

Contract Farming R&D Coalition

Stimulating Sustainable and Scalable Innovation
in Smallholder Sourcing



TechnoServe is a nonprofit organization that develops business solutions to poverty. We work with enterprising men and women in 29 developing countries to build competitive farms, businesses and industries.

ABOUT THE COALITION

The Contract Farming R&D Coalition is dedicated to generating evidence on innovations in smallholder sourcing that improve outcomes for farmers and companies, and promoting their broad-based adoption. During its three-year proof of concept phase, the Coalition – led by TechnoServe – will be composed of three private companies operating contract farming schemes at scale in sub-Saharan Africa, and a high caliber research partner, IDinsight (www.IDinsight.org). Designed with innovation, experimentation, agility and openness as its core values, the Coalition's vision is to ultimately expand the reach of outgrower schemes and enhance their value to both companies and farmers through the adoption of improved practices.

With funding from a U.S. philanthropic organization, TechnoServe launched the initial three-year proof of concept of the Contract Farming R&D Coalition in 2015. During this phase, the Coalition will pilot, test and evaluate six innovations through three competitively selected private companies operating large contract farming schemes in Mozambique and Uganda, which collectively reach 180,000 smallholder farmers.

The innovations to be tested span a broad spectrum in terms of scale and scope and include the following:

- An SMS-based platform to enable regular, two-way communication between the company and its outgrower/supplier base.
- A farmer data management system to uniquely identify farmers, allow for better data collection and management, and ultimately enable better targeting of extension services among the company's outgrower base.
- A concentration farming scheme where farmers are provided access to 5 to 10 hectares of land on a company-managed farming block with access to on-site services such as mechanization, inputs and agronomic advice.
- Integration of a staple crop (maize) into a company's product



basket to encourage farmer loyalty for core cash crops and to diversify company costs and risks.

- An intervention consisting of a number of experiments grounded in the behavioral sciences aimed at encouraging timely planting among farmers.
- An initiative to pilot and test the effectiveness of concrete farmer engagement and extension strategies aimed at better engaging and supporting female outgrowers.

Each coalition member company will receive matching grant funding to support innovation implementation within its contract farming operations. An independent research partner will run rigorous impact evaluations on each innovation as it is implemented by member companies.

TechnoServe will drive dissemination of learnings from the innovations and evaluations to create a community of knowledge and to support broad adoption of effective innovations among a variety of industry players. At the end of the three-year proof



of concept, TechnoServe and its evaluation partner will assess the degree to which the coalition has successfully developed a system in which innovations in smallholder contract farming can be identified, evaluated and evolved into well-developed packages capable of scaling across commodities and geographies.

A FOCUS ON EVIDENCE

The Contract Farming R&D Coalition's mission centers around generating rigorous, scientific evidence on the impact of contract farming innovations on farmers and companies, and utilizing this evidence to encourage broad adoption of effective innovations. The Coalition is unique in that it has dedicated significant resources towards rigorous impact evaluation, integrated into the design of each innovation from the start through the inclusion of IDinsight, the research partner, from the start.

IDinsight is a unique client-service organization that helps social sector managers generate and use evidence to inform program decisions. The IDinsight team combines top-tier consulting experience with deep impact measurement expertise to help social sector organizations amplify their impact. IDinsight's core service tailors rigorous impact evaluation methodologies – including, but not limited to, randomized controlled trials – to the decision-making needs of governments, NGOs, and other development stakeholders across Asia and Africa. The IDinsight team has coordinated over 40 monitoring and impact evaluation engagements in Africa and Asia, and has a team of over 50 full-time staff based in Zambia, Kenya, India and the United States.

The Coalition is structured in such a way that the companies are able to focus on their core activities and innovation implementation, with IDinsight responsible for designing and running evaluations from start to finish. To ensure that innovations in contract farming schemes are rolled out in a manner that is conducive to rigorous evaluation, IDinsight is closely involved in the design, planning and implementation of each innovation right from the start.

COALITION MEMBER COMPANIES & INNOVATIONS

The initial three-year proof of concept of the Contract Farming R&D Coalition is focused on piloting, testing and rigorously evaluating six innovations at three private companies operating contract farming schemes with 180,000+ smallholders in Sub-Saharan Africa.

Plexus Mozambique Limited

Innovation: Leveraging data to reduce extension costs and applying behavioral research to boost productivity by encouraging timely planting.

Plexus Mozambique Limited (PML) operates a cotton ginning and export business in the Cabo Delgado and Nampula provinces of Mozambique. PML works with over 70,000 smallholders year-on-year, and manually collects and records millions of data points for these farmers through its extension and buying networks. Like many other contract farming companies, PML struggles to uniquely identify farmers across years, and does not effectively utilize the wealth of data available across disparate spreadsheets and files. Through the R&D Coalition, Plexus will develop and roll out a system to uniquely identify farmers in the field, streamline data collection and data entry systems using mobile technology, and develop the reporting functionality of its underlying database to allow for real time reporting and analysis for managers. The end goal is to be able to test how better data can be used to reduce extension costs and increase productivity per farmers. Using farmer analytics from the system, Plexus will roll out tiered support packages to farmers based on their historical performance, and IDinsight will evaluate how such tiered support packages can improve outcomes for farmers and Plexus.

At PML the Coalition will also test behavioral interventions aimed at encouraging adoption of what the company believes is a critical agronomic practice – timely planting. Per PML, if farmers plant on time (with the first sustained rains), they can maximize their growing season and experience higher yields. Yet self-reported data from a sample of Plexus' farmers found only 30 percent of farmers planting on time. The Coalition partnered with ideas42 (www.ideas42.org) – a New York-based behavioral re-

search and design lab that uses the power of behavioral science to design scalable solutions to some of society's most difficult problems— to design two interventions to encourage on-time planting that will be tested at PML and evaluated by IDinsight.

Gulu Agriculture Development Company

Innovation: Incorporating a staple crop into the company's crop portfolio to strengthen farmer loyalty and spread company overheads.

Gulu Agriculture Development Company (GADC) is a diversified agricultural company focused on cotton, sesame, chili and sunflower export. GADC sources from over 80,000 smallholders throughout the northern region of Uganda. Like many contract farming companies, GADC is interested in lowering its extension and buying costs per farmer, while continuing to support farmers to produce and sell more quality product to GADC. GADC will diversify into maize by setting up a maize mill and an animal feed mill as a dual strategy – to spread extension costs and overheads over an additional value chain, and simultaneously incentivize and encourage farmer loyalty and production of the company's core cash crops by purchasing a staple crop ubiquitous to the region. GADC's expansion into maize offers an opportunity for the Coalition to run a number of interesting experiments that fit within its new maize business line and are relevant to contract farming companies more generally. Specifically, at GADC we will be testing how purchases of a staple crop conditional on the farmer bringing the company's core cash crops to market can incentivize loyalty and production. We are also testing out how in-kind payments in the form of key agricultural inputs can encourage the purchase of inputs; we are testing how incentives to lead farmers can be used as a mechanism to increase effectiveness of farmer extension within the company's maize agronomy training structure; and we are testing concrete strategies for how female farmers can be better supported through the company's extension network.

JFS-SAN

Innovation: Piloting a farming model involving company-managed farming hubs, and leveraging SMS technology to strengthen farmer loyalty and satisfaction.

JFS-SAN operates a cotton ginning and export business in the Niassa province of Mozambique, providing inputs to and purchasing cotton from 30,000 smallholders across the province. Cotton farmers in the region, with an average landholding of less



than a hectare, have varying levels of productivity. JFS-SAN is interested in testing a model where its most productive and committed suppliers can be supported to move along the continuum from smallholders to commercial farmers through a Concentration Farming Scheme. Over 100 of the company's best farmers will be provided with access to 5 to 10 hectares of land on a company-managed block, with access to mechanized land preparation services, an on-site agronomist, and an on-site input shop. The model if successful has the potential to dramatically raise farmer production and income, and simultaneously allow JFS-SAN to better control its supply chain and reduce its extension costs per unit of cotton. The impact on farmer production and net incomes, as well as company costs per unit will be evaluated through the Coalition.

JFS-SAN is also implementing an ICT-based innovation to support improved communications with its farmers throughout the year. The company will distribute simple mobile phones to its farmers and roll out an SMS-based two-way communication platform. The company will send messages and information to farmers relating to cotton farming and agronomic practices, weather and rain predictions, cotton prices, health and the Better Cotton Initiative. The company's goal is to support farmer loyalty and farmer satisfaction, and to maintain a direct communication link with farmers throughout the year at a lower cost per farmer.

HEADQUARTERS

1120 19th Street NW | 8th Floor | Washington D.C. 20036
T +1 202 785 4515 | F +1 202 785 4544

R&D COALITION

37 Bath Ave | Rosebank | Johannesburg 2196 | South Africa
T +271 10489900

technoserve.org



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