



**Cracking  
theNut®'23**

*Reducing Risk in Rural  
and Agricultural  
Investment*



# Lessons from the 2023 Conference

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## Acronyms

AGRO	USAID/Agriculture Growing Rural Opportunities
AI	Artificial Intelligence
AOS	Agricultural Operating System
ARE	USAID/Agriculture and Rural Empowerment
BDS	Business Development Services
BII	British International Investment
CAP	Credit for Agricultural Producers
CASA TAF	UKAID/Commercial Agriculture for Smallholders and Agribusiness Technical Assistance Facility
CCA	<i>Compania Colombiana Agroindustrial</i>
CEO	Chief Executive Officer
CFDA	Climate Finance for Development Accelerator
CFIN	Climate Finance Investment Network
CINSERE	Climate Information Services for Increased Resilience and Productivity in Senegal
CNFA	Cultivating New Frontiers in Agriculture
COP	Chief of Party
CRS	Catholic Relief Services
DFI	Development Finance Institution
DFC	Development Finance Institution
DFS	Digital Financial Services
DR	Dominican Republic
DRC	Democratic Republic of the Congo
EBITDA	Earnings Before Interest, Taxes, Depreciation, and Amortization
EDGE	Enterprises for Development Growth and Empowerment
FI	Financial Institution
FMO	<i>Dutch Development Bank</i>
FSP	USAID/Food Security Project
GARI	Global Adaptation and Resilience Investment
GEM	Gender Equality Mainstreaming
GHG	Greenhouse Gas

GSMA	Global System for Mobile Communications Association
ICT	Information and Communication Technology
IP	Implementing Partner
JOBS	USAID/Tunisia Jobs, Opportunities and Business Success
KCDMS	Kenya Crops and Dairy Market Systems
MEDA	Mennonite Economic Development Associates
MFI	Microfinance institution
MSD	Market Systems Development
MSME	Micro, Small, and Medium Enterprise
PLI	Project Linked Investment
PO	Producer Organizations
POVE	Producer Organization Viability Evaluation
PSE	Private Sector Engagement
PSP	Private Service Provider
SCTP	Social Cash Transfer Program
SG	Savings Group
SHF	Smallholder Farmers
SILC	Savings and Internal Lending Committee
SME	Small and Medium Enterprise
SWAY AgFin	Sterling Women and Youth Agricultural Finance
TA	Technical Assistance
TCB	Tanzania Community Bank
U-IMCEC	<i>Union of Community Mutual Institutions for Savings and Credit</i>
USAID	United States Agency for International Development
USDA	United States Department of Agriculture
VSLA	Village Savings and Loan Association
WAI	Women in Agriculture Initiative
WE4F	Water and Energy for Food
WFCU	Worldwide Foundation for Credit Unions
WI-ROI	USAID/Women-Inclusive Return on Investment
WOCCU	World Council of Credit Unions

## Foreword

This year's *Cracking the Nut*<sup>®</sup> conference took place at Chemonics International's beautiful new office building in Washington, D.C. While we focused on "Reducing Risks in Rural and Agricultural Investment," the underlying objective of this year's learning event was to raise awareness for the fact that commercial finance alone is not sufficient to meet demand for rural and agricultural investment in developing countries. I have long been a supporter of market approaches to rural and agricultural finance and investment, and yet I am increasingly aware of how far down the list of priorities these investments are for banks and commercial investors for their scarce capital resources. As COVID negatively impacted supply chains and climate change adds to weather variability, poverty is increasing and becoming more concentrated in developing countries, requiring creative approaches to reduce risk and stimulate investment.

Showcasing their creative use of incentives and risk reduction strategies to encourage banks to increase lending to agri-SMEs, Aceli Africa's CEO Brian Milder and Head of Finance Sector Andrew Ahiaku started off the conference by sharing their experiences and lessons learned in East Africa. The KeyNote was followed by a series of participatory breakout sessions related to these sub-themes:

- Reducing risks associated with rural and agricultural investments;
- Using subsidies and blending commercial capital to achieve development impacts; and
- Integrating underserved populations into commercial markets.

We also benefited from a couple of interesting plenary sessions that focused on the role of climate change and green finance in rural and agricultural investment. Not surprisingly, a common thread across the conference was the importance of applying climate smart agricultural approaches. There is increasing consensus on the fact that much of the green finance funds to date have been focused on "mitigation" of climate change, with limited amounts flowing down to support smallholder farmers' needs for "adaptation" investments. In fact, "less than 5% of climate finance is being spent on climate adaptation and resilience efforts."<sup>1</sup> On a recent webinar sponsored by the Global Adaptation and Resilience Investment (GARI) Working Group,<sup>2</sup> Mihir Mysore, Expert Partner of McKinsey and Company, argued that there is a serious need "to scale adaptation technologies," such as drip irrigation and solar water pumps, to meet the growing global demand for food, amidst an increasingly volatile and complicated eco-system. So, Connexus is now considering taking on the topic of "Climate 2.0" for *Cracking the Nut*<sup>®</sup> 2024. So together, we can identify new strategies and solutions that can be replicated and scaled to more rapidly address food insecurity and stimulate commercial markets in developing countries across the world.

Sincerely,



Anita Campion  
President and Chief Executive Officer (CEO)



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<sup>1</sup> [www.climateasap.org](http://www.climateasap.org)

<sup>2</sup> [www.garigroup.com](http://www.garigroup.com)

## Executive Summary

This year's *Cracking the Nut*® conference was launched with a primary example of the value addition that is needed to facilitate access to rural and agricultural finance and investment in a way that is inclusive. Keynote Speakers, Brian Milder and Andrew Ahiaku, highlighted how Aceli Africa is:

- Reducing risks associated with rural and agricultural investments;
- Using subsidies and blending commercial capital to achieve development impacts;
- Integrating underserved populations into commercial markets.

### ***Theme 1: Reducing Risks Associated with Rural and Agricultural Investments***

To attract commercial investors to rural and agricultural investments, it is important to reduce risks, which can come in the form of technical assistance and capacity building, credit enhancement and insurance, as well as creative partnerships.

**Lesson 1: When agribusinesses operate professionally and transparently, risks diminish and financial flow improves.** SCOPEinsight has been able to reduce risk and increase bankability by using data on the drivers of professionalism to strengthen agribusinesses professionalism.

**Lesson 2: Building local capacity for demand and supply of agricultural investment reduces risks.** By working both with agribusinesses to demonstrate their value proposition and with financial institutions to better manage agribusiness portfolios, Connexus has helped to reduce risk and facilitate investment in Colombia, Nigeria and Tunisia, while adapting for the country context.

**Lesson 3: AgTechs can play a role in providing direct finance and/or facilitating finance to value chain actors.** In Bangladesh, for example, iFarmer links farmers to agricultural technologies, soil testing, training and advisory services with lowcost finance that does not require collateral.

**Lesson 4: Scaling insurance reduces risks and unlocks productivity if designed to address farmers' needs and vulnerabilities.** By bundling insurance with every agricultural loan, for example, U-IMCEC a microfinance institution in Senegal has found this strategy not only mitigates risks at the institutional level, but also helps farmers to be more resilient.

**Lesson 5: Embedding insurance and financial literacy increases uptake and reduces risks to governments, financial institutions, and agribusinesses.** In Zambia, Pula works with a consortium of insurance providers and other stakeholders to offer embedded insurance via input voucher programs.

**Lesson 6: To reduce the risk of climate change, financial and non-financial approaches are needed.** Opportunity International is working with 137,000 farmers in six African countries, providing a combination of financial and non-financial solutions to adapt to climate change. It is currently pilot testing 20 high tech solutions, in hopes of scaling in the future.

**Lesson 7: During chaotic times, it is important to negotiate flexible boundaries and priorities to be responsive; local partners are paramount to success.** When war hit Ukraine, Chemonics was able to pivot quickly on its USAID AGRO project by working closely with local partners and embracing flexibility. This approach has proven valid during Lebanon's economic crisis (USAID ARE) and drought in the Horn of Africa (Feed the Future CBCR).

## ***Theme 2: Using Subsidies and Blending Finance to Achieve Development Impacts***

Social investors are more likely to offer lower cost, patient capital to support climate smart agriculture. Blending social capital with commercial capital can attract investment in rural and agribusinesses, especially when additional technical assistance is provided to address risks and ensure impact.

**Lesson 8: Blended finance and technical assistance are needed to address the agri-MSME finance gap.** TechnoServe has used its Technical Assistance facilities, such as the UKAID-funded Commercial Agriculture for Smallholders and Agribusiness Technical Assistance Facility (CASA TAF), to reinforce investments from development finance institutions (DFIs) and patient capital investors (including BII, FMO and Zebu Investment Partners) in developing countries.

**Lesson 9: Leveraging blended finance to build capacity of supply and demand sides can broaden impact of financial services to Agri-MSMEs.** RTI's KCDMS Activity has blended grants to agribusinesses with commercial capital to transform agricultural market systems in Kenya into a viable ecosystem that improves livelihoods and supports resilience of smallholder households.

**Lesson 10: Blended finance and creative partnerships can help connect demand and supply for agri-MSME finance through digitalization of existing systems and products.** On the Feed the Future Nigeria Agribusiness Investment Activity, for example, CNFA and Connexus worked with Sterling Bank, to source funding from MasterCard Foundation and design its Sterling Women and Youth Agricultural Finance (SWAY AgFin) product, which reached 13,000 new women and youth clients in two years.

**Lesson 11: Blended finance and tailored agricultural loan products can help to incentivize smallholders to invest in climate smart agriculture.** In Egypt, for example, Abt Associates offers FIs technical assistance on product development and revolving grants to encourage rural farmers to apply climate smart practices, such as improved water management and soil fertility, crop planning and rotation.

**Lesson 12: Private sector investment can be leveraged to support climate smart agriculture and transition supply chains to reduce greenhouse gas (GHG) emissions.** For example, Chemonics International is implementing USAID's Climate Finance for Development Accelerator (CFDA), which is a \$250M initiative designed to leverage \$2.5B in public and private climate investments by 2030.

**Lesson 13: Positive social, environmental, and climate impacts can crowd in investment and attract patient capital needed to support rural and agribusiness investments.** A partnership between CRS, Caritas and Silverlands Tanzania has led to the development of a network of agri-hubs to provide climate smart inputs, training, and offtaking from the farming community, and attracted in additional capital to create a variety of positive impacts.

## ***Theme 3: Integrating Underserved Populations into Commercial Markets***

Development practitioners can play a role in working with private sector actors to see the economic, social, and governance-related benefits of ensuring that systems adequately accommodate the specific needs and concerns of marginalized populations, including SHFs, women and youth.

**Lesson 14: Investing in women can reduce risks and decrease employee turnover while increasing firm revenue, decreasing loan default rates, and increasing women's employment.** Through their experiences with impact investing in gender-inclusive enterprises and studying the evolution of participating agri-SMEs, Root Capital and Mennonite Economic Development Associates (MEDA) have demonstrated the business case for investing in women-led agri-SMEs.



**Lesson 15: Aligning inclusion with profit strategies is key to ensuring that businesses engage with women over the long term.** Designed with input from MarketShare Associates, USAID’s Women-Inclusive Return on Investment (WI-ROI) Framework provides a useful lens through which private companies can measure the financial impact of a firm’s investments in including and empowering women.

**Lesson 16: Designing different finance products for clients with different risk profiles can be an effective strategy for lending to agri-MSMEs that facilitate smallholder access to inputs and markets.** Recently, CRS launched Isidro, a “segmented” impact investment fund, Isidro, which provides loans from \$25,000 to \$500,000 targeted to MSMEs who work directly with SHFs.

**Lesson 17: Integrating savings groups into producer organizations can enhance impact for underserved populations.** Mercy Corps demonstrated this through its projects in Uganda and DRC, by applying its Producer Organization Viability Evaluation’ (POVE) toolkit, which systematically assess the capacity of producer organizations and the benefits of linking to savings groups.

**Lesson 18: Agri DFS can be a powerful tool to increase smallholder farmers’ access to capital and risk-coping mechanisms.** GSMA provided innovation grants to six digital agriculture providers, four of which launched digital loan services, which have collectively served more than 72,000 smallholders in Indonesia, Nigeria, Pakistan, and Tanzania.

**Lesson 19: Providing blended finance through credit unions can be an effective way to stabilize agricultural finance, inclusive of smallholder farmers and MSMEs, during times of crisis.** When the war started in Ukraine, for example, WOCCU and WFCU worked with USAID to design and implement a \$1M Liquidity Fund offering low-cost finance to stabilize agricultural lending for credit union partners.

## **Conclusion**

This year’s *Cracking the Nut*® conference focused heavily on the need for creative solutions to reduce risk of rural and agricultural investments, emphasizing the need for smart subsidies and incentives to attract and scale private sector investment. We need to ensure that solutions are inclusive of women, youth and other marginalized populations.

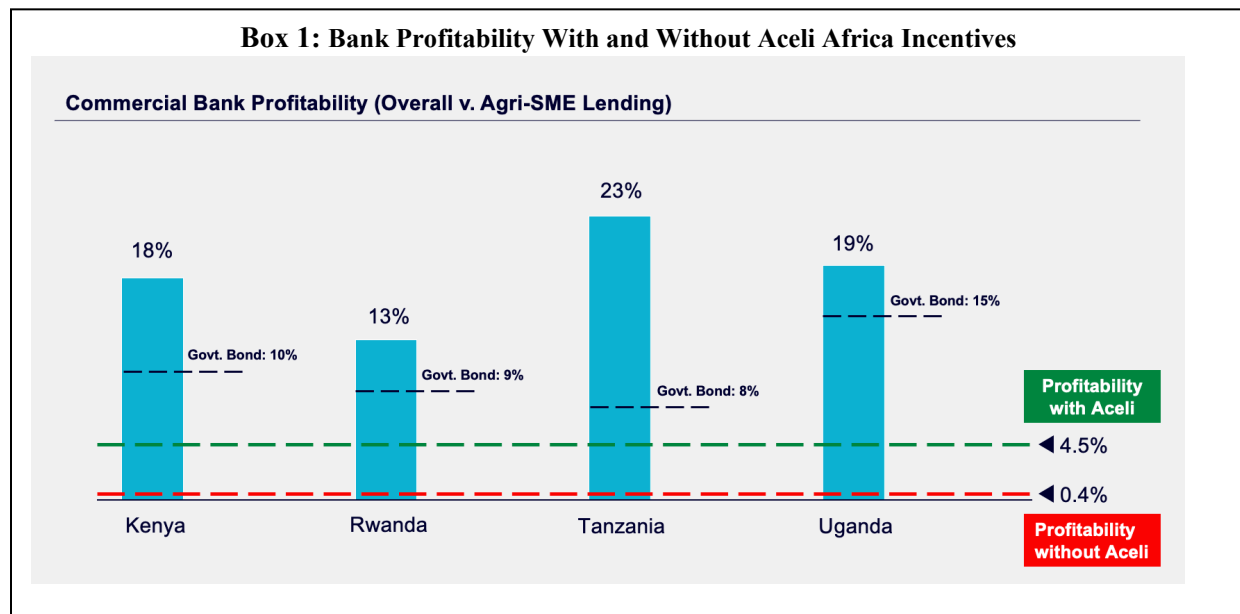
Given that the rate of climate change is accelerating, making rural and agricultural investments more volatile and complicated, Connexus plans to focus *Cracking the Nut*® 2024 on “Preparing for Accelerated Climate Change” or “Climate 2.0.”

# I. Introduction

Aceli Africa leadership was the ideal team to open the conference, as Aceli CEO Brian Milder explained that “the 2023 *Cracking the Nut*® themes are embedded in the design of Aceli Africa,” as described below. The purpose for the creation of the Aceli Africa market incentive facility is to increase the risk appetite of lenders serving agricultural SMEs, determine how best to blend different types of capital to achieve development impact, and steer capital markets to be inclusive of marginalized populations (especially women and youth), climate resilience, and environmental sustainability. Aceli’s Head of Financial Sector, Andrew Ahiaku, explained that he learned some of the best practices in agri-SME lending from his work with Connexus on the USAID/Ghana FinGAP project, which helped him transform Barclay’s Bank from a very conservative financial institution into the top agricultural lender in Ghana by 2017. These results motivated him to take the position at Aceli Africa so he could help lenders across East Africa expand agri-SME lending.

## 1. Reducing Risks Associated with Rural and Agricultural Investments

Prior to designing incentives and launching in September 2020, Aceli partnered with Dalberg Advisors to assess data from more than 30 lenders on more than 22,000 agricultural finance transactions totaling \$4.5 billion. In East Africa, approximately two-thirds of the population relies on agricultural livelihoods, and yet the sector receives less than 5% of commercial lending. The research found that agri-loans were in fact risky and twice as likely to default than loans to other sectors. Aceli chose to focus on agri-SMEs because of their potential to be the backbone of inclusive agricultural economies. Aceli found that traditional loan guarantees that cover 50% of credit losses on a *pari-passu* basis are not sufficient risk mitigation to motivate lenders to scale agri-SME finance. Therefore, Aceli Africa decided to offer Portfolio First-Loss Cover for agri-SME loans of \$25K – \$1.75M, which is paid into a reserve account to partner financial institutions to cover actual losses resulting from these loans (representing approximately 5% of loan portfolios on average). As Box 1 depicts, traditional guarantees only allow agri-SME lending to achieve 0.4% profitability on average, but Aceli incentives help increase this number to 4.5%. This increases lenders’ appetites for agri-SME loans as it complements traditional loan guarantees and absorbs the incremental risk associated with lending to underserved SMEs.



## 2. Using Subsidies and Blending Commercial Capital to Achieve Development Impacts

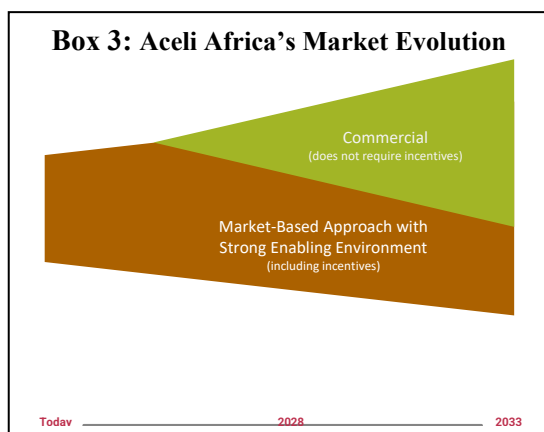
Aceli Africa also offers Origination Incentives to partner financial institutions to defray the high transaction costs and motivate lending to new and smaller agri-SMEs. These incentives apply to loans of \$25K – \$500K with unrestricted payments of 2-14% of the loan amount, which can be used to hire new agri-finance specialists, train staff, conduct value chain analysis, and cover transport costs associated with field visits.

Nonetheless, Aceli has found that financial incentives to buy down risk and increase profit are not enough. Organizational transformation of partner financial institutions starting at the board and senior management, reaching all the way down through middle management and branches (including training loan officers) is needed to fully institutionalize agri-SME finance. At the same time, technical assistance for agri-SMEs is needed because “building the bridge from both sides increases the odds they’ll meet in the middle.” Aceli funds technical assistance to support both the supply of and demand from agri-finance. As Brian Milder explains, “This takes time; requiring up to a year to on-board a new lender and longer to align their strategies, product offering, policies, and expertise to serve the agri-SME market at scale.”

Aceli thus offers a combination of smart subsidies and blended finance to attract additional commercial capital to support agricultural finance. As a result, Aceli has helped mobilize \$122M to date, leveraging approximately \$11 for every \$1 invested. The average loan size is just over \$100K to SMEs employing 18 people and purchasing from 750 smallholder farmers (SHFs) on average.

## 3. Integrating Underserved Populations into Commercial Markets

Aceli also designed tiered incentives to motivate lenders to seek and serve first-time borrowers and those that represent higher levels of social impact across gender, youth, nutrition and food security, climate, and environment. Aceli Africa is working with more than 30 lenders in Uganda, Kenya, Tanzania, and Rwanda. (See Box 2 for examples of Aceli’s impact on three partner banks.)



### Box 2: Aceli’s Impacts on Financial Institutions in East Africa

- **Centenary Bank, Uganda**, known for its commitment to agricultural finance, leveraged Aceli support to lower its collateral requirements from 120% of loan value to just 80%, and offer larger agri-loans.
- **Family Bank, Kenya** had a large portfolio of loans in the tea sector, but with Aceli’s support over three years, the bank grew its agri-loan portfolio by 79% and diversified to more than 60% in non-tea investments. In addition, Family Bank doubled the number of women-owned borrowers with support from Aceli’s gender inclusion incentives.
- **Tanzania Community Bank (TCB)** increased its agri-loans from just 2% to 41% of its total loan portfolio. Using Aceli’s origination incentives to cover travel time and expenses, as well as an analysis of the cassava value chain, TCB lent \$800K to nine cassava agri-SMEs serving almost 2,000 SHFs.

To achieve greater development impact, Aceli is now shifting its focus toward lower loan sizes and partnerships with more local lenders (see Box 3, which depicts how Aceli Africa foresees its market evolution). It has found that international lenders tend to focus on larger loan sizes, while local lenders focus on smaller loans (under \$200K). In terms of sustainability, Aceli’s leadership expects that larger loan clients will be able to transition from Aceli

Africa’s incentives and smart subsidies toward purely commercial finance. However, they expect that much of the market will require continuing support, particularly for smaller loan sizes, primary production, less formal value chains, and regions prone to climate variability. Aceli Africa is committed to building the evidence base to demonstrate the positive impact that incentives have on stimulating access to agri-finance in hopes that more donors and governments will see the value of building the enabling environment for thriving and inclusive agricultural economies

## II. Reducing Risks Associated with Rural and Agricultural Investments

To attract commercial investors to rural and agricultural investments, it is important to reduce risks. Management risks must be addressed at the level of the farmer or rural agribusiness prior to seeking finance. Credit risks can be reduced through insurance and other credit enhancements. During times of chaos, whether from natural disaster or political upheaval, even more attention is needed to manage partnerships and reduce risks, often including some public co-investment to avoid catastrophic losses.

### **Lesson 1: When agribusinesses operate professionally and transparently, risks diminish and financial flow improves.**

The agricultural sector of emerging economies faces numerous hurdles. As agribusinesses often start as small businesses in rural areas, they tend to operate with a lack of professionalism, leading to market failures and unrealized potential. However, data-driven solutions can inject much-needed professionalism into agribusinesses and unlock immense growth opportunities.

There is a high need to invest in agribusinesses. National governments grapple with insufficient rural development, dwindling employment, and shrinking tax revenues. Similarly, donors and their implementing partners find themselves funneling billions of dollars into capacity-building efforts. Financial institutions perceive agribusinesses as high-risk with steep transaction costs and therefore are cautious about getting involved, limiting the number of bankable agribusinesses, and missing out on a market valued at more than \$100B. Aggregators, traders, and retailers also find themselves challenged by high sourcing and value chain risks, unsustainable and unreliable supply chains, and obstacles in investing and expansion.

Nonetheless, the tide can turn through the professionalization of agribusinesses. SCOPEinsight is a pioneering business intelligence provider committed to empowering agribusinesses in emerging markets. Based out of Netherlands, it asserts that this shift can yield tremendous benefits for all stakeholders; professional agribusinesses can manage their resources and processes more efficiently, effectively, sustainably, and transparently. This transformation means better job opportunities for agribusiness/cooperative members and improved business prospects. National governments benefit from increased food production, greater exports, and enticing investment opportunities. Donors and capacity builders run more effective, efficient, market-driven support programs. Additionally, financial institutions gain access to a higher quality pipeline of bankable cooperatives, expanding their market share in an untapped and underserved market. Traders also reap benefits, such as improved sourcing, better value chain risk management, and maximized yield, quality, and market share.

The goal of SCOPEinsight is to systematically transform the agricultural sector by infusing agribusinesses with a dose of professionalism through the power of data. It collects data on the drivers of professionalism and leverages these insights to facilitate more efficient support. SCOPEinsight uses a color-coded heat map to pinpoint the strengths and weaknesses of agribusinesses across eight dimensions of professionalism, culminating in a comprehensive SCOPE score. This data-driven approach has led to the development of SCOPEinsight's predictive model, which plays a pivotal role in assessing the bankability of agribusinesses. Currently, less than 10% of agribusinesses achieve "bankable" or loan-eligible status even after receiving business development services (BDS). However, SCOPEinsight has demonstrated that by focusing on the critical aspects of becoming bankable, this figure can be significantly elevated an additional 35%. This success showcases the potential for growth and improvement when agribusinesses receive targeted support and guidance.

As agribusinesses progress along the ladder of professionalism, they become an attractive pipeline for financial institutions. This is achieved by standardizing agribusiness profiles and consistently collecting relevant data, resulting in the creation of a track record that resonates with lenders. Through this transparent and data-backed track record, lenders are inspired with confidence to serve agribusinesses, including social lenders, local financial institutions, and microfinance institutions. This increased access to finance enables agribusinesses to secure the resources needed for expansion, investment, and sustainable growth.

SCOPEinsight's emphasis on data standardization, collection, and analysis not only empowers agribusinesses but also builds trust and transparency within the financial ecosystem. By demonstrating the bankability and potential of agribusinesses through their track record, SCOPEinsight stimulates a positive response from lenders, encouraging them to actively support and invest in the growth of this vital sector.

Through their data-driven approach and the power of its predictive model, SCOPEinsight is driving change in the agribusiness landscape. By enabling agribusinesses to become more professional, transparent, and attractive to lenders, SCOPEinsight is paving the way for increased access to finance, fostering economic growth, and creating a lasting positive impact in emerging markets.

## **Lesson 2: Building local capacity for demand and supply of agricultural investment reduces risks.**

An essential element of facilitating access to finance and investment for development objectives is building local capacity on the supply side, within financial institutions (FIs), as well as on the demand side, within agribusinesses. Developing and implementing holistic technical assistance packages that strengthen the capacity of local actors is key to reducing risk and ensuring long-term, sustainable impact. Capacity building, however, needs to be responsive to individual needs, with training materials that cater to organizational objectives and follow-up support to ensure lessons from a training are applied appropriately. Further, innovative adaptive management should play a role in capacity strengthening, to better respond to evolving contexts, available resources, and changing priorities. Below are examples from Connexus Corporation's local capacity building to reduce risk and facilitate sustainable agricultural investment in Colombia, Nigeria, and Tunisia.

Connexus built the capacity of ECOM's subsidiary in Colombia, *Compania Colombiana Agroindustrial* (CCA), to strengthen its ability to access a steady source of coffee cherries for processing. A survey of 54 coffee producers revealed that farmers needed credit for inputs and technical assistance on how to use inputs to maximize productivity. To overcome these obstacles, Connexus built CCA's capacity to offer in-kind loans to coffee producers to support short-term credit needs, bundling inputs and technical assistance, with repayment at harvest. Connexus worked with CCA to develop a credit methodology and comprehensive credit manual, in addition to adapting and delivering Connexus' Credit Readiness Training of Trainers to CCA staff to use to prepare farmers for finance. Over time, Connexus also facilitated the transfer of \$200,000 of CCA's loan portfolio from four farmer associations to a local impact investor, freeing up CCA funds to serve more coffee farmers. Though Connexus had a relatively small budget and short timeframe to achieve lasting and impactful results, it was ultimately able to do so by understanding the unique perspectives and motivations of a private coffee aggregator, processor, and wholesaler to invest in coffee producers.

In Nigeria, Connexus is supporting two Feed the Future activities: the Feed the Future Nigeria Agribusiness Investment Activity ("the Agribusiness Investment Activity") led by Cultivating New Frontiers in Agriculture (CNFA) and the Feed the Future Nigeria Agricultural Extension and Advisory Services Activity ("the Extension Activity") led by Winrock International. These projects have the same target states and value chains and partner with similar FIs, but the Agribusiness Investment Activity focuses primarily on facilitating access to finance and investment for agri-small and medium enterprises (SMEs) while the Extension Activity targets smallholders. The projects have also faced challenges including political,

economic, and social uncertainty such as the Covid-19 pandemic, instability in northern regions spreading south, extreme inflation, and contested elections.

As a subcontractor on two projects with somewhat overlapping objectives, Connexus proposed creative approaches to working together without double counting results, in addition to designing innovative technical assistance packages responsive to the needs of the FIs and the projects' target clients. At the outset of Covid-19, it was essential to pivot quickly to providing technical assistance virtually. At the request of the partner FIs, Connexus designed and implemented an agricultural loan portfolio management training that identified creative ways FIs could reduce portfolio risk while continuing to lend during the pandemic. Connexus also supported discussions between the prime contractors and USAID to revise the projects' key performance indicators given the impact of Covid-19 and the overlapping indicators. This case highlights the importance of employing organizational adaptability and flexibility in challenging and evolving contexts, which enabled the Agribusiness Investment Activity to facilitate more than \$224M in finance and investment to agri-SMEs, and the Extension Activity to develop a pipeline that exceeds its target of facilitating \$60M in agricultural financing, primarily by bundling agricultural inputs and extension services to benefit smallholders.

Since 2018, Connexus has supported Chemonics International on the USAID/Tunisia Jobs, Opportunities, and Business Success (JOBS) project, by building capacity of formal FIs, including debt and equity investors, serving urban and rural SMEs. While JOBS initially focused on creating jobs for SMEs, the focus switched from job creation to job retention after the Covid-19 pandemic started. This unanticipated shock forced a quick change in strategy to respond to the needs of the project's target groups. Because of country lockdowns and reductions in in-person interactions caused by the pandemic, JOBS began providing technical assistance for digitalization. This support increased access to finance for underserved populations, improved risk management strategies, and ensured intervention sustainability by building internal institutional capacity. Digitalization and the development of more accurate risk criteria led to improvements in portfolio quality for partner FIs, including a substantial increase in loan recovery rates from 78% to 94% in two years. This case highlights the necessity of employing adaptive approaches and techniques in the midst of unanticipated shocks and the fact that improved risk management systems will only reach scale and sustainability if accompanied by targeted training and capacity building.

### **Lesson 3: AgTechs can play a role in providing direct finance and/or facilitating finance to value chain actors.**

Agriculture Technology, commonly known as AgTech, includes technologies that help scale yield, improve decision-making around farm management, and provide financial resources for operations. According to Pitchbook, "These tools include biotech, sensors, machinery, AI solutions, indoor farming equipment, and automation ... they can also include digital marketplaces accessible via mobile applications and platforms that perform non-traditional credit scoring." According to Global Systems for Mobile Communications Association (GSMA), six potential use cases for AgTechs are digital procurement, agricultural e-commerce, smart farming, information services, weather and climate services, and digital finance.

AgTech firms are transforming the agricultural sector by playing a two-fold role: they streamline financing within value chains, while also drawing external funding into the sector. By implementing unconventional credit assessments, AgTechs enhance the quality and accessibility of information in the value chain. They can help agribusinesses establish direct connections with lenders and use their tech-based business model to scale up and attract further investment. The prevalence of similar AgTech innovations, like MasterCard's FarmPass<sup>3</sup>, underscores this trend, and the success that some companies are having is attracting additional investors to the sector. Non-traditional lenders, such as impact investors, view AgTechs as an opportunity

<sup>3</sup> <https://www.mastercard.us/content/dam/public/mastercardcom/na/global-site/public-sector/other/humanitarian-farm-pass-jul2021.pdf>

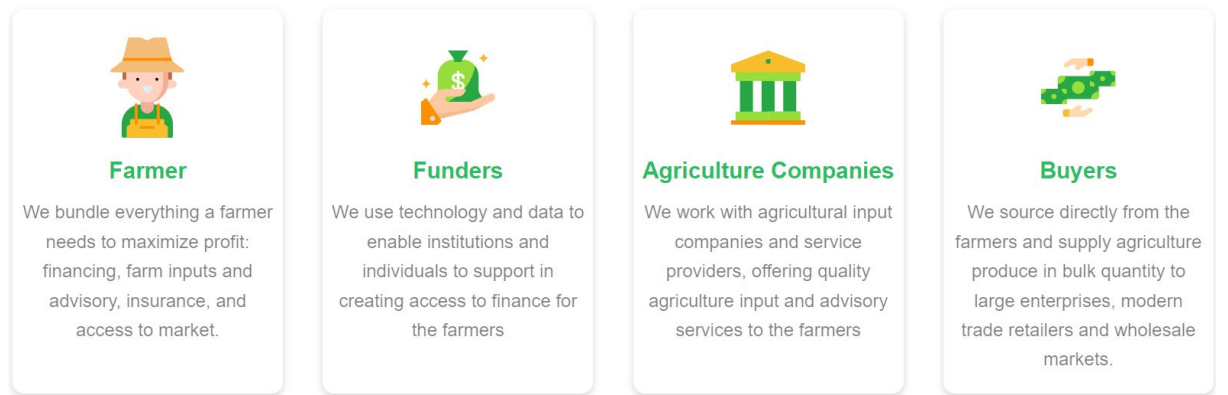
to diversify their portfolios in both the technological and agricultural fields. Organizations such as ACDI/VOCA have supported and leveraged the capacity of AgTechs to mitigate agriculture investment risks in various global projects, thus highlighting their potential in facilitating and attracting financing for agriculture.

AV Ventures is ACDI/VOCA’s investment management subsidiary. AV Ventures provides innovative, catalytic financing to agribusiness small and medium enterprises (SMEs) in West Africa and Central Asia. Through its four impact investment funds (Burkina Faso, Central Asia, Ghana, and Kenya) AV Ventures has invested in 18 businesses, including several AgTechs. In Kenya, AV Ventures invested in Solargen, a solar energy, water, and irrigation solution provider. AV Ventures partnered with Solargen to design a custom financial product that is better suited to the non-traditional business model of an AgTech. They developed a profit-sharing model that utilized 3% of the company’s EBITDA on a semi-annual basis in lieu of fixed-interest payments. So far, Solargen has used the proceeds of the Fund’s loans to finance over 10 MSMEs in Wajir, Marsabit and Turkana Counties. End clients include communities benefiting from boreholes, solarized water pumps, and solar electricity panels for businesses.

Overall, the successful integration of AgTech into agricultural financing models indicates that these technologies can play a pivotal role in facilitating and providing direct finance. This effectiveness can be further optimized through appropriate scaling, resource allocation, contract flexibility, and network leveraging. The potential challenges, such as adoption hurdles and data privacy concerns, can be mitigated through effective strategies and partnerships, thus maximizing the benefits of AgTech in agricultural financing. See Box 4 below for an example from Bangladesh of how AgTech helped to reduce risks and facilitate access to finance.

**Box 4: Role of AgTech iFarmer in Bangladesh**

Launched in 2018, iFarmer has been revolutionizing the agricultural landscape of Bangladesh through a multi-faceted approach to financing. The company operates in approximately 12 value chains, leveraging AgTech to provide direct financing to farmers and facilitating finance to agricultural value chain actors.



**Box 4 Continued...**

For farmers, access to affordable financing can be a critical hurdle. iFarmer provides farmers with low-cost, collateral-free financing, significantly reducing barriers to entry and enabling them to invest in their operations. This model supports farmers in purchasing necessary farming inputs and machinery, helping them increase their yield and ultimately their income. Moreover, iFarmer goes beyond just finance, offering farmers training in field-specific areas, soil testing, and advisory services. These additional services provide farmers with the knowledge and skills they need to utilize their finances effectively and optimize their farming practices, further increasing their productivity and sustainability.

For value chain actors such as retailers, iFarmer offers a unique model that bridges the gap between them and financial institutions. Through their one-stop-shop platform for agri-input products, they provide "buy now and pay later" services, allowing retailers to purchase necessary goods without immediate payment. This service assists retailers in accessing loans from financial institutions based on their transaction history with iFarmer, thus facilitating financial flows within the value chain. For financial institutions, iFarmer uses an alternative credit scoring algorithm, providing a new approach to assessing customer viability and reducing investment risks.

By 2023, iFarmer had served approximately 90,000 farmers with a plan to scale up to 500,000. Looking forward, the company aims for regional expansion in Bangladesh, intending to bring their innovative AgTech financing model to more farmers and value chain actors. Through its direct financing and finance-facilitation roles, iFarmer is a prime example of how AgTechs can play a pivotal role in invigorating agricultural value chains. Their approach not only enhances agricultural productivity, but also promotes financial inclusion and sustainability within the sector.

#### **Lesson 4: Scaling insurance reduces risks and unlocks productivity if designed to address farmers' needs and vulnerabilities.**

Climate change has significantly amplified risks faced by smallholder farmers, specifically through frequent droughts and floods, making agricultural insurance an even more critical financial product. However, scaling insurance solutions to reach a large number of farmers presents several challenges, primary among them being a thorough understanding of their needs and vulnerabilities.

Addressing these challenges has been the focus of organizations like Tetra Tech in Malawi and the Union of Cooperative Mutuals for Savings and Credit (U-IMCEC) in Senegal. In partnership with the World Bank, Tetra Tech has developed a data-driven, rules-based mechanism to support Government of Malawi's Social Protection program to provide additional assistance to poor and vulnerable households affected by drought. While Government funded, and not through client premiums, this program was designed with the end-user in mind. (See Box 5).

In Senegal, U-IMCEC, a cooperative microfinance institution, offers a unique solution for the agricultural sector. Recognizing the underserved nature of the sector, U-IMCEC, with support from Connexus Corporation via the Feed the Future *Nafore Warsaaji* project, has taken strides to build its capacity in agricultural lending. The institution has adopted a strategy of bundling agricultural insurance with every agricultural loan. This approach not only helps farmers face crises, but also mitigates risks at the institutional level, thus increasing productivity.

However, there are challenges in implementing agricultural insurance. These include difficulty in understanding the premium cost and administrative processes by smallholder farmers, timely claim submissions, and the need for appropriate communication from insurance providers. These challenges highlight the importance of clear communication, effective training for clients and staff, and the need for



trust in the provision of insurance services. U-IMCEC found that insurance becomes profitable when it is made mandatory with loans or other financial services, providing an affordable option for farmers.

These examples demonstrate that scaling insurance reduces risks and unlocks productivity when designed to be affordable to farmers. The initiatives by Tetra Tech and U-IMCEC provide models for how affordable, comprehensive risk financing and insurance solutions can be implemented at scale to protect farmers from environmental risks, thus enabling them to focus on enhancing productivity. This underscores the lesson that scaling insurance not only reduces risks but also empowers farmers to improve their farming practices, contributing significantly to agricultural resilience in the face of climate change.

### Box 5: Tetra Tech's Trigger Design for Scaling a Social Cash Transfer Program in Malawi

Malawi, a country heavily dependent on agriculture, is grappling with the accelerating pace of climate change. With the majority of the population consisting of subsistence and smallholder farmers, the impact of environmental hazards, such as droughts and floods, is disproportionately harsh. In response to the challenge, the Government of Malawi has put in place a mechanism to enable its flagship social protection program, the Social Cash Transfer Program (SCTP), to scale up to additional beneficiaries in the event of climate shocks. In partnership with the government and the World Bank, Tetra Tech designed a trigger mechanism to monitor early indicators of shocks and initial signs of food insecurity stress, allowing the expansion of the SCTP.

To create effective triggers for drought impact, Tetra Tech analyzed more than 15 datasets and over a dozen risk models and presented options to the government. The final selection was for two primary triggers utilizing satellite data: the early season trigger (from November to January) and the full season trigger (from November to mid-April). When rainfall drops below 45-55% of normal rainfall levels in the early season or 10-15% in the full season, the mechanism triggers and provides support to pre-targeted households. Additionally, Tetra Tech recommended the inclusion of a secondary trigger based on evidence review to capture drought impacts that primary triggers may miss or do not sufficiently capture. See Figure 1 below for the timeline for monitoring triggers.

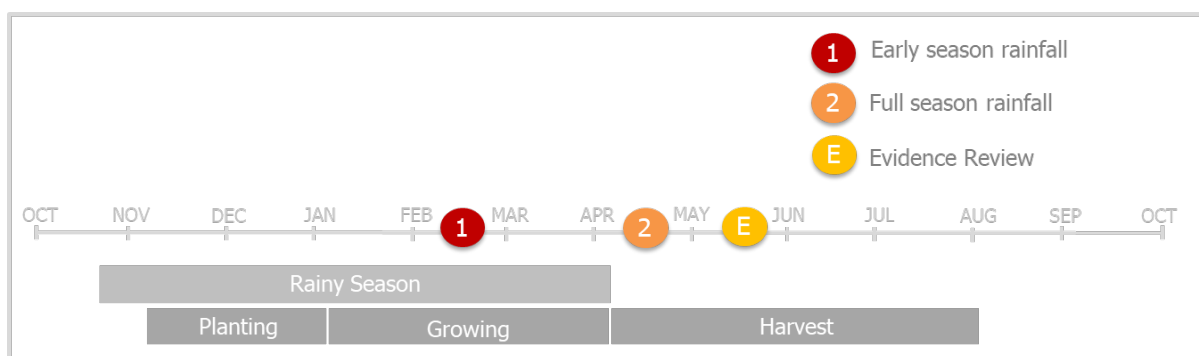


Figure 1: Timeline for Monitoring Triggers

**Box 5 Continued...**

Tetra Tech's approach underscored the importance of demand-driven solutions that respond directly to households' needs. Critical to the success of the triggering mechanism was the need to understand what farmers required, when households require them, and how they could access assistance. Another innovative aspect was covering a portfolio of crops on the farm by targeting a rainfall deficit, as opposed to a single crop, highlighting the importance of a comprehensive approach to risk management. A crucial lesson learned was the necessity for trigger timing that pays attention to both the early and full season. This attention to detail ensures a more accurate and fair distribution of resources in response to rainfall deficits over the season.

During the first year of implementation, the triggering mechanism was activated due to a delayed onset of the rainfall season, resulting in crop failure, along with the occurrence of floods caused by a cyclone and soaring food prices, which intensified food insecurity among households. The scale up directly benefited 74,000 households in three districts.

Source: <https://www.financialprotectionforum.org/publication/technical-analysis-to-inform-the-trigger-design-for-adaptive-safety-nets-in-malawi-2023>

### **Lesson 5: Embedding insurance and financial literacy increases uptake and reduces risks to governments, financial institutions, and agribusinesses.**

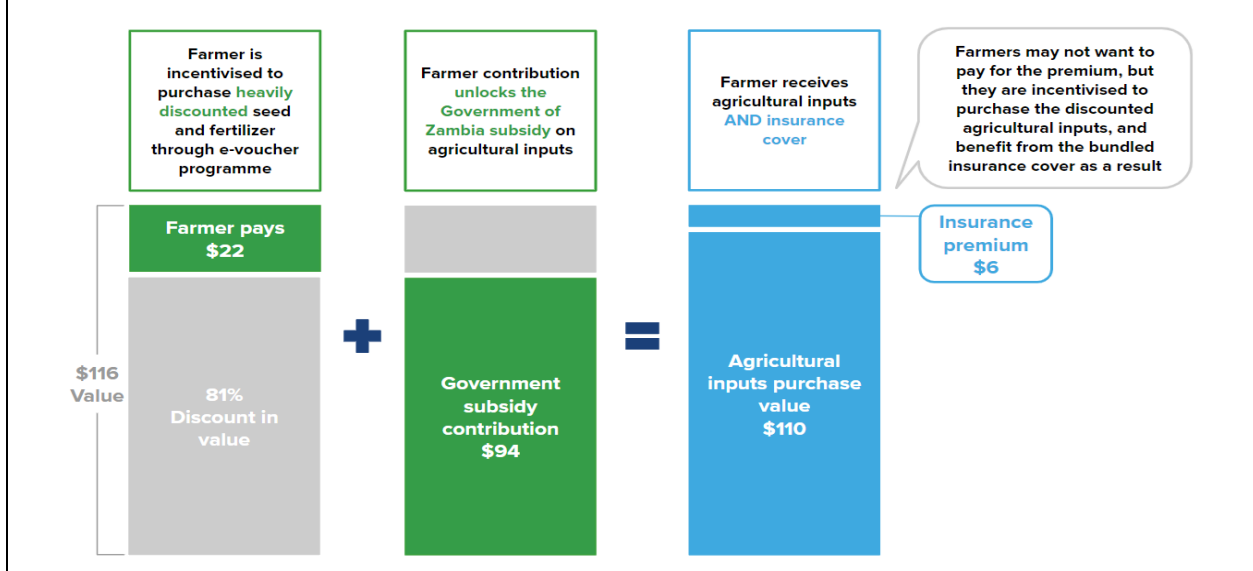
Weather plays a crucial role for smallholder farmers, affecting their yields and ultimately their livelihoods. Despite the high stakes, many farmers in developing countries remain uninsured. The scarcity of agricultural insurance in these regions stems from many factors, among them the farmers' mistrust in insurance companies, their perceived low value of insurance, and the complexity of agricultural insurance products.

An innovative solution to this predicament is to combine index insurance, specifically Weather Index Insurance and Area Yield Index Insurance. These hybrid insurance types are designed to mitigate risks associated with unpredictable weather patterns and crop yield variations. However, implementing these insurance types on a large scale involves overcoming a host of challenges, such as building trust with farmers and establishing an effective data collection and quality control process. This is where companies like Pula can make a difference.

Pula has developed a system in which they partner with aggregators that have financial transactions with farmers, such as government bodies, lenders, development agencies, and agribusinesses. They then embed insurance into these transactions, thus reaching thousands of farmers. This approach has not only reduced per farmer acquisition and servicing cost, but has also contributed to a 127% year-on-year renewal rate in farmer spend.

To make insurance more affordable and appealing to farmers, some governments have introduced initiatives to subsidize premiums. In Zambia, for example, the Ministry of Agriculture has bundled insurance with the Farmer Input Support Program, a scheme reaching 70% of Zambian rural households. While these initiatives are fruitful, only a handful of similar programs exist in Africa (see Box 6.)

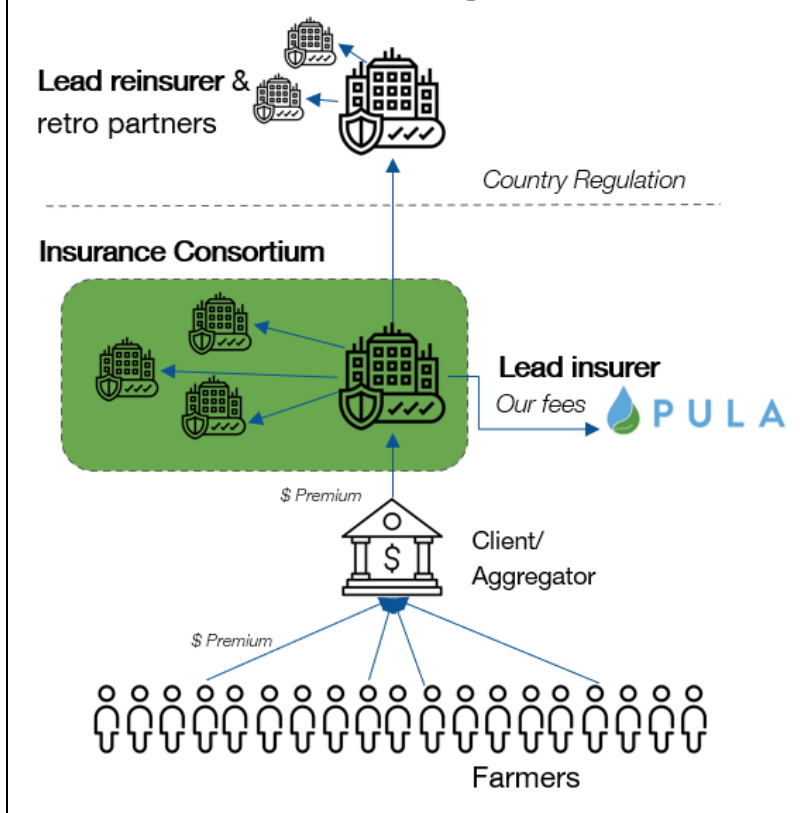
**Box 6: Pula’s embedded Insurance in input voucher programs in Zambia**



The crucial element in ensuring the uptake of insurance is financial literacy. Farmers need to understand the purpose and workings of insurance. Pula raises awareness and understanding among farmers about how insurance works, fostering long-term demand. Their efforts have been rewarded with most farmers in Zambia willing to contribute to insurance premiums.

But why should governments invest in agricultural insurance? Subsidies can correct failures and externalities in insurance markets and build public goods. They also provide positive externalities by enabling poor farm households to access credit and game-changing technologies. Further, they support farm incomes, help introduce new products, and assist farmers in adapting to climate change.

**Box 7: Pula’s Insurance Partnership Model**



Subsidies can correct failures and externalities in insurance markets and build public goods. They also provide positive externalities by enabling poor farm households to access credit and game-changing technologies. Further, they support farm incomes, help introduce new products, and assist farmers in adapting to climate change.

Investing in agricultural insurance has wide-ranging implications for all stakeholders. For farmers, it provides a safety net against unpredictable weather patterns and yields. For governments, it fosters rural development, reduces risks, and contributes to climate change adaptation strategies. For FIs, it unlocks a new market segment, thus diversifying their portfolio and reducing their risk exposure. Finally, for agribusinesses, it assures a reliable supply chain, mitigating sourcing and value chain risks.

Pula nurtures an insurance partnership model including farmers, aggregators (commercial clients or governments), insurance consortiums, and lead reinsurance companies. These partnership models drive local capacity. Pula partners with local insurers and supports them to form a consortium. Pula is the technical service provider to this consortium and the lead insurer of the consortium pays Pula for these services. These consortia offer numerous benefits to both regulators and insurers, including the ability to retain the maximum amount of premium in the local market and minimize foreign exchange outflows. Additionally, they serve as a channel for premium subsidies. Pula introduces its clients to the consortium of insurers, which precludes any competition for their services since they work toward having as many insurers as possible in a country join the consortium (see Box 7).

In conclusion, embedding insurance and financial literacy in agricultural transactions increases uptake and reduces risks to governments, financial institutions, and agribusinesses. It provides a sustainable and scalable solution to the challenges plaguing the agricultural sector, particularly in emerging economies. Hence, governments' co-investment in agricultural insurance as a public good is not only desirable but necessary for a resilient and sustainable agricultural sector.

### **Lesson 6: To reduce the risk of climate change, finance and non-financial approaches are needed.**

Tim Strong, Opportunity International's Head of Agricultural Finance explained, "In 2018 alone, over 30 million people were affected by climate change. By 2050, over 200 million will be displaced by climate events." In developing countries, smallholder farmers and those at the bottom of the economic pyramid are disproportionately impacted. These marginalized populations are particularly constrained by the resources they can access. Joanna Veltri, the Chief of Americas Liaison Office of the International Fund for Agricultural Development, reported that the rural poor are "all concerned about climate, conflict, and fragility." She expressed concern for the imbalance of funds available to pre-emptively prepare for climate crises, as "humanitarian crises are now more frequently driven by climate change" and yet "there is a cavernous gap in funding for humanitarian assistance and an even bigger one for development!" She estimates that \$1 of preparatory spending now could save \$10 on crisis spending later. To pre-emptively mitigate the impacts of climate change on smallholders, a combination of financial and non-financial assistance is needed.

"While Opportunity International cannot change cyclones, we can support farmers to be climate ready," asserted Tim Strong. Currently, Opportunity International is working with 137,000 farmers in six African countries, providing a combination of financial and non-financial solutions to adapt to climate change. Currently, Opportunity International's partners have a loan portfolio of more than \$20M to approximately 20,000 smallholders (over 50% women) with an average portfolio at risk over 30 days past due of 14%. Tim explained that in addition to finance for inputs, smallholder farmers also need training and durable solutions to support long-term livelihoods and investments. Opportunity International is exploring high-tech solutions and is pilot testing 20 such innovations. For example, Tim described how the artificial intelligence platform ChatGPT helped identify a locally available fungicide to address a common problem, soybean rust.

While the funding gap is huge, development finance institutions are increasingly focusing on climate mitigation and adaptation, as described below. The US Development Finance Corporation (DFC), for example, recently released its Climate Action Plan to drive more investment toward adaptation and resilience to climate change in low- and middle-income countries. DFC's Food Security and Agriculture team is structuring bankable projects that help achieve development impact goals, especially in ways that address climate change. Nadia Guivel, DFC's Director of Food Security and Agriculture explained that its support for the "Build Back Better World" initiative includes mobilizing capital for developing nations with three objectives: integrating climate across key priority sectors; achieving net zero GHG investment portfolio by 2050; and improving the livelihoods of more than 1 million smallholder farmers. To improve

nutrition globally, DFC created the Global Initiative Financing Alliance (GNFA) with the Eleanor Crook Foundation and USAID in 2020. DFC supports the entire value chain of agriculture, from financing primary agriculture all the way to large commodity trading companies. DFC is also expanding financing for warehousing and ag-tech.

While traditional foundations tend to focus primarily on grants, Visa Foundation decided upon creation in 2017 to invest primarily in impact investment funds aligned with its mission to mitigate systemic barriers facing small businesses, particularly led by women or people from underrepresented groups. Over the past few years, Visa Foundation has invested \$50M in grants and \$125M in private impact investment funds that focus on gender equity and small business development around the world. For example, Visa Foundation invested \$5M in Root Capital's Women in Agriculture loan portfolio and simultaneously provided a \$3M grant to support operational and technical capacity building related to climate resilience.

**Lesson 7: During chaotic times, it is important to negotiate flexible boundaries and priorities to be responsive; local partners are paramount to success.**

The agricultural sector of several countries has been facing immense challenges including the impacts of climate change, political and economic crisis and the on-going impacts of the pandemic. To reduce risk, agricultural market systems need to be flexible and responsive to the multifaceted crises to effectively serve ever-changing needs in chaotic times. Through strategic partnerships, adaptive approaches and a focus on local empowerment, agriculture market systems can reduce risks associated with agriculture investments while making significant progress in mitigating the impacts of the crises and foster resilience while protecting development gains.

In Ukraine, the USAID Agriculture Growing Rural Opportunities (AGRO) Activity, faced the onset of war and its continuing disruptions, compounded recently by the floods caused by the destruction of the Kakhovka Dam, creating an environment of uncertainty and chaos. Kseniya Sydorkina of Chemonics International explained that the lack of data made it challenging to assess the scope of the problems and develop appropriate responses while time was of the essence. However, local partnerships played a crucial role in collecting necessary information at the grassroots level and delivering coordinated support. Embracing flexibility and responsiveness in the face of uncertainty led AGRO to have the capacity to pivot quickly as activities were being deployed and maintain a positive momentum.

Initially, the focus of aid was on Small and Medium Enterprises (SMEs), which traditionally require more support. However, in the wake of the war and with the increasing food insecurity, attention was shifted towards working with larger enterprises, recognized as crucial drivers in stabilizing and rebuilding the economy. The approach involved co-investing with larger enterprises to create value-added goods using a market systems approach through formal value chains. Simultaneously, investments were targeted towards existing SME partners, helping to de-risk their agricultural investments and providing support for the wider ecosystem to ensure stability.

Along with AGRO, its partners also embraced pivoting and even radical repurposing of assets. One example of the impacts of the conflict and the subsequent resilience of the people involved a dairy business owner. When her farm fell under occupation, she repurposed her equipment to start a bakery and made bread. After the liberation of that region, the business owner returned and is being supported by AGRO to restart her dairy operations.

Sami Khairallah of Chemonics International shared another example of flexible boundaries and priorities from the USAID Agriculture and Rural Empowerment (ARE) Activity in Lebanon. Since 2019, Lebanon

has been facing significant challenges due to a series of shocks and events, including political and economic crises, hyperinflation, currency devaluation, a collapse of the banking sector, and the Beirut port explosion. These crises severely impacted the agricultural sector, making it difficult for farmers to access financing, afford inputs, operate machinery, and transport produce. Moreover, the war on Ukraine compromised further food security in the country given Lebanon's major imports of vegetable oils and grains from Ukraine. Despite the multifaceted crisis, ARE adapted rapidly, renegotiating objectives with donors, restructuring the technical team, diversifying assistance, and revising program design. The banks froze their loan products, so ARE negotiated with USAID to drop its Access to Finance component. The program launched two funding tracks. The first track focused on increasing the competitiveness of Micro, Small, and Medium Enterprises (MSMEs) by partnering with champion firms within value chains. This involved de-risking investments while accessing market opportunities through import substitution and exports. The second track aimed to improve food security and increase productivity at the primary production level. ARE introduced new technologies, such as modern greenhouses and forage intercropping, to enhance agricultural productivity by 20-25%, and reduce production costs.

To streamline operations, ARE made strategic adjustments, including requesting waivers in advance to expedite procurement, restructuring the technical teams, and expanding support functions. These changes allowed for better workflow management and reduced lead times from partner identification to implementation. Despite the multifaceted crisis, ARE's interventions yielded significant transformations. In the Alfalfa value chain, imports were substituted at the country level, while the wine sector saw an annual increase of 200,000 bottles in production for high-value markets. Over 70 farmers invested in modern greenhouses, generating a minimum of 300 tons of fresh vegetable produce. ARE also facilitated improvements in food quality through certification programs and supported the establishment of a certified grapevine nursery.

Another example of flexibility and using local partnerships for resilience comes from the Feed the Future Cross Border Community Resilience Activity, that operates in the Horn of Africa (Kenya, Uganda, South Sudan, Ethiopia and Somalia). The region has been facing the worst drought in forty years. Conflict, political instability, and climatic shocks all compound the humanitarian crisis. Jebiwot Sumbeiywo of Chemonics International explained that in 2022 this USAID Activity started with a new approach that supported local governments and organizations to plan and execute their own ideas, a departure from previous prescriptive methods. In this approach, all interventions are to be implemented by local development organizations, providing a unique opportunity for local stakeholders to take charge.

When the drought situation worsened, USAID prioritized protecting development gains in a humanitarian crisis. This meant focusing on rapidly deployable, short-term interventions and income diversification efforts targeted at women, youth, and pastoralists who no longer had their own livestock. They worked with local partners to explore various alternative income sources to livestock for the pastoralists, including fishing, beekeeping, and brick making. Despite initial hesitation from local governments and communities, the USAID Activity was later applauded for its proactive approach in supporting the pastoralist dropouts. As droughts caused the death of 8-9 million livestock, a significant number of people were forced to abandon pastoralist livelihoods and move towards urban areas. By focusing on resilience programming, USAID helped these communities pivot to other sources of income.

### III. Using Subsidies and Blending Commercial Capital to Achieve Development Impacts

Smart subsidies are often needed to attract commercial capital to rural and agricultural investment, especially given the increasing negative impacts of climate change. Blending social capital with commercial capital can entice commercial investors, especially when additional technical assistance is provided to address risks and ensure impact.

#### **Lesson 8: Blended finance and technical assistance are needed to address the agri-MSME finance gap.**

One form of blended finance is to provide technical assistance (TA) alongside impact investments. Blended finance can help mobilize private capital when public sector funds cannot do the job alone. Agribusinesses often cannot bear all costs and risks involved in delivering needed services. Therefore, investors, donors, and agribusinesses must work together to ensure critical services are available to agri-MSMEs, including smallholder farmers (SHFs). TechnoServe has found that by providing upfront inclusive business analysis and planning in tandem with patient capital from social investors, they can help reduce risks and manage the complexities of agribusiness models, pinpointing where private capital should be deployed and targeting public funding where it is most needed.

TechnoServe, through major Technical Assistance facilities such as the UKAID-funded Commercial Agriculture for Smallholders and Agribusiness Technical Assistance Facility (CASA TAF), works alongside development finance institutions (DFIs) and patient capital investors (including BII, FMO and Zebu Investment Partners) to provide inclusive business support to their Food and Agriculture portfolios towards enhancing the direct impact of their investments on low income households in low and lower middle income countries. They identify businesses within investor portfolios who could benefit from tailored support to make their business models more inclusive, i.e., business models that invest in services, products or assets that can drive material and sustainable increases in farmer incomes and resilience.

Melanie Machingawuta, TechnoServe's Director of Inclusive Investment, explains that the CASA technical assistance facility works with supported enterprises to identify inclusive business opportunities and detail the business case to unlock investment; and then co-invests to support the companies to operationalize them. Proposed investments are tailored and prioritized in relation to expected risk and return (from a commercial and impact perspective) as well as the business' risk appetite and capacity. This helps to ensure buy-in and increase the probability of sustained adoption.

Whilst the businesses supported have received some form of impact investment, many still face challenges accessing the affordable working capital needed to scale – this often becomes a key barrier to profitability for the agri-SMEs that TechnoServe supports. In addition, there is a need for longer timelines for investment. Many agribusinesses require long-term, patient capital (e.g., 10-year time horizons), in order to match the time it takes to realize returns on both the agronomic maturity of certain crops and the benefits from implementing an inclusive sourcing model.

Zebu Investment Partners, an African private equity investor that focuses on primary and secondary production for food security, partnered with TechnoServe to facilitate the transfer of knowledge on animal husbandry practices in South Africa to support an investment in an SME pork company in Cameroon. Knowledge transfer highlights included learnings on how to improve animal welfare, reduce mortality, and double returns. Since the original investment in 2012 (in Zebu's first fund), the company has grown from 80 sows to approximately 1,000 sows in the production line. Zebu Investment holds investments for between three to seven years with the objective of reaping both financial and social developmental returns.

Building on learning from post-investment TA that enhances the performance and impact of existing investments, TechnoServe sees an opportunity to expand the pool of “investment-ready” agribusinesses by better coordinating the market-building and pre-investment support offered by the public sector and investors. Specifically, more intentional and structured coordination, greater transparency as well as targeted technical assistance is needed between donor funded private sector development programs and investors operating at different stages of MSME growth in order to help scale and graduate businesses to new, more commercial forms of finance.

British International Investment (BII) and the Dutch Development Bank (FMO) see challenges but also opportunities emerging in investing in rural and inclusive agricultural markets. They explain some of the instruments they use (including TA) to enhance and catalyze investments.

British International Investment (BII), the British Development Finance Institution, has worked with TechnoServe for six years as partner under the CASA TA Facility and through funding TA alongside its investment in the Africa Food Security Fund managed by Zebu. Sarah Marchand, BII’s Head of Capital Solutions, explains that “Finance alone is not going to shape markets. I believe we can and need to work together to have a material and positive impact on nascent and challenging sectors.” Some practical ways in which we can do this are outlined in the “Bridging the Gap report” that was put together by BII and Gatsby Africa Foundation and published in 2022. BII offers equity and debt (both directly and indirectly through funds and financial institutions) to support investments in Africa and Southeast Asia (\$1.5-2B per year). Over the last seven years, BII has used its “Catalyst” capital, to take a more flexible approach to risk and enable it to invest in private sector organizations that are pioneering new business models in more nascent and challenging markets. Fifteen percent of this portfolio is made up of investments in the agriculture sector. In recent years, BII has seen interesting growth in the ag-tech investment space, especially in India. The rise of ag-tech has made businesses that work with smallholder farmers more economically viable. Technology can be used to reduce acquisition costs, identify and map farmers, customize marketing to them, and facilitate extension services and pricing. In many cases, these services are bundled in a way that has a positive impact on the unit costs of reaching smallholders. As a result, these tech enabled agribusinesses are more attractive to commercial investors. As well as being inclusive, many of the investments BII makes in the agriculture sector have a positive impact on climate. However, while there is significant funding available to support “green” investments, most is focused on climate mitigation rather than climate adaptation, which is what is needed to help those in agricultural value chains to address the physical effects of climate change on their livelihoods. Given the scale of the needs and the impact on people and planet, BII plans to continue to make ag-related investments in the coming years, including through its Catalyst capital.

Dutch Development Bank, FMO, will increasingly focus on making “pre-bankable” enterprises bankable, including in the agribusiness, sustainable forestry /agro-forestry sectors. FMO uses a full spectrum of funding from public funds, syndications with commercial banks and institutional investors, such as pension funds, in order to create development impact in the private sectors of low- and middle-income countries. Andrew Shaw, FMO’s Head of Technical Assistance for Market Ecosystems, believes that “DFIs can act as a conduit to stimulate blended finance” and that “grants and technical assistance can help to stabilize and support investments to become scalable with faster impact.”

### **Lesson 9: Leveraging blended finance to build capacity of supply and demand sides can broaden impact of financial services to Agri-MSMEs.**

While agricultural value chain assessments consider financial institutions to be “support institutions” outside the value chain, market systems development considers FIs to be an integral part of the system. For FIs to be truly integral to the market ecosystem, their needs and constraints have to be balanced with the needs and constraints of agribusinesses. For example, the Feed the Future Kenya Crops and Dairy Market



Systems (KCDMS) Activity implemented by RTI International applies a “portfolio approach,” which is based on the premise that access to finance should not be isolated from market systems development.

The KCDMS Activity uses grants blended with commercial capital to transform agricultural market systems into a viable ecosystem in a way that improves livelihoods and supports resilience of smallholder farming households. KCDMS’ portfolio approach combines simultaneous pull and push interventions to promote competitive and inclusive agricultural market systems. The Activity is particularly focused on integrating women and youth into agricultural market systems and building collaborations for market systems change and climate smart adaptation. To date, KCDMS interventions have reached 29 FIs and almost 50,000 borrowers with \$42M in commercial loans.

By engaging a broad range of market players, KCDMS addresses both supply and demand constraints by building support functions and the infrastructure for market systems development. On the supply side, the Activity uses blended finance to leverage private capital by de-risking debt and equity investments with matching grant funds while also strengthening the capacity of capital providers, their value proposition for smallholders, and addressing risk factors in agribusiness finance. On the demand side, the Activity works with anchor firms to build pathways between FIs and value chain actors (including off-takers, buyers, and input suppliers) to provide credit through contractual relationships. The KCDMS team also collaborates with other USAID implementing partners to transition agribusinesses to larger loans.

The primary mechanisms that KCDMS uses to build markets are co-investments in FI capacity building, geographical expansion, and market linkage development. Investments in capacity building have been focused on FIs engaged in agricultural lending. For example, KCDMS supports partners in developing new agricultural finance products in collaboration with local business schools and business development services providers. The Activity also builds value chain linkages to increase access to finance through business-to-business connections, training, and technical assistance to increase financial knowledge and capacity.

To increase saving and lending, particularly for women and youth, KCDMS works with village saving and lending associations (VSLAs) to strengthen group management and build access to formal FIs. KCDMS builds the capacity of VSLAs by co-investing in information and communication technology (ICT) to expand their geographical outreach to rural and agricultural clients, particularly women and youth. In collaboration with Making Cents International, KCDMS introduced ICT technology to 770 VSLA groups from 2019 to 2022. With improved financial management systems, these VSLA partners were able to grow their savings portfolio from \$200K to \$545K, while extending \$786K worth of credit to their members.

### **Lesson 10: Blended finance and creative partnerships can help connect demand and supply for agri-MSME finance through digitalization of existing systems and products.**

There are many forms of blended finance, including combining patient capital with commercial capital to lower the cost of funds, providing technical assistance alongside commercial investment, and mixing donor funds with commercial funds to buy down risk, etc. For example, the USAID Feed the Future Nigeria Agribusiness Investment Activity combines technical assistance from CNFA and Connexus Corporation with commercial investment to catalyze development outcomes and impact. Using this form of blended finance to strengthen inter-value chain finance, inputs, and technical services, the Activity builds on existing market systems, planning for scalability and eventual exit.

Blended finance has been used to digitalize existing systems and products to leverage private sector investment and to increase efficiency and outreach to agribusinesses. The Activity’s financial partner,

Sterling Bank, sourced funding from MasterCard Foundation to design its Sterling Women and Youth Agricultural Finance (SWAY AgFin) product to support youth and women in agribusiness. The product was designed for smallholder farmers, processors, input providers, and SMEs. The SWAY loan product was developed with a blended investment of \$21.45M from MasterCard Foundation and \$11.6M from Sterling Bank, which also leveraged over a \$100M intervention funds from the Federal Government of Nigeria through the Central Bank of Nigeria.

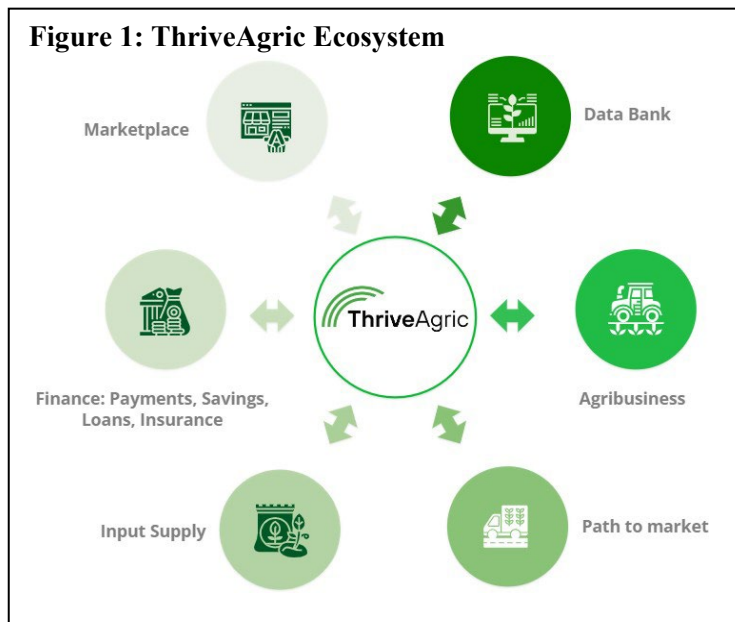
As Sterling Bank rolled out the new SWAY product, management realized that manual loan systems slowed disbursements and were a barrier to increased outreach. So, with the support of the Activity, Sterling hired an IT firm to digitalize the SWAY-AgFin loan product with the twin goals of reaching more underserved MSMEs and reaching them more efficiently.

Sterling Bank encountered challenges in rolling out the new digital system, including initial low uptake by women clients, who required additional training and support from field agents to become comfortable using the system. Sensitization was also required to counter perceptions that loans were grants from MasterCard Foundation that did not require repayment. To reduce risks associated with natural disasters, such as droughts and flooding, SWAY AgFin was bundled with customized insurance and included a grace period until harvest season.

In addition to outreach and efficiency gains, Sterling Bank has noted increased yields and productivity among clients, as well as improved access to markets and increased business turnover. Employment for women and youth has also increased. By leveraging blended capital from the Activity, MasterCard Foundation, and Sterling, the bank reached 13,000 new women and youth clients in two years with \$14M in loans at a subsidized annual rate of 9%, requiring minimal documentation and no collateral. With their new portal in place, Sterling Bank anticipates increasing its SWAY-AgFin portfolio by 80% over the next two years.

Since 2017, ThriveAgric has built a network of 500,000 farmers and a staff of 2,000 people. The ThriveAgric platform seamlessly connects financial service providers and input suppliers, insurance

providers, mechanization providers, transporters, and premium off-takers in an agritech ecosystem. In this ecosystem (see Figure 1), ThriveAgric facilitates loans to farmers averaging \$350 from partners, such as Sterling Bank. With the proceeds of the loan, farmers are able to purchase a package of the products and services they need to enable successful crop cultivation. The input package includes seeds, herbicides, pesticides, field mapping, insurance, and tech-enabled advisory services offered by ThriveAgric’s partners. Farmers also receive training in good agricultural practices as well as crop monitoring and just-in-time technical support. ThriveAgric also connects farmers to harvesting and transport services to get their crops to market as well as a digital platform for selling their crops.



Despite its strong growth trajectory, initially ThriveAgric faced challenges with access to capital, high funding and operational costs, slow manual loan processing systems, poor visibility over lending operations, and high default rates. In addition, they had difficulty in identifying farms and reaching clients with extension services.

To address these challenges, ThriveAgric automated its Agricultural Operating System (AOS) client intake and management system with support from the Activity. This new online system leveraged \$100M in capital investment from ThriveAgric. The AOS has a range of features to help smallholder farmers and facilitate commerce in rural communities. It is a cloud-based system, but operates both online and offline, and is both scalable and secure. The system's functions include farmer onboarding, farm mapping and monitoring, input distribution, end-to-end inventory management, and buying of inputs at the start of the season as well as selling crops at harvest. To manage the AOS in the field, ThriveAgric has a network of more than 2,000 agents equipped with the AOS mobile app to capture data from clusters of new and returning farmers throughout the farming cycle. To improve outreach to women and youth, ThriveAgric developed training materials in local languages explaining how to use the AOS system. With just-in-time agricultural inputs and mechanization services through the AOS, farmers' yields increased, repayments improved, and loyalty incentives increased.

The AOS has had a major impact on the growth and quality of ThriveAgric's portfolio, as ThriveAgric has increased farmer onboarding from 500 to 500,000 clients, in just over the last 5 years. By tracking agricultural inputs through the AOS, ThriveAgric reduced side selling from 30% to 0%, increasing visibility on warehouse inventory from less than 70% to 100%, and increasing harvest visibility from less than 60% to more than 90%. Improved tracking also helped reduce the default rate from 35% to less than 2%. Digital onboarding with the AOS also improved efficiency, reducing the average time required to onboard clients from 10 days to less than one day and reducing the cost to bring on new farmers from an average of \$10 per client to less than \$2 per client.

### **Lesson 11: Blended finance and tailored agricultural loan products can help to incentivize smallholders to invest in climate smart agriculture.**

There is an urgency to adapt to climate change, especially for smallholder farmers in rural areas and yet smallholders tend to have limited resources and access to finance. Financing climate smart agriculture requires products tailored to different crops and geographies. By offering a combination of reasonable cost local finance with technical assistance, SHFs can be convinced of the value of adapting to climate smart approaches. In Egypt, for example, Abt Associates offers an integrated approach of technical assistance and revolving grants to encourage rural farmers to apply climate smart practices, such as improved water management and soil fertility, crop planning and rotation. Abt is currently working with nine NGO lending partners to develop new agricultural finance products tailored to specific crops.

Challenges to agricultural finance include increased covariant risk, the seasonality of agricultural cycle, lack of physical collateral and human capital among SFHs, as well as low awareness of financial products and institutions. Some strategies to address these shortcomings include partnering with local lenders, developing digital market platforms for buying and selling high quality agricultural inputs and crops, and creating a revolving fund to leverage donor capital.

Egypt is one of the top 5 unbanked countries in the world; less than 25% of the population has bank accounts. One solution to leapfrog constraints to access to finance is digital financial services (DFS). Clients using DFS are 50% more likely to use other services as well, including financial literacy training and peer to peer networking opportunities. However, 2/3rds of female clients need some training and technical support to be able to use DFS. DFS can also decrease risk by increasing transparency and efficiency to align incentives for lending and repayment.

## **Lesson 12: Private sector investment can be leveraged to support climate smart agriculture and transition supply chains to reduce GHG emissions.**

As the number and frequency of negative impacts of climate change are increasing, the private sector is demonstrating an increasing commitment to work cooperatively with donors and development practitioners to create innovative blended finance mechanisms that support climate smart agriculture and reductions in greenhouse gases within their supply chains. Consumer demand for sustainably sourced goods is further pushing these types of initiatives. For example, Chemonics International is implementing USAID’s Climate Finance for Development Accelerator (CFDA), which is a \$250M initiative designed to leverage \$2.5B in public and private climate investments by 2030. Investments will support a range of climate change mitigation and adaptation activities, many of which will intersect with climate smart agricultural investments, with all scaling a more rapid transition to net-zero greenhouse gas (GHG) economies. CFDA is designed as a platform to help countries meet their national commitments to the Paris Agreement through evidence-based solutions that address gas in global, regional, and national climate finance ecosystem. CFDA is also designed to manage the Climate Finance Investment Network (CFIN), a partnership portal to facilitate catalytic support for climate-related investments. As CFDA Chief of Party, Anne Spahr, explained, these concepts were developed through a co-creation process with USAID and other partners over the course of a year.

Sashi Jayatileke, Senior Climate Advisor for USAID’s Center for Energy, Environment, and Infrastructure, explained that while “agriculture is a driver of job creation in many developing countries, it is also a driver of significant GHG emissions, which will only increase with population growth.” Therefore, it is important to create the right incentives to encourage farmers to adapt to climate smart practices. USAID’s \$250M investment in CFDA and \$50M investment in the Enterprises for Development Growth and Empowerment (EDGE) Fund are examples of how USAID is finding innovative ways to work with private sector partners to address development challenges (<https://www.usaid.gov/work-usaid/private-sector-engagement/edge-fund>). Below are a few examples of how large private agribusinesses are blending commercial capital with donor funding and technical assistance to create blended finance facilities that support agricultural supply chains, including smallholder farmers.

Danone North America, a multinational dairy company especially known for its Danone yogurt products in the US, is committed to supporting regenerative agriculture. As Chris Adamo, Vice President of Public Affairs and Regenerative Agriculture Policy, explained, Danone has seen that farms within their supply chain have limited funds and resources to afford the substantial up-front costs required to transition to climate smart agriculture, which often requires changes to soil and crop management, agricultural inputs and equipment, and herd management, etc. For example, to lower methane emissions, dairies of all sizes require technical assistance and significant investments in new management and innovations which are generally unattainable by themselves. Therefore, Danone is focused on developing longer term relationships to help manage and address issues from the farm up the value chain. As they seek opportunities with farmers to lessen risk and create more market certainty with incentives and co-investment from Danone, they help farmers afford investing in regenerative agriculture and reduction of GHGs. In addition to blended finance, Danone is focused on efficiency improvements and is building a tool to calculate farm-level return on investment to further incentivize climate smart investment.

Starbucks, a global roaster and retailer of coffee, as well as tea, cocoa, and spices, envisions a sustainable future for all in its supply chain. Partnered with Conservation International, Starbucks is designing a fully transparent and socially and environmentally sustainable supply chain with a goal to be carbon neutral. Starbucks is committed to investing in green fertilizer, farmer incentives to encourage climate smart adaptations, and 100 million trees. In 2011, Starbucks created the Global Farmer Fund with \$15M – which has since grown to \$100M – to support farmers’ sustainable practices with low interest rate loans. Starbucks is now working to embed sustainability into its business model. As Starbucks’ Global Director of Social Impact & Sustainability Heather Pfahl exclaimed, “This is not CSR (corporate social responsibility)!” They

have co-invested with Root Capital to scale up debt and equity finance for farmers, including first and second loss loan guarantees to support women impacted by climate change. Recently, Starbucks started a \$50M Water Equity Fund to support water scarce areas in developing countries and they are in discussions with Cargill to create another innovative finance mechanism.

McCormick & Company is a 130-year-old global leader in flavor, seasonings, and spices. As Senior Director of Global Sustainability, Katherine Rostkowski described, McCormick has always focused on “doing what is right; its purpose-led performance commitment is embedded in its business strategy.” Recently McCormick & Company made two big commitments: to 100% sustainable sourcing of its top five brands by 2025, and to achieving net zero GHGs by 2050. The firm is working toward these goals by implementing environmental standards for community resilience, building communities, and empowering women. In 2018, McCormick assessed the role of women in their supply chains and identified the many ways in which women are economically disadvantaged, such as by heavy responsibilities for childcare and housework, in addition to farm work. In response, McCormick is now offering demand-driven training for women on topics such as financial management and bookkeeping, as well as supporting skill building, access to finance, education, nutrition and health services.

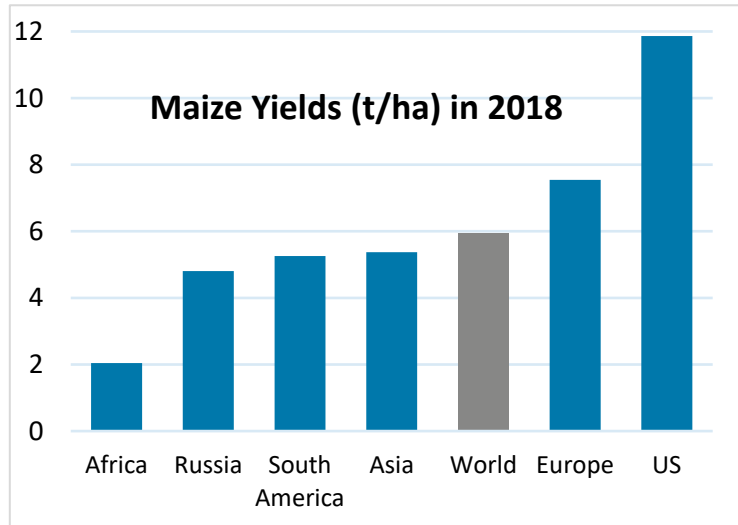
Land Innovation Fund, established in 2020 with \$30M from Cargill, is managed by Chemonics International to support farmer-focused innovations across the Amazon Basin. The Fund offers seed funding for start-ups as well as finance to scale promising solutions to climate change in Argentina, Bolivia, Paraguay, and Brazil. The Fund has already supported 1,400 farms, with innovations such as low-cost soil and carbon analysis, and created the first traceability system for the soy value chain in Argentina.

### **Lesson 13: Positive social, environmental, and climate impacts can crowd in investment and attract patient capital needed to support rural and agribusiness investments.**

Poor farming practices and lack of market linkages contribute to poor soil health, low yields and low incomes for SHFs. Many farmers still respond by moving onto better land, which drives deforestation and environmental degradation. By addressing the economic needs of SHFs, they can be empowered to co-invest in better farming systems, and positive social and environmental improvements in ways that make their local communities more climate resilient. These realities have driven Catholic Relief Services (CRS) to find innovative ways to enhance its development initiatives through a combination of agricultural advisory support, blended finance, including direct investment of a portion of its reserves in institutional quality impact investment funds. These activities have led to a private sector engagement approach that has brought together several development actors to support smallholder farmers in developing long term, sustainable farming systems linked to growth markets.

Caritas and CRS began working in the Southern Agricultural Growth Corridor of Tanzania to upgrade the soybean value chain in 2012 on a CRS-led, USDA-funded project entitled Soya Ni Pesa, “Soy brings money!” This project enabled soy producer groups to adopt a package of methods including improved seed, sustainable agriculture practices, savings groups, financial education and stronger market linkages for inputs and outputs. The farming operations were later facilitated through links to agricultural loans at local banks. CRS worked with Caritas Songea and other partners to raise SHF production from less than 1,000MT in 2012 to over 5,000MT per year by 2018. Production of soybean has continued to increase incrementally since that time and production is now over 10,000 MT/year.

In 2014, CRS facilitated market linkages between Caritas, the SHFs and Silverlands Tanzania. Silverlands is a major agribusiness in southern Africa, engaged in buying soy and maize from SHFs to supply a rapidly growing poultry feed industry. Silverlands found that SHF maize yields in Tanzania were significantly lower than the rest of the world (see graphic). They worked with partners to identify a package of farming methods and technologies that could be used by farmers to improve both soils and water use and raise yields. The upgrading package included access to high quality seeds and regenerative farming methods, such as planting on time, using mulch composting, crop rotation or intercropping, use of cover crops and judicious use of fertilizer to raise yields.



In 2022, as the Soya Ni Pesa project was ending, CRS used its impact funds to invest in SilverStreet Capital's Co-Investment Fund. This investment round included an upgrade in Zamseed, a seed company that Silverlands had invested in to support regional agriculture. Zamseed has strong seed products, all non-GMO, that target SHFs and their requirements, with traits such as drought and disease tolerances. Zamseed required a management and marketing upgrade to re-establish its position in the national and regional agricultural seed markets.

Silverlands also strengthened its working relationship with Caritas Songea to continue extension support to the SHFs in a post project phase, which promoted a combination of access to finance, improved inputs, and training on soil conservation, water management, and climate smart agriculture. This new collaboration aims to help SHFs in Songea to double their maize yields. By rotating maize with soybean, which is a legume, nitrogen is fixed and released back into the soil at harvest. This residual nitrogen reduces the need for artificial fertilizers.

In 2023, Zamseed introduced improved seeds into the extension process through a demonstration model. As part of the package, farmers were offered free packets of high-quality seed and training on how to maximize their yields. These farmers are now self-sufficient selling their production and purchasing the improved seeds at planting.

The various investments and activities supported by a partnership between CRS, Caritas and Silverlands Tanzania has led to the development of a network of agri-hubs to provide inputs, training, and offtaking from the farming community. The aim is to establish five agrihubs by 2024. Once the business model has been optimized, the team plans to scale the agrihub model up to 50 sites in the future. As Gary Vaughan-Smith of Silver Street Capital posits, "Tanzania has the potential to become a major exporter of maize, soya, vegetable oil and pulses, all produced by smallholder farmers, and this will transform these farmers' incomes and food security whilst reducing the need for deforestation by improving yields on existing farms."

## IV. Integrating Underserved Populations into Commercial Markets

Increasing inclusion, especially of women and youth, is becoming more automatically integrated into the design of development projects and activities. As we move toward a system-based focus, development practitioners can play a role in working with private sector actors to see the economic, social, and governance-related benefits of ensuring that systems adequately accommodate the specific needs and concerns of potentially marginalized populations. For systems to be fully functional, they should be designed to be as inclusive as possible. Below are some of the specific lessons associated with increasing inclusion in commercial markets and systems.

### **Lesson 14: Investing in women can reduce risks and decrease employee turnover while increasing firm revenue and women’s employment and decreasing loan default rates.**

Root Capital and Mennonite Economic Development Associates (MEDA) have experience impact investing in gender-inclusive enterprises and studying the evolution of participating agri-SMEs to observe how these firms evolve compared to non-gender inclusive businesses. While they have largely worked separately, their primary findings are coherent and in agreement. Together they have demonstrated the business case for investing in women.

Through Root Capital’s Women in Agriculture Initiative (WAI), started in 2012, Root Capital reviewed more than 1,220 loans to 550 borrowers and found that:

- Controlling for the loan size, region, and industry, loans to women-led enterprises on average yield \$17,850 more annual profits than loans to non-women-led enterprises;
- Women-led enterprises are more financially stable, with one-third smaller variations in year-to-year revenues;
- Women-led enterprises have a 4.12% lower average default rate than non-women-led enterprises;
- Gender-inclusive enterprises are associated with a 20.8% higher likelihood of obtaining new social or commercial financing after a loan from Root Capital;
- Today, 60% of Root Capital’s lending portfolio is gender inclusive and 30% is women-led, indicating that systems are changing.

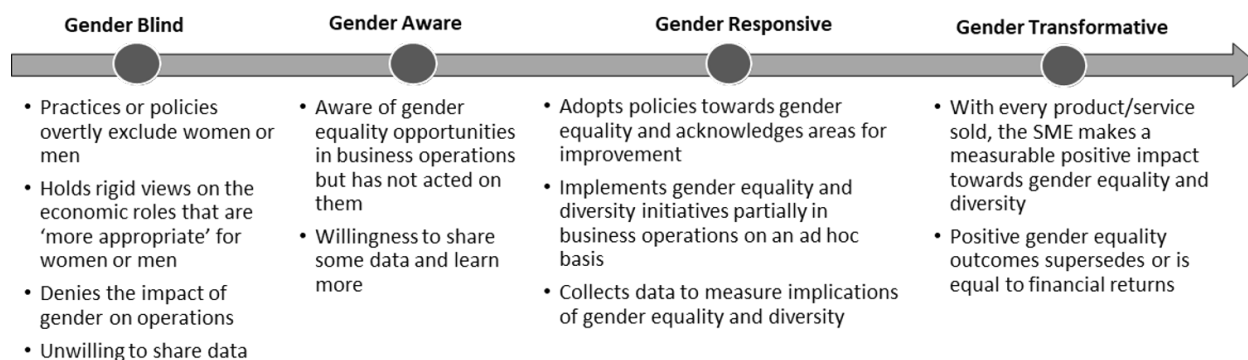
Since 2017, MEDA has been leveraging the Gender Equality Mainstreaming (GEM) toolkit to conduct assessments and create action plans that move firms to develop gender sensitive policies, conduct targeted recruitment for women, and create woman-focused product and marketing strategies. After observing 30 firms and seven investment funds that have applied the GEM framework, MEDA has found that:

- As a firm scores higher on GEM, they also demonstrate better profitability, enhanced risk management skills, improved employee capacity, better productivity and employee retention, and expanding markets and market share;
- Linking MEDA impact investments to projects that provide technical assistance and incentives to improve gender indicators drives employment and women’s employment in particular. Project Linked Investments (PLIs) that combine both capital and incentives outperform non-PLIs on women’s job growth by a factor of 10. This is accelerated even more when women assume management roles in the projects.

The goal of GEM is to increase firms’ integration of gender concerns into all dimensions of the business and move the firm along a spectrum from “gender blind” toward “gender aware,” “gender responsive,” and, ultimately, “gender transformative,” which indicates that gender goals span the entire organization and are

strongly considered in all operations. The graphic below illustrates this evolution in a firm's gender integration.

MEDA continues to evolve the GEM Framework to include a greater focus on environmental considerations as they are increasingly finding that there are opportunities for addressing both gender and climate issues with agribusinesses.



### **Lesson 15: Aligning inclusion with profit strategies is key to ensuring that businesses engage with women over the long term.**

The new USAID-funded Women-Inclusive Return on Investment (WI-ROI) Framework implemented by MarketShare Associates and USAID provides a useful lens through which implementing partners (IPs) and private sector companies can measure the financial success of a firm's investments to include and empower women. ROI is a meaningful business metric for private sector businesses because it allows them to compare costs and impacts across their different businesses and strategies. A primary objective of WI-ROI is to help firms understand the evidence as it relates to four frequently deployed business strategies and to illuminate how these strategies can be aligned to firm's needs for profitability and sustainability.

The WI-ROI research and implementation in the Feed the Future Uganda Inclusive Agricultural Markets Project indicates that the four most commonly implemented inclusion strategies by SMEs are: fostering women's talent and leadership, creating a tolerant and inclusive workplace culture, developing supply chains that include women, and targeting women consumers. Challenges remain in documenting how firms cost out social inclusion investments as well as how they measure the return of less direct investments. Initial evidence shows that although SMEs and large businesses generally recognize the utility of long-term and more indirect benefits, such metrics are less commonly included in WI-ROI calculations. Research highlights a dearth of guidance, skills, and tools to help firms link inclusion to their core businesses.

### **Lesson 16: Designing different finance products for clients with different risk profiles can be an effective strategy for lending to agri-MSMEs that facilitate smallholder access to inputs and markets.**

While this lesson can be true for any FI, it can also be relevant to impact investment funds, aiming to target a broad range of clients. In 2020, Catholic Relief Services launched Isidro, a "segmented" impact investment fund named after the patron saint of farmers. Isidro provides loans from \$25,000 to \$500,000 targeted to MSMEs who work directly with smallholder farmers to provide access to inputs and markets. Isidro provides short- and medium-term loans, with flexible structures, for working capital, trade finance, and capital asset finance. CRS also provides business development services, technical assistance, and coaching to help ensure MSME success.



To control risk across the whole fund, Isidro segments its clients into different types and risk profiles, according to their experience, size, management structure, credit history, primary value chains, and the size of their required investments. Higher risk segments involve financing emerging markets, niche value chains, or new clients, while lower risk segments entail lending to established firms and primary value chains. For its more established clients, Isidro offers mid-term low- or no-collateral operational loans and CAPEX financing for infrastructure and equipment. For new clients, Isidro offers first-time loan products to buy raw material from smallholder farmers and “solidarity” loans to groups of first-time borrowers who take a collective loan. Isidro has also developed a product called “Common Good” specifically designed for agricultural cooperatives.

Segmenting lending enables Isidro to better tailor its products to its clients’ needs while also ensuring the viability of the overall fund by providing a means to balance its risk across high- and low-risk ventures. This allows Isidro to invest in a number of novel, higher risk opportunities with new firms that have strong potential impacts on the livelihoods of smallholder farmers.

To date, Isidro has made more than \$1.1M in loans to MSMEs who, in turn, provided technical assistance, business services, and market linkages to more than 2,600 farmers last year. As of December 31, 2022, Isidro had a 100% repayment record. By the end of 2023, CRS aims to double the Isidro lending portfolio to \$2M.

### **Lesson 17: Integrating savings groups into producer organizations can enhance impact for underserved populations.**

Market systems development tends to focus on end market actors and links to agri-SMEs. However, there are creative ways to ensure that marginalized populations, including rural smallholders, women, and youth are factored into the development approach. Evidence from two separate USAID-funded programs, the *Apolou* program in Uganda, and Food Security Project (FSP) in South Kivu, DRC, illustrate how Mercy Corps is using a carefully structured, multi-pronged market systems development (MSD) approach to integrate 15,000 women farmers – into commercial agricultural market systems in Uganda and DRC.

First, Mercy Corps applies its Producer Organization Viability Evaluation’ (POVE) toolkit, which begins with a diagnostic exercise to systematically assess the capacity of producer organizations (POs) across five primary dimensions:

1. Managerial organization
2. Access to agricultural inputs and techniques
3. Storage and aggregation
4. Output market access
5. Access to Capital

The POVE diagnostic tool then informs the creation and ongoing adjustment of a quarterly action plan for each participating PO, which structures partner technical assistance and provides direction for the group’s own activities. Regular participatory evaluations allow PO members to take ownership of the process and observe the evolution of their POVE scores over time. Across both projects, more than 200 POs have already implemented POVE, leading to an average 200% increase in production yields among participating POs while average annual farmer sales have climbed from \$15 to \$93 per PO member over three years.

Second, both projects methodically integrate pre-existing savings groups (SGs) into the PO activities, ensuring the participation of 15,000 women farmers and providing initial capital and a future path to increase the available capital for commercial farming activities by introducing SGs to FIs. In most cases, private service providers (PSPs) are used to link the FIs to the savings groups. Of the 1,000 SGs that have been included in the two projects, 300 have opened accounts at local MFIs and banks and 300 of the groups have now received formal loans ranging from \$2,000 to \$4,000. More than \$330,000 in loans have been

provided to participating SG groups. However, that represents only 20% of total capital disbursed by the SGs over the life of the projects. SG participants not only report an improvement in their business activities but also in their ability to fulfil basic household needs and access healthcare and education for children.

After five years of implementation, the impacts of combining the POVE toolkit with SG integration are observable and widespread. Mercy Corps has also identified some emerging key lessons and areas of further study to improve the application of their MSD programming going forward, based on observations made during implementation of *Apolou* and FSP: Because applying the POVE toolkit is time- and resource-intensive, it is essential to start early to vet and prioritize participating POs and to help them take ownership over the process through participatory evaluations to ensure engaged, sustained PO implementation over the long term.

Combining POVE-based training and skills development with gender training and joint household decision-making was particularly important for women participants, as it helped them enhance their economic independence and increase their confidence to start and grow their businesses.

While the MFIs and banks view the SGs as an important new clientele and articulate a desire to scale-up lending to SGs, they also request support to buy down the costs and risks inherent in providing small loans in predominantly rural environments. Therefore, providing smart subsidies for a limited time may be an appropriate addition to the intervention strategy.

Using last mile PSPs proved an effective way of helping FIs increase their outreach to clients and help build relationships between POs and FIs and has increased the dynamism of the SGs. However, challenges remain around the PSP agent business model, including improving their financial viability through better commission structures from the FIs or introducing a range of products and services for PSPs to sell. Now, various approaches are being tested, including, for example, helping PSPs perform multiple functions, such as input supplier and last mile credit facilitator for groups.

Many local finance policies limit what the MFIs can do with SGs in Uganda and DRC by banking policies. So, these groups are now becoming active in advocacy aimed at changing government fiscal policies.

### **Lesson 18: Agri digital financial services (agri-DFS) can be a powerful tool to increase smallholders' access to capital and risk-coping mechanisms.**

While agri DFS can help to reduce costs of financial outreach to rural and agribusinesses, business models should be carefully structured to ensure success, scalability, inclusion, and sustainability. GSMA offers one model that is structured this way.

**Digital loan products.** GSMA provided innovation grants to six digital agriculture providers, four of which launched digital loan services. Three services were in-kind input loans while one was a digital overdraft service offered through a mobile money platform. Altogether, more than 72,000 smallholders accessed these loan services across four markets: Indonesia, Nigeria, Pakistan and Tanzania. Feedback from farmers indicated that loans were considered an extremely valuable service that allows for critical capital when cash flow is low. In addition, digital loans had a direct positive impact on incomes for 50% of surveyed farmers mainly through improving access to inputs or by allowing access to better-quality inputs, both of which are vital to boosting yields.

GSMA documented several key findings and lessons in providing adequate digital loan services to SHFs:

- Requiring farmers to rely on agents to request a loan gives them less agency and creates a barrier to adoption. In-kind input loans can be subject to delays due to the logistics of acquiring and disbursing inputs. These loans can potentially create risks for providers because low quality inputs can cause serious reputational damage.

- Although loan registration and repayment processes were overall deemed easy and user-friendly, most farmers emphasized that the loans were of insufficient size to fully cover their needs. Loans that are limited to inputs fall short of meeting the range of farmer needs that include labor hire, asset financing, and non-agricultural expenses. Therefore, broader loan offerings are needed to meaningfully improve smallholders' livelihoods.
- On-boarding financial institutions to provide cash loans to farmers remains a key challenge. While some GSMA grantees partnered with financial institutions (FIs) to underwrite input loans, none of them was able to establish a data-sharing partnership with a regulated financial institution to provide cash loans to smallholder farmers. This is because most FIs lack understanding of the business opportunity behind agri DFS and of credit scoring models that leverage earnings-based assessment of creditworthiness. More efforts are needed to communicate the business opportunity to FIs, refine credit scoring models to secure higher loan amounts and provide loan guarantees to FIs to reduce losses.
- Partnering with MFIs and credit cooperatives, which are smaller and already habitually working with smallholders, can help improve scaling and increase repayment rates.

**Insurance services.** Four GSMA grantees piloted weather-index insurance and area-yield index insurance services. These services saw a low uptake, mainly because insurance premiums were deemed too high in comparison to the risk. In total, some 8,800 farmers were insured across four markets. Key barriers to accessing insurance services included a lack of awareness or understanding of insurance and lower levels of trust in FIs. Subsidising the cost of insurance or bundling it with inputs have proven to be effective strategies to boost adoption. Yet, more needs to be done to increase awareness and understanding of the value of insurance services.

**Gender gap.** GSMA observed a significant gap in the use of agri DFS between men and women. According to data collected by the GSMA, women farmers are 59% less likely to be issued a loan than men, and account for just 6% of farmers who took up insurance. Agri DFS will have a limited impact on women farmers unless key barriers to access and usage are addressed. DFS providers should consider the specific challenges, circumstances, needs, and preferences of women farmers to design appropriate and relevant solutions. This requires collecting and using gender disaggregated data and developing gender-inclusive strategies to reach more women farmers.

**Lesson 19: Providing blended finance through credit unions can be an effective way to stabilize agricultural finance, inclusive of smallholder farmers and MSMEs, during times of crisis.**

Despite the double challenge posed by the COVID pandemic and Russia's full-scale war against Ukraine, credit unions continue to provide a substantial amount of the total agricultural lending to smallholder farmers and MSMEs in Ukraine. Through the USAID-funded Credit for Agricultural Producers (CAP) project, the World Council of Credit Unions (WOCCU) works with 23 credit unions throughout Ukraine to build their capacity to expand lending to rural and agricultural MSMEs. Since 2016, participating credit union partners have made 18,100 agricultural loans to MSMEs totalling more than \$27M.

As commercial financing for agriculture is increasingly constrained due to the war, WOCCU and the Worldwide Foundation for Credit Unions (WFCU) have worked with USAID to design and implement a \$1M Liquidity Fund to stabilize agricultural lending for CAP credit union partners. The Liquidity Fund helps ensure that CAP partners are able to maintain lending activities and respect their obligations to their depositors. This also serves as a tested model for replication and investments from other donors.

Features of the Liquidity Fund include:

- A low interest reimbursable loan to qualified credit unions who are members of one of two APEX institutions. This is a reimbursable loan and not a grant.
- The donor converts the funds to local currency and absorbs currency fluctuation losses, thus helping ensure stability for the fund and minimize credit unions' risks.
- The loan can be recalled if the performance is bad.
- The loan can be extended to the credit union every two years based on performance.
- Loan pricing and collateral terms are flexible and left to the credit union.
- CAP and USAID were involved in the vetting of credit union recipients and monitoring of on-lending at the outset but have now delegated those responsibilities to the APEX organizations.

The CAP-supervised Liquidity Fund has been instrumental in ensuring liquidity for agricultural MSME lending during the COVID pandemic and the war. The \$1M provided by USAID has been blended with funds from each recipient institution, who have, together, provided 922 agricultural loans totalling \$2.21M since 2021. Of the 922 loans, 589 loans, totalling \$1.38M, have been issued since the onset of the war in February of 2022. The Liquidity Fund is currently the only source of liquidity that credit unions can access due to commercial banks' reluctance to take on more risk during uncertain times.

Since the Liquidity Fund has demonstrated positive results, in summer 2023, WFCU will allocate additional \$0.5M to Ukrainian Credit Unions Resilience Initiative under a similar design to promote credit unions' lending to MSMEs run by vulnerable groups (women, returnees, the displaced) in rural areas and financing sustainable business needs.

## V. Conclusion

This year's *Cracking the Nut*® conference focused heavily on the need for creative solutions to reduce risk of rural and agricultural investments, emphasizing the need for smart subsidies and incentives to attract in and scale private sector investment, especially need to ensure solutions were inclusive of women, youth and other marginalized populations. Given the increasingly negative impacts of climate change on agriculture and food security, one can only expect more incentives will be needed in the future.

For 2024, Connexus plans to build on the lessons from the 2023 conference to address the highlighted need to increase the flow of climate smart ideas, technologies, innovations and funding to support rural and agricultural development. At a recent webinar sponsored by GARI, the concern was raised that “less than 5% of climate finance is being spent on climate adaptation and resilience efforts”<sup>4</sup> and Paul Bodnar, Director of Sustainable Finance, Industry and Diplomacy at the Bezos Earth Fund, argued that we need “to reframe adaptation finance to attract more investors...to support climate resilience solutions.” Jessica Thye, Director of Sustainable Investing at BlackRock, suggested that green finance needs “to shift focus from mitigation to adaptation.” And GARI Chair, Jay Koh, referred to the need to integrate mitigation and adaptation elements into all climate investment solutions as “Climate 2.0.” Given the fact that the rate of climate change is accelerating, making rural and agricultural investments more volatile and complicated, Connexus plans to focus *Cracking the Nut*® 2024 on “Preparing for Accelerated Climate Change.”

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<sup>4</sup> [www.climateasap.org](http://www.climateasap.org); [www.garigroup.com](http://www.garigroup.com)