





PRIVATE SECTOR SOLUTIONS FOR HELPING SMALLHOLDER FARMERS



# Changing Lives:

Private Sector Solutions for Helping Smallholder Farmers



A sorghum farmer in Kenya, protected by Pula insurance. Courtesy of Pula Advisors

### **Contents**

Foreword	7
The Challenge	13
Private Sector Solutions	15
Advisory Services	17
Raising Agricultural Productivity & Improving Climate Resilience	19
Paddies to Plates: Cambodia's Journey Towards Sustainable Rice Production	21
Inclusive Business & Gender	25
In Zambia, A Training Program is Planting the Seeds of Resilience	27
Empowering Leaders and Transforming Agriculture, One Supply Chain at a Time	33
Insuring the Future: Pula's Mission to Secure Smallholder Livelihoods	37
Closing the Gap	41
Increasing Nutritional Intake & Adoption of High-Yield and Innovative Technology	43
Better Seeds, Better Futures	45
Making the Difference for Women Farmers in Bangladesh	51
Improving Access to Finance	57
In Kosovo, Microfinance Expands Herds—And Hopes	59



Reung Siroth, a GAFSP-supported rice farmer in Cambodia. Yarn Soveit/IFC

### **Foreword**

# Building private sector opportunities in the world's most challenging markets

We met Reung Siroth this past spring in Cambodia's Banteay Meanchey Province, standing amidst black earth and the small, two-hectare rice field that he's cultivated for most of his life.

Until recently, Siroth burned his rice fields at least twice a year and relied on traditional farming methods, many of which emitted high levels of greenhouse gas. Recently, though, he switched to more sustainable practices, which have opened new markets and boosted his modest income. "Being part of this project is good for the environment," Siroth said, "but it's also good for me."

Through support from the Private Sector Window of the Global Agriculture and Food Security Program (GAFSP), Siroth participated in a training program, where he learned about water-efficient irrigation techniques and other climate-smart agricultural methods—all of which enable him to sell his paddy to a nearby mill that supplies to Mars Food & Nutrition, the global food conglomerate. For farmers like Siroth, access to training and markets is more than just an economic opportunity—it's a pathway to long-term resilience.

Siroth's rice will eventually make its way to grocery stores across Europe and North America—a win-win for both smallholder farmers and the companies they supply, which increasingly need supplies of sustainably sourced rice.

"By advancing sustainability in Cambodia's rice sector, IFC is making the country more attractive to international buyers," Inge Jacobs, Global Sustainable Sourcing Lead for Mars Food & Nutrition, said of the project.

That linkage—made possible by GAFSP—is an important reminder of our mandate. And it highlights our unique ability to provide private-sector solutions that help smallholder farmers who are tasked with feeding a growing world despite the many challenges they face.

In these pages, you will meet GAFSP beneficiaries from nearly a dozen countries, united by a common determination to forge a better future for themselves and their families. These farmers benefit from GAFSP-supported investment and advisory programs, which help the world's rural poor navigate the compounding challenges of extreme weather, surging input prices, and the difficulties they face in boosting yields and accessing markets.

From Bangladesh to Zambia, we're strengthening smallholder-based value chains— increasing access to hybrid seeds, improving climate-smart training, ensuring food safety, and boosting the private sector as an engine of growth and development.

Since our program began in 2011, GAFSP's Private Sector Window, in collaboration with IFC, has approved investments totaling \$505 million to support 93 agribusiness projects in 29 countries. Additionally, we have supported \$54 million in 106 advisory projects across 35 countries.

GAFSP builds on IFC's deep commitment to fostering markets and unlocking private sector opportunities in some of the world's most challenging places. This includes support for early-stage or high-risk projects with significant potential for development impact and long-term sustainability in areas where it is needed most. Central to our approach is the conviction that concessional funding should serve as a temporary catalyst, 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.

In this edition, you'll meet farmers like Siroth, as well as others like Monica Chikonkoto (cover), a smallholder in central Zambia, who said that GAFSP-supported training is helping her family better prepare for drought. You will also meet Gladys Clement, a cotton farmer along the western shores of Lake Malawi, whose access to improved cotton seed—thanks to a GAFSP investment in Mahyco International—has helped boost her yields. 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 continue to accelerate initiatives that support smallholder farmers, their families and their communities.

As we navigate the complexities of global food security, the importance of sustainable agriculture cannot be overstated. Our commitment to supporting smallholder farmers like those you'll meet in these pages remains unwavering. Through the support of our global partners, we're continuing to build resilient agricultural value chains to help build a more food-secure future, one farmer, one field, and one community at a time.

#### Niraj H. Shah

Principal Investment Officer Program Manager, GAFSP Private Sector Window Working together with our donor partners—the governments of Australia, Canada, Japan, the Netherlands, the United Kingdom, and the United States—we continue to accelerate initiatives that support smallholder farmers, their families, and their communities.



Niraj H. Shah with Ly Thoeurt, deputy head of a GAFSP-supported cooperative in Cambodia.. Yarn Soveit/IFC

# 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 & KNOWLEDGE 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 highyield 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 4.7 million farmers.



A smallholder farmer in Laos tends to his garden on the banks of the Mekong River. Bart Verweij/IFC

## 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 formal 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 food insecurity, extreme weather, and 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 smallholder 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.



Pula insurance helps this Zambian maize farmer protect his harvest. Courtesy of Pula Advisors

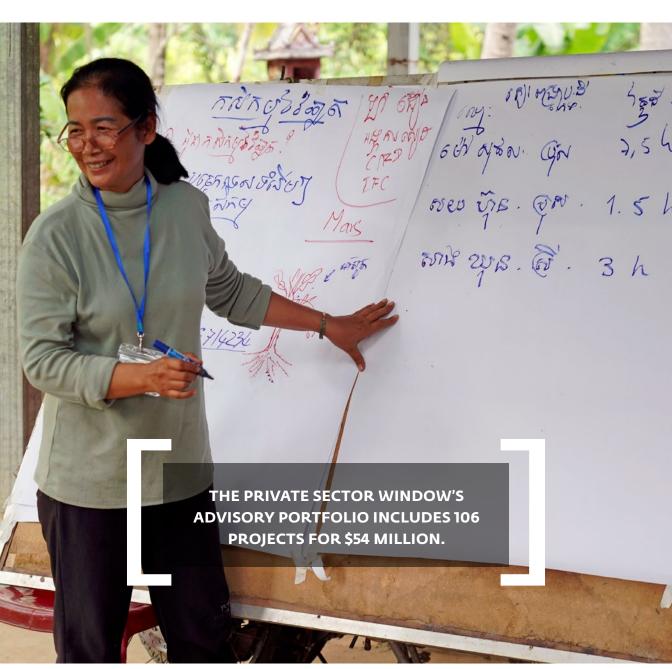
### Private Sector Solutions

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: farm inputs, logistics, storage, 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. GAFSP has approved \$505 million in 93 agribusiness investment projects in 29 countries.

In addition, we have supported 106 advisory projects in 35 countries for \$54 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 the effects of extreme weather. Read more about our Advisory Services on the next page. GAFSP is making a difference, one innovative investment at a time.



In Cambodia, a GAFSP-supported training is helping smallholders improve their farming practices. Yarn Soveit/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 \$54 million. Our work spans the globe, with active projects in 35 countries, including Zambia, where we are working closely with agricultural cooperatives throughout the country, training farmers to more effectively manage their farms and households in an effort to boost resilience and strengthen local food systems.

We are also working in Cambodia, where a GAFSP-supported advisory project is helping smallholders improve their farming practices and connecting them with international markets that source high-value, sustainable rice.

And in Haiti, as part of the Agribusiness Leadership Program (ALP), we are connecting Haitian smallholders to a leading fruit and vegetable wholesaler working to increase productivity among the country's farmers.



Chifwembe Nsofu, a GAFSP-supported smallholder farmer in Zambia's Chibombo district. Chloe George/IFC





Reung Siroth, a GAFSP-supported farmer, on his rice field in Cambodia's Banteay Meanchey province. Yarn Soveit/IFC

# Paddies to Plates: Cambodia's Journey Towards Sustainable Rice Production

A partnership with Mars Food & Nutrition, the global food conglomerate, is helping smallholders improve their farming practices and connecting them with buyers that source high-value, sustainable rice.

Squatting to survey his fields, Reung Siroth digs his hands into the moist soil and inspects the black earth at his feet. He has spent the morning ploughing and harrowing, a process of aeration that grinds the field into finely churned particles, which improves soil health after the rice harvest.

Around him, fields are covered in ash. In some, smoke still billows from the remains of charred and discarded rice straw. Siroth used to burn his fields too, sometimes up to three times a year, but that's since changed.

"Those are the farmers that didn't get the training," he said, gesturing at the neighboring fields. Rice burning—a traditional practice across Cambodia and much of Asia— clears fields of crop residue, but it also releases greenhouse gases, and has a range of negative environmental impacts. But Siroth recently learned about sustainable alternatives that maintain soil moisture and nutrients—and readily made the switch.

This change—as well as others he's instituted on his two-hectare rice field— has made him eliqible to sell his unmilled paddy to the

Battambang Rice Investment Co. (BRICo), a nearby rice mill that supplies to Mars Food & Nutrition, a global business with some of the world's leading food brands within Mars, Incorporated. "Being part of this project is good for the environment," Siroth said, "but it's also good for me."

IFC, with support from GAFSP, is training farmers like Siroth across Cambodia as part of an advisory services project that aims to improve their farming practices and connect them with international markets that source high-value, sustainable rice. The program has also provided farmers with quality seeds so that the paddy they produce is compliant with the Sustainable Rice Platform (SRP) standard for sustainable rice cultivation, a voluntary sustainable rice cultivation, a voluntary sustainability standard that promotes climate-smart agriculture, supports smallholder farmers, protects biodiversity, and boosts access to high-quality rice.

#### Connecting farmers to global markets

The training—and access to higher quality rice seed—is creating opportunities for Siroth's family. And a more reliable supply

chain is also helping Mars Food & Nutrition, a longstanding IFC partner and leading global food company, make progress towards its sustainability targets. Mars Food & Nutrition sources most of its rice from farmers who are in the process of working towards the SRP standard. In the coming years, it's aiming to increase its volumes of SRP rice from farmers who have completed the process and attained full SRP certification.

"Our partnership with IFC means that farmers can be trained on sustainable rice production and we have boots on the ground to ensure we're getting high-quality SRP-certified rice in our supply chain. By advancing sustainability in Cambodia's rice sector, IFC is making the country more attractive to international buyers," said Inge Jacobs, Global Sustainable Sourcing Lead for Mars Food & Nutrition.



Reung Siroth plowing and harrowing his field, which improves soil health after the rice harvest. Yarn Soveit/IFC.

IFC partnered with BRICo, also an IFC client. in 2018 to develop a climate-smart, traceable, and inclusive supply chain for Mars Food & Nutrition. IFC's support to agricultural cooperatives, which includes training on seed multiplication, pest management, postharvest practices, climate-smart agriculture, and financial skills, has helped ensure that the paddy these farmers sell to BRICo meets Mars' quality requirements. The project has also introduced farmers to fragrant jasmine rice, a higher-value alternative to the plain white rice that many local farmers routinely grow. Mars Food & Nutition sources the fragrant varieties for its popular brand of Ben's Original™ rice.

#### Strengthening Cambodia's rice sector

Rice, a staple food for Cambodians, is critical to agriculture in the country and though the sector is growing consistently, trends were disrupted during COVID-19, when shipping costs soared, and the country's exports dropped by 29 percent. Agriculture contributes 22 percent of Cambodia's country's gross domestic product (GDP), according to World Bank estimates.

IFC has been working in Cambodia's rice sector since 2011, helping to address ongoing challenges in the supply chain by improving paddy quality, increasing milling efficiency, enhancing food safety, and boosting Cambodian rice exports. In more than a decade of working in the rice sector, IFC contributed to a sixfold rice export increase from 100,000 metric tons in 2010 to more than 656,323 in 2023. Building on that, IFC, with the help of GAFSP, also provided investment funding and technical support to Cambodia's leading producer and exporter of

organic rice, AMRU Rice, which expanded its processing capacity with the establishment of a state-of-the-art rice mill and helped the company adopt sustainable farming standards and practices in its supply chain.

"By identifying international buyers like Mars Food & Nutrition, we've been able to create a good market for farmers, who are motivated to adopt sustainable cultivation practices and produce high-quality paddy—and that's having a significant positive impact on the sector more broadly," said Alan Johnson, IFC senior operations officer and project lead.

Though the first stage of the project has ended, Mars Food & Nutrition has partnered with IFC for a follow up project, which is extending the existing sourcing partnership. The new phase of the project is also providing additional training on income diversification, with a focus on women farmers, and further boosting cooperative management capacity.

For farmers like Siroth, the ongoing partnership is good news. The extra income from last year's harvest helped cover the family's school fees, and he's eager to continue learning new methods. In previous years, Siroth recalls, the ground beneath him was so uneven that water sometimes reached his ankles, and sometimes his knees. Access to laser leveling for his fields has helped reduce water consumption and ensure more efficient fertilizer use—and is critical to ensuring that his paddy ends up in Ben's Original™ products in grocery carts on the other side of the world. "I've been a rice farmer for 20 years," he said, "and I'm still learning."



A GAFSP-supported smallholder in Malawi received training as part of the Global Tea project. Bennie Khanyizira/IFC





Monica Chikonkoto, Ruth Mukopali, and Sibongile Matambo are beneficiaries of a GAFSP-supported training. Chloe George/IFC

# In Zambia, A Training Program is Planting the Seeds of Resilience

The project is helping smallholders more effectively manage their farms and households in an effort to strengthen local food systems.

As she watched her field of maize and soybeans wither earlier this year, Monica Chikonkoto braced herself for the lean months ahead. Like other smallholders across Zambia, Chikonkoto's crops are entirely rainfed, and with no expectation of rain, she'd have nothing to harvest—a "total loss," as she put it.

In previous years, a drought would have been catastrophic for her family of four, but last year, Chikonkoto built a small chicken coop behind her home in Chibombo, in Zambia's central province.

"Because of the training, I knew to diversify and prepare in case of drought," she said recently, munching on freshly uprooted cassava during a rare afternoon break.

The chickens—and a small vegetable garden she had also learned to plant— were a lifeline for her family, as they navigated extreme climate, unpredictable rainfall, and a precarious food system that defines life for much of the country's estimated 1.6 million smallholder farmers.

Chikonkoto, and the other members of her local cooperative, are better prepared for managing these obstacles because of a training program supported by IFC and ETG, a global agricultural conglomerate with operations across more than 50 countries, including 32 countries in Africa.

The advisory project, which is supported by GAFSP, is working closely with agricultural cooperatives throughout the country, training farmers to more effectively manage their farms and households in an effort to boost resilience and strengthen local food systems. IFC and ETG are working with farmers across ETG's maize and soybean supply chains to enhance sustainability, improve last mile distribution of inputs such as fertilizer, and increase market linkages for smallholder farmers.

Launched in 2022, the program is aiming to reach nearly 30,000 smallholders in Zambia and Malawi by 2026. It's currently being rolled out in Tanzania and Mozambique.

#### Training farmers on financial management

When the training came to Chikonkoto's cooperative two years ago, the effects were transformative: "It opened my mind," she said.

IFC is also working closely with ETG's own staff to train and coach key intermediaries including agro dealers and village-based agents as part of a strategy to boost ETG inputs like seeds and fertilizer, as well as increase their network of



Alex Mutinta Mainza and Thandiwe Mainza, a husband and wife who co-own and manage Muboto Agro. Chloe George/IFC



farmers who ultimately sell their crops back to the company.

Many farmers say that lessons around "farming as a family business" have been particularly crucial.

Chikonkoto, for example, said that learning to budget and keep records has meant that her family isn't using funds allocated for fertilizer or seeds to cover household expenses. By teaching farming as a business—rather than a way of life—the training helps her stay accountable. Chikonkoto's family now meets at the start of every month to outline the costs ahead. "In past years, the rainy season would approach, and I would start to panic because I had already spent the money that should have been set aside for the fields," she said. "We had no system, so we spent money on whatever comes. Now I am happy because we can acquire inputs on time."

Farmers also say that for the first time, they're keeping track of farming income—which helps in planning for the future. "In the past, I wouldn't know whether I made a profit or a loss," said Chifwembe Nsofu, another smallholder farmer in Chibombo. Now, when she's had a good month, she knows it, "and that helps grow my business."

### A longstanding partnership for farmer support

IFC and ETG have a long-standing relationship, with both investment and advisory projects dating back to 2010. In 2021, IFC, with support from GAFSP, extended a US\$30 million loan, providing working capital liquidity support during the COVID-19 crisis, when numerous banks withdrew support from emerging markets and commodities

traders. Most recently, in 2024, IFC made an additional investment in ETG to support the company's agricultural commodities and fertilizer trade operations in Africa.

For ETG, working with IFC is therefore a natural fit. "Working with a partner like IFC is mutually beneficial," said Himanshu Shah, deputy general manager for ETG's treasury department. "Both organizations have a desire to enhance the livelihood of farmers, and supporting emerging farmers in Africa has always played a key role in ETG's strategy."

The program, which operates in two provinces in Zambia and two districts in Malawi, also includes training to agricultural input dealers, who are the main conduits for ETG's commercial fertilizer and seed business. The training strengthens their business analytics, budgeting, inventory monitoring, and planning skills.

Alex Mutinta Mainza and Thandiwe Mainza, a husband and wife who co-own and manage Muboto Agro, a seed and fertilizer distributor, said that the training has allowed them to create a one-stop shop that gives farmers everything they need. They have created a network of last mile retailers that are giving

farmers much-needed access to high-quality inputs, alongside extension services to farmers. And it's working: they've grown from serving 500 farmers a month to 20,000 farmers across eight stores, employing 13 people in the process.

"Before, farmers would come, sign in a book and take their inputs, but we had no way of monitoring the credit," Alex said. "The training opened my mind and made me realize that to grow bigger, I needed proper documentation."

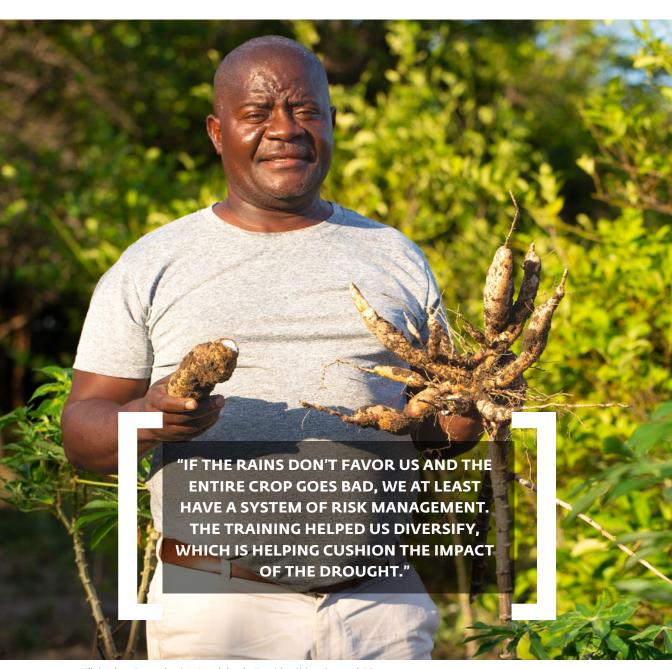
They still extend credit to neighbors and farmers they know, he said, but farmers now sign an agreement specifying the loan amount—and the timeframe during which they need to return the payment.

"Business is risky and you never know the outcome, but the knowledge they gave us has helped us embrace a new vision, with the potential to keep growing," his wife, Thandiwe added.

She surveyed her shop, filled with visitors on a recent afternoon, who had come to learn more about their success. "This is what happens when you put your house in order," she said, smiling.







Elijah Nirenda received ALP training in Zambia. Chloe George/IFC

# Empowering Leaders and Transforming Agriculture, One Supply Chain at a Time

The Agribusiness Leadership Program (ALP) is helping agribusinesses around the world improve their operations, access new markets, and do more for the communities and smallholder farmers in their supply chains.

By his own admission, Kouassi Yao Hervey's cocoa cooperative in Côte d'Ivoire used to be in total disarray: The division of labor was unclear, the cooperatives' finances were a mess, and "everyone stepped on each other's toes," he recalls.

That all changed when Hervey enrolled in the Cargill Coop Academy in 2016, an educational program for cocoa cooperative managers that attendees describe as a cross between a mini-MBA and an organizational boot camp.

What followed—a transformation he likens to a "rebirth"—has allowed his cooperative to grow in the many years that have followed. "The Coop Academy compelled us to build a structure, which not only changed our lives, but also the lives of the farmers," he said.

The Academy, in partnership with leading global cocoa producer Cargill, is part of IFC's Agribusiness Leadership Program (ALP), a training and coaching program that helps agribusinesses around the world improve their operations, access new markets and financing, and do more for the communities and smallholder farmers in their supply chains.

Since its creation in 2016, ALP, which is supported by GAFSP, has reached more than one million smallholder farmers across nearly 20 value chains in sub—Saharan Africa, Latin America, and Asia. It's currently operational in 23 countries, including Côte d'Ivoire, where Hervey first enrolled in the training. The program includes a rigorous training and coaching program to professionalize farmers and employees throughout a company's operations, which is helping IFC clients create more successful and sustainable commercial enterprises.

"Agriculture is at the heart of rural livelihoods and food security. As the world's population grows, climate change, conflict, and other shocks mean that agribusinesses need to become more efficient, resilient, productive, and professional than ever," said Alan Johnson, IFC's lead for smallholder supply chains in agribusiness. "Providing skills that help farmers manage their businesses more effectively and make more informed decisions in the market gives our clients the tools they need to succeed."

#### Building skills, strengthening supply chains

ALP aims to create sustainable commercial. enterprises and is customized for various supply chains and country-specific challenges. In Ethiopia, for example, the program helps develop and grow the barley supply chain, helping farmers supply more and betterquality grain. In Cambodia, ALP introduced more sustainable farming practices to rice farmers and helped connect them with international markets that source highvalue, sustainable rice. And in Nicaragua, the program helped farmers plant nutritious, drought-tolerant pastures, so that their livestock would have more reliable access to quality forage and water, regardless of the season.

Marvin Tercero, a farmer along Nicaragua's remote Caribbean coast and recipient of ALP training, said that healthier cows—and a 27 percent increase in total milk production—allowed him to invest in a biodigester, which converts manure into gas for cooking and also generates bio-fertilizer that he uses on his pastures, helping him avoid additional fertilizer costs. "We don't need to cut down or burn trees anymore," he said.

In a typical ALP project, the IFC project team conducts a baseline assessment of the agribusiness, and then designs a capacity-building program tailored to learners' needs, assessment scores, sector, and education levels. Capacity building usually involves a combination of in-person training, coaching, and digital learning opportunities. At the end of the project, agribusinesses are reassessed using the same assessment tool.

In Zambia, Elijah Nirenda said that ALP helped teach him and the other members of his cooperative skills related to financial literacy, farming as a family business, and how to better budget. "I've learned that I can't divert money from school fees to fertilizer or from chicken feed to water supply," he said recently. "At the beginning of the planting year, I set aside money for fertilizer, seeds, insecticides, and all of my inputs—and then stick with my budget."

He said that the training has also taught the smallholder farmers in his cooperative how to better navigate the country's recent drought. "If the rains don't favor us and the entire crop goes bad, we at least have a system of risk management," he said. "The training helped us diversify, which is helping cushion the impact of the drought."

Though ALP began as a face-to-face capacity-building program, it has more recently evolved to include blended learning, combining in-person training and coaching with opportunities for digital skill building, including **free offerings** on the World Bank's Open Learning Campus. In Nicaragua, for example, training also featured agronomist-led WhatsApp groups and a call center

#### A win-win for farmers and agribusinesses

By investing in leadership development, the program is shaping a new era for farmers—and better trained, more professional farmers means a more reliable supply chain. "The partnership with IFC and local farmers is helping us manage our value chain and guarantee access to high-quality produce," said Jean Robert Estime, director of



In Haiti, ALP is shaping a new era for farmers. Nadia Todres/IFC

GreenFresh, a Haitian firm specializing in the production and commercialization of high-quality produce that received ALP training.

GreenFresh requires a stable, predictable, and local source of high-quality fruit and vegetables to sell to supermarkets, hotels, and restaurants—so it's a win-win for both the company and the farmers in its supply chain.

Kettelie, a tomato farmer from the mountains high above Port au Prince, said that the training has boosted her income—and her

faith in her country. "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," she said. Kettellie is being identified by her first name only because of security concerns.

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."



A Kenyan smallholder, who is insured by Pula, sorting mung beans. Courtesy of Pula Advisors

# Insuring the Future: Pula's Mission to Secure Smallholder Livelihoods

An interview with Rose Goslinga, president and co-founder of Pula Advisors, on agricultural insurance and the transformation of livelihoods in Africa and beyond.

Rose Goslinga didn't start out thinking she would run a business — but today, she is the co-founder and president of Pula, an agricultural insurance and technology company that designs and delivers insurance and digital products to help smallholder farmers in Africa and other emerging markets manage risks and boost their income. Since its inception in 2015, IFC-investee Pula has partnered with over 70 insurance companies, 20 reinsurance companies, and 100 distribution partners across the globe to reach more than 15 million farmers.

Agriculture insurance provides farmers with financial protection against production losses caused by natural events, such as drought, excessive rainfall, pests, and diseases. In this interview, Goslinga discusses the seed that led her to launch her business, leading a team to thrive, and increasing startup funding for women founders.

### How did you start your entrepreneurial journey?

**Rose**: I come from a family of missionaries and doctors. I remember when I told my father I wanted to study economics, his response was: "You want to make money?" But I've always been interested in finance, and in my first job

as an economics fellow in Rwanda's Ministry of Agriculture, all my pet projects were about how to get banks to lend to agriculture. At some point my boss said, "You know Rose, it's great to do finance but we can never really do agriculture finance without insurance." That planted a seed for me.

#### What inspired you to become an entrepreneur?

Rose: I started the first agriculture insurance pilot in Rwanda. After that, I started the insurance program for the foundation of the Swiss agribusiness Syngenta, growing their project from 185 to 185,000 farmers. Working on these projects made me realize that I was passionate about this and wanted to reach even more farmers.

When I started Pula in 2015, my co-founder and I didn't have money and we didn't raise any money for the first three years. We were really focused on what the business model would be and how the business would make money long-term.

It's been a lot of twists and turns. Startup life is a rollercoaster, but Pula insured six million farmers in 2023 alone, bringing our number to million farmers since we started.

### What has Pula achieved that you are most proud of?

**Rose**: Our company has a unique model. I think that is what I'm most proud of. Agriculture insurance in developing markets has struggled. The textbooks have usually failed. So, we needed to write our own textbooks, so to speak.

For example, we develop insurance for smallholder farmers, but we do not sell directly to farmers. We develop insurance products, but we do not take on insurance risk. We develop comprehensive crop insurance against all risks. All these things were unheard of or were considered impossible.

To achieve this, our teams push to get banks, agribusinesses, and governments to sign up the farmers they work with. My team members take flights in the middle of the night to sit across from ministers of agriculture in the afternoon. Our actuaries work around the clock to ensure insurers are comfortable with our risks.

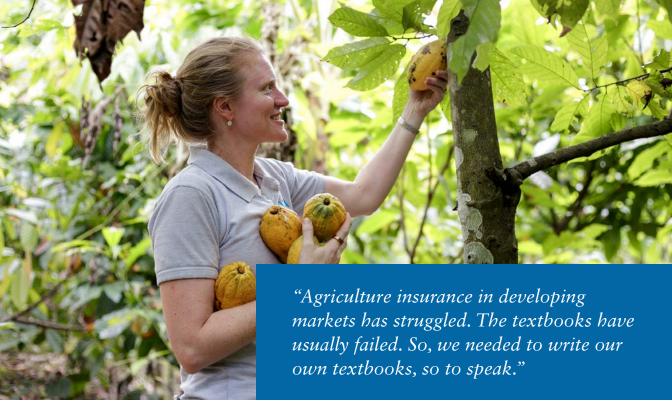
We welcome nonconformists, allow them to thrive and achieve the impossible, and reward them well

# Pula received funding from TLCom Capital's fund TIDE, which has a goal of increasing financing for women entrepreneurs. Why is this important?

Rose: I deeply believe in diversity of minds and perspectives to build solutions. Diversity comes from people with different backgrounds. Background for me can be culture, education, gender, or country. Having different perspectives around the table when you must solve difficult problems is very valuable because you're more likely to find the



Fiona Hoffman-Harland, Director of Strategic Partnerships and Growth at Pula Advisors (left) speaks with GAFSP's Lead Operations Officer Bheeshm Chaudhary.



Rose Goslinga on a cocoa farm in Ghana. Courtesy of Pula Advisors

solution. So, for me, having women and our perspective around the table is just naturally valuable when we're solving hard problems.

# What more can the private equity and venture capital sectors do so that women have the same access to funding?

Rose: I've always felt I needed to be double sure that what I was doing would make sense and make money. We tend to be more careful but that also makes us less visible and less 'daring' as compared to our male counterparts. But I've always felt that you have to use your weaknesses to your advantage. Being conservative and careful can also be seen as being robust and trusted. For the sector, my suggestion is that investors make the effort to get to know founders, sit down with them, tease out their achievements. It may take more time to find

female founders, but I believe that it will be certainly worth the effort.

### What is your message to other women entrepreneurs?

**Rose:** I never think that because I'm a woman I can't do something. I come to my meetings, work, and job prepared and I find that as long as I'm prepared, I can overcome anything that the world throws at me. Being prepared is a great skill. Do it and you will rarely fail.

IFC has invested in Pula through its investment in venture capital fund TLCom Capital's TIDE Africa fund with support from the We-Fi blended finance facility and with a direct investment together with the GAFSP Private Sector Window announced in March 2024 in Pula's Series B fundraise. This story was originally published on the IFC platform in June 2024.



In Malawi, a GAFSP-supported project provided financial literacy training to macadamia farmers. Bennie Khanyizira / IFC

## Closing the 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.



GAFSP-supported farmers carrying bags of rice in Cambodia's Banteay Meanchey Province. Photo: Yarn Soveit/IFC.





Usha Barwale Zehr, Mahyco's Director and Chief Technology Officer. Anshuman Akash/IFC

## Better Seeds, Better Futures

A partnership with Mahyco International is building resilience for smallholder farmers.

For Gladys Clement, a cotton farmer along the western shores of Lake Malawi, recurring cycles of drought and floods, coupled with ongoing disease and pests, have long conspired to keep her livelihood precarious and largely unpredictable. For years, she and her family have battled the insects that ravaged their small plot of land—and so when she heard about a new cotton seed that kept insidious pests at bay, she decided to take a chance, albeit a cautious one.

In the first year, she bought just two small packets of hybrid cotton seeds, manufactured by an Indian company nearly 8,000 kilometers away. Each seed, around the size of a grain of corn, was more expensive than what she was used to paying, and so she did a kind of experiment, planting them in a small corner of the family plot. She left them to germinate and grow.

"The first crop was greener, tall and robust," she recalled on a recent afternoon. "It had more bolls"—the rounded pod that holds the cotton fibers—"the branching was very good, I had much fewer pests and very good yields." In the first year alone, Clement more than doubled her cotton crop without the use of pesticides, which helped the family purchase pigs, as well as windows for their home.

The seeds, produced by Mahyco International, a subsidiary of Mahyco Private Limited, are the results of years of scientific research and plant technology pioneered on a quiet, verdant 100-acre campus in Ialna in the Indian state of Maharashtra. Mahyco, as the family-owned company is known, is one of the country's leading seed producers, with a self-proclaimed mission to improve the lives of farmers through science. Amidst laboratories filled with petri dishes and tissue cultures, dozens of greenhouses where agronomists and plant breeders test varying genetic combinations, and fields monitored by drones that calculate yields and productivity, scientists are pioneering hybrid seeds. Their work is helping smallholders like Clement in the face of soaring temperatures, unpredictable rainfall, and relentless pest invasions.

"Farmers everywhere, regardless of scale, want two things—to reduce their costs and increase their incomes—and science can empower them to achieve that," said Rajendra Barwale, Mahyco's chairman.

#### Seed pioneers in India

Founded in 1964 by the late Dr. B. R. Barwale, a leading figure in the Indian seed industry, Mahyco has been a pioneer in improved seeds. As Shirish Barwale, the company's managing director and member of the family's third generation explained, seeds are convenient vehicles for technology transfer: Unlike more complex farming methods—which can require nuanced training—seeds are relatively easy to

adopt and deliver. "That's the beauty: all of the technology is in the seed itself," he said.

In 2020, IFC, with support from the GAFSP, invested in Mahyco's subsidiary, Mahyco International, to fund the company's cotton and rice seed business in Sub-Saharan Africa, Bangladesh and Southeast Asia. The hybrid seeds, widely available in India, are expected to increase yields, boost climate resilience and improve rural incomes in countries that need access to improved agricultural inputs. The US\$10 million equity investment from GAFSP, alongside an IFC US\$10 million equity investment, underscores IFC's commitment to strengthening agriculture and is part of its wider work to link small-scale farmers to resources and markets.

IFC has invested in several Indian companies since 2020 to support their entry and operations in Africa, with volume over US\$500 million, as part of a larger strategy to support and promote cooperation and investment along the India-Africa corridor. South-South investment and transfer of know-how from India to countries like Bangladesh, Sub-Saharan Africa and Southeast Asia remains pivotal in addressing global challenges and building a more solid foundation for sustainable development. IFC is one of the leading global investors of agribusiness in the African continent. This experience and long-standing track record was invaluable to Mahyco, as this was the company's first investment in the region.

"Strengthening agricultural value chains is critical not only for food security but also for building resilient rural economies and creating jobs," said Carsten Mueller, IFC's Regional Industry Director for Manufacturing, Agribusiness and Services, Asia. "At IFC, we are committed to investing in solutions that help farmers increase productivity, improve incomes, and expand employment opportunities. Our partnership with Mahyco demonstrates how South-South cooperation can accelerate progress by bringing high-quality agricultural innovations to farmers across Africa and beyond."

#### Supporting African farmers through seed innovation

Cotton is one of the most important cash crops in Sub-Saharan Africa for both farmers and governments and is a crucial source of income for millions of smallholder families across the continent. Africa produces approximately seven percent of the world's cotton and though soil and weather conditions in several Sub-Saharan African countries are ideal for cotton cultivation, low-quality seeds, basic farming practices, and heavy pest infestation have long kept yields low.

Unpredictable weather patterns and intense heat further stress budding plants, while many diseases and new pests thrive in sweltering environments. West Africa loses about 25 percent to 30 percent of its cotton production due to pests annually, according to the International Cotton Researchers Association. Mahyco's pest-resistant seeds which on average double yields for farmers, according to trial data available from the farmers in Africa— are therefore instrumental for many users. Watson Fanuel, a smallholder in southern Malawi, now sprays his cotton fields just once, compared to the eight sprays per season with the seeds he used previously. "The crop was heavily attacked by pests [in the past] whereas it is very much under control



Gladys Clement in her village along the western shores of Lake Malawi. Courtesy of Mahyco International



Amidst laboratories filled with petri dishes and tissue cultures, Mahyco's scientists are pioneering hybrid seeds. Anshuman Akash/IFC

with Mahyco seeds," he said. "There is a clear difference." The seeds he uses also mature early and produce long and strong cotton fibers that fetch higher prices at his local ginner—all of which has helped him purchase cattle, repair his home, and pay secondary school fees for his teenage daughter.

#### The science behind hybrid seeds

Mahyco's seed development often takes years and plant breeding helps the company boost desirable traits, said Usha Barwale Zehr, Mahyco's Director and Chief Technology Officer. "By bringing all the good traits into a Mahyco's pest-resistant seeds on average double yields for smallholders, according to trial data available from farmers in Africa.



single seed, you are able to limit the number of interventions a farmer needs in order to succeed," she said.

She said that the company designs seeds to meet the challenges of modern farming, including less arable land, water with high salinity, extreme heat and drought, and high levels of pest infestation. The seeds, Barwale Zehr said, are also designed to meet local needs—and so the cotton seed the company produces and markets in India will be different, for example, than the one Clement, Fanuel, and other farmers in Malawi use.

Mahyco International is active in 20 countries, including Bangladesh, Malawi, Tanzania, and Vietnam. The company's work in Sub-Saharan Africa is still unfolding and they say blended finance support has given them the time required to build their supply chain, despite setbacks including COVID-19. Their hybrid cotton seeds, which have been rolled out and are commercially available in Kenya, Malawi, Nigeria and South Africa, are currently in the approval process in Burkina Faso and Zimbabwe.

Most of the company's seeds for use in Sub-Saharan Africa are produced in India, and the company has multiple breeding stations and testing centers across the continent. Mahyco is working to boost its local supply chain to include 120,000 smallholders who will multiply the seeds on their farms.

"Farmers in Africa have arable land, highquality soil, and a favorable climate and can become leaders in the world's cotton production," Shirish Barwale, the company's managing director, said. "There's a real opportunity to introduce high-quality seed technology. One small input can make such a difference."



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 said, 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 using 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, said 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.

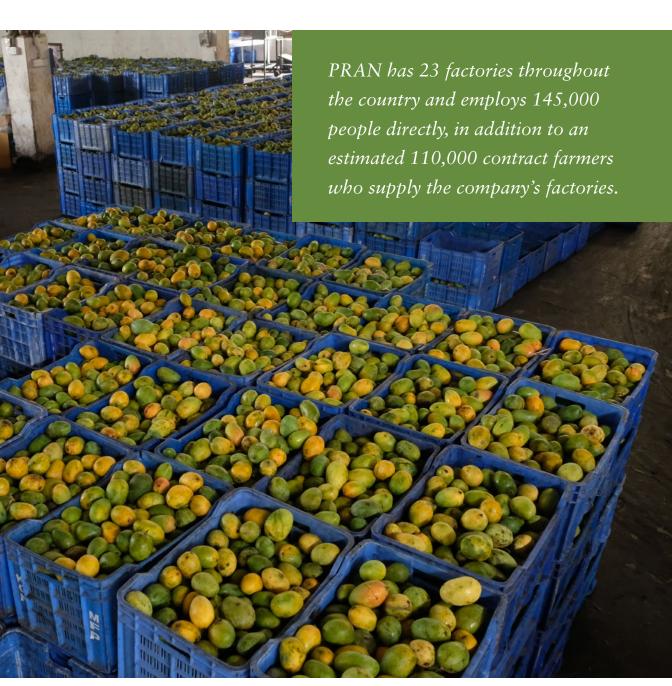
Agriculture is critical to Bangladesh's economy. Though it accounts for less than 12 percent of the country's gross domestic product (GDP), it constitutes the bulk of employment opportunities in rural areas, particularly for women.

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, said 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 said, 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





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



to boost food safety within the factories 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 quidance, 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."



In Senegal, a GAFSP-supported project helped smallholders more easily access financing and technology. Birom Seck/IFC





Cows on Remzi Bala's homestead in central Kosovo. 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, said 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 and goes all the way to €25,000," 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.

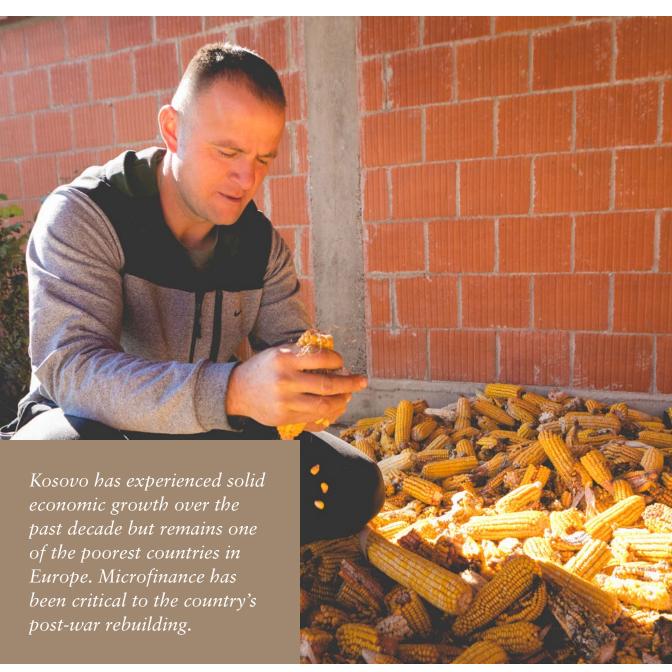
According to Muharrem Krasniqi, KEP's Head of Agro Lending, Hyseni is typical of their agricultural clients—most of whom use the loans for small, incremental investments that have significantly improved lives and livelihoods. "Our loans can't help farmers build a new barn or buy a large plot of land, 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."



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



A rice farmer distributes seedlings into a flooded paddy during planting season in Muang Fuang, Laos. Bert Verweij/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.qafspfund.org or www.ifc.org/GAFSP.

Written and produced by Daphna Berman.



