

Partnering for Innovation



INNOVATION PORTFOLIO

Agricultural products commercialized in partnership with
Feed the Future Partnering for Innovation



Updated March 2017

This program is made possible with support by the American people through the United States Agency for International Development (USAID), under the terms of Cooperative Agreement No. OAA-A-00051, and managed by Fintrac Inc. The opinions expressed herein are those of Fintrac Inc. and do not necessarily reflect the views of the United States government. For more information, please contact:

Fintrac Inc.
www.fintrac.com
info@fintrac.com

US Virgin Islands
3077 Kronprindsens Gade 72
St. Thomas, USVI 00802
Tel: (340) 776-7600
Fax: (340) 776-7601

Washington, DC
1400 16th Street NW, Suite 400
Washington, DC 20036
Tel: (202) 462-8475
Fax: (202) 462-8478



AGRO TRACKING

HAITI

Solutions, a Haitian IT company, with subpartner GeoNova, is formalizing the export mango sector in Haiti by organizing growers into trained producer groups and making mangos available for purchase by exporters that are traceable back to the farm. Using its Agro Tracking software, Solutions is providing full electronic traceability for mangos grown by the producer groups, ensuring compliance with US import regulations. Solutions and GeoNova are also providing good agricultural practices training that will increase the quality of mangos produced by the groups. 9,000 farmers in the new groups will receive a price premium from exporters and will have continued access to the US market.

CERTIFIED LEGUME SEEDS

ZAMBIA

Stewards Globe, the largest supplier of legume seeds in Zambia, is increasing production of their certified seed varieties, which include groundnut, soybean, common bean, sunflower, and cow pea, in order to increase their capacity to meet demand. Stewards Globe is using an outgrower scheme to increase certified seed production and is increasing awareness of their brand through demonstration plots, field days, and promotional materials. Stewards Globe will establish contractual relationships with 220 seed outgrowers, more than half of whom will be women, promote new legume varieties through installing 200 demonstration plots and training agrodealers, and provide 60,000 smallholder farmers access to seed through sales of 600 MT of soy, sunflower, cow pea, groundnut, and common bean varieties.

KILIMO BOOSTER

KENYA

Grameen Foundation is partnering with local finance institution Musoni to develop Kilimo Booster, a loan tailored specifically for smallholder farmers with flexible terms and a customizable grace period based on the farmer's seasonal cash flow. Grameen Foundation is supporting the sustainable growth of Musoni's Kilimo Booster loan for smallholder farmers by developing a loan application software that will streamline the loan application process, shorten the approval and disbursement turnaround time, and increase Musoni's profitability by reaching a greater market share of smallholder borrowers. Grameen Foundation and Musoni will disburse approximately \$1 million in new loans and reach 3,500 new loan recipients.

STRIGAWAY

KENYA, TANZANIA, UGANDA

In Kenya, Tanzania, and Uganda, striga, a parasitic weed, infests 1.4 million hectares of farmland. The **African Agricultural Technology Foundation (AATF)** is working with seven local companies to increase seed production with automated treating equipment, improved packaging and labeling, and safety training. At least 40,000 farmers will plant 955 tons of imazapyr-resistant maize, valued at more than \$2 million.

PRODUCTION

FARM MACHINERY HUBS

BANGLADESH

The Metal is establishing Farm Machinery Hubs for integrated marketing, education, training, and aftersales services supporting reaper commercialization. On average, it takes six laborers eight hours to manually reap one acre, whereas the reaper can reap that area of paddy or wheat in just one hour. The Metal will establish six Farm Machinery Hubs and will sell 75 reapers to local service providers with the goal of bringing this technology to more than 3,750 smallholder farmers.

NITROFIX

MALAWI

Agro-Input Suppliers Limited (AISL) is working with the Department of Agriculture Research and the International Institute of Tropical Agriculture to commercialize NITROFIX, a legume inoculant that contains rhizobia bacteria that boost legumes' natural nitrogen fixation. To increase product availability and ensure proper use, AISL will sell NITROFIX through 25 agrodealers, set up 116 demonstration plots, and organize 50 farmer field days to show the difference between soybeans planted with and without NITROFIX. AISL will sell 500,000 packets of NITROFIX to approximately 80,000 smallholder farmers who will increase soybean yields by 50 percent.

NEMAPOWER

HONDURAS

Zamorano University is producing beneficial nematodes to control insect infestations in select horticultural crops. Through scale-up of its biocontrol laboratory, Zamorano will produce and sell 20 times as many doses of beneficial nematodes by 2017 as in 2015. Known as NemaPower, this product costs less than pesticides and reduces infestations by as much as 98 percent in six months. Zamorano will sell NemaPower to more than 9,000 smallholders who are farming 25,000 hectares of land in Honduras.

BIOFIX

KENYA

MEA Fertilizers manufactures and sells BIOFIX, a rhizobial inoculant for legumes that increases yields by 40 percent. To meet the high demand among Kenyan farmers, MEA is increasing the amount of BIOFIX on the market by 50 percent by reducing production time from 21 to seven days. Moreover, BIOFIX is now available in a wider range of quantities in 10, 20, and 50-gram packages, making it more adaptable to Kenya's widely varying farm sizes. MEA also provides demonstration plots, farmer training, and aftersales support. More than 51,000 legume farmers will apply BIOFIX to their crops on 25,000 acres of land.





DRIP IRRIGATION SYSTEM

ZAMBIA

iDE partnered with Toro to commercialize a small-scale drip irrigation kit. Working with iDE and using human-centered design, Toro incorporated smallholder feedback to redesign the kit to support 500 square meter plots. MRI AGRO Zambia Limited, which has 580 local agricultural supply shops, has purchased 500 kits and has sold more than 200 of them to smallholders.

INSTAKIT

INDIA

With vegetable export companies, local distributors, and import companies, **Driptech** is commercializing the Instakit, a small-scale drip irrigation system. The system is affordable and customizable, and farmers can install these half-acre and one-acre drip irrigation systems in less than three hours. More than 1,779 Instakits were sold to Indian, sub-Saharan African, and other farmers during the award period, contributing to yield increases of 50 percent and labor savings of 80 percent. Driptech is now expanding into African markets.

FAMILY DRIP SYSTEM

KENYA

Netafim and its distributor, Amiran Kenya Ltd., are selling the Family Drip System, a comprehensive gravity-based drip irrigation system in 250 and 500 square meter as well as one-acre sizes, to smallholder farmers. To make the system affordable, Netafim has teamed with financial firms to offer non-collateral lending programs through local commercial banks. Up to 4,600 smallholders will be using the Netafim drip irrigation kits and will receive technical assistance, starter seed, and fertilizer packages.

FARMFORCE

GUATEMALA

Mercy Corps is facilitating the commercialization of Farmforce, a software developed by the Syngenta Foundation for Sustainable Agriculture that provides full electronic traceability to the farm level and improves overall information management by removing the need for pen and paper-based recordkeeping and helping exporters comply with Global Good Agricultural Practice requirements. Farmforce is customizable and can track things like pesticide use, location, electronic loan payments, and mobile phone receipts. Seven companies have purchased the software, providing them with electronic traceability for 3,000 smallholder farmers. The number of smallholders will reach 15,000 by 2017.

RURAL-URBAN CONNECTIONS

KENYA

Twiga Foods is a Kenyan company that uses a mobile business-to-business (B2B) platform to connect smallholder farmers to informal urban produce markets and enhance the supply chains that link them. Twiga is expanding its network of rural collection centers, where it aggregates produce from smallholder farmers, from the existing eight to 33. By expanding its network, Twiga is providing a market for more farmers, and is providing urban vendors with better and more affordable produce to sell. Twiga's innovative B2B platform generates rich data that will further improve its processes. Twiga hopes to ultimately replicate its model in other African cities with suboptimal supply chains for fresh produce from rural smallholder farmers. Twiga will increase the number of smallholder farmers from which it sources by 7,500.

POSTHARVEST STORAGE AND PROCESSING

SMALL-SCALE SILOS

ZAMBIA

Through the Bags2Bulk project, **AGCO** and its local distributor GSI Africa are selling small-scale metal grain storage silos to grain traders who lease storage to smallholder farmers. This allows smallholders to safely store their grain, reducing postharvest loss and increasing their ability to sell the grain for higher prices at a later time. AGCO is also offering financing for grain traders to afford this purchase. Forty silos will be sold to grain traders, providing access to grain storage for more than 12,000 smallholder farmers.

COOLBOT

HONDURAS & GUATEMALA

Because other options for cold storage are too expensive for exporters who source from smallholders, **Store It Cold** is commercializing the CoolBot, the only low-cost alternative to traditional refrigeration in Central America. The CoolBot attaches to a standard air conditioner to regulate and control the temperature of an insulated room, extending shelf life, maintaining quality, and reducing rejection rates for horticultural crops. The CoolBot helps generate higher incomes for smallholder farmers by providing reliable cold storage for exporters and associations that source from them. As many as 12,000 smallholder farmers will benefit from increased availability of affordable cold storage.

PEARL MILLET TOOLS

SENEGAL

Compatible Technology International's Pearl Millet Tools are mechanical, hand-operated tools that include a manually operated stripper, thresher, winnower, and grinder that process pearl millet from seed heads into clean, unbroken grain in minutes. The thresher alone allows women to process one kilogram of grain in less than half the time as threshing manually and results in close to zero grain loss. During the grant period, CTI sold 86 threshers and 102 grinders to farmers and farmer cooperatives, reaching more than 1,000 smallholder households. CTI is now working with a local manufacturer to reduce the sales price with a goal to reach 16,200 individuals within five years.

PICS BAGS

KENYA AND RWANDA

The Purdue Improved Crop Storage (PICS) bags, developed by **Purdue University**, provide small-scale hermetic grain storage to reduce postharvest pest damage. Made of two high-density polyethylene inner bags that fit inside another bag, small-scale farmers can use PICS bags to store either a few kilograms or a full 50 or 100 kilograms. When sealed, PICS reduces insect damage for stored grain and other crops to virtually zero. In Kenya, local distributor Bell Industries Ltd. has sold more than 200,000 PICS bags for use by more than 46,000 smallholder farmers. In Rwanda, plastics recycler EcoPlastics has sold more than 100,000 PICS bags for use by more than 50,000 smallholder farmers and is expanding production and sales to reach more than 250,000 farmers in Rwanda, Burundi, and eastern DRC in five years.

PROMETHEAN POWER SYSTEMS

BANGLADESH

India-based **Promethean Power Systems** is introducing and selling milk chillers to dairy processors in Bangladesh that source from smallholder farmers. Promethean develops cold storage solutions for processors in areas with inconsistent electricity and where individual farmers produce relatively small quantities of milk. To expand its business into Bangladesh, Promethean is establishing a local team, developing relationships with dairy processors, conducting equipment trials, and launching an outreach campaign explaining the benefits of cool storage for dairy. Promethean will provide 3,000 smallholder farmers with access to the dairy cold chain, dramatically reducing spoilage and improving quality, increasing farmers' income and the incentive to increase production.





DISEASE-FREE SHRIMP

BANGLADESH

Moana Technologies is introducing disease-free black tiger shrimp broodstock into Bangladesh through MKA Hatchery. Smallholder shrimp farmers can grow these broodstock more than twice as fast as wild shrimp, and they command a significantly higher price than other varieties in the export market. Commercializing disease-free shrimp broodstock will produce more than 50 million larvae and increase the productivity of more than 1,000 smallholder shrimp farmers.

IMPROVED POULTRY BREEDS

ETHIOPIA

EthioChicken sells an improved variety of chicken along with affordable, nutritious feed. The company also trains rural extension workers to raise the chickens to adolescence and then sell them to smallholder farmers. The improved breed produces more than four times as many eggs per year and, in the first three months, grows to be 150 percent larger than local breeds. Through a trained salesforce, EthioChicken will sell more than 2.2 million day-old chicks to approximately 400,000 smallholder farmers comprised of 80 percent women.

UDDERCHECK

RWANDA

Through **PortaScience's** UdderCheck mastitis detection dipstick and udder hygiene kits, smallholder dairy farmers can detect early-stage mastitis, a common inflammatory disease in cows, in less than two minutes. With its Rwanda-based partner, Africa Breeder Service/Total Cattle Management, PortaScience completed farmer training and is selling the kits through local milk collection centers. PortaScience demonstrated that an improved hygiene regimen for cows can reduce the incidence of mastitis by an average of 50 percent and lead to increased productivity and income for Rwandan smallholder dairy farmers.

SMALL-SCALE EGG INCUBATORS

KENYA

South Africa-based **Surehatch** is selling small-scale egg incubators and providing training and post-sales technical and veterinary support to smallholder farmers in Kenya who can then start their own poultry businesses. Using the incubator increases hatch rates tenfold over traditional practices. During this project, Surehatch sold 250 smallholder egg incubators to individual farmers and farmer cooperatives and has established a trained salesforce in Kenya. More than a third of its Kenyan customers are women, and it is expanding into other African countries.

WISH PONDS

CAMBODIA

Built with plastic sheeting or cement and stocked with 600 fish per pond, **WorldFish** water and fish (WISH) model ponds yield three times more fish than traditional ponds and specialized feed mixes boost fish reproduction. Fifty WISH ponds were built and stocked during the award period, benefitting 200 household members.

LIVESTOCK AND POULTRY

USAID/BENIN

CASHEW PROCESSING

More than 40 percent of the world's raw cashew nuts are grown in West Africa but more than 90 percent of that crop is exported for roasting, seasoning, and packaging. Benin's processors and smallholder growers are missing out on significant value added income that would result from in-country processing of cashews for retail sale. **Tolaro Global** is establishing an organic and fair trade cashew roasting, seasoning, and packaging plant to sell retail quality cashews to overseas markets. Tolaro will identify 3,200 smallholder cashew farmers to supply raw cashew nut to the company and will provide agronomic training to the farmers, assist them in becoming organic certified, pay Fair Trade certified prices for raw nuts, and provide them with equity ownership in Tolaro through stock.



USAID/GUATEMALA

YOUTH SAVINGS AND LOAN GROUPS

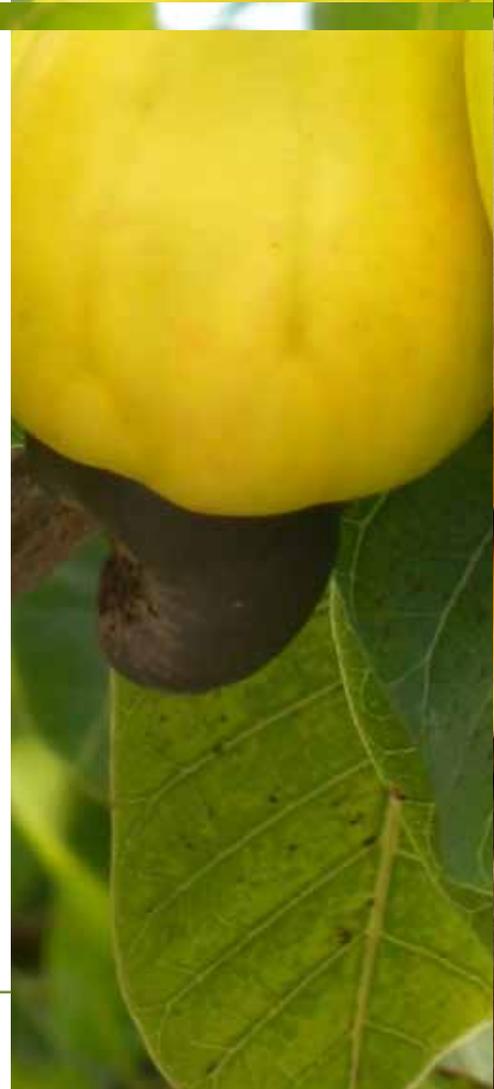
Mercy Corps is organizing savings and loan groups for youth in Guatemala, whose lack of access to formal credit constrains their ability to generate income. Youth in this activity, called **Agrijoven**, will engage in formal discussions on agronomic and social topics and will be encouraged to purchase agricultural technologies that will help them improve on-farm productivity. Rana Labs, a digital media agency that trains youth in multimedia development, will train youth on video production using smartphone technology to provide mobile extension services and promote the savings and loan groups. 1,020 youth will access savings and loan groups and 1,500 youth will engage in formal discussions on technical and social topics.

CERTIFIED POTATO SEED

Guatemala is Central America's largest producer of potatoes yet only five percent of farmers use certified seed, providing a market opportunity for **Servicios de Post-Cosecha** to introduce new varieties sold under their **Papais** brand. **Servicios Post-Cosecha**, with technical support from the International Potato Center (CIP), will establish a laboratory, nursery, and greenhouse to produce certified seed in the Western Highlands. Additionally, **Servicios Post-Cosecha** and local partners **Dayco** and **Asociación de Organizaciones de los Cucuhmatanes (ASOCUCH)** will recruit and train seed outgrowers to grow certified seed and will establish direct market access to buyers of the improved seed. **Servicios Post-Cosecha** will also establish a permanent laboratory in the Western Highlands. As a result of this partnership, more than 1,400 producers, mostly youth, will have access to improved potato seed to increase productivity and incomes.

BIOLOGICAL PEST CONTROL

Popoyán is scaling up production, marketing, and sales of beneficial insects and biological pest control products. The company has established more than 30 demonstration plots showing the benefits of beneficial insects and other organisms that improve plant health in horticultural crops. **Popoyán** will train more than 3,000 smallholder farmers in integrated pest management. One thousand hectares of land will be under organic pest management in the western highlands, and demand for biological pest products among smallholders will stimulate sales of \$130,000.





FINANCIAL AND BANKING SERVICES

Opportunity International Bank Malawi is working with Opportunity International and Catholic Relief Services to provide groundnut, soybean, and orange-fleshed sweet potato farmers in Malawi with financial and banking services. To make these services affordable and ensure loan repayment, the project will train groups of farmers in good agricultural practices. At least 10,000 smallholder farmers will be trained, 5,000 farmers will receive loans and mobile money services, and 7,000 smallholder farmers will open savings accounts. No less than 30 percent of the trainings and financial services will directly benefit women.

MARKETING AND STORAGE FACILITIES

In Malawi, **Rab Processors** is working with the Agricultural Commodity Exchange for Africa (ACE) to strengthen the soybean, groundnut, maize, and pigeon pea value chains by establishing three rural marketing and storage facilities and a warehouse receipts program to ensure that smallholder farmers can maximize market prices. Rab Processors will procure more than 10,000 MT of agricultural commodities through three rural marketing and storage facilities benefiting 9,000 smallholder farmers. ACE will provide community outreach and training on warehouse receipts to 15,000 smallholder farmers.

ORANGE-FLESHED SWEET POTATO PRODUCTS

Universal Industries is working with the International Potato Center (CIP) to provide training on orange-fleshed sweet potato (OFSP) production, including growing improved vines and sales opportunities for smallholder farmers. Universal Industries will develop products with OFSP puree or flour, run an OFSP processing plant, and commercialize OFSP-based products. At least 8,000 smallholder farmers will sell a total of 8,000 MT of OFSP to Universal Industries, which will develop six OFSP products in their plant, commercialize at least four of these, and yield revenue of \$136,000.

USAID/MALAWI

USAID/MOZAMBIQUE

SERVICE CENTERS

Technologia E Consultoria Agro-Pecuaria (TECAP) is scaling its network of one-stop agriculture service centers, called farmers houses, from the one existing location in Maputo to Manica, Nampula, and Tete. TECAP plans to further expand the distribution of inputs through a network of 50 agrodealers, 20 franchisees and 250 agriculture development agents. Through establishing three new farmers houses, TECAP will reach 18,750 farmers with improved inputs and access to mechanization services and will generate at least \$2,828,308 in sales of agriculture inputs and mechanization services among the three farmers houses.

FINANCIAL AND BANKING SERVICES

Opportunity International, through a private local financial services provider, Banco Oportunidade de Mozambique, is providing sesame and soybean farmers with financial and banking services including loans, savings accounts, and mobile money services. At least 5,000 smallholder farmers will be trained in good agricultural practices and will gain access to loans and other banking services.

RETAIL HUBS

Export Marketing Company Limited is providing farmers with storage facilities, market opportunities, quality agro inputs, and small-scale equipment rental through state-of-the-art retail hubs. Each hub consists of an agro input retailer, farm equipment dealer, and warehouse facility. The hubs will allow smallholder farmers to sell or store maize and beans free of charge for 90 days, so they can receive higher sales prices at a later time. The hubs also provide currently unavailable seeds, fertilizers, and pest control products. Another partner, Techno Brain, is providing smallholders with a mobile platform with weather forecasts, commodity pricing, pest control advice, and other useful information. Nearly 23,000 smallholder farmers will access storage facilities, market opportunities, quality inputs, mobile data, and mechanized equipment. Twenty-three entrepreneurs, two-thirds women, will manage the retail outlets.





CERTIFIED SEED

Txopela Investments and the cooperative COPAZA are investing in the creation of a company called Sociedade Beneficiamento Sementes (SBS) to develop it into a profitable supplier of certified seed and other agricultural inputs in Mozambique. With TechnoServe's support, SBS will establish a facility for cleaning, grading, storing, and packaging improved seed. SBS will distribute other agricultural inputs and provide training, mechanization, offtaking, and other services to smallholder farmers in the Alta Zambezia region. SBS's facility will produce and sell 450 metric tons of improved soy, pigeon pea, sesame, and common bean seeds. SBS's customers will include 3,600 farmers, 20 percent of them women.

ACCESS TO QUALITY INPUTS

NCBA CLUSA, Oruwera, and Phoenix Seeds are improving access to quality inputs and services for smallholders through extension services, land preparation and harvest services, and improving Oruwera and Phoenix Seeds agent and lead farmer capacity. Oruwera and Phoenix Seeds are also developing ready-to-go input packages including seed, fertilizer, and inoculants. At least 10,000 smallholder farmers will access improved agricultural inputs and value-added services through private sector-led distribution models.

RURAL AGRODEALER NETWORKS

Portuguese seed and input supplier Lusosem is partnering with **IDE** and HUB Assistancia Technica e Formacao to enter the Mozambican market and provide high-quality imported seeds and other inputs. They will support the opening or expansion of 40 agrodealers and will train 200 advisors to provide extension services to smallholder farmers. Through these measures, the partnership aims to achieve a robust and sustainable market-based system of agrodealers in the heart of rural Mozambique where communities are traditionally underserved. At least 10,000 smallholder farmers will have access to new agricultural inputs, technical advice, and expanded markets.

USAID/NIGERIA

SMART TRACTORS

A majority of Nigerian smallholder farmers, who make up more than 70 percent of the total farming population, do not have access to mechanization or technology that would make farming more efficient. **Hello Tractor** designed a versatile Smart Tractor to serve farmers throughout the farm production cycle. Each tractor is fitted with a GPS antenna, local SIM card, hard drive, and telematics capabilities, enabling Hello Tractor to pair farmers in need of services with a Smart Tractor owner nearby. Smallholders can access affordable tractor services to increase their productivity, while Smart Tractor owners are given the opportunity to earn additional income with their machine. 24,500 smallholder farmers will newly access tractor services; 100 youth entrepreneurs will be trained on the business of owning a fleet of Smart Tractors; and 15 youth technicians will be trained to repair Smart Tractors to allow tractor owners access to timely maintenance.

CASSAVA PEEL PROCESSING

Nigeria is the world's leading producer of cassava. Despite the volume of cassava processed there and the commercial potential of cassava peel for livestock feed, there is virtually no commercially-available livestock feed made from cassava peel. **Niji Foods**, with the International Livestock Research Institute, is establishing three cassava peel processing centers to address this market gap. They will recruit and train staff on critical operations and business management, not only creating the processing centers but also providing long term local employment. In addition, they will ultimately hand over partial ownership of the centers to at least three women's groups.

SMALLHOLDER FARMER COOPERATIVES

Smallholder farmers' low economies of scale inhibit access to the credit required to purchase agricultural inputs, access to appropriate information on best practices to optimize yields, and the ability to delay the sale of their produce to attain a higher price as the product value appreciates postharvest. **Babban Gona** is addressing this challenge by forming smallholder farmer cooperatives called trust groups, which enable maize, rice, and soybean farmers to attain high economies of scale. Babban Gona provides member farmers with services designed to optimize crop yields, production costs, and prices of agricultural outputs, thereby increasing profitability and in turn improving household food security and livelihoods. 20,000 smallholder farmers will be formalized into trust groups with collective new incomes of \$2,000,000.

AQUACULTURE INPUTS

Recognizing the need to increase Nigeria's domestic fish production to meet growing demand, **Chi Farms** is expanding its capacity to produce high quality inputs for smallholder fish farmers. Smallholder farmers will have access to high quality juvenile catfish from Chi Farms' multiple hatcheries, as well as aquaculture management training and financial tools to provide the knowledge necessary to build successful aquaculture businesses. Chi Farms is also expanding its current feed production to include high quality aqua feed, which will not only benefit fish farmers, but also soybean and maize farmers supplying raw material for the feed. 1,000 smallholder fish farmers will receive access to high quality inputs, including fingerlings. Chi Farms will purchase commodities from 2,700 soybean farmers and 3,600 maize farmers.





HIGH-QUALITY SEED POTATOES

Agrico is producing and storing high quality seed potatoes for sale to small- and medium-scale farmers. It is also providing them with training and support in proper planting, cultivation, and harvesting of potatoes. Agrico will triple its storage capacity to 3,000 MT of high-quality seed potatoes leading to 450 farmers purchasing seeds with a goal of increasing potato yields by 30 percent increase and revenue by 43 percent.

SOIL, PLANT, AND WATER ANALYSIS

Agrobonus is expanding its services to include soil, plant, and water analysis aimed at improving incomes and productivity. The company will offer these services through a state-of-the-art central laboratory and 16 mobile laboratories. At least 1,435 small- and medium-size farmers will receive fertilization and field management consultations, resulting in a 30 percent increase in income from input cost reductions and crop yield increases.

IMPROVED AGRIBUSINESS PRACTICES

Bayer and the International Finance Corporation will design, field test, and implement 11 improved agribusiness practices in human resources, precision farming, and financial management for small- and medium-size farmers. Twenty agricultural distribution partners will provide training. More than 840 sales representatives and 20,000 farmers will adopt better practices, resulting in a 10 percent increase in distributor sales and an 8 percent increase in Bayer sales.

IMPROVED MILK PRODUCTION

To improve milk quality, **International Charity Fund Community Wellbeing** and its partners, including yogurt company Danone, are training family farmers in state-of-the-art milk production, including the use of improved breeds, cooling tanks, milking machines, and other modern equipment. Danone will then purchase milk produced by these farmers to create higher quality milk products. At least 170 family farms will receive new equipment and training to increase milk production and income by 40 percent. An additional 1,000 smallholder dairy farmers will use milk cooling tanks, which will improve product quality and increase incomes by 20 percent.

OUTGROWER SCHEME EXPANSION

Amatheon, a Zambian agricultural company, produces on a large-scale farm and by sourcing from smallholder outgrowers. It is expanding its outgrower scheme, which provides free training in conservation farming and business skills, access to inputs and markets, and facilitates linkage between emerging farmers and financial services, by establishing 20 new rural aggregation and input depots and one new seed bank. Amatheon is integrating 6,000 additional smallholder farmers into its outgrower scheme, providing access to higher value markets, enhancing productivity and incomes, increasing access to finance and inputs, and improving food security and nutrition.

SEEDLING PRODUCTION FACILITIES

To meet the rising demand in Zambia for horticultural products like tomato and cabbage, **MRI-Syngenta** is building a sustainable seedling distribution model for horticultural crops. It is setting up 20 seedling production and propagation facilities that are owned and operated by entrepreneurial young plant raisers, who will conduct extension, training, and marketing field days to more than 12,000 smallholder farmers. By growing and promoting hybrid seed, MRI-Syngenta is also addressing a lack of quality seed availability and understanding among farmers of the value of using hybrid seed, increasing farmer productivity and incomes.

SMALLHOLDER FARMER COOPERATIVES

Community Markets for Conservation (COMACO) and **TechnoServe** are increasing the production capacity of farmer cooperatives that supply raw agricultural commodities for Comaco's It'sWild brand. Through its innovative cooperative structure, COMACO provides market opportunities for its farmer suppliers. In order to increase and secure its capacity to improve the livelihoods of smallholder farmers, COMACO is working with TechnoServe to develop an improved training program that provides business and agricultural training to member farmers, as well as additional business and marketing training to COMACO. It will initially train 10,000 farmers, including introducing them to new revenue streams such as honey production and poultry rearing.

OUTGROWER LEGUME SEED NETWORK

One of Zambia's biggest agricultural challenges is a lack of availability of high quality early generation and certified seed in the right quantities and at the right time for smallholder farmers. **Good Nature** is addressing this issue by expanding its seed outgrower network. It is also expanding its private extension agent network and providing soil analysis and creating an organic fertilizer blend specifically targeted at smallholder legume seed farmers. Limited supply of foundation seed is a key bottleneck in the legume value chain in Zambia, so Good Nature is also developing its own foundation seed farm that will allow it to deliver high quality foundation seed in a timely manner to its outgrowers. Good Nature will add 5,200 smallholder farmers to its outgrower network and train an additional 80 private extension agents.



Join our online community, the AgTechXChange!

agtech.partneringforinnovation.org

AgTechXChange

Powered by Feed the Future Partnering for Innovation

Contact us:

innovation@fintrac.com

202-733-1185

partneringforinnovation.org