has become a regular supplier to Ethiopian Airlines, which is a premium customer that will not negotiate on quality. Under the strict quality supervision of trainers/coaches (initially hired on a cost-sharing basis between the union and 2SCALE) at different points – during seed variety selection, field practices, harvesting schedule, value addition at the pack house and cold truck management – Meki Batu FVGCU has been able to maintain a constant supply of ready-to-use vegetables on a weekly basis for the last two years. The market provided by Ethiopian Airlines has also allowed the union to provide jobs for 33 women in value addition activities at the pack house.

Increased marketing and share of final prices by farmers

When 2SCALE started working with Meki Batu FVGCU, only 5% of the total harvest of the farmers was marketed through the union, but by the end of 2016 this had increased to 24%. The percentage of sorghum marketed collectively during 2016 is relatively low, since it was the first year of production and only a pilot. As the unions continue to improve their supply efficiency, the brewery has promised to fully depend on them for their sorghum demand. The unions also have engagements with other buyers and, hence, not all marketing activities can be attributed to the facilitation by 2SCALE. Therefore, the data provided represents the commodity sales achieved as a result of the 2SCALE partnership (Table 7).

Table 7 | Data on commodity sales by unions

Union (FCU)	Commodity	Volumes traded (tons)	Farmers involved (nb)	Production costs (ETB/100 kg)	Price paid to union (ETB/100 kg)	Price paid to members (ETB/100 kg)	Price paid to non-members (ETB/100 kg)
Selam	Sorghum	400	330	343.50	834	642	500
Dansha Auraro	Sorghum	400	335	369.80	777	583	450
Metema	Sorghum	460	370	353.00	777	583	450
Setite Humera	Sorghum	1,160	1,000	319.25	777	583	450
Meki Batu	Onion	3,341	1,085	550	1050	935	800
	Tomato	2,784	887	450	1055	945	900

Farmers' share of the final price increases when they sell their produce through the unions compared to when it was sold through middlemen. Particularly, the agreements established with the large companies (Diageo and Ethiopian Airlines) enables the cooperatives to raise the farmers' share in the final price paid by the buyer (Table 7). This contributes to higher incomes for the farmers. In addition, any profit generated by the



Onions produced by Meki Batu, Ethiopia

primary cooperatives is paid back as a dividend to their members, while unions pay out further dividends to the primary cooperatives who in return pay back to the member farmers. These dividends result in a multifold income increase for the member farmers.

Professionalization of cooperatives and unions

In order to strengthen the capacity of the unions to respond to the demands of the primary cooperatives and member farmers, 2SCALE supported the professionalization of marketing activities, restructuring the marketing wings and, more importantly, helping the unions to attract, maintain and grow their customer bases. For this purpose, 2SCALE employed the Business Model Canvas (BMC) method (www.strategyzer.com) to develop marketing strategies specific to the different market segments. Emphasis was given to improving the relationship of the unions with member farmers and, hence, creating a mindset at the union level that the most important customer of the union is the farmer. In this respect there are still challenges ahead for transforming these organizations into viable enterprises that are led by farmers' needs, at the service of their members and accountable to them.

One of the major challenges is the low level of professionalism, especially at the primary cooperative level. The cooperatives are managed by smallholder farmers and most of these farmers have a relatively low level of education. This limits their ability to seek a new method of management that will eventually transform the cooperatives.

The lack of transparency and minimal accountability among the primary cooperatives and unions is another challenge. Consequently, the loss of sense of ownership has been observed between members and their organizations. Though the membership base of the cooperatives and unions is increasing, a considerable number of farmers who are nominally members do not actively participate in the activities of the cooperatives and hence, the unions. This is a challenge in terms of realizing the full potential for organizing smallholder farmers for sustainable value chain development.

Finally, the endless government support to unions and cooperatives also represents a challenge. On the one hand, this has almost led to a perfect vertical integration in value chains. On the other hand, it has created dependency and in many cases farmers' organizations expect the government to solve their problems. Currently the majority of the primary cooperatives and unions are working on input distribution (fertilizers, seeds etc.), while they expect the controlling government body to handle any problems that arise.

Lessons learned

The experience of 2SCALE in supporting the unions and primary cooperatives to become drivers of inclusive agribusiness development has shown their potential and the extent to which changes can be realized by tailoring activities to the particular conditions of smallholder farmers. Understanding the particular challenges and circumstances in which smallholder farmers operate is the key starting point. Knowing their unique mindset and perceptions of the risk factors is critical to tailoring interventions.

2SCALE avoided 'one size fits all' and 'top down' approaches, instead supporting the cooperatives and unions in identifying and understanding their core problems, and then engaging other key actors when solutions were proposed. However, during the implementation of activities, the unions remained the primary leaders. A committed ownership of the partnerships by the cooperatives and unions was critical to realizing the targets that were defined by the partnership.

Improving professionalization at the union level is fundamental to translating theory into practice. Overcoming the weakness of farmers' organizations in their mindsets and business orientation, together with raising their level of professionalization, will attract different segments of buyers who are interested in the scale of production and keen to influence the production system to meet their quality parameters. The experience of 2SCALE clearly indicated that with a little strategic support, cooperatives and unions are able to tailor their services to the particular conditions of smallholder farmers and at the same time attract big buyers. In doing so, the cooperatives and unions play a key role as drivers of inclusive development with the ability to tailor their services to the particular needs of smallholder farmers, who would otherwise not be able to integrate themselves into well-functioning value chains.



Young lady transporting soybean kebabs, Ghana

Photo by Joris Maatman

Attracting the youth to agribusiness

Thompson Ogunsanmi

KEY MESSAGE

A youth-oriented approach involves asking practical questions to develop tailored services for youth in the agribusiness sector. 2SCALE has been experimenting with various options to support young producers and entrepreneurs. Making agriculture interesting to youth requires making it attractive and remunerative by having access to land, finance and technologies in order to modernize. Besides production another alternative for youth inclusion was explored: specialized service delivery to value chain actors.

Why the focus on youth in the 2SCALE partnerships?

Gender mainstreaming is not a new item on the development agenda. It has been part of 2SCALE's strategy since the beginning of the program. However, the focus on youth in agribusiness came at a later stage. A youth-oriented approach involves asking practical questions, such as who the youth are and how they are involved in agribusinesses and agricultural value chains. Once the answers to these questions are identified, the first challenge is to actually make the sector attractive to young people; it is then necessary



Photo by Mahamane Toure

Youth in a vegetable learning center, Nigeria

to ensure equity in the accessibility of opportunities and accompanying benefits compared to more seasoned actors in the value chain.

Through experience, 2SCALE learned that partnerships could be more inclusive towards youth if existing approaches were adjusted. Attempts towards paying greater attention to the interests and capacities of youth in agricultural value chains were made during 2SCALE's partnerships in Benin, Ethiopia, Kenya, Mali and Nigeria. While these examples do not showcase perfect approaches to youth inclusion, they exemplify honest attempts to address the issue.

There are general constraints for farmers and entrepreneurs in agribusiness, which are well known and include access to finance, land, markets and technologies, among others. While these constraints are commonly experienced by farmers in sub-Saharan Africa, they are exacerbated for the youth, as the social context often makes it harder for young people to claim their space, overcoming challenges such as rigid hierarchy among other factors. Moreover, there is the issue of under-employment of youth in rural areas, since work in agriculture is mainly family-based with relatively few employment and income generating opportunities for young people.

It is important to realize that youth as a category is not homogenous. The African Youth Charter definition for youth is: individuals between 15 and 35 years of age. Encompassing a 20 year age range, individuals considered youth are likely to have different needs,

ambitions, resources and levels of education. A young man of 30 living in Nairobi's suburbs and a woman of 18 with 2 children, living in rural Mali are both categorized as youth, but will face significantly different challenges. It is impossible to take a blanket approach to youth inclusion, so the experiences of 2SCALE provide interesting insights in dealing with the diversity of youth.

Where to start?

In order to address the inclusivity of 2SCALE partnerships in regards to youth participation, it was important to first understand the current involvement – or not – of youth in agricultural value chains, as well as the constraints and aspirations of young people working in the sector. When looking at the partnerships more closely, it was found that youth are, in fact, involved across value chains in different roles and functions, and to different extents.

One way ahead for agricultural development is the professionalization of agricultural activities. Making agriculture less of a 'hard work, low-paid job' and more of a 'profit-making business' is, of course, attractive to all, but particularly to youth. Better access to services and resources is necessary, and with this access youth are enabled to modernize agricultural activities and apply new technologies to increase efficiency.

New financial arrangements

Challenges in regards to access to land and finance not only prevent rural youth from starting their own agribusiness, but also make it harder to attract youth for whom agriculture is not the obvious option. This is of particular importance in a context of rural migration to urban centers. However, access to finance is not a youth specific issue; collateral requirements (land, house) are a significant bottleneck to securing loans. Aside from this, many financial institutions tend to poorly understand the agricultural reality and charge very high interest rates. Some of the objectives pursued by the 2SCALE partnerships include improved access to finance for farmers' cooperatives and other rural enterprises.

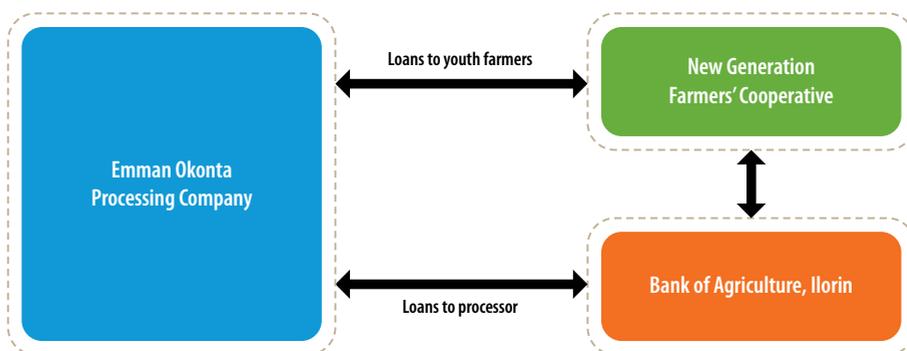
In most of the countries where 2SCALE works, the financial institutions active in the partnerships' locations were profiled. Through discussions, the partnerships developed sustainable relationships with these banks. In Nigeria and Benin, for example, memorandums of understanding were signed with LAPO Microfinance Bank (MFB) and ALIDé (a microfinance institution [MFI] in Benin), with a focus on gender inclusive value chain development (Box 34).

Tailor-made loans for women and youth were developed with LAPO MFB and ALIDé. The loans for youth do not require material collateral, but instead required the loan user to be part of a professional cooperative with good access to markets. Loans given to young producers, are overseen by the cooperative organization and are guaranteed by the buyer, through the purchase of the product. The loan is channeled through the buyer and to the cooperative who has an agreement with the financial institution. This tripartite financing model, where a firm acts as a catalyzer for finance, enables youth to access credit (Figure 19).

BOX 34 | GUARANTEE FUND EXCLUSIVELY FOR YOUTH AND WOMEN TO ACCESS CREDIT IN BENIN

With the support of the Dutch Embassy in Benin, the International Fertilizer Development Center (IFDC) was granted a guarantee fund to bolster farmers' access to finance for specific inputs. The fund, formerly used under the Non-Cotton Inputs Project (PINC), was transferred in 2013 to 2SCALE and *Approche Communale pour le Marché Agricole* (ACMA) programs. A partnership was initiated with ALIDé to significantly improve the outreach of microfinance in agriculture and promote inclusivity in agribusiness, in terms of the availability of financial services and products in both programs. After three years of using this fund to all farmers, 2SCALE has decided to use this guarantee fund exclusively for youth and women to increase their access to credit.

Figure 19 | Tripartite model of finance to youth. Funding arrangement of youth with Emman Okonta Processing Limited and the Bank of Agriculture in Ilorin, Nigeria



Securing access to land

Access to land is a major obstacle when it comes to making a living from agriculture in rural areas. Youth overwhelmingly face challenges in securing a parcel of land for their own use and from which they can keep the proceeds for their own livelihoods. Land transfer happens at a later age so young people have to wait many years, usually until the death of their parents, before inheriting their share of the family land. In many countries, inheritance of land is highly gender sensitive, with women rarely accessing land through this mean.

2SCALE works on land issues in the same way that it works on rural finance; it brokers relations and strengthens capacities for collective action towards technological, organizational and institutional innovation, and, if relevant and feasible, innovations in land tenure issues. However, changing land tenure structures is a complex and long-term process and the program does not always see opportunities to support the transformative capacity of groups in addressing land tenure issues. For this reason, 2SCALE decided to facilitate interactions between stakeholders on land issues in some of the locations where partnerships are active (Box 35).

BOX 35 | ACCESSING LAND FOR VEGETABLE PRODUCTION

In Benin, the producers of the Sèmè-Kpodji agribusiness cluster (ABC), with the support of 2SCALE, were able to set up a system with the *'mairie'* (municipal authority) to allocate land for vegetable production for youth and women. Simple rules and procedures were set-up to ensure easy access to land.

As part of the soybean partnership in Nigeria, the New Face Fadama User Cooperative Group mobilized youth across 16 local government areas (LGAs) of Kwara State, Nigeria, to form a common front in asking the government to allocate the youth public land for cultivation. The group had to register with the government and changed their name to Kwara Youth Integrated Farmers Organization of Nigeria (KYIFON) in order to cover more LGAs, allowing the participation of more young farmers. With this change, an additional 24 cooperatives joined the organization. Together, their core objective was to secure and sign a lease for 422 ha of public land.

2SCALE provided support to develop the necessary capacities of KYIFON leaders to negotiate and manage this deal. This meant a strong focus on structuring the organization and developing its vision and mission, accompanied by clear decision and communication procedures. By-laws and a democratic leadership were established. A strategy was then developed to attract public sector actors to join the campaign and identify entry-points to influence the Kwara State Government Ministry of Agriculture to support the allocation of public land to the members of KYIFON. 2SCALE facilitated the organization of a discussion to present the strategy on 27 March 2017. 2SCALE, the N2Africa project of International Institute for Tropical Agriculture (IITA) and officers from a UK Department for International Development (DfID) project working on land management, were invited as observers. During the forum, the challenges faced in regards to land acquisition for production and the need for public land as the only option for youth to continue with their production activities. The forum discussions resulted in securing 442 ha of land for 10 years, with youth as the prime users. The government also granted a lease of hold for the young farmers through KYIFON, who will manage re-distribution of the land among their youth members.

Opportunities beyond farming

Service provision in the value chain

One important insight from the 2SCALE partnerships is that young people can play an important role in value chain activities beyond production. Such opportunities often do not require a high level of education, yet provide a good income alternative to casual labor on someone else's farm. Opportunities to work further along agricultural value chains, include employment with large companies like FrieslandCampina (FC) and Nigerian Breweries; or in some cases, young people may establish their own agribusinesses, which contributes to the transformation of value chain activities. Supporting the creation of these alternative opportunities for youth, not only improves value chain efficiency, but also tackles the issue of under-employment in rural areas.

BOX 36 | STICK PLANTER SERVICES PROVIDED BY THE YOUTH

In various 2SCALE partnerships it was noticed that adopting new farming technology, particularly the use of stick planters, is attractive to young people. During the theoretical and demonstration sessions of the use of the planting cane in the partnerships in Benin, Mali, Nigeria and Togo, the youth participants found it easier to adopt the technique required to use the new technology. As a result, these young people are now frequently solicited by artisan farmers to sow their fields and apply fertilizer in all four countries. They charge 30,000-32,000 FCFA (€50) per hectare for the combination of sowing maize seed and applying fertilizer in Mali and Togo. The enthusiasm of producers for their services creates a business opportunity for young people in these countries. The advantages of this work include cash payments and the short service delivery time, which allows young people to move on quickly to something else. The stick planter requires a low investment cost and can be used over a relatively long period. Maintenance of the cane is simple and without any additional costs.

As service providers, young people can establish a clientele to which they can offer specialized services for a fee, such as spraying pesticide, tractor rental, transport services and quality control management (Box 36).

Specialized service providers were set up to tackle weed infestation in farm production in Nigeria. Spray service providers (SSP) can be young people with limited education, who are trained on how to safely and accurately apply pesticide in farmers' fields. As a result,

Ladies peeling onions



Photo by Joris Maatman

registered and certified SSPs handle pesticide application in farmers' fields, reducing risks of contamination and misuse of the products. 2SCALE trained over 100 young people as SSPs. They were trained on the use of the knapsack sprayer, as well as on safe use and responsible handling of agro-input chemicals for cassava, maize and vegetables. It was a perfect opportunity to integrate youth into three different partnerships (2SCALE's cassava, maize and vegetable partnerships). The SSPs charge about Naira 6,000 /ha for the work they accomplish. For example, five SSPs in northern Nigeria, who work in a team, provided services to 117 farmers in 2016.

In Ethiopia, 2SCALE also made use of this SSP model to develop employment opportunities for the youth in the Meki Batu Fruit and Vegetables Growers' Union partnership in the Rift Valley (Chapter 12). There, vegetables are cultivated intensively throughout the year and face the challenge of the unsafe and ineffective use of pesticides. To mitigate these challenges 2SCALE Ethiopia partnered with CropLife Ethiopia to set-up the SSP model. The SSPs are trained youth whose families are members of the primary cooperatives involved in the partnership. The certified SSPs started providing services to 500 famers on 400 ha of land under vegetable production. This SSP model has also been replicated in Ghana and Mali.

Such income generating activities from service provision are only profitable during the busier farming season and, therefore, only partially address the issue of under-employment. During the off-season the young often migrate to urban centers to find jobs. This problem might be solved by the off-season activities of vegetable ABCs that requires SSPs; for instance, growing onions out of season.

Other opportunities for off-farm and off-season activities for youth that 2SCALE has introduced are micro-franchise models for the last-mile distribution of products (Chapter 2; Chapter 9). This attracts mainly young people, both men and women, eager to start as micro- entrepreneurs, in a promising value chain (e.g. the cases of GUTS Agro Industry in Ethiopia (Chapter 2) and Promo Fruits in Benin (Chapter 7).

In the FC partnership (Box 15) and the NB partnership with Psaltry (Chapter 5), youth were involved as transporters. They were trained and hired to deliver fresh milk and cassava tubers to milk collection centers (MCC) and the Psaltry factory respectively. In addition, they were trained to understand the quality parameters of both lead firms and became part of the supply chains' mechanism for monitoring the quality of the products. In both cases, delivery of the products needs to be scheduled shortly after collection and meet very specific criteria. Cassava tubers are delivered to the Psaltry factory in under 24 hours, while milk must be supplied to the MCC between 7.00 and 9.00 in the morning. During the process of organizing these arrangements, the challenges identified were tackled with the training and capacity building of actors in order to improve the efficiency and quality of the services provided. FC employed Fulani youth for quality checks at the MCC level. This community integrated approach paid off as they became the interface between producers and the company, facilitating exchange and dialogue.

One of the key problems faced in some partnerships is the lack of on-farm mechanization to improve productivity and reduce production costs. The Hello Tractor company, based

in Abuja in Nigeria, targeted youth as service providers for tractor hire. 2SCALE introduced the idea to several partnerships, where youth are employed as agribusiness coaches, and pilots were initiated with the Epe chilli, Gboko soybean, Makurdi soybean and Ayetoro maize ABCs. A training program on 'Mechanisation in Agriculture' was set-up for 80 youth service providers in collaboration with 2SCALE, IITA and Hello Tractor. The training was focused on the agribusiness, technical and operational aspects of the tractor service. The tractors are available on a pay-for-service basis, in which they can be hired to carry out various farming operations from land preparation to harvesting. The service can be booked via SMS, so that farmers can easily connect to the service provider.

Gaining in efficiency and quality with information and communication technologies (ICTs)

SMS bookings are one way of improving services in agriculture. Other new ICTs, including smartphone applications, are slowly gaining ground. It would be a dangerous assumption to say that all youth are technology savvy. However, as a group they show interest in new technologies and the way that these tools can be used to support the professionalization and efficiency of the agricultural sector.

Applications like Farmforce®, a cloud-based platform, allow for the remote management of out-grower farmers. Farmforce® supports the handling of transactions (ordering, invoicing and payment), logistics (collection, storage and transport), quality assurance (safety and traceability), and process management (production oversight, input distribution, and extension); and facilitates data collection, for example information on farming plots, weeding, fertilizer application and harvesting.

The Farmforce® app also provides timely and precise information on production and sourcing (e.g. volumes available). According to Ife Gbamigboye, the extension manager of Psaltry and himself a young man with interest in ICTs, "You only need to visit the farmers' field based on producers' needs and not assumptions. You can act based on evidence rather than taking decisions blindly." Because of the net advantages Farmforce® provided Psaltry to manage its out-grower scheme, it was quickly adopted as a mainstream management tool. The extension manager believes that such tools make agriculture more appealing to youth because they improve farm-to-firm relationship management and deliver greater returns on investments.

It was noticed that in Nigeria 80% of 2SCALE agribusiness coaches fit into the 'youth' category. To further capitalize on this opportunity for youth inclusion in the different partnerships, 2SCALE organized a training module designed to encourage youth (including coaches) to build their capacity for using free web-based platforms, like Wordpress and Blogger. These platforms provide an opportunity to spread information on innovative activities in agribusiness that would be attractive to other young people who use the platforms to access information.

The training also aimed at showing participants how to access information using different ICT tools. This approach aims to increase knowledge of online tools to share and access information among the agricultural community, and make agriculture more attractive



Milk delivery, Kenya

to young people, assuming youth have a certain interest in new technologies. Future opportunities for 2SCALE to explore could focus on the potential of online stores for consumers and the possibilities for linking farmers to agro-dealers through software applications, among other possibilities.

Lessons learned

The examples provided do not showcase systematic youth inclusion in the 2SCALE partnerships, but they are good starting points. They provide insights on how, within the mandate of the partnerships, it was possible to foster the inclusion of youth in agribusiness. Looking carefully at opportunities for young people not only within production, but also beyond this, such as in service delivery, is necessary for value chain development. By harnessing the potential of youth, a positive impact on the productivity, efficiency and high quality of value chain operations can be achieved.

Young people are more open to change – to adopting better practices, using new ICTs, building new connections and adopting different financing models. They are often more flexible and committed than their seniors. Therefore, actively involving youth in 2SCALE partnerships also contributes to ensuring intended changes are achieved (more quickly).

Addressing the structural challenges for youth to get involved in the agricultural sector is also important – facilitating and building their advocacy capacity to promote access to land and brokering arrangements to access finance are key in supporting young and willing farmers. ICTs can help in managing farms to run like agribusinesses, rather than only focusing on subsistence agriculture.

For young people for whom farming is not an option, specializing in service provision can be one way of making a living. Sprayers, transporters and quality controllers are good options for young people to earn a livelihood. They are simple options, which do not require many resources, but require a certain level of education, i.e. literacy to read labels and manuals. Specific training to perform these activities can easily be provided and the necessary skills acquired. The partnership approaches to youth inclusion in these areas contributed to a reduction in transportation costs, the improved quality of products and the mitigation of conflicts with producers. Opening up such positions to youth is a viable option for improving services in agricultural value chains, which is key to developing the agricultural sector.

Linkages between agriculture and other sectors like engineering and computer science should not be overlooked. Closer relations between these sectors could result in the innovation of agricultural tools, and the development of software for agribusiness and improved service delivery. Overall, such links and innovations can make the agricultural sector more appealing to youth.

In the case of future partnerships, an assessment of the opportunities for youth prior to developing intervention strategies is required to understand the underlying dynamics and prospects for young people. As for gender, 2SCALE must also come up with an explicit gender-sensitive youth approach and tools to better integrate both young men and young women. Though there is still a need to address structural challenges, like access to land, to support agricultural development and the farmers of tomorrow, there is a real opportunity for skilled young people to make a living out of agribusiness activities.

This chapter presents examples of youth employment in farming and related value addition at the local level. There are still few examples of young entrepreneurs, or inclusive businesses that offer new opportunities for young employees in food processing companies, agro-industries, marketing and the last-mile distribution of foods. However, it may well be that these are the most attractive segments of the value chain for youth, since they offer new and interesting prospects for modernizing the sector and generating greater profits. It remains to be further explored.



Specialized young man providing spraying service for vegetable production



Soybean kebab in school

Photo by Mahamane Toure

Local network building for inclusive agribusiness development

François Dossouhoui

KEY MESSAGE:

Investing in the building of networks of local actors is instrumental in the realization of durable, inclusive agricultural agribusiness. Such local network building requires co-investment of public and private resources initially. Once established, inclusive agribusiness partnerships can autonomously sustain local networks.

Introduction

2SCALE establishes public-private partnerships (PPPs) as a means to support inclusive agribusiness models, which contribute in a lasting manner to rural economic development, food and nutrition security and poverty reduction. The fast-growing food market in the countries where 2SCALE operates provides tremendous opportunity for economic development. Agribusiness development holds great potential for rural poverty reduction in this environment of growing demand for, and turn-over of, agricultural produce. However, the capacity for agribusiness partnerships

to have a significant effect on poverty reduction depends on the specific terms and configuration of that partnership.

The approach that 2SCALE uses for the development of inclusive agribusiness relationships centers around the formation of agribusiness clusters (ABCs). An ABC is a multi-actor network operating at grassroots level. It involves all local actors that are in some way connected to a particular commodity, and who are seeking solutions to their input, production, processing and marketing problems and opportunities for improving their competitiveness and collective performance. Both value chain actors (input dealers, farmers, processors, traders, etc.) and service providers (transporters, credit providers, extension service providers, researchers, business service providers, etc.) can be part of an ABC.

This chapter presents the principles, objectives and process of ABC development, describes the roles of coaches in the process, and debates how ABCs can be sustained over time.

ABC objectives

As a general objective, ABCs must assure the competitiveness of agribusiness partners from a locality or geographical area in the wider market. In the ABC, the interests of agricultural producers, local traders, processors, transporters and service providers converge. To develop and maintain a competitive edge in the larger market, collaboration between the ABC actors is essential. The ABC may also include the local brokers, who are often accused of unreasonable rent-seeking, and are excluded in value chain development programs (Box 37). ABC development is facilitated by 2SCALE around a specific crop and its derived products, to assure that the ABC participants have a joint interest, and a clear focus.

Yellow Maize, Mali



Photo by Mahamane Toure

BOX 37 | VEGETABLE BROKERS BECOME PARTNERS IN THE ABC

Brokers and middlemen have a bad reputation in Kenya. Nonetheless, they are critical in many value chains involving smallholder farmers. Bulk buyers do not collect produce from individual farms (or even cooperatives) because the quantities offered are usually small. Instead, brokers identify smallholders offering produce, and buy from the farm-gate on behalf of traders bulking the produce. Brokers provide a much-needed service, and they have unique skills, such as knowledge of the local market, flexibility, and often a long-term relationship with the community. But they make a living from the margin between buying and selling, and are skilled negotiators. This gives brokers a bad reputation, as they 'reap where they didn't sow'.

KIAMA, a vegetable producing and trading cooperative in central Kenya, grows cabbages, kale, pepper, tomatoes and other vegetables for the Nairobi market. Like other small cooperatives, they relied on brokers for their marketing. When working on the creation of a vegetable ABC, the actors identified several brokers whom they were working with on an *ad hoc* basis, and asked them to join the ABC.

As a result of the ABC seeking to develop the local vegetable sector, they have renegotiated their terms of trade related to *terere* (amaranthus). The cooperative members agreed to sell exclusively to the selected brokers. In addition, they developed a production calendar to assure a stable supply throughout the year. The brokers on their part agreed to collect produce from the farm gate, at a 40% premium compared to the farm gate price offered by brokers before and a 20% premium compared to the local market price. The agreement triggered an increase in production and sales. In six months, the members sold more than 40 tons of *terere*, a four-fold increase compared to the previous year.

To the farmers, the catalyst was price. Previously, the members had to choose between selling their *terere* at the farm gate for KSh 20/kg, and transporting it to the nearest market, 30 km away, and selling for KSh 24/kg. Neither option was attractive. Currently, producers get KSh 28/kg at the farm gate on average, and the brokers benefit from a year-round supply of good quality *terere*. Though no written formal contract has been signed, the agreement is still in effect.

Mary Munyutha is smiling all the way to the bank. After two rounds of sales (*terere* can be planted, harvested and sold, all within a 1.5-month cycle), her production has increased five times and enabled her to install a drip irrigation system. She plans to double the *terere* garden again in 2017, and to experiment with new crops such as pepino melon, which has a growing niche market among health-conscious Nairobi consumers.

To realize and maintain a competitive edge in the wider market, ABCs pursue five specific objectives:

- 1 Empowerment of the local actors for fair and equitable agribusiness;
- 2 Co-innovation to address problems and seize opportunities;
- 3 Establishment of effective business relations for output marketing;
- 4 Improving access to inputs;
- 5 Improving access to services.

The desired state of an ABC, after an intervention by 2SCALE, is to have the capacity to pursue these objectives autonomously, without external support.

BOX 38 | YELLOW MAIZE IN MALI

In the first season of contracted yellow maize supply by producer organizations to Nama & Sons' (SONAF), the local market price for yellow maize rose above the contracted price. In response, the leaders of three producer organizations (Kignan, Ktiorni and M'pégnesso) from the Sikasso region approached SONAF to negotiate, and they managed to agree on a price increase on behalf of all 10 producer organizations that were united in the ABC. In addition, they adjusted the contract conditions for the next season, to assure that the pricing would take into consideration fluctuations of prices in the market (Chapter 4).

Empowerment of the local actors

The empowerment of local actors is the primary objective in building ABCs. When local actors are collaborating closely, they have more clout in the wider agribusiness arena. Their combined production represents a significant market, and as a group they are much more able to negotiate rewarding agribusiness deals. For example, in Mali, maize producers and community-based traders, united in an ABC, were able to negotiate the pricing mechanism used for the procurement of their yellow maize (Box 38). Another instance of local actor empowerment can be found in Nigeria, where an ABC was formed around cassava in order to supply the cassava trading and processing company, Psaltry (Chapter 5). Local transport unions, together with the ABC actors, identified indiscriminate and non-regulated taxation at police road-blocks of their vehicles loaded with cassava roots as a major constraint, because of the unpredictability of the costs, as well as the delays it causes in transportation. Jointly, they have managed to persuade the local police to reduce such 'informal taxations' paid at checkpoints, and to replace them with a formal, predictable levy, for which they receive a sticker on their windscreen (Box 39).

Co-innovation to address problems and seize opportunities

The second objective of ABCs is co-innovation. The ABC needs to create the capacity to effectively respond to changing circumstances and emerging opportunities, to maintain and possibly increase competitiveness in the larger market. The ABCs focus mainly on innovation that affects the profitability and efficiency of their operations at

BOX 39 | CASSAVA CLUSTER NEGOTIATING WITH THE POLICE IN NIGERIA

As a result of capacity strengthening and empowerment activities in the Psaltry cassava partnership in Nigeria (Chapter 5), local transport unions acting within their local ABCs were able to persuade the local police authorities to eliminate extortions from cassava trucks using local routes. A modest fixed levy for each vehicle was agreed, for which a sticker could be obtained to place on the windscreen of the car, indicating that the vehicle had paid the levy. This is a landmark achievement, which has contributed to a reduction in the transport costs of cassava, as well as speedy delivery before the tubers spoil. This benefit has been shared with farmers through a reduction in the charges for cassava transport.

grassroots level. However, this does not mean that the ideas for innovation originate exclusively from within the local network. On the contrary, through their organization the ABCs obtain better access to innovative ideas from outside their own community, by building a network of people and organizations, with knowledge and expertise of interest to their agribusinesses.

In Ethiopia, for example, vegetable producers in the Rift Valley collectively failed to be competitive in the market (Chapter 12). But by effectively linking with outside expertise from Agriterria and the Ethiopian Institute for Agricultural Research, ABCs in Abosa, Adami Tukli, Dugda and Meki Batu were able to professionalize their production technologies. As a result they reduced their production costs per unit product by 28%, which made them competitive in the market.

The ultimate objective is to build a resilient local agribusiness network, which can respond to the inevitable changes in market realities. The citrus partnership in Ghana offers an example of an effective response to a shifting market: in this case, ABCs were able to overcome the abrupt insolvency of their single most important buyer, and seek alternative buyers for their oranges, and thus continue profitable production (Box 40).

Facilitated identification of constraints and opportunities for change is just the start. What is most essential is joint experimentation and piloting solutions. The improvement of production practices by vegetable farmers in the Rift Valley in Ethiopia, for example, was the result of testing and adapting improved production technologies that were proposed by researchers (Chapter 12).

BOX 40 | CITRUS PARTNERSHIP IN GHANA: EMPOWERED CLUSTERS RESILIENT TO A SUDDEN CHANGE IN MARKETS

In 2015, Fruittiland, the principle buyer and processor of citrus fruit from farmers in Central, Eastern and Ashanti regions in Ghana, faced delays in securing funds for factory operations. In December 2015, at the beginning of the harvest season, the company announced the suspension of its operations until further notice. This decision threatened to break down the Fairtrade and conventional citrus juice value chains built up over four years, and to deprive over 3,800 citrus farmers from a market. The producers urgently needed to assure an alternative buyer for their produce.

2SCALE facilitated a 'diagnostic and design' workshop with actors from eight citrus ABCs, including farmers, business support service (BSS) providers and other partners. The objective was to help citrus clusters develop a strategy to target other conventional and Fairtrade markets. With support from the Dutch juice buyers, Verbruggen Juice and Fair Trade Original, an agreement was brokered with another Ghanaian processing firm, Pinora. Through the ABC structure the situation could be explained to farmers, farmers were re-engaged in the Fairtrade certification process, and groups of professional pesticide sprayers, transporters and other local partners were mobilized to initiate business relationships with Pinora. On its side, Pinora committed to provide training and extension services, and signed citrus purchase contracts for 300 tons of fruits in 2016 (Chapter 8).

The process of joint experimentation and piloting serves a double purpose. The first objective is to address a particular problem, and to experiment with possible solutions. Of equal importance, however, is the effectiveness of joint action as a tool for building trust between local actors, and to strengthen the functioning of ABCs. It offers a reason to come together and learn from each other. As such, a pilot with the aim of solving one particular problem can become the starting point for the identification and initiation of actions around the next opportunity for change. The joint interests and proximity of the actors are essential ingredients for effective trust-building and business development.

Co-innovation by ABCs does not develop automatically. It is a process, which requires a trusted facilitator with the ability to understand and connect the different actors. Particularly at the outset of ABC formation, time investment in the facilitation process is significant. And even once ABCs are established, facilitation will remain necessary, albeit at a lower level of intensity. ABCs must therefore find a way to accommodate the costs of this facilitation, in order to assure their own continuity.

Realization of business relations for effective output marketing

The third objective of ABCs is to seek the creation of inclusive agribusiness relations, which benefit the local actors. While ABCs are centered on farmers and their organizations, other actors also have an important role. Creating new – and improving existing – business relations locally within the ABC, and with buyers outside of the ABC, is one of the key objectives of the ABCs. Such business relations can be local, as is the case with soybean ABCs in Benin (Box 41), but they can also engage national, or even international level buyers.

Improving access to inputs

The fourth objective of ABCs is to improve access to inputs through improved business relations with suppliers. Local input dealers are deliberately included as partners in the clusters. The input suppliers have a direct economic interest to improve their offer, to better respond to farmer demand. Through ABCs demand and supply for inputs can

BOX 41 | LOCAL AGRIBUSINESS PARTNERSHIP DEVELOPMENT: SOYBEAN IN BENIN

In central and southern Benin, soybean production seemed a promising alternative source of revenue for smallholder producers, to substitute cotton production on unproductive, depleted soils. Soybean ABCs were formulated with the aim of supplying FLUDOR and *Société des Huileries du Bénin* (SHB), soybean oil processors. After one year it became apparent that the processors could not pay a remunerative price for the soybean, and harbored no ambition to enhance inclusion of smallholder producers in the value chain. Instead, the ABCs triggered a partnership between soybean producers and women's groups who process soybean into soybean cheese and kebabs for the local base of the pyramid (BoP) market, as a healthy and affordable alternative for meat. Now incorporated into the ABC, these local processors have become an essential component of the partnership. 2SCALE worked with the farmers on good agricultural practices, access to improved soybean varieties, access to *Rhizobium* inoculum and the development of business relations with women's groups (Chapter 2).



Maize ABC coaching session, Mali

be better coordinated, and solutions devised where the appropriate inputs are not available. In Ethiopia, for example, farmers of a sorghum ABC managed to negotiate access to the sorghum variety they wanted to plant (Box 42). Similarly, in Ghana, soybean farmers learned that they could improve their productivity through the use of *Rhizobium* inoculants; however, the inoculants were not available for purchase in the country. Through the ABC, a willing input supplier was identified who spotted a business opportunity in developing the commercial importation and distribution of *Rhizobium* inoculants, and in the longer run, local production of the *Rhizobium* inoculants. In Kenya, rice ABCs have been instrumental in providing access to briquettes of urea fertilizer for deep placement, and to blended fertilizers for basal application (Box 22).

BOX 42 | ACCESS TO INPUTS IN ETHIOPIA; PREFERRED SORGHUM VARIETY

Sesame ABCs in Dansha, Setit Humera and Metema have worked on improving revenue from their rotational sorghum crop. They tested different sorghum varieties released by the Ethiopian Institute of Agricultural Research (EIAR), and identified the white sorghum variety 'Deber' as their preference, because of its dual purpose, both as ingredient in the main staple food *ingera*, as well as an ingredient in industrial beer brewing.

To obtain access to quality seed of this particular variety, the ABCs had to lobby at state level, because seed allocation to farmer cooperatives is usually decided centrally by the regional agricultural board, and varieties are allocated to farmer cooperatives randomly, without paying attention to variety preference.

Currently, the cooperative unions, which are represented in the ABCs, are supplying an estimated 3,000 tons of sorghum annually to Meta Abo brewery, a subsidiary of Diageo, in Ethiopia. Sorghum has become a remunerative rotation crop for sesame, making the farming system more sustainable (Chapter 12).

BOX 43 | ACCESS TO SERVICES: SPRAY SERVICE PROVISION IN ETHIOPIA

In Meki Batu, Ethiopia, the vegetable ABC identified ineffective weed and insect control as a major constraint in production. An associated challenge was that crop protection chemicals were applied by farmers or laborers without any training in effective and safe application. Through ZSCALE, the ABC received support from Crop Life Ethiopia. Motivated jobless youths who had completed high school were trained, and 15 qualified as specialist spray service providers, and are now providing professional crop protection services to farmers in the area (Chapter 12).

Access to services

The fifth ABC objective is to facilitate access to services. Through the organization of actors in ABCs, access to desired agricultural services becomes easier. Local service providers are part of the ABC, and linkages to non-local services is facilitated by an ABC's status as a local multi-stakeholder network, rather than as individual producers or as a farmer group or cooperative. Soybean processors in Benin, for example, obtained access to training on improved processing technology to make soybean cheese (Chapter 2). This was made possible through the ABC, which included local service providers with the right network. In Ethiopia, specialized spray service provision was developed as a result of the identified ineffective crop protection in vegetable production by the ABC (Box 43).

Financial inclusion can also be improved through the ABCs. By providing access to a larger number of clients, the ABCs constitute a platform for financial institutes to offer their services. The structure of ABCs, which aim at testing and adapting solutions, situates them as a good partner for financial institutions seeking to innovate and tailor their services to farmers. In Mali, farmers obtained input credit for yellow maize production based on the supply contract they had agreed with the buyer. The negotiations for access to credit were facilitated through the ABC (Box 44).

BOX 44 | ACCESS TO INPUTS ON CREDIT BY YELLOW MAIZE FARMERS IN MALI

Inaccessibility to inputs posed a constraint for a yellow maize ABC in Mali, because production without the appropriate inputs resulted in poor quality, and therefore unprofitable, produce. Together with the National Bank for Agricultural Development (BNDA), a tailor-made value chain credit scheme was devised to ensure access to inputs for yellow maize farmers.

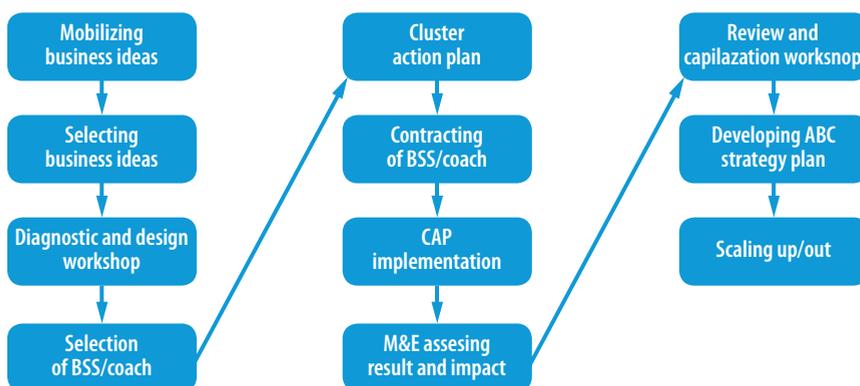
Based on a yellow maize supply contract between farmer organizations and SONAF (the maize off-taker), BNDA is providing input credit. It is paying the input supplier for the delivery of the inputs to the farmers. The credit is paid back to the bank through SONAF, which withholds the amount due by the farmer organization, which then settles the outstanding credit with the individual farmers. This credit system has contributed to the intensification of production, and the volume of yellow maize produced and traded to SONAF has increased from 8,000 to 28,000 tons in three years (Chapter 4).

Agribusiness cluster (ABC) coach

2SCALE's support to the emergence of ABCs is a facilitated multi-stakeholder process, which is tailor-made, building on a series of generic steps (Figure 20). The process starts by inviting the submission of business ideas, through different channels. 2SCALE screens the applications and selects the ideas that qualify. After further field cross-checks and exchanges with the champion, 2SCALE initiates the process to support the formation of ABCs, built around the champions. This includes the following steps:

- Identifying and inviting stakeholders that could play a role in the cluster;
- Assessing the efficiency, competitiveness and market penetration of the product(s) related to the business idea proposed by the agribusiness champion;
- Identifying major challenges and possible solutions;
- Articulating a common understanding of local actors' business constraints and opportunities;
- Developing and implementing a yearly cluster action plan (CAP);
- Monitoring and evaluating the implementation of the CAP, and its adjustments;
- Developing a multi-year strategic plan for the ABC.

Figure 20 | Steps in the process of ABC formation



To facilitate the consecutive processes of ABC development, an agribusiness coach is identified by 2SCALE. The coach is a process facilitator, who, on a part-time basis, supports the ABC in its establishment and development. The interventions and tasks expected from the coaches include:

- Facilitation of ABC meetings;
- Facilitation of stakeholder interaction for co-innovation, through experiential learning and action-research;
- Facilitation of market relations for outputs, and inputs;
- Technical capacity building, in crop production, post-harvest management or processing;
- Soft skill capacity building on topics such as economic analysis, marketing, and monitoring-evaluation;
- Broker access to knowledge, by seeking information and involving outside expertise where required.

Support for the coach

A coach is locally selected, and can be from a local farmer organization, from an agribusiness firm (input dealer, trader, processor) or from a support organization (extension, research, local government, consultant or non-governmental organization [NGO]). Background and education, experience and proven competence, availability, and equally important, proximity to the cluster location are the key criteria for coach selection.

A coach should have the capacity to listen, observe, ask the right questions and stimulate analysis and reflection, while portraying a neutral attitude. Solutions and ideas should come from the actors themselves, rather than being imposed by the coach. A coach facilitates decision-making processes among the different actors and stimulate the actors in the reflection on, and documentation of, their experiences. A good agribusiness coach should be communicative, service-oriented and innovative, with good facilitation skills. In addition, a coach needs to be pro-active in seeking linkages and networking opportunities for the ABC, outside of the local community. Beyond these key qualifications, diversity among coaches (in terms of gender, age, professional background, ethnicity, etc.) enriches exchanges among them and the generation of innovative coaching options.

The selected coaches will require capacity strengthening in order to effectively contribute to, and assume their responsibilities within, the ABC. 2SCALE has developed an intensive training and mentoring process for the coaches. Capacity strengthening plans are designed for coaches, which are tailored to the specific needs of the ABC they are supporting. These plans comprise a staggered set of learning cycles (Figure 21). Each learning cycle consists of three steps:

- 1 A **workshop**, grouping the coaches intervening in the same crop, to introduce new concepts, tools, ideas and principles. At the end of the workshop, the terms of reference for a specific field assignment are developed.
- 2 An **individual field assignment**, in which the coach practices the learnings from the workshop, under mentoring by 2SCALE.
- 3 A **review session**, grouping the coaches to review the experiences of the field assignment and draw lessons. This session is combined with the workshop for the next learning cycle.

Figure 21 | Set of learning cycles for ABC coaches



Learning topics include:

Inter-actor issues, such as: competition, collaboration and competitive playing fields; building business relationships; finance (education and services); warehouse receipt systems; negotiation and contract development; and loyalty building between lead firms and ABCs.

Actor-specific issues, such as: business plan development; cost of production – including options for cost reduction; market prospection; product specification; brand development; product promotion; and branding. And for producer organizations: setup/membership, functions, and legal aspects; and collective marketing and business planning.

Remuneration of coaches

To ensure the continued motivation of the ABC coaches, a modest form of remuneration is essential. Initially, at the outset of an ABC's development, the role of the coach is more intensive, and 2SCALE pays coaches a modest allowance for the specific facilitation of ABC meeting sessions. In West Africa, for example, the coaches receive payment for day-long coaching sessions, varying between €25 and €40, depending on the country. Each year three to four such coaching sessions are organized for each ABC. Further day-to-day support to the ABC development is not specifically paid. To assure continuity of the coaching beyond the timespan of the 2SCALE intervention, establishment of some form of payment of the coaches for their services by the ABC members themselves must occur (Box 45).

BOX 45 | PAYMENTS OF COACHES

In Ethiopia, the coaches are staff of farmer cooperatives or farmer cooperative unions. It has been negotiated with the farmers' cooperative unions that the payment of the coaches by 2SCALE will gradually be taken over by the unions. In the first year of their engagement, 100% of the coaching fee is paid by 2SCALE; this falls to 70% in the second year and 50% in the third year. In the fourth year, payment for the coach is the full responsibility of the farmer union and the ABC.

In the Shalem partnership in Kenya (Chapter 5), coaches were from farmer organizations and worked on a voluntary basis, only receiving transport, airtime and lunch allowance on the days they facilitated a session. In 2016, 2SCALE organized training in group formation and dynamics for the coaches, in order to build trust, financial literacy and their networking capacity, in addition to sorghum production practices. The coaches then provided the same training service to farmers, free of charge, which was not deemed sustainable. To reward the coaches for their efforts, they were given approval to aggregate sorghum from the groups they were engaging with at a commission of KSh 1/kg.

Lucy Kairuthi, who is a coach for five farmer groups, managed to aggregate 130 t of sorghum, earning KSh 130,000 in commission. She proudly attributes this to 2SCALE's interventions, which armed her with the requisite skills and insights in interaction with farmers and the ability to earn their trust. This has become a great motivation for coaches to continue their activities.

Several other options to pay for coaching services were identified by ABC actors. In Benin, for instance, a levy on each kilogram of pineapple supplied by producer organizations to the processing company, Fruittiland, contributes to a fund that is used to pay for services from 27 technicians and coaches (Chapter 7).

Embedding coaches

At the outset of the project, coaches were selected from local NGOs, public services and local consultancy firms. However, it was observed that the turn-over among these coaches was very high, and their dedication to the success of the ABCs was not sufficient. These external coaches were essentially outsiders, and had no direct economic stake in the success of the ABCs. In response, 2SCALE started identifying internal coaches with a more direct economic interest in the success of the ABCs. Coaches were selected from producer organizations, input dealers and traders or their associations, or from processors. Although these coaches had, at least initially, less developed facilitation skills than the external coaches, they have shown to be more reliable in terms of continuity and dedication. A disadvantage is that they are not neutral, since they represent a specific stakeholder in the chain. As such, it is important to not rely too heavily on these coaches for the facilitation of direct economic negotiations between actors.

Lessons learned

ABCs are an essential element in the building of inclusive agribusiness partnerships. They empower local actors, facilitate co-innovation to maintain a competitive edge, support the realization of business relations and are instrumental in improving access to inputs and services.

The initiation and continued existence of ABCs requires facilitation. Facilitation of an ABC itself requires a variety of skills which no single person will have, and training and mentoring of coaches is needed. Continuity of facilitation by the same coach is essential at the start of an ABC.

The selection of dedicated coaches is critical, and ways to remunerate them should be anticipated and agreed upon – particularly during an ABC's formative stages – in order to avoid coach personnel changes before the ABC is stable enough to survive. With a direct economic interest, internal coaches are less prone to high turn-over when compared with external coaches. Internal coaches do, however, require more capacity building, and cannot be expected to be entirely neutral. The modest public or project resource investment in coaches is necessary to get ABCs established and functioning. In the long-term, the cost of remuneration of coaches needs to be integrated into the overall cost structure of the value chain.

Finally, it is important to recognize and respond to internal friction and difficulties emerging within the ABC, to be able to respond with targeted capacity strengthening that gives the actors the ability to address the issues that emerge.



Weeding onions, Ghana

Photo by Joris Maatman

Facilitating inclusive growth: lessons from 2SCALE and reflections for the future

Author Arno Maatman and Raphaël Vogelsperger

KEY MESSAGE

The partnerships in 2SCALE are diverse, but the most successful ones share a number of core elements: 1) a committed lead partner (champion); 2) business cases based on regional comparative advantages; 3) a focus on local networks to engage and empower local actors; 4) a facilitated and inclusive process to identify and co-develop opportunities; and 5) a strong entrepreneurial, 'learning-by-doing' spirit.

Introduction

Between 2012 and 2017, the 2SCALE program brokered, designed and implemented over 50 public-private partnerships (PPPs), across nine African countries, which aimed to realize and scale inclusive agribusiness in the agrifood sector. Over 575,000 farmers and 3,500 small and medium-sized enterprises (SMEs) were involved. In addition, more than €50 million has been leveraged by private actors to complement the €41.85 million grant from the Ministry of Foreign Affairs of the Netherlands.

Key insights and experiences from the five-year program have been described in the preceding chapters. This chapter brings together the main lessons learned.

Lessons 1: Starting points for inclusive agribusiness development

The commitment to realize true inclusive agribusiness varies among enterprises and this is hard to assess at the onset of a partnership. 2SCALE aimed to only partner with companies and cooperatives that were interested in developing long-term relationships with smallholder farmers and base of the pyramid (BoP) consumers, and who were committed to co-design and mainstream inclusive agribusiness models. However, the level of engagement of the top management of the partnering company was not always sufficient. At times the commitment to smallholder farmer engagement was limited to local sourcing/supply chain departments. The level of buy-in from the top managers is not always certain, and their engagement to inclusiveness sometimes changes over time because of events that are hard to predict (e.g. market/price trends, competitive forces, staff turn-over, strategic decisions in national or overseas' board rooms).

To reduce the risk of a disappointing result from a PPP that is not able to effectively foster inclusive agribusiness development, the following conditions must be met before a partnership is formalized:

- **Solid core business.** The core agribusiness proposition needs to be solid and based on an existing market. Start-up agribusinesses in unsure markets with marginal profits have little opportunity to invest extra effort in realizing inclusiveness. The quest for more inclusive agribusinesses is difficult enough, and particularly does not suit start-up enterprises which are seeking their competitive edge in the market. Inclusive agribusiness partnerships should be based on realistic assessments of comparative advantages, continued market opportunities, and trends. Continued competitiveness requires continuous incremental innovation to strengthen productivity, increase resilience and to reduce transaction costs along target value chains.
- **Agribusiness driver:** Inclusive partnerships need to make agribusiness sense for the lead agribusiness enterprise. There needs to be a plausible promise of improved supply security as a result of the PPP, or improved quality of supply for those enterprises buying (directly or indirectly) from smallholder farmers. For those selling inputs or services to smallholder farmers, or food products to the BoP market, there needs to be a promise of stronger customer relations, or the creation of new markets for existing and new products.
- **Social responsibility driver:** In addition to the agribusiness driver, the lead enterprise has to show a genuine desire to contribute to positive social results, such as employment creation, income increase and food and nutrition security. This is often easier to obtain in 'short' value chains, with lead enterprises located close to the (target) smallholder farmers, and in partnerships including local aggregators and processors.

For 2SCALE it was hard to assess if candidate lead enterprises had this double motivation of agribusiness and social responsibility drive. It is easy to express a social agenda, but only the reality of partnership development and joint action will reveal the proof of actual engagement by different parties. It therefore makes sense to start a partnership

small, and to add new partners and interventions based on the demonstrated level of actual engagement. 2SCALE has learnt that one should not be afraid of stopping a partnership earlier than planned when the lead organization is not living up to its commitments (in terms of leadership, investments, transparency, etc.).

Lesson 2: Championship in the partnership

The lead enterprise driving the inclusive agribusiness partnership, whether it is a private company or a commercial farmer cooperative, should take ownership of the partnership and drive it, i.e. be the 'champion' of the PPP and its activities. Championship needs to be encouraged and supported when needed through capacity building. However championship does not mean that the lead partner takes unilateral decisions in the PPP; the lead enterprise is expected to take the initiative and to monitor progress in the partnership.

To let the lead enterprise develop this championship role, it is essential that the role of the intermediate organization such as 2SCALE, which is brokering and supporting the partnership development, does not take a central role. The lead organization needs to take the lead in major steps of the partnership development (e.g. to call for a governance meeting, set targets, refine strategies, etc.), even if this means that the process takes longer. Bringing in additional outside support for the lead enterprise should be done cautiously.

Lesson 3: Partnership facilitation

In the 2SCALE program, each partnership had a facilitator (full-time or part-time). Partnership facilitators supported and complemented the lead private partner in the design and development of the inclusive agribusiness model. The facilitators played an important role in bringing all relevant stakeholders together in the partnership, and developing its governance structure. The facilitators supported the partnership stakeholders in the elaboration and implementation of an action plan for inclusive agribusiness development. Support to implementation of activities could be provided by 2SCALE staff, or be outsourced to other (local, international) organizations and experts. The partnership facilitator therefore essentially played a networking/brokering role. In addition, depending on their expertise, the partnership facilitator also played a role in facilitating discussions, exchanging experiences, capacity strengthening, and as an advisor to partners. Partnership facilitators received support from other specialized 2SCALE staff, in areas such as BoP marketing, access to finance, access to information, monitoring and evaluation, and action research. Action research was used particularly to assess the feasibility of agribusiness cases, test and adapt technical innovations, and test market opportunities, to be able to support the partnerships in evidence-based priority setting and decision-making.

It is critical that the facilitator avoids becoming the anchor point for all PPP activities, as their role is temporary, and joint action by the actors in the PPP should continue beyond the facilitator's availability. The partnership governance structure plays an important role here, both to avoid the partnership facilitator acting 'alone' and to develop the internal capacity within the partnership to assure the facilitation of collaboration.



Photo by Joris Maatman

Binding-up of tomato plants, Ghana

However, the importance of the facilitator’s role should not be downplayed: they are navigating between different stakeholder groups, which means bringing together various interests that are, at times, not well-aligned or may even be conflicting. It may well be the most essential support that the 2SCALE program offers to PPPs working on inclusive agribusiness development. 2SCALE has invested much of its (human) resources in offering this facilitation to PPPs and in building the unique skillset of the facilitators. It is unlikely that the PPPs would have grown and developed in the way they have – if they had happened at all – without the facilitators.

Lesson 4: Customized interventions

There is no standard recipe or package of activities for the development of inclusive agribusiness partnerships. To achieve the right blend of agribusiness results and social impact, a tailored combination of support activities is needed. When considering the activities that were deployed by the different PPPs to develop inclusive agribusiness, a combination of diverse interventions are seen that are specific to each PPP. Together, and over time, best-fit interventions contribute to the development of economically, sustainable, inclusive agribusiness relations. However, a distinction can be made between direct interventions in the organization and functioning of the core value chain, and indirect interventions through improvements in value chain support services and input supply. From the large portfolio of PPPs supported by 2SCALE, a repertoire of optional actions to support inclusive agribusiness development can be derived.

Value chain services and input supply
Improve input supply systems
Develop and implement advisory services on good agricultural practices
Develop and implement agribusiness advisory services for farmers, traders and micro, small- and medium-scale enterprises (MSMEs)
Co-develop and facilitate access to supply chain management and quality control services
Facilitate access to (innovative) production and processing technologies (including through rental services)
Facilitate access to (innovative) storage and transport services
Core value chain relations (farmer to market)
Support market/industry assessments for value chain actors
Strengthen consumer understanding, and support awareness raising campaigns for lead partners
Strengthen negotiation skills (farmers, local agents) and support the development of supply contracts and arrangements
Organize farmers for access to inputs and markets
Support development of product bulking, grading and quality control systems
Organize traders and facilitate negotiation in terms of trade
Support development of new products for market differentiation, with a particular focus on the BoP market
Support the marketing and distribution of (new) products

When selecting a set of activities from this repertoire, specific attention should be given to women and young people (both men and women). This is because the combination of constraints faced by women and youth in agricultural value chains often prevents them from adopting practices and technologies as readily as men, which leads to lower productivity and weaker value chains.

To address this issue, 2SCALE built the capacity of its staff and partners (partnership facilitators, technical specialists, trainers, agribusiness coaches, external consultants) to proactively analyze key constraints faced by women and youth in focus value chains. This approach allowed partners to prioritize activities addressing their most critical constraints, customize some interventions to specifically target the weakest groups in the chains, and ensure equal access to support provided through the partnership

Lesson 5: Innovation brokering

To ensure that the inclusive agribusiness partnerships are economically sustainable and can grow to benefit ever more people, they need to remain competitive. This requires continuous innovation to improve production and value chain efficiency. Technical and market innovations have been promoted in almost all partnerships – from innovations in farming practices to innovations in agricultural services, post-harvest handling, processing and marketing. For such innovations to be successful, often organizational and institutional changes are needed.

It is important to make sure that the initial identification of a need for innovation comes from the lead enterprise or other partnership members, but not from 2SCALE. Ideas for change that emerge as a response to needs and opportunities identified within the PPP stand a better chance of success. 2SCALE facilitators played an important role as ‘innovation brokers’ by linking relevant stakeholders at agribusiness cluster (ABC) and value chain levels with companies and knowledge organizations – both local and international – to introduce innovative solutions.

Ultimately, the inclusive agribusiness partnerships must develop their own capacity to innovate. By the time that 2SCALE support ends, the inclusive agribusiness partners need to have acquired the capacity (skills and attitude) to identify constraints and opportunities to sustain and scale their inclusive agribusiness, and be able to act upon this.

Lesson 6: Capacity to co-innovate

2SCALE observed the tendency of partnerships to turn every identified challenge into an action point. This quickly leads to action plans for inclusive agribusiness development that are far too heavy, complex and expensive to execute. This, in turn, leads to disappointment by the actors involved and a stalled process. A better approach to tackle challenges and opportunities for inclusive agribusiness development is to identify leverage points, and opportunities for change with momentum and motivated people. Collectively working as a partnership on such an opportunity with momentum creates the spirit, trust and collective energy to tackle the next problem or opportunity. New problems and opportunities will always emerge, and the most important factor to sustain competitiveness and maintain inclusive agribusiness relations resides in

individual and collective capacities to co-innovate. Such capacity is not likely to be the product of a program that tries to solve all identified problems once and for all. A more promising approach is to create a lasting partnership, by collectively addressing problems of a manageable size, and developing the capacity to effectively collaborate and innovate. It is advisable to agree at the design phase on longer-term ambitions and objectives or 'theory of change' (ToC), accompanied with a first small set of concrete activities for the short-term.

Lesson 7: Networks matter

2SCALE's partnerships foster networks at both the local (ABC) and regional (value chain) levels. At the local level, the formation of ABCs aims to develop networks of smallholder farmers and other local actors, which are better able to articulate and cater for their own needs for the development of their agricultural enterprises. The objective of the ABC formation is to encourage bottom-up innovation to ensure direct access to services, including financial services, and to strengthen bargaining power of grassroots actors. In the value chain, ABCs support the alignment of investments, strengthen coordination among local actors, and assist in realizing market organization, and thus also help to reduce transaction costs. Importantly, as a result of the ABC formation, the collaborating local actors can become more attractive agribusiness partners for large agribusiness enterprises, as they can offer volume, consistent quality and a collaboration structure.

Agricultural value chain development projects sometimes only invest in linking farmers to markets. 2SCALE has shown that value chain development projects benefit by going beyond merely linking farmers to markets, and also including grassroots network building in their efforts. Local network building proved to be a key ingredient for sustainable inclusive agribusiness partnerships. The building of networks of local actors in the form of ABCs supports smallholder farmers to coordinate their agribusinesses among themselves, and with other actors in the proximity, to co-learn, innovate, invest, adjust to evolving business conditions, and to maintain their competitive edge. Access to services in the area, including information on markets and alternative market channel options, is a strategy to improve smallholder influence in agribusiness value chains, and indeed strengthens their bargaining power. Private agribusiness firms sometimes fear activities that strengthen bargaining power of grassroots actors, but sustainable and (more) inclusive contractual arrangements depend on equal access to information and empowered grassroots actors. ABCs help avoid farmers becoming 'locked' into one business relationship. Clusters support smallholder farmers to negotiate fair relationships, and understand long-term business relationships and, whenever useful, to diversify their business relations, which is an essential part of 'farming as a business'. Local networks also stimulate local value-addition and local specialization in service provision, which promotes local employment and fosters economic growth at the grassroots level.

Lessons 8: Agribusiness coaches

In the 2SCALE approach, agribusiness coaches played a crucial role in setting-up, supporting and coaching ABCs in facilitating relations between clusters and with all relevant up- and downward value chain actors, such as input suppliers and off-takers of agricultural produce. Three types of agribusiness coaches (not mutually exclusive) are possible:

- 1 community leaders, selected by the smallholder farmers themselves;
- 2 staff members of lead companies or commercial cooperatives; and
- 3 staff of business support service providers (BSS, e.g. non-governmental organizations [NGOs], consulting companies).

The first type of agribusiness coaches tends to focus mainly on farmer organizations, while coaches from companies/cooperatives are usually responsible for managing supply chain relations, between the clusters and the off-taker. Coaches from BSSs play a more diverse role in the chain, which allows them to remain independent from chain actors and be more neutral when navigating business relationships.

The agribusiness coaches received support from 2SCALE trainers and partnership facilitators. Over 225 coaches have been engaged and have completed capacity strengthening plans to support local networking and grassroots' empowerment. Some services offered by coaches are of a 'one-off' support that does not need to be repeated year after year or followed-up. However, most grassroots networking and empowerment interventions require long-term support from coaches. For partnership sustainability, it is critical that most of these services are maintained beyond 2SCALE. To assure this, the costs of the agribusiness coaches need to be kept low from the beginning to factor them into the value chain price structure. At the time of writing, more than 80% of 2SCALE's agribusiness coaches are 'internal' – their salaries are paid by a farmer cooperative (e.g. through a levy on commodity volumes sold) or by a private firm that works with a farmer group. Alternatively, the coach offers free training but acquires an income by selling associated goods or services such as inputs, animal vaccination services or training, to trainees. Training and coaching costs are thus built into the system such that no external funding is required.

Lesson 9: Brokering access to finance

From 2015, 2SCALE increased its emphasis on access to finance. This was needed for two reasons:

- 1 With the growth of partnerships, the demand for relatively simple financial services multiplied, i.e. more actors were expressing similar financial needs;
- 2 The evolution of partnerships also led to more complex questions related to financing, e.g. on financing investments in processing/production lines, and on increasing working capital for aggregators and agents to ensure timely payment to smallholder farmers.

Firms and cooperatives in target value chains were assisted to assess financing needs, and inventories of financial services were carried out, and made available. Consequently, meetings were held with banks, memorandums of understanding were developed, and



Milk quality control at reception, Kenya

(selected) farmers and SME partners were supported to submit business and investment plans. As a result, over 40 financial institutions have been linked to various value chains and some of them have a seat in the partnership governance structures.

By the end of 2017, over €40 million of loans had been accessed by farmers and SMEs as a result of direct support from 2SCALE specialists. However, despite these successes – in particular in financing agro-inputs – the results in terms of innovative financing schemes (e.g. savings systems, payment arrangements, working capital for farmers – especially women farmers, and investment capital for SMEs) are still limited. Financial institutes, in particular the foreign banks and international investors, still remain extremely reluctant to engage in the agricultural sector in Africa despite quality propositions, guarantees of technical support (through 2SCALE), and off-take contracts (for the farmers involved).

Lesson 10: Domestic (BoP) food markets as change drivers

Transformative change in African food systems requires more attention with regards to local food, including BoP markets. 2SCALE has, from the beginning, focused on local markets, as local and domestic markets offer more opportunities to contribute to food and nutrition security in Africa, and pose fewer constraints than export markets for local sourcing and engagement by smallholder farmers. Similarly, local value addition is more realistic for domestic markets than for export markets, where produce standards and especially norms for the uniformity of produce are very strict. The focus on local and domestic markets has proven to be effective in the 2SCALE program. Consumers are often closer to the farmers and the lead partner to engage directly in testing panels and market surveys. Feedback from the market drives (new) product development and has an immediate impact on local communities, including – if well-organized – on local-level value addition. Retailing of new products aimed at the local and domestic market creates local employment (especially for women) and triggers further value chain innovation and competition.

However, while local markets pose fewer quality constraints on grassroots producers and processors, it is not necessarily easier to target domestic markets rather than export markets, and certainly not the BoP end of these markets. This is because agribusiness enterprises and value chain support actors do not always understand poor consumers well. Understanding BoP preferences, cash flows and purchase decision-making is essential for getting affordable and relevant food products to these markets, which requires innovative approaches to increase efficiencies in distribution and retail logistics and packaging along target value chains. It also requires specialized expertise to assess trends in rural and urban (BoP) markets, and to facilitate innovations in food products, value addition and marketing channel choices to reach out to these markets. As part of 2SCALE, 28 BoP pilots have been implemented, which all include one or several of the following elements:

- 1 Improvement of consumer understanding and market targeting by farmers and processors;
- 2 Development of novel nutritious products and packaging, and design of marketing strategies; and



3 Identification of innovative, cost-efficient distribution channels BoP product pilots design, introduce and test a new idea (product, distribution/marketing strategy) to see if they are feasible and commercially viable. However, this is relatively new 'ground', which requires intensive interaction with private partners. 2SCALE has demonstrated that the facilitation of BoP pilots is an effective instrument for value chain actors to experiment with and discover the opportunities that the BoP market offers. The pilots show the potential viability of a new marketing channel, and/or new nutritious food product destined for a BoP market. Besides the specific product marketing side of the pilot, distribution models can also be tested.

Going to scale!

2SCALE aims to provide 'inspiring examples' of inclusive agribusiness. This is done by supporting agribusiness champions to realize their inclusive business agendas. The 2SCALE program therefore depends first of all on the existence, as well as on its capacity to identify, these inclusive agribusiness champions.

The 2SCALE experiences so far indicate that there is a genuine interest from private companies – and many farmer cooperatives – to pursue private profit as well as explicit social objectives. It makes sense to use public funds to support the private sector in such efforts, e.g. to remove or reduce barriers to entering into more inclusive agribusiness models, to overcome some of the risks associated with a combined agenda of competitiveness and inclusiveness, and to accelerate pathways and build networks that bring about inclusive change.

Moreover, scaling of successful agribusiness models is not only achieved by expansion (in volumes, and numbers of smallholder farmers, or jobs created) of target value chains; it can also – and maybe even more easily – be achieved through the replication of agribusiness models in other regions and industries, as observed by 2SCALE. This requires pro-active engagement of a project like 2SCALE to support the transfer of (or parts of) agribusiness models to other areas, and to integrate such models in new partnerships.

Through this publication 2SCALE facilitators and coordinators share their experiences. 2SCALE manages public-private partnerships (PPPs) for inclusive agri-business in Africa. Partnership agreements are developed with companies with inclusive business agendas. 2SCALE offers support services to companies, farmer groups and other relevant stakeholders – enabling them to produce, transform and supply quality food products to local, national and regional markets, including Base of the Pyramid consumers. 2SCALE strengthens the capacity of grassroots and value chain actors, supports innovation and coordinated action, and improves skills to assure effective participation in markets. The focus countries of the programme are Benin, Ethiopia, Ghana, Ivory Coast, Kenya, Mali, Mozambique, Nigeria and Uganda.

Contact: avaradachary@ifdc.org

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