





PRIVATE SECTOR SOLUTIONS FOR HELPING SMALLHOLDER FARMERS



Changing Lives:

Private Sector Solutions for Helping Smallholder Farmers



John Hogg/World Bank

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Macadamia farmer Annie Fred received training as part of the Global Tea project. Bennie Khanyizira/IFC

Foreword

Building Private Sector Opportunities in the World's Most Challenging Markets

I met Stella Wosu this past summer in Thyolo, some 400 kilometers south of Malawi's capital, under a clear blue sky in a field surrounded by blooming macadamia trees. I had traveled to Thyolo to meet farmers as part of the Global Tea project and when I met Stella, she offered me freshly-roasted macadamia nuts—the most delicious I'd ever tasted.

Stella is a smallholder farmer—and she had just harvested the nuts when our team arrived for a visit. Like the other farmers in the Global Tea advisory project, Stella had received training in cooperative management, alongside guidance on financial literacy and budget keeping. All this helped her diversify the crops on her farm, so that in addition to maize and soy, she also generated income by selling the flavorful nuts we all enjoyed that afternoon.

"Farmers love the macadamia tree very much because they know it's an investment that will bring income for many years," she told me.

Stella, who also helps train other farmers in the program, is one of the many smallholders I met this year on visits to investment and advisory programs supported by the Private Sector Window of the Global Agriculture and Food Security Program (GAFSP). She's a poignant reminder of the responsibility and privilege we have in supporting smallholder farmers, their families and their communities, who are tasked with feeding a growing world.

With earnings from her macadamia crop, savings from her training gig and her newly acquired financial literacy training, Stella established a small business last year, making and selling sausages out of her home. In the months since, her macadamia trees—and her plans—have started to take root and flourish, and she now has plans to open a butcher shop in her local village. Stella is smart, outgoing, and ambitious—and I left our conversation gratified to know that IFC and GAFSP are making her dreams possible.

"The relationship with Global Tea and the practical skills they've attained through the project will help the farmers for years to come," Beza Hailu Woldegiorgis, an IFC operations officer and project lead, later told me. "Macadamia trees take at least five years to start producing and up to ten years to be fully mature and so in that way, it's not a traditional smallholder crop."

Farmers like Stella who've joined the project have showed their long-term vision and willingness to invest, he said, forgoing some immediate financial benefit for the good of their farms and their families. "The mindset is transformational and I'm proud to be part of it," he said.

Indeed, it's the vision—and optimism—that accompanied me throughout my field visits this year to projects in Malawi, Ethiopia, and

Bangladesh, where I met farmers eager for tools, training, and access to markets that can propel themselves and their communities forward. The projects, of course, are unique and each tackles the challenges facing smallholders from a different angle. But throughout my field visits, I saw a common thread: farmers who are determined to forge a better future. Indeed, because of GAFSPsupported training, knowledge and access to finance, the smallholders we support can better navigate the reality of climate change, surging input prices, and the very real challenges they face in boosting yields and accessing markets. I returned to my office in Washington D.C. buoyed by stories about ways our investment and advisory programs are creating innovative solutions that are supporting the world's rural poor.

The challenges facing smallholder farmers are familiar to all of us—and at GAFSP. our investment teams use innovative blended finance solutions and work closely with advisory teams to shore up smallholder value chains. In Port-au-Prince, Haiti, for example, we are connecting farmers to formal vegetable wholesalers—and in doing so, helping bypass the widespread violence that plagues informal markets. In Bangladesh, we are providing training to rural women who supply PRAN, one of the country's largest food processors. And in Ethiopia, we are helping smallholders switch to high-yield barley seed varieties and adopt techniques to increase their soil quality.

Mobilizing private sector investment continues to be critical, as we aspire to create a world free of poverty on a livable planet. IFC and GAFSP's unique blended finance solutions

enable companies and financial institutions focused on smallholder-based value chains to build competitive business models, create new jobs, and accelerate development in challenging markets. And there's so much more work to be done.

Since our program began in 2011, our Private Sector Window has approved investments totaling \$475 million to support 89 agribusiness investment projects in 29 countries. In addition, we have approved 101 advisory projects in 35 countries for \$53 million.

GAFSP is building on IFC's strong commitment to create markets and private sector opportunities in some of the world's most challenging places, including investing in early stage or risky projects that hold high potential for development impact and sustainability in places where it is needed most. Rooted in the heart of our model is the belief that our concessional funding should be temporary, and that our clients will one day become financially and commercially sustainable.

This latest edition of *Changing Lives*, our award-winning flagship publication, offers a snapshot of some of our most recent GAFSP Private Sector Window investment and advisory projects. Organized under four themes, these investments focus on our efforts to transform the lives of smallholders through 1) raising agricultural productivity and improving climate resilience; 2) promoting inclusive business and gender; 3) increasing nutritional intake and adoption of high-yield and innovative technology; and 4) improving access to finance.



Stella Wosu and Niraj H. Shah in Thyolo, Malawi. Bennie Khanyizira/IFC

In this edition, you will meet some of these smallholders, including Selina Khatun from Bashbaria in northern Bangladesh, who opened her first bank account after GAFSP-supported training on crop production and fertilizer management came to her village. You will also meet Remzi Bala from central Kosovo, whose recent loan from KEP Trust allowed him to expand his homestead to include a few more cows and a tractor. Their stories are a poignant reminder of GAFSP's mission.

Working together with our donor partners—the governments of Australia, Canada, Japan, the Netherlands, the United Kingdom and the United States—we expect to continue to accelerate upstream and innovative initiatives, help build competitive smallholder linked agricultural value chains and create new jobs.

With food security at the forefront of policy discussions, GAFSP will continue to do what we do best: support agribusiness and agrifinance investment and advisory services projects that commercial investors deem too risky. Uncertainty continues to loom over global financial markets, underscoring the need to support smallholders in the world's poorest countries. Indeed, the need for GAFSP support remains critical as we rebuild value chains, strengthen food systems, and support smallholders. Our commitment as advisors, investors, and innovators has never been stronger.

Niraj H. Shah

Principal Investment Officer
Program Manager, GAFSP Private Sector Window

Smallholder farmers face big challenges along the way from farm to market

Smallholder farmers lack proper inputs for their farms, including high-yield seeds, technologies and fertilizer.

Financiers view small farmers as risky borrowers because most of them have undocumented credit histories, unstable incomes and little collateral.



ACCESS TO INPUTS & KNOWLEGE

ACCESS TO FINANCE

Every \$1 of Private Sector Window funding leverages an estimated \$6.50 of private sector funding. We support business models that provide access to improved seeds, fertilizers and high-yield technologies, alongside access to training and knowledge.

We invest in nontraditional lenders who work with smaller borrowers and provide private supply-chain finance that can provide farmers with more credit & more stable income. Women farmers are particularly disadvantaged, lacking land ownership opportunities and access to inputs. Smallholder farmers lack access to fair markets and to reliable storage facilities, often forced to sell their crops at harvest time when prices are low.

GENDER IN-EQUALITY ACCESS
TO
MARKETS &
STORAGE



We support investments & advisory services that empower women farmers.

We support development of farm-to-market linkages and improving post-farm logistics.

Private Sector Window projects are targeted to reach 5.3 million farmers.



Dominic Chavez/World Bank

The Challenge

Seventy-five percent of the world's poor live in rural areas, toiling on tiny plots of land that yield barely enough to support their family's basic needs and necessities.

For many of these rural citizens, agriculture has the greatest potential to lift them out of poverty—proving two to four times more effective in raising incomes among the very poor than other sectors. But for many smallholder farmers struggling to feed their families, formidable obstacles stand in the way.

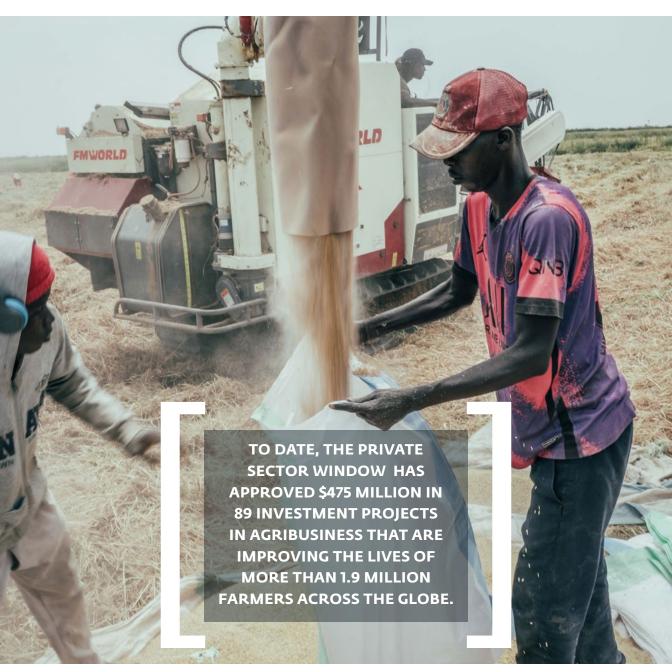
Even if they have land to farm, many small farmers, particularly women, lack access to proper agricultural inputs, including high-yield seeds, technologies and fertilizers.

Shut out from traditional forms of banking, these farmers have little access to formalized financing. At harvest time, with no credit, they are unable to store their crops in reliable and safe warehouses. Often working in remote areas, they find it difficult to get their harvested goods to market.

It is a vicious cycle that keeps them mired in perpetual poverty: forced to sell crops at a time when prices are low, and forced to buy food and inputs at a time when prices are high. These challenges have been compounded in recent years with the overlapping threats of COVID-19, climate change, and food price volatility.

These are the people the Private Sector Window of GAFSP aims to help. By harnessing the private sector as an engine of growth and development, we know that we can make a difference in the lives of millions of small holder farmers throughout the world.

Given the right enabling conditions and private sector support, these farmers can transform the rural landscape and unleash a new and sustainable agricultural revolution.



Birom Seck/IFC

Private Sector Solutions

Supporting agribusiness and agri-finance projects that commercial investors deem too risky is what GAFSP does best. We invest across the entire food supply chain from farm inputs to logistics and storage, to processing and financing.

We use blended finance solutions and IFC's expertise and knowledge to support projects in the agricultural sector that may not attract commercial funding due to perceived high risks. GAFSP funding is coinvested alongside IFC funding while also offering less demanding terms. This allows us to invest in early stage or riskier projects that hold high potential for development impact and financial sustainability. That means that we can partner with companies who include farmers as part of their overall value chain, providing access to markets, financing and storage, and increasing production and incomes for those living and working in the world's lowest income countries. To date, GAFSP has approved

\$475 million in 89 agribusiness investment projects in 29 countries that are improving the lives of more than 1.9 million farmers across the globe.

In addition, we have supported 101 advisory projects in 35 countries for \$53 million. These projects involve working with technical specialists who provide on-the-ground training and advice for businesses and farmers in promoting access to agricultural finance, improving farmer productivity, establishing market links, reducing risks and mitigating climate change effects. Read more about our Advisory Services on the next page.

GAFSP is making a difference, one innovative investment at a time.



GAFSP support to PRAN, one of Bangladesh's largest food processors, has boosted food safety. Shoeb Faruquee/IFC

Advisory Services

It takes more than just finance to achieve sustainable private sector development. Advice is a critical part of the Private Sector Window's work as a comprehensive blended finance solutions provider.

The Private Sector Window supports IFC advisory services teams in providing technical and financing knowledge, expertise, and tools to:

- Raise agricultural productivity and improve climate resilience through climate-smart practices
- Increase nutritional intake and adoption of high-yield and innovative technology through better farm management
- Create opportunities for inclusive business by linking farmers to global value chains and implementing approaches that target gender equality
- Develop financial products and services that help farmers access finance and invest in new technologies

The Private Sector Window's advisory portfolio includes 101 advisory projects for \$53 million. Our work spans the globe, with

active projects in 35 countries, including Haiti, where we are connecting Haitian smallholders to a leading fruit and vegetable wholesaler working to increase productivity among Haiti's farmers.

We are also working in Bangladesh, where a GAFSP-supported advisory project is supporting women farmers, who receive training on crop production and fertilizer management. The project also boosts food safety by implementing good hygiene and manufacturing practices in factories run by PRAN, one of Bangladesh's largest food processors.

And in Ethiopia, we are working with local smallholders to improve and increase yields with top-quality seeds, agribusiness training, access to microfinance, and links to reliable markets. By connecting small scale farmers to the malt supply chain, the farmers have been able to increase their income by 150 percent.





GAFSP is supporting climate-smart agricultural training in Côte d'Ivoire. Djibril Coulibaly/IFC



Kettelie displays her harvest of cherry tomatoes. Nadia Todres/IFC

In Haiti, Private Sector Links are Boosting Farmer Incomes

A horticulture project is connecting smallholders to top hotels, restaurants, and supermarkets in Port-au-Prince.

Kettelie,* a farmer from the mountains high above Port-au-Prince, Haiti, remembers her first cherry tomato harvest, when well-meaning neighbors rushed to her fields in a panic to see what went wrong. "Someone shrunk your tomatoes," they told her.

Her neighbors stopped worrying, she recalled recently, when they saw how quickly she was able to sell the tiny fruits to a local produce aggregator that supplies the city's top hotels, restaurants, and supermarkets.

Until recently, high-end produce like cherry tomatoes were all imported, but that's starting to change, thanks to an IFC Haiti Horticulture advisory project that is connecting Haitian smallholder farmers like Kettelie to GreenFresh Ltd., a local firm specializing in the production and commercialization of high-quality vegetables.

The project, which is supported by GAFSP, is working closely with SOHADERK, a local farming association, and FONHDAD, the Haitian Foundation for Sustainable Agricultural Development. It's providing farmers with training and inputs, while boosting domestic production and producing

sustainable incomes for a sector that employs half of Haiti's population.

The project, through GreenFresh, sells high-quality produce to supermarkets and other clients to replace imported products, in order to boost local production and reduce foreign currency demand. In addition, imported goods are often unpredictable because of border closures, disruptions at the port, and insecurity more generally. It's a win-win for the company, according to Jean Robert Estime, director of GreenFresh, which needs a stable, predictable, and local source of high-quality fruit and vegetables to sell to supermarkets, hotels, and restaurants.

"The partnership with IFC and local farmers is helping us manage our value chain and guarantee access to high-quality produce," he said. "By working with farmers, providing them with inputs and training, and giving them information on what the market wants, we are creating an incentive for farmers to have a long-term relationship with us."

Agriculture contributes 25 percent of Haiti's GDP and employs half the workforce, but food insecurity is high and nearly half the

^{*} Like other farmers in the story, Kettellie is being identified by her first name only because of security concerns.

population is classified as food insecure. Though markets are well-stocked, and food is plentiful, prices are beyond what most Haitians can afford. Ongoing struggles with political instability, gang violence, and vulnerability to extreme weather have compounded the challenges facing the country's agricultural sector. Kettelie, for example, has been farming her whole life but in recent years, she's struggled to support her two children.

"Haiti has an incredibly complex food system with multiple institutional and sectoral crises, and so it is very difficult for farmers to generate income," said Kenel Cadet. coordinator at FONHDAD, the Haitian Foundation for Sustainable Agricultural Development, which is providing farmer training as part of the project. As a result, Cadet says, the project has been uniquely designed to address these challenges from various lenses—providing training and inputs, while also creating direct market access for farmers. By working with formal buyers, for example, Kettelie is able to reduce the risk of traveling to informal markets farther away, along roads that carry the risk of gang violence and kidnapping.

"Market-oriented extension services are critical to support farmers to increase production, and also give them direct access to markets they couldn't otherwise reach,"

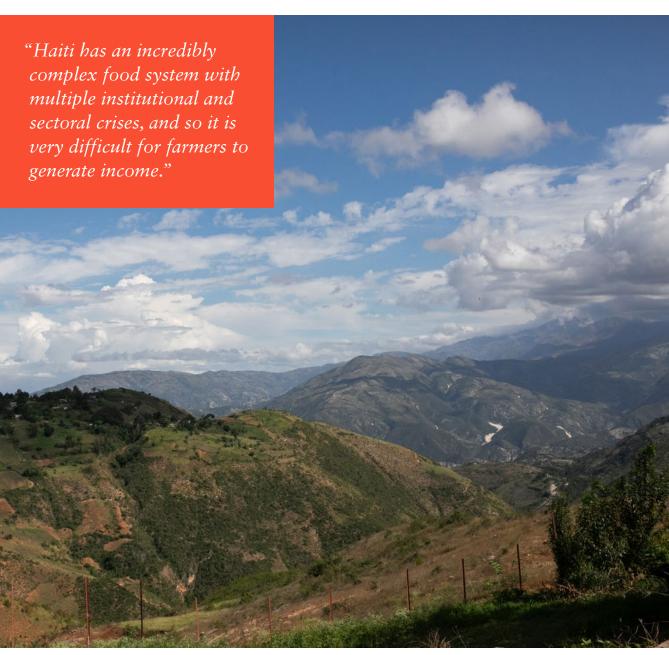
According to Cadet, improving farmers' incomes is critical to boosting food security and economic independence. The project therefore works closely with farmers, providing high-quality seeds alongside training in modern planting and harvesting



"In the past when I would have pests devastate my crop I would be really discouraged; but with this project I now know ways to prevent that."



Agronomist Pierre-Paul Jules speaks to farmers at the launch of the horticulture project. Nadia Todres/IFC



The project is based in Kenscoff, at the southern end of Port-au-Prince, with an elevation of nearly 5,000 feet. Nadia Todres/IFC

techniques. It also teaches farming as a business, helping farmers learn tools to weather economic and political uncertainty, better manage shocks, and produce a harvest that is competitive with imports.

Charles, a pepper and cabbage farmer from the mountain village of Robin, says that he's learned to be more resilient. "In the past when I would have pests devastate my crop I would be really discouraged; but with this project I now know ways to prevent that," he said. "The project taught me a lot about commercialization and credit," he added. "Now I can provide for my family."

As part of the program, farmers receive training on post-harvest management, food safety, and proper storage and packaging so that GreenFresh and the hotels and restaurants they supply receive produce free of contaminants, blemishes or bruises. Farmers also learn to cultivate high-end produce like cherry tomatoes, red cabbage, broccoli and special varieties of lettuce, which are typically imported.

Project results have so far been promising, with farmers diversifying their vegetable production while also doubling yields, according to Colomb Louisma, an agronomist and technical director at SOHADERK, one

of the project training partners. "Farmers are producing more and losing less in post-harvest loss," he said. "The project is giving farmers the opportunity to become more self-sufficient and reach a premium market—which they never would have been able to do otherwise. And it creates an assurance for farmers that someone will buy their produce from them."

The training, he said, is also helping farmers deliver to GreenFresh during the dry season, creating a reliable and sustainable source of income for farmers and helping prevent market saturation during the rainy season when prices drop. And SOHADERK has allowed farmers the use of their greenhouse year-round.

For Kettelie, the project has been transformational. "It has shown us how important it is that Haiti can be self-sufficient," she said. "The more we produce in Haiti, the more the money stays in Haiti, giving us the ability to take care of our children, families, and community."

Her husband, Josué, also a farmer in the program, agrees. "Haiti has a lot of people who want to work hard," he said. "The country is very difficult but with the right support we can do a lot."



Ray Witlin/World Bank

Food Security in Bangladesh Means Delivering on Rice

The project is laying the groundwork for a more resilient global food system amid surging costs.

As Salma Akhtar reaches for the item that all Bangladeshis seek for while shopping for groceries—a bag of rice—she notices, yet again, that buying food has become an increasingly costly exercise. It means she has to think very carefully about what she can buy to feed her family, a trade off on quality, quantity or both.

"We eat rice three times a day. Food prices in the market have gone up so much that we are barely able to think of buying anything beyond what we need for survival," says Akhtar, a mother of two children who now finds her food spend is being squeezed.

Russia's invasion of Ukraine has led to a surge in energy prices, resulting in a hike in commodity prices. With higher energy costs leading to higher production costs, the price of food staples like rice in Bangladesh has gone up, with inflation above recent historical levels

In Bangladesh, a country of nearly 170 million people, food security equates to rice security. The country is the third largest rice producer in the world and it is a key staple for its population—providing people with about 67 percent of total calories.

But that has been increasingly under threat.

It's not just the cost of energy causing issues. So too is the price of fertilizers amid reports that farmers are now struggling to produce enough food grain in a cost-efficient manner. The US Department of Agriculture reported that Bangladesh harvested 35.65 million tons of rice in 2023, a little short of its original projection.

These are statistics that matter. The agriculture sector contributes about 12 percent of Bangladesh's GDP. About 63 percent of the population live in rural areas and are mainly smallholder farmers dependent on agriculture as a source of livelihood and farming on less than two hectares. Rice is the most produced crop in the country and an essential source of livelihood.

Farming continues to grow due to increased demand as the population increases rapidly. But the high demand for food has put pressure on farmers to increase production. However, this is constrained by limited access to agricultural inputs and low adoption of climate-smart agricultural practices.

This reality means Bangladesh has a huge scope for improving agricultural value chains, which currently limit the ability of smallholder farmers to take part in markets given high



Thomas Sennett/World Bank

transaction costs and inadequate rural storage—with too many relying on old sheds. Poor storage of rice by smallholder farmers leads to high moisture content, increasing the risk of quality deterioration, which then denies farmers the opportunity to get higher prices. So post-harvest losses can be high. FAO estimates that 13.6 percent of food in South Asia is lost from production to the retail level due to inadequate storage by farmers, along with losses during primary processing.

To help turn that around, IFC has now structured an investment—the first under its new \$6 billion Global Food Security Platform (GFSP) – which aims to respond to the global food crisis by mobilizing private investment to address the deterioration in food security, particularly in the world's most vulnerable countries. The transaction, worth \$35 million. is with the Meghna Group of Industries (MGI), a leading conglomerate in Bangladesh and a key player in the country's food supply chain. This project involves \$21 million from IFC as well as a subordinated loan of up to \$14 million from GAFSP, a blended finance arrangement that allows for long term funding not currently available in the market.

"This is a project designed to lay the groundwork for a more resilient global food system in the future," says Ananthan Nallappa, IFC's Team Leader on the project.

Key elements of the financing support involve the construction by Tanveer Food Limited, a subsidiary of Meghna Group, of a greenfield automated rice mill in the northern part of Bangladesh, with a processing capacity of 1,000 metric tonnes per day (MTPD), along with an 80 MTPD rice bran oil plant and a captive husk-based cogeneration plant—for

heating and electricity—contributing to climate mitigation.

"At its heart, the project will expand local rice processing capacity and jobs in Bogura, an underserved region of Bangladesh, improve supply chain efficiencies and reduce food losses, which will all contribute to strengthening the country's resilience to external price shocks," says Rowshan Tamanna, IFC's senior investment officer in Bangladesh.

"While the project in itself may not be large in the context of the country's rice production capacity, the reality is it can have a significant demonstration effect by showcasing how the price of rice can be made resilient to fluctuations in the cost of energy during production while providing consistent quality rice at affordable prices."

With the state-of-the-art automated mill in the Bogura region, in northern Bangladesh, producing packaged rice of consistent quality aimed at addressing increasing food safety and quality requirements, IFC expects the project to produce over 170,000 tons of quality packaged rice by 2027.

Overall, the project will generate more than 500 jobs and reach over 123,100 smallholder farmers, including about 50,000 women farmers. It is also helping increase the participation of women in the value chain, helping to reduce the gender economic gap in Bangladesh.

"At the end of the day, it's about building up resilience while meeting the demands and needs of the people of Bangladesh," says Tahmina Binthe Mostafa, Director of MGI.





Djibril Coulibaly/IFC





Mulugeta Wolde/IFC

Harvesting a Better Future for Ethiopia's Barley Farmers

Investments in manufacturing facilities and the professionalization of local farmers are yielding results.

Three years ago, Soufflet Malt Ethiopia, the subsidiary of French agricultural group InVivo, was purchasing 1,500 metric tons of barley from local farmers in Ethiopia. Today, it is purchasing 80,000 tons. The transformation is the result of a project that connects farmers to better seeds, inputs, and new market sources. The participation of small-scale farmers like Endashaw Mekonnen, who, along with more than 79,000 other farmers in the program are now growing more and better barley, has been key to this growth.

Before the program began, Mekonnen's harvests from his vast barley fields in western Ethiopia were small and his profits thin. During his time in the Soufflet Malt Ethiopia training program, he discovered the problem: inadequate seeds and soil. With the training and financing he received through the program, Mekonnen switched to high-yield seed varieties and adopted techniques to increase the fertility of his soil.

"I'm very happy with the training around modern agricultural practices," he said.

Barley, an important ingredient used in beer-making and found in foods like Injera, a popular spongy flatbread, is the fifth most produced cereal in Ethiopia after teff, wheat, corn, and sorghum.

Even though farmers have grown barley in the favorable climate of the Ethiopian highlands for generations, inefficient practices and limited access to important inputs have prevented farmers from reaching their full yield potential. Weak supply chains have also made it difficult for farmers to access markets and earn regular incomes.

At the same time, demand for malt barley in Ethiopia is growing because investors such as Soufflet and Boortmalt, as well as brewers such as Heineken, Castel, and Habesha, manufacture products that require malt barley. In the past, since the industry was unable to secure sufficient quantities of local barley for its needs, it relied on imported barley. Before the project began, about 70 percent of the malt used by Ethiopian brewers was being imported.

But that is changing. Between 2018 and 2021, the amount of barley Ethiopia imports has dropped by 78 percent, supported by significant investment in the local supply chain. The entire malt barley sector in Ethiopia has generated more than 137,000 jobs, according to IFC research looking at the last three to five years.

With funding support from IFC and GAFSP, Soufflet Malt Ethiopia built a large malting

"Building local supply chains is at the heart of our strategy to ensure we have enough barley to feed our factory," said Jean-Benoit Vivet, Soufflet Malt Ethiopia General Manager.

factory in Addis Ababa to increase local barley malting capacity and source 100 percent of its barley needs locally.

As part of the project, Soufflet Malt Ethiopia worked closely with farmers to help grow and transform Ethiopia's barley sector.

"Building local supply chains is at the heart of our strategy to ensure we have enough barley to feed our factory," said Jean-Benoit Vivet, Soufflet Malt Ethiopia General Manager.

In 2020, Soufflet Malt Ethiopia, with support from IFC and GAFSP, established the three-year BOOST training program, inspired by a similar project IFC ran with Heineken that helped some farmers double their barley output. BOOST—which stands for "barley organization of supply and training"— helped local producers such as Mekonnen improve and increase yields with top-quality seeds, agribusiness training, access to microfinance, and links to reliable markets

During the last three years, BOOST has enabled Soufflet Malt Ethiopia to source all its malt barley demand from small producers. By connecting small-scale farmers to the malt supply chain, the farmers have been able to

increase their income by 150 percent. The increased production has also strengthened local food security: of the new production, 27 percent of products are consumed by households

The program also placed special emphasis on training and empowering an estimated 7,300 women farmers like Tadelech Hunde, a widowed mother of six. After two years of training, Hunde produced and sold about 15 tons of malt barley to Soufflet in 2021 and 2022 combined, up from two tons previously. She attributes this to her access to quality inputs and use of mechanization for farming and harvesting.

"Thanks to the malt barley business, we can provide better-quality food and clothing to our family. My first son is now pursuing his BSc in accounting, his younger brother and sisters are also attending high school and middle school. I am happy that I am sending them to school to fulfil all their needs," Hunde said from her farm in Limuna Bilbilo district, about 155 miles outside of Addis Ababa.

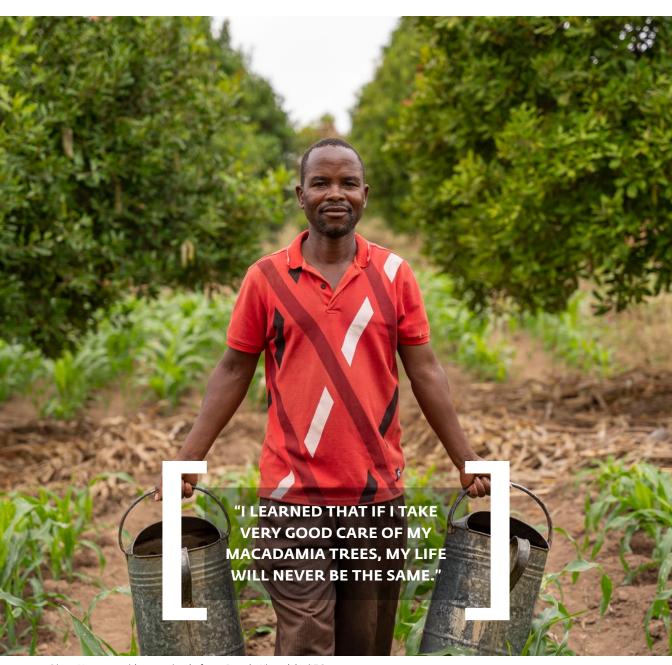
The additional income Hunde has received from improved barley productivity has also allowed her to purchase other assets, including a house and land, milk cows, oxen, sheep, and donkeys. She also plans to start a business to continue to provide for her family.

Hunde says her experience shows that with the right inputs and training, other farmers can follow her path from subsistence to commercial farming.

"I want to share my experience so that other women in my village can get trained and get involved in malt barley production," she said.







Obert Ntonyo on his macadamia farm. Bennie Khanyizira/IFC

Growing Macadamia Nuts for Malawi's Future Generation

A program linking smallholder farmers to resources and markets is boosting incomes and creating opportunity.

Every sunrise, Obert Ntonyo walks to his macadamia trees, which grow in long, straight rows across his farm in Malawi's fertile Thyolo district.

"I do not spend a day without inspecting this farm," said Ntonyo. "What I have learned is that if I take very good care of my macadamia trees, my life will never be the same."

Five years ago, Ntonyo, along with his wife and eldest daughter, planted 300 seedlings, which were provided by Global Tea and Commodities Ltd. as part of a program to help small scale farmers become macadamia nut producers. Ntonyo's seedlings have since grown into sturdy, leafy trees that are bearing fruit—and transforming the way his family farms.

Thanks to the trees, Ntonyo has doubled his income. He earns between \$20 and \$60 a harvest—depending on weather and other conditions—and sells directly to Global Tea, one of Malawi's largest macadamia nut producers, which then exports the flavorful, versatile nuts to consumers in Africa and beyond.

Once his plantation is fully grown, Ntonyo expects his income to reach up to \$340 annually. His macadamia earnings are already

helping to pay for school supplies for his children, funding upgrades to his home, enabling him to invest in fertilizer and other inputs for his trees, and to save for the future.

"When this project was introduced, I saw that I could plant my own trees and become a company myself so that my children and grandchildren could have their own macadamia farm," he said.

While Global Tea has for years grown macadamia trees on its own farms, the company more recently adopted a strategy to bring local farmers into its supply chain and help them succeed.

Malawi accounts for 3 percent of the world's macadamia nut output and is the third largest producer in Africa. Macadamia nuts have higher earning potential than other crops, but seedlings are expensive for many smallholder farmers.

Between 2016 and 2022, Global Tea, in partnership with the Dutch government, distributed 300,000 macadamia seedlings to 3,000 farmers across Malawi's Thyolo and Mzimba Districts, where rolling hills and good growing conditions favor the growth of macadamia. Half of the 3,000 farmers in the program are women.

The company partnered with a local NGO, Development from People to People (DAPP) Malawi, to train the farmers on managing pests and plant disease, controlling erosion, and applying low-tech irrigation techniques.

"It's a win-win for both sides," said William Matapa, Global Tea's Quality Assurance Manager. "We're providing the farmers with skills training, support, and a market and plan to purchase a large volume of nuts for many years to come."

In 2023, Global Tea purchased 1,000 kilograms of quality macadamia nuts from its farmers. The company expects that number to jump to 5,000 kilograms in 2024—and within five years Global Tea believes nuts from the farmers in its supply chain could account for half its exports from Malawi.

IFC and the GAFSP backed this initiative with a \$4 million joint investment in Global Tea in 2018. The project underscores IFC's commitment to strengthening agriculture and is part of its wider work across Africa to link smallholder farmers to resources and markets

In addition to the funding for Global Tea, IFC delivered a three-year advisory program with GAFSP to support more than 2,600 farmers with financial literacy training, including guidance on record keeping, managing loans, and budgeting during crop cycles.

IFC also worked with four macadamia cooperatives in Malawi to improve their management capacity, helping them better serve and support farmers. The cooperatives will serve as aggregators, making it easier for Global Tea to purchase nuts from more small farmers. The advisory program ended in June 2023.

"Working with smallholder farmers and cooperatives is critical to build resilient agricultural supply chains in countries like Malawi, which would encourage more companies like Global Tea to invest in offtake arrangements that open new market opportunities for farmers," said Beza Hailu Woldegiorgis, an IFC Operations Officer who led the advisory program.

Even with hard work, the right support, and reliable access to markets, being a farmer isn't easy.

Beyond the daily challenges, Ntonyo and other small-scale farmers must also contend with the unpredictability of thieves and climate change. Macadamia nuts are known as a high value crop and Ntonyo has lost nuts from his trees in the night. Additionally, droughts in 2022 and Cyclone Freddy in March 2023 wiped out half of his Ntonyo's crops both years, as they did for many other farmers in Malawi.

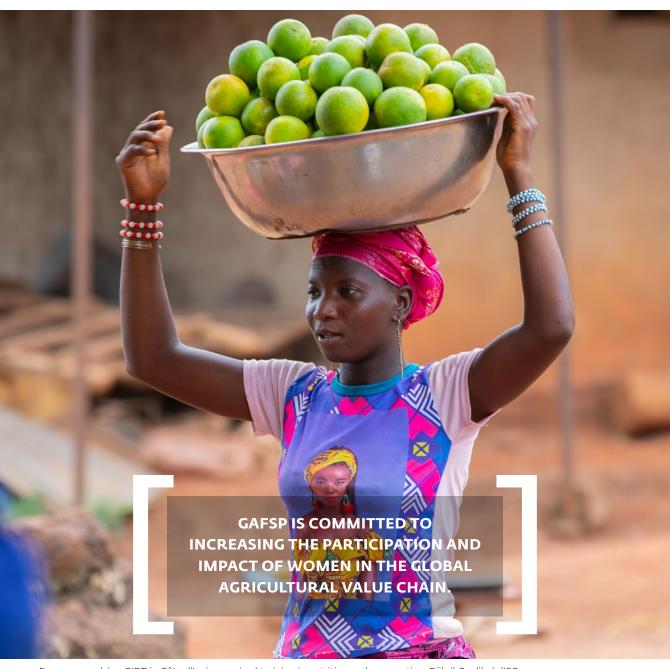
"Climate change is hitting us hard. The storm destroyed the crops and also scattered the macadamia fruits from the trees, it was painful losing everything we worked for in seconds," Ntonyo said.

IFC's financial management training is helping Ntonyo and other farmers better prepare for the unpredictable and ensure that their livelihoods are sustainable, even when threatened with serious challenges.

"I treat the trees as a business. Now I save money in the mobile account or at my bank account so that I can save more," said Ntonyo. "This new farming venture is now showing me the possibility of attaining my dream for a better life...my vision is to create what future generations will inherit from me."







Farmers supplying CIDT in Côte d'Ivoire received training in nutrition and composting. Djibril Coulibaly/IFC

Closing the Gender Gap

Women—who produce more than half of the world's food—are the beating heart of agricultural productivity.

Yet most women farmers toil in relative obscurity, shut out from land ownership, lacking market price information and agricultural inputs. They tend to have smaller plots of land and have to travel long distances to market. As a result, many female farmers are less productive and miss out on valuable earnings, money that could feed their families and educate their children.

GAFSP is committed to helping women farmers raise their productivity profile through gender related actions attached to many of our projects. To date, more than 327,000 female farmers have been reached through our investments.

Gender is now a driving force in all Private Sector Window projects. Before we agree to a new investment or advisory services project, IFC staff will undertake a thorough gender assessment as part of the appraisal process. With specialized training from IFC's gender team, our staff can help GAFSP's corporate clients understand the importance of including women in their value chain.

By allowing women the same access to agricultural resources as men, the Food and Agriculture Organization of the United Nations estimates that women's agricultural yields would increase by 20 to 30 percent over current levels. With GAFSP support, we are committed to increasing the participation and impact of women in the global agricultural value chain.



Birom Seck/IFC

Smallholder Handbook Gives Practical Guidance for Agribusiness Growth

New guide helps companies incorporate smallholders into value chains.

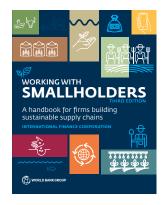
The recently published Working with Smallholders: A Handbook for Firms Building Sustainable Supply Chains (Third Edition) focuses on the role of the private sector and how agribusinesses can best engage with smallholder farmers to help drive transformation in agricultural systems, create sustainable growth and alleviate rural poverty. Through case studies and guidance for practitioners, the book highlights opportunities and challenges to help agribusinesses modernize their supply chains and operations and work more effectively with smallholders in a profitable and sustainable way.

The handbook, which is supported by GAFSP, builds on lessons learned since the publication of the previous edition, including the potential for digital technologies and increased demands for sustainable farming. The book includes chapters on agricultural technology, access to finance, partnerships, nutrition, sustainability and other key topics that highlight how to effectively work with smallholder farmers and help secure a reliable supply chain.

"The smallholder agenda is even more important now than it was in previous editions," said Alan Johnson, IFC's agribusiness advisory lead for smallholder supply chains and the project lead for the handbook. As Johnson noted, "80 percent of the world's farmers are smallholders and they play a vital role in providing food security and managing farmland sustainably."

"Engaging with those smalholders," he added, "is going to be critical if we are going to meet the 2030 goals."

You can download the handbook here.







Shoeb Faruquee/IFC



Women farmers who supply PRAN received training in agricultural best practices. Shoeb Faruquee/IFC

Making the Difference for Women Farmers in Bangladesh

Advanced training programs delivered in the South Asian nation are improving production and financial resilience across the food production chain.

When harvest season came, Selina Khatun used to walk around her mango field in the early summer morning, wooden stick in hand, whacking tree branches so hard that the ripened fruit fell to the ground. Insects would swarm the mangos, and the fall—a few meters at least—often meant that the fruit was bruised by the time it made its way to the market.

Khatun now laughs and shakes her head as she recalls her old techniques. "Everything changed after the training," she says, her smile wide.

Since the IFC-supported training on crop production and fertilizer management came to her village of Bashbaria in northern Bangladesh more than three years ago, Khatun is spending less—and earning more. As Khatun tells it, this has meant that she easily covers school fees for her two children and with the extra money, she often invites neighbors and friends to her home. "After the training, I opened my own bank account," she said.

Khatun is one of more than 110,000 smallholder farmers supplying PRAN, one of Bangladesh's largest food processors. With support from IFC and GAFSP, PRAN has been

working closely with smallholder farmers like Khatun, who have proven to be critical to the company's supply chain and have helped fuel its rapid expansion.

"For PRAN, working with farmers and providing this training means higher yields, less food loss, and higher quality products," said Md. Kamruzzaman Tito, Deputy General Manager and head of contract farming for PRAN, who forges agreements between the company and farmers before production begins.

PRAN manufactures hundreds of food items, from pickled mango and ketchup to noodles and spices and though it's a well-known domestic brand, it also exports to 145 countries. The company has 23 factories throughout the country and employs 145,000 people directly, in addition to an estimated 110,000 contract farmers who supply the company's factories.

As part of the IFC-supported program, trainers work closely with farmers, teaching proper use of pesticides, more efficient harvest techniques and safe storage systems so that famers, for example, learn to place ripe mangos on a sheet or straw, rather than soil, immediately after harvest. Md. Shoriful Islam,

a mango and tomato farmer who supplies PRAN, used to spray pesticides on the buds of flowering fruit trees, but he's since learned that soap and water—cheaper, and more sustainable—is just as effective and also safer. "This knowledge has made a big difference," he said. Islam, a volunteer trainer for PRAN, says that the nearly 70 farmers he trains "will show up for lessons no matter what time of the day. They are very enthusiastic," he said.

Agriculture is critical to Bangladesh's economy. Though it accounts for less than 12 percent of the country's gross domestic product (GDP), it constitutes the bulk of employment opportunities in rural areas, particularly for women.

Gender inclusion is therefore critical to the training. In addition to agricultural best practices and integrated pest management, women farmers in the program learn bookkeeping and basic accounting, alongside health and nutrition. Farida Parveen, a mango, rice and sesame farmer, says that more sustainable and effective agricultural practices have increased her income by 30 percent—and have helped her family withstand soaring inflation and rising food costs. But more significantly, Parveen says, she is now able to track costs for animal feed, fertilizer, and other agricultural inputs and has also taken over her family's finances.

"I trained my husband, which makes me very proud," she said, standing under the shade of a sprawling mango tree. "Before, he talked, and I listened. Now we both teach each other."

In addition to the farmer trainings, IFC also works closely with PRAN management to boost food safety within the factories





GAFSP worked closely with PRAN management to boost food safety. Shoeb Faruquee/IFC



Farida Parveen and Selina Khatun holding the mangoes they harvested. Shoeb Faruquee/IFC



by implementing good hygiene and manufacturing practices. Together, they've ensured proper protective gear, taken precautions to eliminate cross-contamination. and instituted the exclusive use of sanitized water throughout the product line—from fruit juices to chocolate. With IFC's guidance, PRAN now lists allergens on all its packaging and an on-site laboratory regularly tests for metal, aflatoxin—a mold growing carcinogen—and other contaminants. IFC has also helped the company install temperature control mechanisms—which keeps employees cool and food safe—while a traceability program means that problems along the factory line can be located and contained.

"IFC has had a very clear role in our growth, because without adequate food safety, you can't export," said Md. Hazrat Ali, general manager of PRAN's factory in the Natore region. "We've grown by more than 200 percent since we first began working with IFC."

Indeed, as IFC wraps up its farmer training program and looks to launch another IFC and GAFSP-supported food safety initiative, both farmers and PRAN management alike agree that there's still work ahead. As Islam, the volunteer trainer and farmer, said recently, ripe mango in hand, "learning is a neverending process."



Dominic Chavez/World Bank

Food Loss Calculator Helps Companies Reduce Crop Loss

An innovative online tool is promoting climate-smart agriculture

A newly released online tool is estimating the greenhouse gas and cost savings associated with reducing food losses and helping companies prioritize interventions that reduce crop losses across their supply chains.

IFC's **Food Loss Climate Impact Tool**, supported by GAFSP, IFC and the Government of the Netherlands, and developed in partnership with Carbon Trust, quantifies GHG emissions broken down by value chain phase for 50 crops in 117 emerging markets.

FAO estimates that annually 1.3 billion tons of food is wasted, resulting in emissions of more than 4 Gigatonnes of CO2 equivalent—an amount greater than what all countries, other than the US and China, emit annually.

"Reducing food loss is a critical priority in climate smart agriculture," said Ahmad Slaibi, an IFC Senior Industry Specialist who helped spearhead the tool's development. "When food is lost between farm and fork, the energy, water, fertilizer, and other resources along the value chain that went into producing this food are wasted as well."

Given that most food loss and waste in developing countries occurs post-harvest, the greatest potential for reduction is investment in infrastructure related to storage, transport, cold chains and distribution, together with skill development. Slaibi also noted that when food is discarded, it often decays, generating methane - a potent greenhouse gas.

The calculator will therefore be an important tool for firms operating in or sourcing from developing countries to help them estimate their scope 3 emissions and prioritize interventions that reduce crop losses, boost food security and build a more resilient and sustainable global food system.

Explore the new tool here.





Yarn Soveit/IFC



Farmer Remzi Bala on his family homestead in central Kosovo. Photo courtesy of KEP Trust

In Kosovo, Microfinance Expands Herds—And Hopes

Microfinance institutions are expanding their support to smallholders in underserved rural areas.

As a young farmer with a small family homestead in central Kosovo, Remzi Bala had one old tractor and no livestock. He struggled to make the farm productive, let alone profitable.

That changed in when he applied for his first loan with KEP Trust, a leading microfinance institution in Kosovo. His initial loan in 2017—just 1,000 euros—helped him purchase a few young cows, while his second, a year later, helped him buy a more reliable tractor. A few years later, when COVID-19 was raging and his country was emerging from lockdown, the funding helped boost his herd size to seven dairy cows and two beef cows.

Bala is now in the process of repaying his fourth loan, and with an output of more than 250 liters of milk a day, he's more than doubled his production from just three years ago.

"There is no doubt that the financial situation in my family has improved since we now have more income," he said recently from KEP offices in Pristina.

Bala is one of an estimated 3,500 farmers now receiving a loan from KEP, which together with Agency for Finance in Kosovo (AFK) and Kreditimi Rural i Kosoves LLC (KRK), two additional microfinance institutions, are

supported by IFC and GAFSP. A €23 million investment last year is helping these three microfinance institutions expand their support to smallholders and small businesses in Kosovo, particularly in underserved rural areas.

"Small farmers in Kosovo have difficulty accessing finance and navigating the banking system," said Vahdet Anadolli, CEO of AFK. "Access to finance is critical for creating jobs, but traditional banks see the agricultural sector as too risky."

Agriculture is critical to Kosovo's private sector development, and though it accounts for an estimated 10 percent of GDP, agricultural loans represent just 2.1 percent of outstanding banking sector loans.

Lulzim Sadrija, the CEO of KRK, says that the country's thriving microfinance institutions play a critical role in serving rural communities. Many would-be clients lack financial literacy or sufficient lending history to navigate financial bureaucracy, and with little to offer as collateral, they are shut out of the formal banking sector. KRK therefore simplifies the loan process for clients who are unable to provide balance sheets and other regulatory information. For many farmers, a small loan helps build credit so that they can turn to formal banking institutions at a

later point, equipped with credit history. "Our lending starts at 200 euro and goes all the way to 25,000 euros," Sadrija said. "We are flexible and give farmers opportunities that traditional banks cannot."

Many clients appreciate the flexibility. Shpresa Hyseni received a 5,000 euro loan from KEP and the process took just a few days, with "very little paperwork," she noted with a smile. Hyseni used the loan to expand her farm in northern Kosovo, from just two cows to a dozen. The extra income has helped the family secure a comfortable home, while also sending their son to school. "We didn't have much income when we started our business and now, we have plans to expand and even double the size of our herd," she said.

According to Muharrem Krasniqi, KEP's Head of Agro Lending, Hyseni is typical of their agricultural clients—most of whom use the loans for small, incremental investments that have significantly improved lives and livelihoods. "Our loans can't help farmers build a new barn or buy a large plot of land, but it can help them make small and important changes—whether it's enlarging a stable, building troughs for their herd, or buying more cows."

Kosovo, a potential candidate for European Union membership, with a population of 1.8 million, has experienced solid economic

growth over the past decade, but remains one of the poorest countries in Europe. Microfinance has been critical to the country's post-war rebuilding, AFK's Anadolli said. "The whole country had been destroyed and microfinance helped provide financial support to unbankable clients to build their businesses and move forward."

The three financial institutions were hit hard by COVID-19, however: In March 2020, the Central Bank of Kosovo issued a moratorium for all clients of financial institutions, which prohibited them from collecting any payments due. Their business cycles came to a halt for nearly two months, though they resumed operations in mid-May as the country began easing restrictions. IFC worked closely with institutions throughout that period, delaying repayment of IFC's own loans and working with senior management on a crisis response strategy to help navigate the pandemic.

The strategy is working: Kosovo's microfinance sector is stabilizing, which is good news for Bala and his family. He recently purchased a tractor and a few more cows and has plans to invest in more modern farm equipment. "The well-being of the whole family has improved," he said, "and I am inspired to continue my professional development."

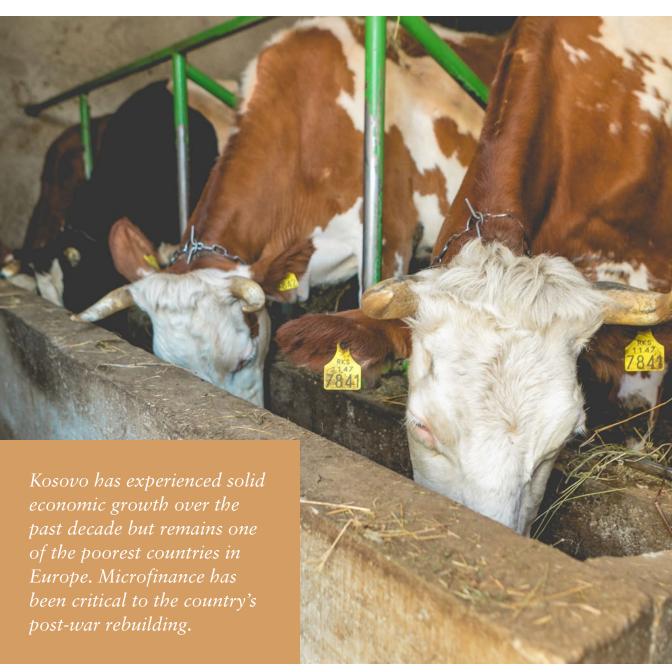


Photo courtesy of KEP Trust



Shoeb Faruquee/IFC

Supporting agribusiness and agri-finance projects that commercial investors deem too risky is what GAFSP Private Sector Window does best.



Global Agriculture and Food Security Program (GAFSP) is a global effort that pools donor resources to fund programs focused on increasing agricultural productivity as a way to reduce poverty and increase food and nutrition security. The Private Sector Window, managed by IFC, and supported by the governments of Australia, Canada, Japan, the Netherlands, the United Kingdom and the United States, provides long and short-term loans, credit guarantees, equity, and technical assistance to private sector companies and financial intermediaries. It links smallholder farmers to markets by improving their access to finance, technology, expertise and inputs.

International Finance Corporation, a member of the World Bank Group, is the largest global development institution focused exclusively on leveraging the power of the private sector to tackle the world's most pressing development challenges. Working with private enterprises in more than 100 countries, IFC uses its capital, expertise, and influence to help eliminate extreme poverty and promote shared prosperity.

For more information, visit www.gafspfund.org or www.ifc.org/GAFSP.

Edited by Daphna Berman. Stories by Daphna Berman, Devon Maylie, Zena Afework, Camille Funnell, Ahsan Z Khan, and Ivy Kuperberg



