



# Business as **UNUSUAL** the 2SCALE project

## Highlights 2016

2SCALE consortium

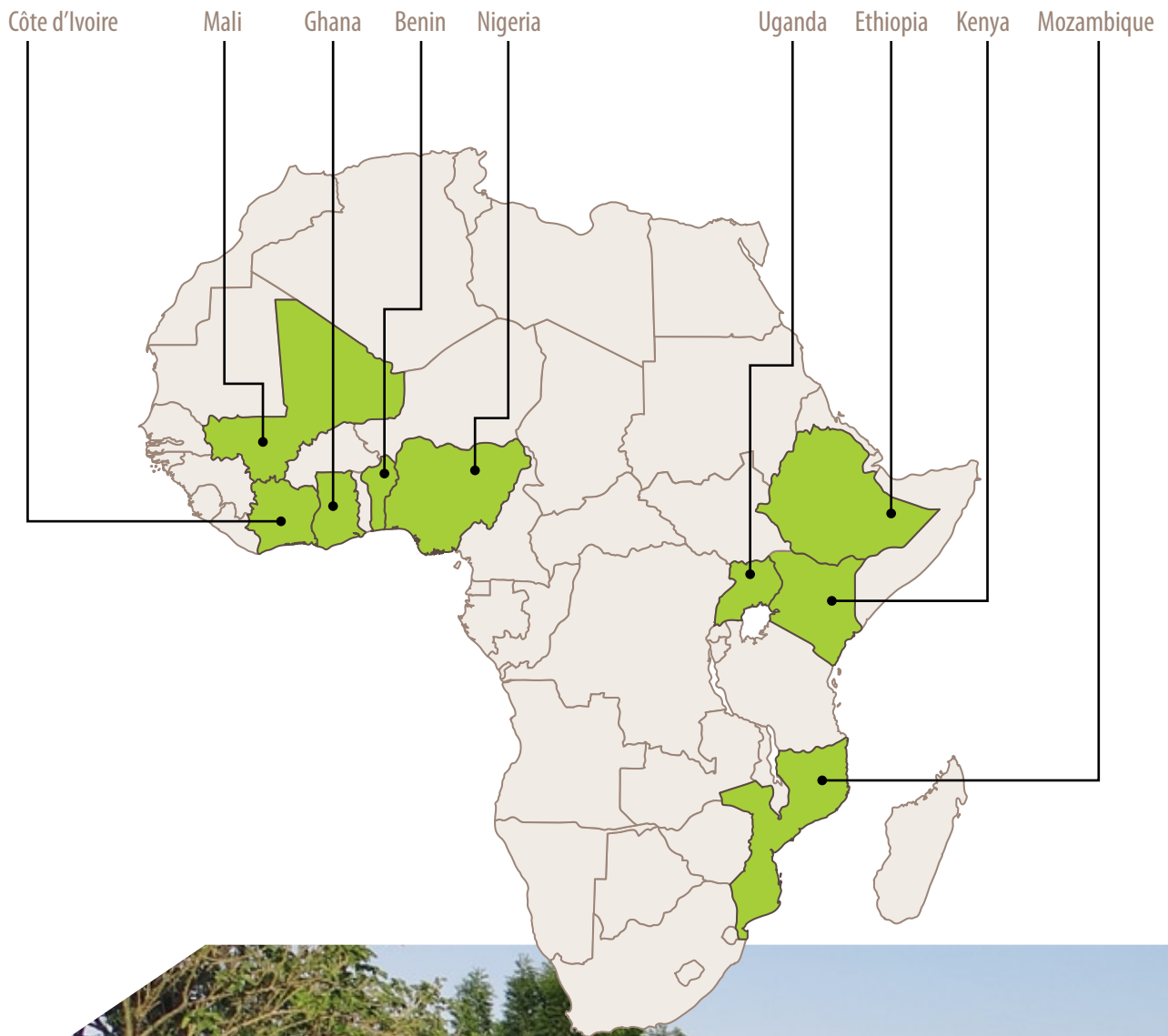
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*Vigorous veggies – new onion varieties offer higher yields and better quality*

# BUILDING AGRIBUSINESS

**Can opposites attract?** Big companies and small farmers, buyers and sellers, balance sheets and social goals. . . The ZSCALE project brings opposites together by applying business principles to development. Nine countries, half a million farmers, 1,400 cooperatives, 1,200 small businesses, scientists, development experts and corporate executives, all working together to build business relationships that are profitable, sustainable and equitable.

The Netherlands government contributes half the project budget. The other half is private investment by companies, small-scale entrepreneurs and farmers.

ZSCALE works in nine countries in Africa: Benin, Côte d'Ivoire, Ethiopia, Ghana, Kenya, Mali, Mozambique, Nigeria and Uganda. The portfolio includes multiple sectors – food staples, vegetables, oilseeds and livestock. We work through partnerships, creating networks that allow small-scale farmers and local entrepreneurs to grow, connect to buyers, and share the profits fairly.

Interventions focus on technology as well as business: innovations to increase yields and farm profitability, and

linkages to help agribusinesses become more competitive, create new products and penetrate new markets. The project has two other goals. One is inclusiveness: giving smallholder farmers and local actors (especially women) a greater voice in decision making. The other is nutrition: working with farmers and processors to deliver affordable, high-quality food products to low-income families.

## THE PROCESS

The core idea is inclusive business – partners working together on equal terms, for mutual benefit. The process begins with a private firm or a cooperative that shares our inclusive-business agenda. Field teams connect the company to other partners, forming an agribusiness 'cluster' that includes not only farmers and buyers but also supporting actors – seed and fertilizer suppliers, extension agents, banks, insurance companies, transporters. . . .

A fledgling network needs support, so we contract agribusiness coaches who work year-round with the cluster, providing advice and market connections. We also provide clusters with small grants to implement clear

## Reaching Out



*Achieved by December 2016*

action plans with targets, budgets and responsibilities agreed. In clusters where only local actors are involved, the grant typically covers half the implementation budget; cluster members pay the rest. In partnerships with a larger commercial firm, 2SCALE contributes only one-third of the budget.

## THE PARTNERS

2SCALE is implemented jointly by three organizations – the International Fertilizer Development Center (IFDC), the International Centre for development oriented Research in Agriculture (ICRA) and the BoP Innovation Centre (BoPInc). Other partners provide support in specific areas: government extension agencies for training, research centers for technology development, private seed companies for new crop varieties, universities for specialized research on markets and value chains, NGOs for business support services.

It's a large and complex environment with multiple challenges – imperfect markets, limited infrastructure, regulatory barriers, cash-poor farmers... but the

*"I'm very impressed by 2SCALE, and I'm not saying this because it is funded by the Dutch government. The different 2SCALE projects that we have been visiting over the years are extremely well done. I hope to see more programs using the same approach, because you can see the markets are getting better quality and more consistent supplies, while farmers have stable, sustainable revenues."*

– Michel Deelen,  
Head of Netherlands Representation in Lagos

partnership model works. Companies and development agencies are now applying the 2SCALE model in their projects, with 2SCALE staff providing advice and technical support. For example, Irish Aid is funding an add-on project in Kenya to build mini-warehouses for potato cooperatives. In Nigeria, Nestlé has expanded its supply chains to include more than 10,000 small-scale sorghum and millet farmers.



*Rice harvest in Kenya: 2SCALE innovations boost production and profits*



*Farmer training: the first step in the soya market chain*

## Soybeans for Smallholders

2SCALE's soybean work in Mozambique goes beyond technologies and markets. Our goal is to build a partnership that creates opportunities all along the value chain. This partnership began with one cluster in Malema district, Nampula province. Today it involves 10,000 farmers (6,500 women) in Nampula and Zambezia.

The lead partner is Agro Commercial Olinda Fundo (ACOF), a woman-headed firm that aggregates soybeans from smallholder farmers for processing and resale. 2SCALE teams work with ACOF to mobilize farmer groups and train farmers, agrodealers and extension staff on crop management and quality control.

Three other partners help ensure that farmers have seeds, fertilizers and other inputs. The NGO Agrimerc built a network of agrodealers who work collectively to organize logistics. Fertilizer company Omnia analyzed more than 800 soil samples from farmers' fields, and is using the data to develop new fertilizer blends containing essential secondary and micro-nutrients in addition to the regular NPK. Greenbelt Fertilizers leads a training program to promote the use of fertilizers and Rhizobium biostimulants that enhance the plant's ability to 'fix' atmospheric nitrogen, essentially producing its own fertilizer.

Ongoing training programs have built farmer capacity in production methods and post-harvest handling. More than 1,000 farmers and agrodealers have been trained on fertilizer and Rhizobium use. The next round of training, beginning in early 2017, will focus on business models, planning and budgeting. The production base has been

stabilized. ACOF provides farmers with inputs, enabling them to plant on time and manage their crops well. Harvests are consistent in terms of both volume and quality.

And markets? 2SCALE signed an agreement with Novos Horizontes, a poultry company based in Rapale, Nampula province; brokered a contract under which ACOF will supply Novos Horizontes with 500 tons of soya per season; and helped Novos Horizontes develop feed formulations enriched with soya. We also led a market research program, interviewing more than 40 retailers and wholesalers. The findings were used to develop a marketing and distribution strategy to sell frozen chicken cuts to low-income consumers. The branding will include packaging and labeling, attractive shop displays and eye-catching uniforms.

With markets assured, partners on board and farmers already having tasted profits, expect the soybean industry to grow rapidly in 2017. ■



*Soybean partnerships benefit everyone – even chickens*

# LINKS TO MARKETS

**G**etting food products from farm to retail shelf isn't easy. It requires very diverse groups of people to work together – farmers, traders, extension agents, transporters, government regulators and many others. 2SCALE's goal is to help make this happen: to build stable relationships based on transparency and fair profit-sharing, remove technical or organizational bottlenecks, and improve competitiveness and efficiency along the value chain.

Partnerships focus on three areas:

- **Input markets:** seeds, fertilizers and other inputs available on time at affordable prices
- **Output markets:** farmer-buyer linkages, logistics
- **Business expansion:** new products, new markets, better distribution

## FARM INPUTS

Partnerships with public-sector scientists and private seed companies have helped scale out new high-yielding, disease-resistant varieties. In Kenya, 2SCALE support helped rice breeders develop a new hybrid with better virus resistance than any other variety currently available. In Mali, new onion varieties yield 30% more than traditional ones. Even more important, they can be grown in the off-season, substantially increasing farmers' profits. In Nigeria, we've organized and trained seed producer groups to multiply previously scarce varieties of soybeans suited for industrial processing: for example, varieties rich in lipids for oil extraction or rich in proteins for animal feed.

Partnerships with fertilizer manufacturers (Yara, Notore, Greenbelt, Toyota) have helped promote blended fertilizers and new application methods that reduce costs

and increase fertilizer use-efficiency. In Kenya, 2SCALE imported two machines to produce fertilizer briquettes. Rice cooperatives now produce their own briquettes, and have increased yields by up to 50% while using one-third less fertilizer. In Nigeria, 2SCALE technical support helped promote a high-sulfur blend specially formulated for cassava. Farmers report that yields have doubled.

Farm inputs are often expensive; the key is to buy collectively and negotiate discounts. 2SCALE teams work with farmer cooperatives in Benin, Ghana, Mali and Nigeria to prepare seed forecasts and aggregate bulk orders. In Mali, cooperatives made bulk-purchases of onion seeds worth \$91,000. In Benin, collective fertilizer purchases by vegetable clusters increased from 4,000 tons in 2015 to 7,000 tons in 2016.

## BROADER MARKETS

We also helped cooperatives and small companies find new markets, and to expand existing ones by upgrading or rebranding their products. In Benin, a flour blend produced by the Ifangni cooperative has been certified by the national food safety authorities, opening the way for bulk sales to schools and hospitals. In Ethiopia, three unions entered the wholesale market segment, and sold more than 3,000 tons of potatoes and green vegetables to wholesalers in 2016. In Nigeria, women's processor cooperatives have introduced branded, hygienically packaged 'Inganci' Tom Brown mix, selling more than 3,000 kg in 2016.

Many of these products are targeted at low-income consumers. This market is believed (often mistakenly) to be risky because of price sensitivity, product preferences



*Fertilizer deep placement: 50% higher yields with one-third less fertilizer*

and low margins. To encourage investors, 2SCALE supports product development and test-marketing through grants and pilot programs. Other partners (notably the Netherlands-PUM program) offer tech support in plant engineering and food technology. These initiatives have helped entrepreneurs crack this potentially vast market.

In Benin, juice manufacturer Promo Fruits rolled out a new distribution system, with vendors using bicycles and push carts. In Ghana, producer association MUGREAG is test-marketing sauce, powder and other mushroom products. In Kenya, Stawi Foods developed a high-protein porridge mix in small, affordable packets. Nearly 10,000 packets were sold in two months. In Mozambique, poultry firm Novos Horizontes introduced the country's first-ever frozen chicken cuts, in half-kilo portions. In Uganda, cotton cooperative Nyakatonzi is launching a selection of cooking oils that will compete with imports on both price and quality.

*"What makes 2SCALE sustainable is the nature of 2SCALE itself. This is not a project on paper. We are meeting real entrepreneurs who are in business relationships with other actors, creating wealth and feeding their families. It is this added value that makes 2SCALE an outstanding project."*

*— Maarten Brouwer,  
Netherlands Ambassador to Mali*

## CONNECT THE DOTS

Value chain development goes beyond technologies and products; it's about connecting the right partners to create opportunities. One example is from Ethiopia, where Diageo subsidiary Meta Beer signed a contract with four farmer unions to supply 2,600 tons of sorghum. This was a landmark – the country's first large-scale sorghum contract, and the first time the crop is being used as a beer ingredient.

This was a culmination of three years of work. 2SCALE teams first helped mobilize and train farmer groups; then worked with the brewer to identify varieties with the right chemical make-up. In collaboration with farmer unions and extension agents we helped establish networks of seed-producer groups to multiply these varieties, and agrodealers to sell fertilizers and other inputs. The first consignment of sorghum was delivered in August 2016.

The marketing arrangements are unique. 2SCALE helped mediate in discussions on pricing. Prices are based on pre-agreed reference markets, with a 7% quality bonus and appropriate mark-ups for 'umbrella' cooperatives that aggregate and pack grain for delivery. Farmers are paid immediately, thanks to innovative financing. The aggregating cooperatives borrow from a bank; Meta Beer pays the interest on the loan.



*Parboiled and profitable: processors have doubled their incomes*

## Nice Rice

Rice is big business in Mali. 2SCALE is helping women's cooperatives target one segment of this market – nutritious, affordable parboiled rice. The partnership involves three agribusiness clusters in the Sikasso region, bringing together 2,000 farmers, 230 small-scale parboilers (mostly women), input suppliers, microfinance lenders and others.

Rice parboilers face multiple challenges: a general preference for white rice (not parboiled), poor quality control, competition from imports, old processing equipment and many more. We used a four-pronged strategy: increase rice yields, upgrade processing equipment, strengthen quality control, and improve marketing.

**Yield.** Training programs (new varieties, crop husbandry, soil fertility management) focused on women processors who grow their own rice. 332 women were trained in 2016; yields increased by 100 to 150%.

**Processing.** Before 2SCALE, parboiling was done in traditional iron pots. 2SCALE grants helped processors switch to new pots and locally designed, energy-efficient stoves. Bintou Traore, head of a women's cooperative, explains the difference. "We reduced cooking time by half and wood consumption by two-thirds – and increased production from 200 kg to 350 kg per week."

**Quality.** Local parboiled rice had a history of bad quality – it's even satirized in popular songs. "Customers would complain that our rice smelled so bad it killed the appetite," says processor Djénébou Coulibaly. Building on past experience in Benin and Burkina Faso, 2SCALE introduced standardized processing methods with simple visual indicators to monitor each step. Today, parboiled rice produced by the cooperatives has a rich aroma and creamy texture. "More than 300 women have now mastered these new techniques," Traore says. "This knowledge is worth gold – it is something we are really proud of."

**Marketing.** 2SCALE designed an advertising campaign, using posters and radio advertisements. In two months, demand rose so much that the cooperatives were able to raise prices by 15% and still sell all they could produce. Incomes grew; many women say their earnings have increased from FCFA 20,000 to 35,000 per week. Sales are still limited to local markets within the Sikasso region, but the cooperatives aim to reach supermarkets in Bamako and other cities.

"It's only a matter of time," Coulibaly says. "If you look at where we have come from, there can be no doubt that we will get there." ■





*For the very first time – a reliable market for smallholder cassava*

## Cash from Cassava

Until recently, cassava was the stereotypical smallholder crop, grown on small plots for family consumption. A partnership with Psaltry International (an award-winning, woman-headed processing firm) and Heineken subsidiary Nigerian Breweries has transformed the value chain, creating the first stable, transparent market for smallholder cassava farmers.

Psaltry buys cassava from 1,300 farmers and processes it into starch and syrup for sale to the brewery. At least 35 local businesses provide planting material, transportation and finance. 2SCALE focuses on mobilization, training, technology transfer and business linkages. We've mobilized farmer groups, trained more than 600 farmers, and introduced new varieties, customized fertilizer blends and labor-saving equipment. Farmers have established their own cooperative; almost every member has been linked to a microfinance provider.

In 2016 Psaltry purchased 28,375 tons from 2SCALE clusters at a pre-agreed price that was 20% above the market price. The company tripled its starch production, and plans to expand further in 2017. With a guaranteed market, farmers are ramping up production. Nasiru Olaniyi,

chairman of the cooperative, says: "A few years ago, farmers were cultivating two, maybe three acres. Then Psaltry came in with service providers, tractors and stem cuttings. Now farmers are planting 5-10 acres."

But the real strength of this partnership, according to Olaniyi, is in building farmer capacity. "It is the way farmers are being grouped and linked with other partners. . . Now we come together to solve problems that are affecting everyone's business."

New partners are coming on board. The Nigerian government, through its Anchor Borrower Scheme, will distribute loans of \$426,000 to 250 Psaltry farmers. UK's DFID is co-funding 2,000 hectares of nucleus farms that Psaltry manages as production and farmer-training centers.

Woman farmer Dauda Kehinde explains how life has changed. "We used to till the land manually, now we use a tractor. Two years ago, only men had the money and the knowledge. But now the women have been trained, we received inputs and bank loans, and we can use machines as well. I used to harvest two pick-up vans of cassava. Now I harvest five vans from the same land." ■

# BUILDING CAPACITY

**A**gribusiness networks, if they succeed, can transform the local economy; but networks often fail due to lack of capacity — technical knowledge, business skills, ability to manage relationships. The first step, therefore, is to empower farmers and entrepreneurs with the skills they need to create and maintain effective local networks.

## FARMERS...

More than 200,000 farmers — 122,000 men and 86,000 women — benefited from 2SCALE capacity building programs in 2016. As in previous years we used a combination of direct and ‘cascade’ training. In some cases, especially for technical training, 2SCALE staff worked directly with farmers. But in most cases we used the cascade approach: 2SCALE staff and external experts trained trainers who trained coaches who then worked with cluster actors, providing year-round support and mentoring. Farmer training in 2016 involved 29 trainers and 243 agribusiness coaches.

The program combines technical training, business skills, and ‘soft skills’ to improve trust and cohesion within a group. For a new cluster, for example, the emphasis would first be on mobilization, then on improving technical skills and building business relationships. As the group develops, the emphasis could shift to financial literacy, quality management and organizational strengthening. Capacity strengthening is hands-on and practical, using a variety of tools — classroom sessions, farmer field schools, learning plots, local-language training manuals and videos (now downloadable on smartphones). Often, the best coaches are farmers themselves, so we sponsor exchange visits between different clusters growing the same crop.

Has 2SCALE made a difference? Vegetable farmers in Ethiopia increased yields by 20% in tomato, 30% in potato and 50% in haricot beans. In Ghana, seed-producer groups, trained in collaboration with the government’s Seed Certification Unit, produced high-quality rice seed that was distributed to nearly 8,500 farmers. In Nigeria, cassava farmers are now using GPS-enabled smartphones to measure their fields accurately, significantly improving budgeting and input-use efficiency.

## COOPERATIVES...

Cooperatives and other producer organizations hold the key to improving not only volumes and quality, but also relationships with large-scale buyers. More than 1,400 producer organizations have benefited from 2SCALE support for developing business plans, upgrading equipment, advertising, and creating training materials.



*Irrigation training: critical, especially in drought-prone areas*



*All hands on deck – farmers, coaches and trainers work together to identify training priorities*

In Ethiopia, 50 primary cooperatives have modified their leadership structure, expanded their membership and improved service delivery; several have introduced financial audits for the first time. In Mali, maize cooperatives have set up quality committees to ensure that every member meets quality standards. Rejection rates have fallen dramatically. In Ghana, 2SCALE support helped citrus producer associations maintain fairtrade status and thus receive higher prices. In 2016, the associations delivered 300 tons of fairtrade citrus to trading firm Pinora, for export to Europe.

### ...AND COMPANIES

Processors and large-scale buyers may have the capacity, but often require additional training or support in specific areas. For example in Ethiopia, processor GUTS Agro had a good product (Supermoms corn-soya blend) but needed support with marketing. We helped to design a marketing campaign with celebrity endorsements, market displays and campaigns in schools; and to provide distributors with training and promotional materials. Sales grew quickly; more than 20,000 packets of Supermoms have been sold to date.

Another area is information technology – in particular, software platforms to improve supply chain management, reduce transaction costs and improve transparency. In Nigeria, cassava processor Psaltry is registering farmers and mapping their land to improve yield forecasting. It has largely eliminated errors caused by manual data entry. In Kenya, Eldoville Dairies has automated the management of its farmer network. Records are accurate and up to date, farmers are paid quickly via electronic transfer.



*Customization is key: training modules being tailored to local conditions*

### WHO PAYS?

The conventional approach, where capacity development is externally funded, works well – until the external funds run out. 2SCALE has developed more sustainable alternatives. In Nigeria, coaches are grooming farmers to take over. Farmer groups nominate one member who works as an apprentice coach for one or two seasons, and then takes leadership. The apprentice program began with cassava, and is being expanded to other crops. In Benin, pineapple farmers have created a training fund. For every kilo of pineapples sold, the farmers' association and the buyer, Promo Fruits, each contributes 1.5 FCFA to the fund. At current production levels, these contributions pay for 70% of training and extension costs, and are expected to reach 100% next year as production expands.



*Tomatoes and trust – 2SCALE mediation led to greater transparency and benefits for both sides*

## Brokering the Brokers

Brokers and middlemen have terrible reputations – but they are critical in any value chain involving smallholder farmers. Bulk buyers do not visit individual farms (or even cooperatives) because the quantities offered are usually small. Instead, they rely on brokers or aggregators. These brokers have unique skills – knowledge of the local market, flexibility, and often a long-term relationship with the community. But they also have the ability to buy cheap and sell dear. Is there a way to alter this balance of power, giving both sides a fair profit?

Ask KIAMA, a vegetable cooperative in Kenya, whose 2,000 members grow cabbages, capsicum, kale, tomatoes and other vegetables for the Nairobi market. 2SCALE organized a series of meetings between KIAMA and local brokers, transforming an unsatisfactory relationship.

The cooperative identified several brokers whom they trusted, and guaranteed that its members would sell exclusively to these brokers. The brokers agreed to collect fresh produce from the farmgate, paying 25% higher than the local market price. The agreement went into effect in August 2016. In five months, the cooperative sold more than 40 tons – compared to 12 tons during the same period a year earlier.

The catalyst was price. Previously, farmers had to choose between selling their *terere* (amaranthus) at the farmgate for 20 shillings per kilo, or transporting it 30 km to the nearest market and selling at 28 shillings. Neither option was attractive. Now they get 35 shillings at the farmgate.

2SCALE coaches work closely with the group, inspecting fields every week to maintain top quality. The cooperative has set up a cropping schedule which ensures that buyers have a steady, year-round supply of exactly the vegetables they need, with no gluts or shortages and stable prices.

Other partners are coming on board, offering seeds, fertilizers and other farm inputs. We're designing a credit scheme (based on 2SCALE experience in other countries) that will allow farmers to upgrade to even better quality seeds.

Mary Munyutha is smiling all the way to the bank. She increased production five-fold in three months, and used the profits to install a drip irrigation system. She plans to double the size of her garden in 2017, and to experiment with new crops for the health-food market.

Mary explains how the relationship has changed. "We used to smile at the brokers only with our teeth – now we smile with our hearts." ■



*Theories of change – understanding how partnerships work*

## Action Research

What makes a good partnership? How to make a good partnership better? An action-research program led by the Partnerships Resource Centre in Rotterdam is helping to find the answers.

The research provides insights on how the design and structure of partnership arrangements contribute to (or hinder) inclusive development, and how these arrangements could be improved. The findings also help to identify leverage points for scaling out successful partnership models.

The basic tool is the Theory of Change, which is essentially a causal framework connecting the actions and strategies of a partnership to a sequence of events and intended outcomes. The researchers worked with field teams to develop Theory-of-Change frameworks for 32 partnerships, covering a range of commodities in seven countries.

A customized information management system, designed by the research team, helps compile and analyze data on each partnership. The key is to begin at the end – identify what outcomes you want, and work backwards. What interventions, and in what sequence, are needed to achieve these outcomes? What are the risks and how can they be avoided?

These frameworks are not simply theoretical; they are being used in day-to-day implementation, to identify risks and tensions within a group, to monitor change, and to refine the partnership's strategies to make it more inclusive and more creative.

Detailed case studies in five countries have led to a deeper understanding of how partnerships contribute to inclusive development. Specifically, the studies look at whether and how the arrangements between companies and farmers (or cluster actors) influence the terms of inclusion.

One study in Uganda examines sourcing arrangements (supply contracts) between beer companies and sorghum farmers. A comparative study in Benin, Mali and Nigeria investigates how food processors or buyers ensure a reliable supply of raw materials while balancing two conflicting requirements – farmer loyalty to a single company versus the farmer's freedom to look for alternative buyers. Studies in Benin and Ethiopia focus on low-cost approaches in niche markets. They examine how the development and marketing of nutritious but affordable food products for poor consumers affects the terms of inclusion for small-scale farmers and women marketers. ■

# MIGRATING KNOWLEDGE

**O**ne of 2SCALE's biggest strengths is **internationality**. We work on four commodity groups in nine countries. In each commodity group, we have partnerships in multiple countries. This means lessons can be shared and successful innovations scaled out quickly from one partnership or country to another.

This 'knowledge migration' works both within and across partnerships. A new seed variety or a better design for warehouses becomes a model for others dealing with the same commodity. Institutional innovations – invoice discounting to improve cash flow, loyalty programs to cement producer-buyer relationships – can quickly be scaled out to different value chains in multiple countries.

Consider two examples, milk and potatoes.

## DAIRY DOES BETTER

Smallholder dairy farming is risky and often unprofitable, unless you have the right technology and the right linkages. 2SCALE and its partners provide both. We work with more than 35,000 dairy farmers in six countries – Benin, Ethiopia, Kenya, Mozambique, Nigeria and Uganda. Partnerships focus on three areas: feed/fodder, value addition and business growth.

**Fodder.** For most small-scale producers, the biggest challenge is shortage of fodder. 2SCALE has helped introduce forage crops that can be grown in rotation with other crops, or round the year in small garden plots. We worked with research centers and seed companies to introduce a 'basket' of forage crops – sorghum, lucerne, oats, vetch, Napier grass and others – that can provide cheap, high-quality fodder round the year. More than



*Pan-African experience, local impact*

300 demonstration plots have been set up and more than 6,000 farmers trained on fodder production, silage making and other feed management techniques. A pilot program in Kenya goes one step further, with intensified fodder production using drip irrigation and fertilizers. Partner firms test soil samples and advise on the best fertilizer combinations; 2SCALE coaches help farmers implement the new practices correctly. Fodder yields increased by 25%, lucerne is now thriving in fields where it had previously failed. Beginning in 2017, the pilot will be replicated in other countries.

Another option is for farmers to buy feed concentrates, but these are expensive. Our approach is to create partnerships that make feed cheaper and more easily accessible. For example in Ethiopia, we work with feed manufacturer Alema Koudijs, dairy processor Family Milk and the farmers

who supply Family Milk. Alema delivers feed in bulk to Family Milk, which distributes to farmers on credit and later repays Alema by deducting from farmer payments. Milk yields have increased by at least three liters per cow per day; fat content has increased from 2.7% to 3.2%, the highest ever. This approach has worked equally well in Kenya, with dairy processor Eldoville. In less than 2 years, 7,500 farmers have bought over \$150,000 worth of feed.

**Value addition.** Most milk in Africa is sold fresh and unprocessed; but value-added products such as cheese and yogurt can be highly profitable for dairy farmers as well as processors. With help from food technologists from the Netherlands PUM program, we're helping processors develop and market new products. Eldoville Dairies has introduced Kenya's first commercial whey product – Whey Cool, available in three flavors, targeted at schoolchildren.

In Benin, Merry Enterprise sells cheese in small servings for low-income consumers. 2SCALE teams helped design the distribution system and the packaging. Crane Creameries in Uganda and Agromaco in Mozambique are developing new flavored milk, yogurt and cheese products, to be launched in 2017.

**Business growth.** Technical and marketing support from 2SCALE is helping dairy companies to grow –

creating reliable supply chains, linking them to partners who provide equipment or finance, improving business planning and marketing, and introducing software platforms to manage quality control, deliveries and payments.

In Uganda, Crane Creameries is expanding to new areas with 2SCALE assistance in market studies, roll-out plans and financial needs assessment. Merry Enterprise in Benin has tripled in size, thanks to a new business plan and new loans to fund expansion. In Kenya, Feska Ltd is moving from milk aggregation to dairy processing. The company increased throughput by 25% in 2016 and is building a new production line that will process 40,000 liters per day.

**Scaling out.** As these examples show, learning-and-replication works. In Nigeria, the partnership with FrieslandCampina has expanded into the Saki area in Oyo State. In Kenya, the Eldoville partnership is being replicated with 12 dairy cooperatives with several thousand members. 2SCALE's feed model, proven in Ethiopia and Kenya, is being replicated in Mozambique, Nigeria and Uganda.

We've helped scale out not only conventional dairy technologies but also low-cost innovations such as biogas digesters, lactometers for quality control, use of food



*Cash cows? Fulani women in Nigeria now have their own dairy cooperatives*



*New potato varieties, Kenya*

processing by-products as animal feed, and a milk cooler that doesn't need electricity – it's made of wire mesh and charcoal, and cuts down milk spoilage by 50%.

## MULTINATIONAL POTATOES

2SCALE works with more than 26,000 potato farmers in Ethiopia, Kenya, Mali and Mozambique. Our partners include processors, seed companies, banks and small businesses that sell services or farm inputs.

**Seeds.** 2SCALE teams work closely with government agencies and private seed companies to identify, test and scale out new varieties with higher yields and better disease resistance. For example, six new varieties developed by Dutch firm Agrico were officially registered in Kenya; several varieties are being tested in other countries.

Another initiative, with Irish firm IPM, produces seed potatoes from 'microplants' to prevent the transmission of seedborne diseases. Seven IPM varieties have been field-tested and will become available in Kenya in 2017. Regulatory agencies in other countries could soon use the same approach. In Mozambique (other countries to follow), we helped train government staff on regulatory procedures for seed certification.

**Storage.** Nearly 40% of the potato harvest never reaches the market; post-harvest damage by insects, fungi and other pests makes it unsaleable. Most small-scale potato farmers lack storage facilities. They are forced to sell their crop immediately after harvest, at low prices.

We've developed a low-cost design for mini-warehouses, built locally using local materials – a wooden frame, wire mesh, bales of straw, and mud for plastering. Fifteen warehouses, with capacities ranging from 40 to 200 tons, have been built in Ethiopia and Kenya, with farmers providing land, labor and most of the construction material. More warehouses will be built in 2017 with funding from local governments, private firms and international development agencies.

**Markets.** We understand how potato markets work; and use this knowledge to help farmers and entrepreneurs increase sales and penetrate new markets. For example in Ethiopia, three farmer unions have entered the wholesale market for the first time, selling more than 1,500 tons to bulk buyers in 2016. In Mozambique, farm cooperatives are negotiating with wholesale buyers in the two largest cities, Maputo and Nampula. In Mali, we helped farmer and trader cooperatives negotiate pricing mechanisms. Two trade cooperatives, Mali Yiriden and URCEP, have expanded considerably, buying potatoes from 15,000 smallholder farmers for resale in five countries.

In Ethiopia the Robe Berga union is integrating vertically, aiming to sell processed, packaged chips rather than raw potatoes. 2SCALE input was crucial – we helped to prepare the bank loan proposal (approved) and to bring in Dutch industry experts to advise on plant design and equipment specifications.



*Low-cost storage, Ethiopia*





*Alema Koudijs Feeds, Ethiopia. 2SCALE linkages helped develop new feed formulations and new financing arrangements for distribution*

# PILOTS FOR THE POOR

**Why does an agribusiness project include a nutrition component?** Two reasons – need and opportunity. There is a need for healthy but affordable food products (health foods are usually expensive); and there is opportunity for local businesses to serve, and profit from, this market.

One of 2SCALE's goals is to improve food access for low-income or 'base of the pyramid' households, by helping to introduce a wider range of foods at lower prices. We do this through pilot programs with local businesses, collaborating on market research, business strategy, product development, marketing and distribution. As many as 28 pilots have been implemented in eight countries, covering a range of products from soy kebabs to high-protein baby food.

Pilots operate for a limited period (usually one year) and are designed to ensure that activities will continue without 2SCALE assistance. For example in Ethiopia, the Likie marketing model is well established, with sales growing in five cities. In Mali, *attieke* sellers have successfully transitioned from roadside vending to markets stalls, and are setting up more stalls at new locations.

**Pineapples on Pushcarts.** In Benin, we've helped broaden the market for pineapple juice. Partner firm Promo Fruits sells fresh, hygienically packed pineapple juice in small packs, at very affordable prices. The pilot program aimed to test the viability of direct sales to low-income consumers (in addition to distribution through wholesalers). Promo Fruits began selling through a small group of 13 vendors on bicycles and push carts. The new strategy worked, reaching 77,000 consumers directly. In 2017, the company will expand the program to 100 vendors.

**Frozen Chicken.** A pilot in Mozambique adds a new dimension to the poultry market. Previously, almost all chickens were sold whole. We worked with poultry firm Novos Horizontes to introduce frozen chicken cuts, which are more affordable. To help Novos Horizontes kick-start, we studied the market and identified the opportunities and challenges of distribution. The new products will be launched in 2017 through local retailers and kiosks in Nampula.

**Ifan Life.** The Ifangni cooperative in Benin produces Ifan Life: protein-enriched maize flour, developed with 2SCALE support. More than 48,000 sachets were sold to 6,000 consumers. The cooperative has taken the next big step; Ifan Life was certified by the national food safety authorities in 2016, creating a huge potential market in schools, hospitals and development programs.

**Soya Kebabs.** Soybean is a good meat substitute: similar in texture and nutritional value but much cheaper. The Banda Boraè cluster, a group of women farmers in Ghana, makes soya kebabs. The pilot program helped them set up branded stalls and advertise their products. Sales shot up – nearly 700,000 kebabs were sold in 2016.



*Pilot programs help poor households access fresher, cheaper vegetables*



*Adding color to cotton – better production, more efficient processing, new products*

## *From Cotton to Cooking Oil*

The Nyakatonzi cooperative in Uganda aggregates cotton from its 15,000 members for processing and resale. 2SCALE support initially focused on technology transfer and training, helping farmers diversify from cotton to soybeans, sunflower and other oilseed crops, grown in rotation with cotton. In 2016, the emphasis shifted towards value addition: increasing processing capacity and upgrading the quality of cooking oil produced at the Nyakatonzi factory in Kasese district, western Uganda.

A new production line was designed with technical assistance from other partners. The cooperative acquired a new oil press, which will be installed in early 2017. It will increase Nyakatonzi's processing capacity to 20 tons per day, increase oil extraction rates from the current 8% to above 12%, and allow the mill to operate year-round. By 2017, revenues are expected to increase seven-fold, from 212 million to 1.5 billion shillings per year – with the profits shared, through dividends, among the smallholder farmers who own the cooperative.

We worked with the Uganda Cotton Development Organization to set up more than 100 demonstration plots to showcase improved varieties and crop management

methods. Coaches from 20 primary cooperatives have been trained, and are now working with farmers to improve not only farming methods but also financial literacy and record-keeping. Six new cooperatives came on board in 2016, and several others are expected to join in early 2017.

In parallel, 2SCALE teams helped sharpen the business strategy and identify markets and customer profiles for different products. They used the 'business model canvas' to identify what exactly the cooperative could offer, and how it could build on its strengths – a secure supply line, well-recognized commitment to smallholder farmers, and most important, demand: Nyakatonzi is the only oil mill in a region with a population of 10 million. Markets have been identified in various segments: households, restaurants and bakeries for cooking oil, animal feed processors for cotton seed cake, mushroom growers for seed husks.

Much of the cooking oil in Uganda is imported – but with locally sourced raw material and help from partners, the cooperative is confident of cracking the market, providing low-income families with affordable cooking oil, and smallholder farmers with additional income. ■

# FINDING FINANCE

**P**eople, companies, countries, banks... everyone borrows money. But some can borrow more easily than others. Farmers and small entrepreneurs find it particularly hard because they are considered poor credit risks. They may not meet the standard lending criteria; their cash flow patterns, and therefore their requirements, are different from those of other borrowers; bank procedures may be complex and time-consuming.

2SCALE helps these under-served groups access loans, insurance and other financial products. We provide financial literacy training (e.g. basic accounting, budgeting), help them analyze costs and develop business plans. In short, we make them more 'bankable'. We then connect them to banks and microfinance agencies, often helping them draft the loan proposal.

In 2016, farmers and businesses received loans of more than \$14.5 million as a direct result of 2SCALE facilitation.

- In Benin, Promo Fruits received \$1.2 million from Oikocredit. The loan was used to buy new packaging equipment and to create a revolving fund for pineapple farmers.
- In Kenya, Shalem Investments received \$500,000 from Root Capital, enabling it to expand from grain trading to processing, and to launch a new brand of blended sorghum flour.
- In Mali, Agrisem received \$140,000 from Banque Atlantique for the import and distribution of improved vegetable seeds from 2SCALE partner East West.
- In Uganda, the Nyakatonzi cooperative received \$1.6 million from the Microfinance Support Center to expand production capacity and to launch a new range of cooking oils.

More than 21,000 farmers received loans in 2016.

- Cabbage farmers in Benin received \$8,000 from Bethesda Microfinance to dig boreholes. They now grow three crops a year instead of one.
- Rice farmers in Ghana have a new package of financial services (loans, mobile banking, e-wallets) thanks to 2SCALE linkages with microfinance provider Advans.
- Vegetable farmers in Kenya have a new revolving fund set up in partnership with the NECCO-FOSA cooperative. More than 300 women have received loans of about \$500 each.

## NEW FINANCIAL PRODUCTS

2SCALE works with financial partners to design new products specifically for farmers and small agribusinesses. In 2016 we introduced input financing for sorghum farmers in Kenya and Uganda, in partnership with four leading banks – Faulu and Equity in Kenya, Postbank and Centenary in Uganda. Recipients were able to buy fertilizers and other inputs, many for the first time. Yields and farm profits increased, loans were repaid promptly, and the banks plan to expand the program in 2017.

Two other innovations, warehouse receipting and invoice discounting, were introduced for soybean clusters in Uganda. In warehouse receipting, farmers store (deposit) their harvest in a designated warehouse; the stored grain serves as collateral for loans. Previously, they sold immediately after harvest; now they store and wait until prices rise. In invoice discounting, aggregators purchasing from farmers and delivering to a large buyer, can 'sell' their invoices to a third party – they are paid immediately, rather than waiting 30-60 days.



*Low-interest loans have helped farmers adopt new soybean technologies*

Another innovation is the use of 2SCALE partner firms as a channel to deliver loans to farmer groups. For example in Nigeria, three 2SCALE partner firms were designated as ‘anchor borrowers’. The country’s Central Bank will disburse loans through these firms, benefiting nearly 6,000 families. In Uganda, the producer organization MADFA received a \$1.2 million line of credit from Crane Bank for onward lending to soybean farmers; nearly 3,500 farmers received loans in 2016.

## NEW SOURCES OF CREDIT

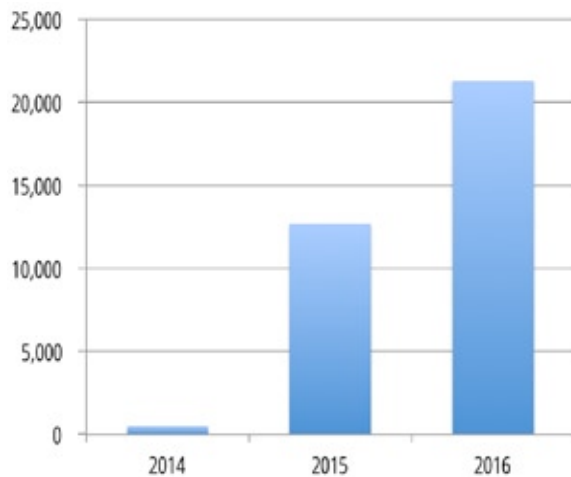
Village Savings and Loans Associations (VSLAs) are another option, especially for segments (e.g. women and youth) that find it hard to access the formal credit market. Each VSLA member saves a small amount every month. The savings are pooled and redistributed as low-interest, short-term loans. 2SCALE has helped set up more than 2,500 VSLAs, 1,400 in 2016 alone. We mobilize and train farmer

groups, advise on registration procedures and by-laws. In some cases we connect VSLAs to banks, with pooled savings used as security for a larger group loan.

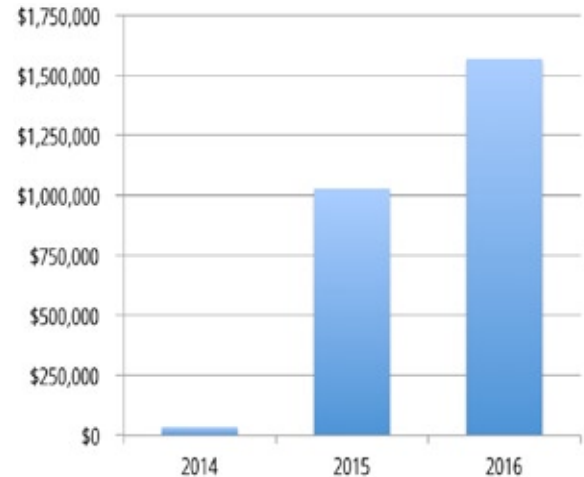
For example in Benin, VSLAs were formed – for the first time – among poor pastoralist communities. In the first season, pooled savings were \$2,200, half of which was disbursed as loans to women’s groups producing cheese for sale to a 2SCALE partner company.

*To date, 2SCALE has facilitated loans of \$36 million, of which \$8.6 million went to smallholder farmers and the rest to local businesses. More than 50,000 households have benefited directly (as loan recipients) and many more indirectly, through employment or business connections with the companies receiving loans.*

*Farmers receiving loans in Kenya and Uganda*



*Value of loans disbursed to farmers in Kenya and Uganda*



# EMPOWERING WOMEN

**G**ender barriers are costly, not only for the women affected but also for society. By denying women land rights or decision-making powers, we are not just being unfair, we're hampering growth. 2SCALE is helping to break down these gender barriers and to empower women to play an even bigger role in small-scale agriculture.

Every 2SCALE partnership has specific gender targets: women's participation in training programs, involvement of women entrepreneurs, adoption of technology innovations, and others. Every 2SCALE staff member has gender goals that must be met; no goal, no salary raise. This deliberate bias towards women is reflected in program design and budgets. Even in traditional, male-dominated rural communities, 37% of 2SCALE farmers are women – and this does not include the thousands of women working on, but not owning, the family farm.

## EMPOWERED THROUGH TRAINING

Women are keen to participate in training programs, but often unable to because of childcare priorities, housework or conservative traditions. 2SCALE used affirmative action to encourage women's participation. Training curricula, venues and timings were designed to make it easier to attend. There were quotas for women, as well as special women-only sessions conducted on fields owned or managed by women. Women were free to bring along their nursing babies. Men were sensitized to allow their wives and daughters to attend. Guidelines were developed for trainers and coaches, with practical tips on how to make women feel sufficiently comfortable to express their views even in conservative settings such as village meetings.

## WOMEN ENTREPRENEURS

Women entrepreneurs face not only the usual challenges of financing, marketing etc, but also additional barriers because of cultural stereotypes. These gender barriers were highlighted at a webinar and an online training course that attracted over 700 participants from 70 countries.

The webinar showcased three businesswomen who partner with 2SCALE. Ruth Kinoti, CEO of Shalem Enterprises, Kenya, aggregates sorghum and other foodgrains from smallholder farmers. 2SCALE has helped her grow from trader to processor, selling her own brand of flour. Ruth Okiror of Acila Enterprises, Uganda, is also a sorghum trader and processor. Project support has enabled her to source larger quantities, increase processing capacity and install reporting and accounting software. Yemisi Iranloye of Psaltry International, Nigeria, drives the country's first reliable commercial market for smallholder cassava farmers. The three women shared their experiences, helping to inspire not only other entrepreneurs but also policy makers, social scientists and development practitioners who participated.

Gender equality is some years away, but we're making progress. The Seguton women's cooperative in Kenya has a new 40-ton store for potatoes, co-funded by Irish Aid. In Nigeria, Fulani women have set up their first ever dairy cooperatives. In Benin, women's groups use a simple solar drier to add value to chili pepper. Anne Dansi explains: "I used to dry my chilies on the floor. With the solar drier, I get much better quality in much less time and I also get better prices. And because I am making more money than before, my family respects me more."



*Inputs, training, markets – transforming women's cooperatives*

## Onions Without Tears

Women face multiple challenges; solutions must address each of these challenges. The onion sector in Mali is a good example of 2SCALE's holistic approach, combining technology, training, markets and finance. More than 8,000 women are involved.

**New varieties.** Onion in Mali is grown mostly in the dry season, because rainy-season crops are attacked by fungal diseases. Partner firm East West Seed provided new fungus-resistant varieties that can be grown during the (rainy) off-season, when prices and profits are much higher. Training programs helped introduce new practices such as making compost from kitchen waste. Yields increased from 9 tons to 20 tons per hectare, quality improved substantially: the new onions have firmer skin, better appearance and longer shelf-life, and sell at higher prices.

**Cheaper inputs.** We linked women's groups to retail company Guina Agricole, which provided seeds and fertilizers on credit. Inputs worth \$140,000 were distributed in 2016 – and the credit has been fully repaid, on schedule.

**Bigger markets.** Women's cooperatives were linked to trading firm Madougou, which purchased 112 tons of onions in 2016. The onions are resold to a Malian factory that produces Bara Musso, a popular brand of seasoning cubes. To smoothen the contract negotiations, we organized a series of meetings between the buyer and every cooperative to agree on volumes, quality requirements, pricing, payment terms, as well as details like location of weighing points and sharing of transport costs.



*Off season, on sale – new onion varieties*

**Safer sprays.** Onions require pesticides but spraying creates health risks, especially for women and babies. We partnered with CropLife to train and equip young men from the community, who provide spraying services at affordable rates. Nearly 2,000 women have used spray services. To ensure that women can pay, we linked the farmers to microfinance agency Soro Yiriwaso, which offers a loan package that includes spray services.

**Fast forward.** Other partners have stepped in as well. In Sebougou, the local administration donated 17 hectares of prime land for a market garden. Development agency USADF is sponsoring the construction of a 30-ton warehouse. We're also partnering with another Dutch-funded project that has set up a 12 million FCFA (\$20,000) guarantee fund with Soro Yiriwaso. Through the fund, more than 4,500 women have received low-interest loans (10%, compared to the market rate of 24%) for buying seeds and fertilizer. ■

# PARTNERSHIP PORTFOLIO

**T**he **2SCALE portfolio** includes 45 partnerships in nine countries, covering four sectors: staple crops, vegetables/potatoes, oilseeds and livestock. Here are a few examples, summarizing achievements in 2016.

## BENIN

**Maize | Lead partner: SOCIA** – SOCIA is a processing firm that supplies white maize grits to the country's largest brewery. The partnership has helped SOCIA expand its farmer network and introduce a traceability system to guarantee quality. It links with the Netherlands-funded ACMA project and with public sector agencies for inputs and extension services. Eight clusters are operational: Ifangni, Toffo, Borgou, Djidja, Glazoué, Savalou, Agbagnizoun and Zogbodomey.

- Partnership currently involves 4,020 farmers (835 women) and 23 local businesses
- SOCIA contracted smallholder farmers, through their umbrella organization, to supply 6,000 tons of maize
- 205 lead farmers (42 women) trained on improved production methods, quality control and other areas
- Pricing mechanism agreed, cluster actors sensitized on SOCIA's quality requirements and delivery/payment procedures

## CÔTE D'IVOIRE

**Soybeans | Lead partner: RMG** – This partnership, recently launched, aims to build a stable supply chain for soybeans. Trading and processing firm RMG will purchase from smallholder farmer groups to produce soybean oil for sale to Unilever as an ingredient in mayonnaise.



Activities target the main production areas in the north and north-west. RMG will provide farmers with seeds and fertilizers on credit and purchase the entire harvest subject to quality requirements.

- More than 160 farmers trained on post-harvest management
- Field staff recruited and deployed
- Clusters have developed concrete action plans, implementation to begin in 2017

## ETHIOPIA

**Sesame & Sorghum | Lead partners: producer organizations and Sesame Business Network** – Sesame monocropping systems are profitable but drain the soil of nutrients. This partnership has helped farmers diversify by introducing rotation crops such as sorghum, mungbeans and soybeans – improving soil health and increasing food availability for migrant laborers who work on sesame farms. Clusters are located around Humera





Rice in Ghana

and Metema in northern Ethiopia. Partners include Wageningen University.

- Partnership currently involves 52,864 farmers (15,693 women) and 65 business enterprises
- Meta Beer (subsidiary of Diageo) is using sorghum as raw material for the first time in Ethiopia; contracted with four cooperatives to supply 2,600 tons
- Sorghum and soybean production manuals produced in collaboration with research centers
- Over 2,500 farmers trained on crop management methods for sorghum and soybeans. Over 10,000 farmers visited demonstration sites for first-hand experience

## GHANA

**Rice | Lead partners: farmer organizations** – The partnership connects smallholder farmers to a large-scale buyer (Wienco), which offers a guaranteed market, formal contracts, extension services, improved fertilizers, and inputs on credit. 2SCALE focuses on building the seed chain. Seven clusters are operational in the main rice growing areas in Greater Accra and the Volta region. Partners include government agencies GIDA (irrigation) and GCAP (infrastructure support).

- Partnership currently involves 10,585 farmers (4,185 women) and 104 local businesses
- More than 8,500 farmers (5,000 women) trained in 2016
- Foundation seed unit established, 150 tons of high-quality seed harvested and distributed in 2016
- 100 savings-and-loan groups established, providing financial support for farm operations

- 500 farmers registered for input credit scheme, in collaboration with rice buyer RMG Copa Connect and finance provider Advans

## KENYA

**Sorghum | Lead partner: Shalem Investments** – This partnership has helped revive a declining sorghum market. Production contracts with Shalem, extension support and better access to credit have allowed farmers to invest in improved technologies. The market, previously centered on beer manufacturers, is diversifying into food products and animal feed. Clusters are located in Meru and Tharaka Nithi counties in central Kenya.

- Partnership currently involves 26,316 farmers (14,884 women) and 59 local companies
- Bulk-SMS system introduced for extension messages and market information
- Farmer Field School program scaled out, reaching 16,000 farmers in 2016
- 17 demonstration plots established to promote hybrids and blended fertilizers. Yields increased by 95%, 5,950 farmers attended field days
- Shalem received loans of \$500,000 for business expansion, facilitated by 2SCALE



Sorghum in Kenya

## MALI

**Yellow maize | Lead partner: SONAF** – The partnership has provided farmers with a stable market, and enabled SONAF to reduce its reliance on imports. Partners include the national research center, government agencies and the NGO PlaNet Guarantee, which facilitates crop insurance.

Ten clusters, involving 113 producer organizations, are operational in the Sikasso region, with SONAF providing not only a market but also assistance with training and farm inputs.

- Partnership currently involves 27,466 farmers (11,725 women) and 37 business enterprises
- 2SCALE clusters supplied 36,000 tons to SONAF in 2016
- Quality committees established in each of the 113 producer organizations
- SONAF established supply contracts with buyers in Niger, Nigeria and Senegal
- BNDA bank increased its credit ceiling for SONAF to \$500,000; purchases will expand significantly in 2017

## MOZAMBIQUE

**Potatoes | Lead partner: Montesco** – Montesco is a seed potato producer and distributor for HZPC-Netherlands. This partnership has helped provide farmers with new high-yielding varieties, training and market linkages; and build the capacity of government regulatory staff on variety registration, seed certification and quality management. Partners include potato processor C&B Farm Fresh, the national seed agency DNSA and the International Potato Center. Ten clusters are active in Manica, Sofala and Tete provinces.

- Partnership currently involves 1,000 farmers (400 women), 6 local businesses and 17 producer organizations
- Partner firm Omnia Fertilizers completed large-scale soil tests; now testing new fertilizer blends for potatoes
- Demonstration plots established (new varieties, crop management), training on post-harvest handling greatly expanded
- Farmer groups linked to processors and wholesale buyers in Maputo and Nampula, supply contracts being negotiated

## NIGERIA

**Dairy | Lead partner: FrieslandCampina Wamco** – This partnership supports government efforts to replace imports with domestic milk production. It has brought traditional Fulani pastoralists as well as ‘sedentary’ smallholder farmers into the commercial dairy market, many for the first time. Government agencies provide

support for infrastructure, tsetse fly control and breed improvement. Other partners include Mueller Ltd (chilling equipment), feed suppliers, seed companies (forage crops) and vet services. Clusters are operational in Alaga, Fashola, Iseyin, Maya and Saki in Oyo state.

- Partnership currently involves 1,792 farmers (953 women) and 24 businesses
- Program expanded to Saki district in Oyo State
- The first Fulani women’s cooperatives created, trained, and now expanding into milk retail
- Improved husbandry practices introduced: selection of dairy cows, better feed management, control of tsetse fly



*Potatoes in Mozambique*

## UGANDA

**Sorghum | Lead partners: Nile Breweries, Uganda Breweries** – This partnership connects farmers to the huge market for sorghum as a beer ingredient. It focuses on the breweries’ purchasing agents, improving technical capacity, efficiency and inclusiveness, with profits shared fairly between agents and smallholder farmers. Fourteen clusters are operational: with Nile Breweries in Bukedea, Kumi, Lira, Ngora and Soroti districts; and with Uganda Breweries in Apac, Lira, Kitgum and Kole.

- Partnership currently involves 31,913 farmers (16,550 women) and 39 small businesses
- 140 sorghum demonstrations established, 4,400 farmers trained in production methods and linked to suppliers of hybrid seed
- 4,000 farmers linked to Opportunity Bank for input financing
- 140 groups formed, supported to obtain government registration, and linked to purchasing agents

# CLEAN VEGGIES, GREEN VEGGIES

**F**eleku Dubale is 35, a mother of four, and part of a unique success story. She works for the Meki Batu fruit and vegetable cooperative in Ethiopia. Her job is to grade, process and pack fresh produce, making sure it meets the quality standards of the cooperative's biggest customer, Ethiopian Airlines. Meki Batu supplies the airline with a range of fruits and vegetables – onions, tomatoes, cabbages, eggplant, papaya, watermelon.

“We process nearly 1 ton of fruits and vegetables every day, so the work is not easy,” Feleku says. “The first step is sorting, rejecting anything that is even slightly damaged. Then we grade, based on size, ripeness and color. Some vegetables require more work. For example, cabbages have to be trimmed. Then we wash, peel and wash again, and cut if needed. Finally we weigh and pack. We make sure the portions are the right size and that everything is shrink-wrapped, sealed and immediately refrigerated, ready for delivery.”

The women work in teams of four – two experienced older women and two younger ones. The teams work well together, and each week teams rotate between jobs, so that, in Feleku's words, “Nobody is bored and everyone is learning.”

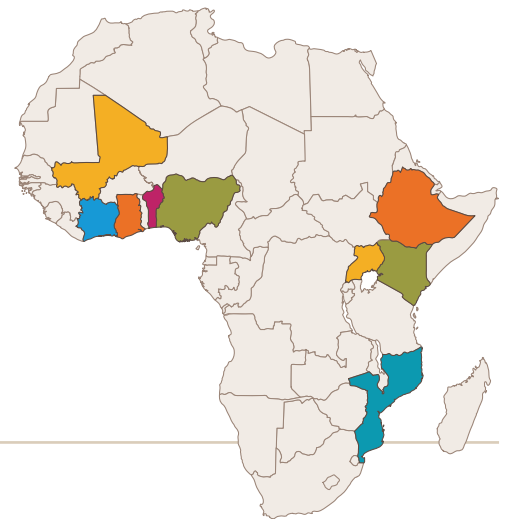
Two years ago, Feleku was unemployed. Today she earns about 60 birr (\$3) per day, well above the average blue-collar wage in this small town. “Now I don't worry so much, because I know we can pay the children's school fees in January.”

The income is sufficient for the time being, but she has ambitions. “My youngest daughter is 8 years old. Before she reaches high school, I want to open my own vegetable shop, selling what is grown by our cooperative.”

Feleku's story – and her ambitions – are an example of how 2SCALE works. The approach is purely business: creating networks, helping them grow, and ensuring that the benefits reach even the smallest players, like Feleku.



*Feleku Dubale (center) at work: new partners, new markets, and new jobs for women*



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