



Investing in rural people



Cambodia in Focus

Contents

IFAD at a glance	3
IFAD portfolio	4
IFAD in numbers	5
Empowering People	6
Our Work, Our Impact	8
1. Value Chain Development	9
2. Climate-Smart Agriculture	18
3. Policy & Development Plans	24
4. Renewable Energy	29
5. Capacity Building	33
6. Infrastructure	38
7. Digital Technology	43
8. Finance	47

“ These stories and photos of farmers are to be celebrated, their success is the success of the collaboration between the Cambodian government and IFAD. We are also grateful to the commitment and support from different management levels of the Ministry of Agriculture, Forestry and Fisheries and the provincial teams. These are their stories too. ”

His Excellency Meas Pyseth

Under Secretary of State

IFAD at a glance

IFAD has been active in Cambodia for over 20 years, with a total loan portfolio of over US\$755 million.

Its current projects and programmes support rural Cambodians by:

- improving market linkages between farmers and buyers,
- increasing resilience to climate change through improved agricultural techniques and technologies,
- and improving poor households' access to rural extension services.

IFAD currently has **4 active projects present in all 25 provinces**, with a particularly strong presence in Battambang, Kandal and Kampong Cham.

The organization's **programmatic approach** seeks to find synergies between its projects, such as organizing Multi-Stakeholder Platform (MSP) meetings for business clusters or planning infrastructure that can benefit farmers and rural beneficiaries targeted by multiple projects.



IFAD portfolio

Current projects in Cambodia valued at*:

\$411.33M

SAAMBAT | Sustainable Assets for Agriculture Markets, Business & Trade Project

\$142.17 M

AIMS | Accelerating Inclusive Markets for Smallholders

\$61.61 M

ASPIRE | Agricultural Services Programme for Innovation, Resilience & Extension

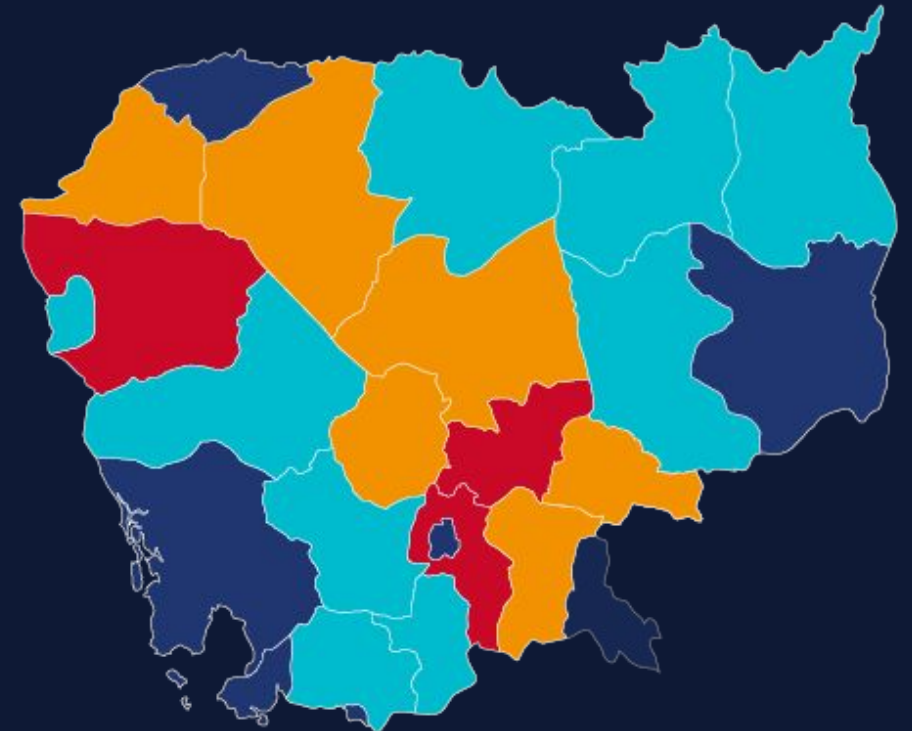
\$86.25 M

TSSD | Tonle Sap Poverty Reduction & Smallholder Development Project

\$121.30 M

IFAD is present in all 25 provinces:

- 4 projects present
- 3 projects
- 2 projects
- 1 project



*all values in US dollars

IFAD12 pipeline projects

Replenishment funds in Cambodia valued at*:

\$333.4M

ASPIRE AT | ASPIRE and Agricultural Trade

\$127.9 M

CAISAR | Climate Adaptive Irrigation and Sustainable Agriculture for Resilience

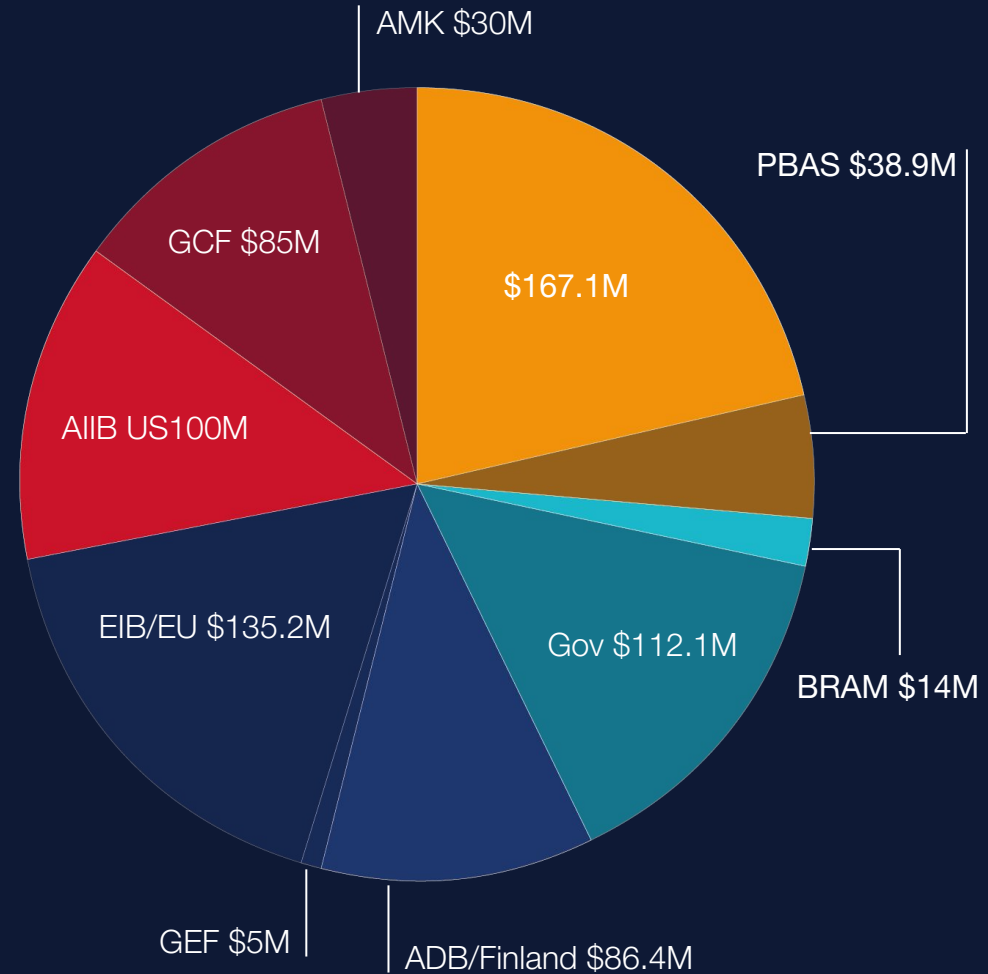
\$200 M

CREA | Climate Resilient Enhancement of Agri-Value chains in rural Cambodia

\$5.5 M

Total

\$773.7M



*all values in US dollars

IFAD in numbers



1.1 million

Direct beneficiaries



5600+

Business Clusters
or Producer Groups



45+

Commodities
& Value Chains



188,000+

Trained in farming
techniques or
income-generating
activities



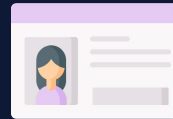
1400+

Formal buyer contracts
signed with farmer groups



Up to 40%

Household
income increase



50%

Reduction in
ID Poor 2 status



900+

Km of road designed
for construction

Empowering People

WOMEN

The participation of women is a priority in all IFAD projects. They are strongly represented in the livelihood improvement and market improvement groups of the TSSD project, and **39 per cent of the business clusters** formed through the ASPIRE project are led by women. These women manage all production and financial transaction records, and facilitate market connections with potential buyers and input suppliers.

Chicken production and trade has in particular made a huge impact, with women often becoming the main breadwinner for their families.

YOUTH

While all projects include rural youth participation, the SAAMBAT project has a particular focus on training those aged 16-30 in **vocational skills** that will help them earn more income. Courses go beyond agricultural production skills and include options such as refrigeration mechanics, automotive repair, tailoring and hairdressing.

Digital literacy is also a large component, and those trained are encouraged to pitch app ideas for SAAMBAT's Khmer Agricultural Suite (KAS) through a Digital Innovation Challenge Fund.

INDIGENOUS PEOPLES

IFAD's work with indigenous peoples is mostly in the Northeastern provinces of Mondulkiri and Ratanakiri.

The AIMS project has been working with farmers on clean seed production and the **cassava value chain**, where producer groups have boosted supply and secured buyer contracts.

The ASPIRE project has been working on improving **non-timber forest products** that assist livelihoods, such as beekeeping, pig farming and sweet bamboo shoots.

EMERGENCY COVID RESPONSE

IFAD's Rural Poor Stimulus Facility provided a grant of US\$1,132,093 to assist farmers impacted by COVID in 15 provinces.

This support was distributed in the form of farming inputs and e-training on production practices that farmers could access through the **Chamka app** (developed through the ASPIRE project).

The project prioritized areas that were most impacted, assisting almost 7000 **chicken and vegetable producers**.

Our Work, Our Impact



1

Value Chain Development

Value Chain Development

IFAD's approach has shifted towards promoting “**farming as a business**” — working with farmers to look beyond what they are already growing for subsistence, into making agriculture their primary source of income.

The focus is on how to nurture **business clusters** — a group of producers, input suppliers, local traders and technology providers. Business clusters help to aggregate producers, improve understanding of buyer needs, share relevant technical knowledge and tools, and eventually help producer organizations secure formal buyer contracts.

IFAD does this by organizing **MSP events**, where they invite different players around a specific commodity, such as rice or cassava. This provides producers with a space to directly meet with buyers, and vice versa, creating a sort of “matchmaking” environment where they can choose who to follow-up with afterwards. Over time, more businesses join these meetings, until they becomes self-organized events once or twice a year.

Each business cluster is led by a **lead farmer**, who is trained in improved techniques and helps others in their producer group troubleshoot as needed. Poultry and vegetables have caught on fastest with this model, mainly due to quick returns on investment. Those involved in chicken production have had a profit increase as high as 109 per cent, followed by vegetables with a 46 per cent increase in profit.



Chhel Thang has always had chickens on her farm in Takeo province, but until recently, she only sold chicks when she had some to spare — “I never had a business plan, or even thought about one.”

In 2019, she was invited to join a training through another farmer in her village, and she learned how to set up a chicken hatchery, vaccinate her chickens and select those good for breeding. “One of the most useful things was learning to separate my chickens into phases — one coop for hatching, and others for each stage of their growing cycle. It makes it easier to keep track of my chickens.”

Thang used to sell about 5-10 chickens a month, now she sells 200 chickens every 4 months (3 growth cycles a year). “I sell them on special days so that I can get a slightly higher price.” She purposely plans her chicken cycles to coincide with Chinese New Year, Khmer New Year and Ching Ming Festival, which offer a few US cents more per kilo. At US\$4.17 per kg, she earns about US\$1,000 per cycle, making chickens her family’s biggest income source.

“My life has changed a lot. I have four children, with the last one still in school, and it makes a big difference having regular income. We just bought 2 big cows for 7,000,000 riel! [US\$1,700] My husband is quite proud of those.”

Thang is part of the Romon Village Producer Organization, which has market linkages with several buyers, including one formal contract which came about through MSP meetings organized by the AIMS project. “This has made finding a buyer less of a hassle for me, I don’t have to worry about where to sell my chickens.”

The farmers in the group provide each other with different types of support — some buy or sell chicks for fattening, Thang herself buys eggs in the winter when her hens aren’t laying as much. “We all knew each other before, but now we are a group and can learn from each other.”





Chicken feed is one of Thang's main operational costs, along with vaccines, occasional medicines and eggs for her hatchery.



Two cows recently bought by Chhel Thang's family with help from her chicken sales.

Some farmers buy chicks that are 5 days old for fattening at US\$0.85
Others wait until the chickens are 21 days old and have been vaccinated (US\$1.35)



Lina (right) is a middleman who buys chickens from farmers in Takeo. He specializes in organic native chickens that are in high demand in the country's capital, Phnom Penh.

Before working with the AIMS project, he used to go door-to-door, trying to collect enough chickens from each farmer in Somroang district. "I used to buy from more than 30 farmers, it was a lot of work."

Since joining several MSP meetings organized through the project, Lina has signed contracts with three Producer Organizations (POs). "Rather than buy 2-3 chickens from each farmer, now the POs do the work for me!" he laughs. When Lina needs a certain number of chickens, he will call the lead farmers and meet them at a designated collection point (also built by the project), to pick up the chickens.

Some POs have better quality chickens, others have more reliable supply. It helps to have a few options to be able to meet the demand from his buyers in the city, mostly organic shops such as ASA Green, Sahakkor Organic Khmer and Srey Oun Shop. "I work with smaller retailers because the supermarkets take too long to pay me for the goods, sometimes even 30-40 days."

The PO in Romon Village is a frequent supplier. Indeed, Lina and Hak Suen (left), the lead farmer of the producer group, get along well. This PO only has 1 formal contract — with Lina. "We work well with Lina because he pays on time, he is fair with the price and we can negotiate easily if needed. Sometimes even if we can't quite meet the supply or quality he needs, he will still buy from us, so as farmers, we trust him and have a good relationship."

Lina also participated in the chicken training provided by the project. Even though he is a buyer, knowing the technical aspects helps him with quality control, "I check the feet, the skin, make sure the chickens are looking healthy. Sometimes I do a taste test also!"



Lead farmer, Hak Suen (left) and chicken trader, Lina (right), observing chicken health and fattening progress.



These chickens will be ready for sale in about one month for Chinese New Year, by which time they should be around 1.2kg.



2

Climate-Smart Agriculture

Climate-Smart Agriculture

Climate resilience is all about making it possible for farmers to bounce back from shocks and be able to cope with uncertainty. How do we spread the risks so that farmers do not lose everything at once?

IFAD's Scaling-up Climate Resilient Agriculture (SUCRA) sub-component under ASPIRE focuses on introducing **Integrated Farming Systems (IFS)** to farmers, where a mix of livestock, crops and climate-smart practices such as drip irrigation, mulching, farm delineation and seasonal crop calendars, can bring multiple benefits to farmers and the ecosystems around them.

1500 farms were set up in Kampong Chhnang and Pursat, with a focus on using localized materials, decreasing chemical inputs, and reducing energy and water consumption. Many farms have also adopted solar dryers and other renewable energy technologies introduced through IFAD's S-RET project.

While this model may provide less cash income, it works well for subsistence, and when labour started to flood back into the provinces at the height of the COVID-19 outbreak, not only did trained farms increase their adoption of IFS practices, neighbouring farms also replicated some methods.



For generations, Earm Thy's family has grown rice on a small plot of land during the rainy season, with few perennial crops around the house — “I grew rice mostly just to feed my family”. He faced common challenges such as erratic rainfall and low productivity.

In 2019, Thy became one of 1500 smallholder households participating in the SUCRA initiative. SUCRA promoted IFS and diversification to maximize productivity while improving soil quality and fertility. “At first I wasn't interested, but later I learned that the project would provide technical support and training, as well as some initial startup inputs such as seeds, fruit tree nursery, chicks and fingerlings. I saw how this would benefit my family.”

Based on the training, Thy reorganized his land to grow a diversity of crops, including fruit trees, sugar cane and lemon. He also raises native chicken and ducks, which along with his farm's compost provides natural fertilization to the land. He has divided his land into three plots that all apply IFS technologies: intercropping between fruit trees and chickens, intercropping between fruit trees and perennials, and intercropping between fruit trees and cash crops.

Production quantity and quality has since increased, enough so that his family sometimes shares produce with their neighbors. Shade from the trees have also made his household environment more livable, and has attracted some wild birds. Thy now recycles all his farm materials fully — for example, remaining food from their house and crop residue is used to feed the chickens, and chicken droppings are used as organic fertilizer.

His family now earns a net income of between US\$100 to US\$150 per month just from the farm. “My previous income was so tiny, I don't even remember”, he said. “What I wanted most was to improve my production and increase my income, to have a good environment around my house, and have enough food to feed my family. Now I have achieved that.”

Whereas before Thy was purely a subsistence farmer who grew food for household consumption, “I now earn extra money to buy other household items too.”





Earn Thy watering his sugarcane field, with fruit trees in the background.



Each IFS has its own unique combination of crops, fruit trees and livestock

Another farming family, headed by Svay Thoeun, also set up an IFS through the SUCRA project and now has stable produce for food and income.



3

Policy & Development Plans

Policy & Development Plans

IFAD works on the government at multiple levels, from helping to design National Agricultural Plans, building on the Cambodian model for agricultural services and turning it into government policy.

For example, the ASPIRE project helped to rethink programme budgeting by introducing **performance-based budgeting allocation**. Priority areas with high economic potential are allocated a base budget, plus a sum based on the number of farmers and climate vulnerability of the province. Each year, **community extension workers** help to assess performance at the farm level, which determines any budget increases in the following year. This was quite an innovative method as previously each province had to lobby on a case-by-case basis for their budgets.

As for extension services, the project explored several channels to reach producers:

1. Farmer to Farmer (F2F) — training farmers through lead farmers
2. Contracting Out — assistance provided by a professional service provider
3. Agriculture Cooperatives (ACs) — to provide services to their members
4. Public Private Partnerships — Input suppliers train farmers on product use
5. Direct Public Extension Service (by PDAFF) — traditional model

During COVID-19, a sixth instrument became popular — the Chamka app, which offers a direct dial up & chat extension service to farmers.

The above efforts have since been mainstreamed into the national Policy on Agricultural Extension in Cambodia (PAEC) and the Cambodia Agriculture Master Plan.



Based in Battambang, Taksey Samaki Agriculture Cooperative is headed by a young, dynamic leader, Nub Nun, who has managed to grow the co-op from 65 members to 160 in less than 5 years, and partner with over 20 ACs across five provinces.

Prior to working with ASPIRE and the Provincial Department of Agriculture, Forestry and Fisheries (PDAFF), most members of the Taksey cooperative were growing vegetables through conventional practices, i.e. open fields — making crops susceptible to pest, disease, flood and drought. This method limited productivity and meant farmers could only grow vegetables seven months a year.


The project introduced nethouse technology to the cooperative, training several staff members, who then used the demo to show its members that they could grow 8-10 cycles of vegetables per year, all year round. Production increased, quality improved, and the need for fewer pesticides allowed their produce to be certified as “safe vegetables”. Members began investing in the technology, and within three years, 50 of them were implementing nethouses. The cooperative now supplies 20 markets in Phnom Penh with at least 30 tons of vegetables per month.

But Nun didn't stop there. The coop formed a 25-member technical team to learn and adapt the technology so that it could be affordable to all farmers, with a potential return on investment after just 1.5 years. This has resulted in a massive uptake of this technology across the country. Taksey Cooperative has disseminated and constructed more than 500 nethouses for 10 ACs in other provinces and trained thousands of interested farmers.

With increased production and networks, the cooperative now owns three cold trucks to transport produce to customers, has hired seven full-time staff, and has 35 seasonal employees that harvest and package vegetables at a salary of US\$200/month. It is also investing in several nethouse vegetable farms close to Phnom Penh, and plans to build a cooperative farm market in 2023 to aggregate products from across the country to distribute to wholesale and retail markets.

“I personally have invested in 17 nethouses of my own, and the cooperative now has more than 20 contracts with market and private firms. I'm grateful to PDAFF for sowing the seed in my head to grow my cooperative, for showing this technology and a path forward.”





Drip irrigation systems in the nethouses provide efficient and consistent water use.

Less pesticide use means the cooperative's vegetables can be labelled as "safe" vegetables.



4

Renewable Energy

Renewable Energy

Prior to IFAD's S-RET project, many government staff working for the Ministry of Agriculture did not know what RET meant — renewable energy technology. The term has since become a well-known acronym and the project was showcased in Global Environment Facility (GEF)'s Good Practices Briefs.

IFAD's work in renewable energy focuses on how to strengthen the private sector's capacity to deliver renewable energy technologies to farmers and rural Cambodians. The project provided companies with a two-phased approach:

- **Testing grants** to test their technologies in the field with farmers, and
- **Rolling-out grants** to establish supply chains and after-sales services

Twelve innovative companies were able to validate their technologies and scale up their production and reduce transaction costs in rural areas (a market they otherwise would not have explored).

Farmers have since invested in over **3000 technology units**, including biodigesters, solar dryers for processing food, portable solar water pumps to irrigate crops, biochar briquettes to heat newly hatched chicks, solar hydroponics for growing vegetables, and solar incubators for crickets and chicken eggs.

Many of these technologies boosted the performance of producers working with the AIMS and ASPIRE projects in their commodity value chains.



Since 2008, Khmer Green Charcoal (KGC), then Sustainable Green Fuel Enterprise (SGFE), has been producing biochar briquettes from waste coconut husks and other waste biomass. But in the early days, the company was set up by two NGOs — GERES and PSE, who wanted to improve the livelihoods of poor communities in Phnom Penh. While well intentioned, the partners had limited knowledge on how to grow a business, so several years later, it was taken over by a new CEO, Carlo Figà Talamanca, who has since transformed the business.

In 2018, IFAD helped give KGC a big boost when it qualified for a testing grant through the S-RET project. Through the grant, it was able to test its products with rural markets, where using charcoal as a cooking fuel is a leading cause of deforestation. With help from IFAD's networks, the company found new use cases for their product, such as heating newly hatched baby chicks, who need to stay warm to survive their critical first 21 days. The company now supplies 3000 farmers, 80 per cent of whom are women, who benefit not only from better income due to reduced chick mortality, but also positive health impacts due to the lack of smoke and pollution.

“The key is finding a solution that people buy because it is a good quality and affordable. Sustainability is not a strong enough motivator for most, especially not the rural poor,” says Carlo, ever the true businessman. Green charcoal buyers value the product's reliability and the fact that it burns with less smoke, but it also has an added positive externality — every kg of Biochar briquettes saves 6.5 kg of wood that is not cut from Cambodian natural forests. At the current rate, the company saves 1 hectare of forest every three days, equal to 7,056 tons of CO₂ emissions.

In the last few years, KGC has risen as a competitive charcoal supplier in Cambodia with a production capacity of over 1,200 tons of charcoal per year. The company also exports to Japan and Europe, and aims to replicate its business model in other developing countries across the world through its sister company, OTAGO.

It is currently engaged in a project with IFAD with help from a Korean grant in Kiribati, a small island nation in the Pacific, where coconuts are abundant but reliable energy is hard to come due to its remote location.



Charcoal is placed in the clay kiln for keeping baby chicks warm.





Street vendors are an important customer of KGC charcoal.

Packing charcoal into bags at KGC's factory.



5

Capacity Building

Capacity Building

While IFAD has traditionally focused on agronomic training, i.e. training farmers on better production methods, post-harvest management etc. The portfolio has since become broader to look at all income-generating and supporting activities within the agriculture value chain.

The AIMS project places a lot of importance on **farmer business training**, from financial literacy to market understanding and business planning. Lead farmers representing a producer organization undergo between 50-70 hours of training, and in turn, they train other farmers in their groups.

The ASPIRE programme has trained over 600 **commune extension workers** to provide farmers in their communities with technical support on how to use the Chamka app for market information and reaching out to agricultural experts.

SAAMBAT has taken training a step further by identifying **24 vocational skills** that are in high demand in the rural labour market. Courses include subjects more directly linked to agriculture, such as vegetable farming and soy milk processing, to refrigeration mechanics and automotive repair, to video editing and marketing skills. Rural applicants aged between 16-30 attend 3-month trainings from either public or private training institutes specializing in those subjects, often followed by internships or job placements. In the case of digital literacy, students are encouraged to apply for a Digital Innovation Challenge Fund award to design apps for the Khmer Agricultural Suite currently under development by the government.



20-year old Sous Sreyrith is the youngest of 8 siblings in Preah Vihear province, Northern Cambodia. After working in Poipot province and later in Phnom Penh for several years, she decided to return to the provinces to help her aging parents, whose livelihood depends solely on vegetable gardening around the house. As the main breadwinner, she started working in a beauty salon but never received any proper training.

After hearing about the beauty salon training offered by Technical and Vocational Education and Training (TVET) through the SAAMBAT project, she was very interested but worried about the fee and how to continue supporting her family while at the training. “When I found out that the training was not only free, but that they could provide some allowance support to make up for my time not working, I was less concerned and excited to join”, says Sreyrith.

At the training, she met many other young women from different villages in Preah Vihear, and this inspired her a lot. “It feels like a new chapter for my life: learning professional skills and making new friends”, she shares, “Meeting others has also made me less afraid, since the training is over an hour’s drive from my house. Now I’m more comfortable to attend the class.”

The training includes four hard skills — facial makeup, hairstyling, haircutting and manicure-pedicure. It also works on soft skills to help students develop a professional mindset, including effective communication, teamwork, interpersonal skills, adaptability, diligence, work discipline, problem solving, gender, productive health, and so on.

The course also require students to do an internship, which Sreyrith is doing on the weekends for a small stipend. She has so far completed her training on facial makeup and has passed the theory and practical exam successfully. The shop owner where she is doing her internship has given her good reviews and plans to hire her officially once the training is complete.

“In the future, I wish to have my own beauty salon so that I can generate enough income to support my family, and enough good food for my parents”, says Sreyrith. She is pleased to be able to work on a high demand skill that she also enjoys, and hopes that she can make good income during the upcoming wedding season, when hairdressing is in high demand.





Students are required to do internships at an actual salon in order to get real-life experience.



Sreyrith's class learns beauty salon skills with 14 other girls in her class.

6

Infrastructure

Infrastructure

IFAD's infrastructure projects are primarily small-scale interventions, such as setting up collection points for farmers to sell produce to traders, irrigation projects and canal rehabilitation for disaster risk reduction, and improving rural roads to better link farms to markets.

The ambitious SAAMBAT project is taking on a larger infrastructural role, with over 400 km of road currently in the design or construction phase, accompanied by supporting elements such as ferry landings for improving produce delivery, buy-sell collection points for rice, chicken and vegetables (the ASPIRE project set up more than 160), and latrines in market places to improve sanitation. The project's infrastructure component is valued at over US\$80 million, co-financed by IFAD and the European Investment Bank (EIB).



Mrs. Bouy Sokha's family has a small two-hectare plot in Battambang province. For the last two decades, she has focused on "putting food in the pot and finding money in my pocket" to clothe and send her four children to school.

Her village has an old and dilapidated water distribution canal that runs through it, but more than 1,800 families depend on it for farming and household use, leading to severe water shortage during the dry season. Rice can only be produced once a year, and vegetables grown only 8 months a year. Those who plant vegetables during the dry season use underground water, which has a high risk of crop loss.

Sokha, used to produce one rice crop and 2-3 vegetable cycles per year. "The third cycle of my vegetable production, long-yard bean or cucumber, has always been risky. I could lose it all if there isn't enough water", she said. During the dry season (between January and May), most farmers migrate to outside the province or to Thailand to seek labour. ASPIRE sought to reduce this migration by co-investing in climate-resilient infrastructure that could make water access more reliable.

In 2018, the programme rehabilitated the canal in Sokha's village. The community's farm production is now thriving, with water no longer being an issue. The rehabilitation was coupled with climate-resilient technical support provided by the Provincial Department of Agriculture, Forestry and Fisheries (PDAFF) and a group of commune extension workers. Farmers now know how to select quality rice seed, use plastic mulching and drip irrigation, practice crop rotation and have improved market linkages to boost their farms' business.

Sokha's now produces rice twice a year, and she can grow four vegetable cycles without stress. Each vegetable cycle is valued between US\$1,200 to US\$1,500, earning her up to US\$6,000 a year.

Her production costs have also reduced as she no longer has to pump as much water from underground. "Thanks to the project, I don't have to worry about water any more", she says with a smile. "I'm also more motivated to continue farming."

As her production has become more reliable, Sokha has more links with input suppliers and local buyers. Her daughter, who is a trader, even orders vegetables from her to sell in provincial markets.





The canal close to Sokha's house in Tros village, Battambang.

Khum, the commune chief, played a key role in getting the canal rehabilitated and working with commune extension workers to train farmers in climate-smart practices.



ឃុំ ឧត្តរត្បាញ	
ស្ថានប្រឡាយចី ប្រវែង 3350 ម	
និង លូមូលមានទ្វារទឹកបន្ទះក្តារ	
លូ 05 កន្លែង និងស្តារសញ្ញា 01 កន្លែង	
ឆ្នាំ 2017	
មូលនិធិឃុំ	០\$
មូលនិធិ ASPIRE	58,533,000\$
ទុនចូលរួម	2,221,900\$
សរុប	60,754,900\$

7

Digital Technology

Digital Technology

The digital market is becoming more and more central to the global agricultural value chain, with Cambodia being no exception. During COVID-19, digital payment methods skyrocketed across the country and the need for digital platforms and improved digital literacy is ever more pressing.

The ASPIRE project took an important first step, co-developing the **Chamka** app with BRONX Technology, which acts as a buy and sell platform for farmers to purchase agricultural inputs and access extension services with a simple tap of a button on their phones.

The SAAMBAT project is taking digital agriculture to the next level with the **Khmer Agriculture Suite (KAS)**, an umbrella platform under development with the government and Techno StartUp Centre. The platform will act as a central database for farmer, crop and soil data from the whole country, and have its own features, such as weather and market information. It will also host a suite of third-party apps relevant for the agricultural sector.

Every year, KAS will work with market players to determine the needs of the agricultural ecosystem and develop satellite apps accordingly, inviting startups to submit proposals through its Digital Innovation Challenge Fund. One function currently in development is **product traceability**, which is particularly in demand for export commodities, such as rice.



Originally funded by the Ministry of Agriculture and the Korean government through ASPIRE, the Chamka app is now a fully functioning phone application with over 65,000 users developed and managed by Agrinovation Inc.

At first, the focus was to create a virtual marketplace where farmers could buy inputs and sell produce, but the app has since expanded into a successful e-learning and extension service platform. “Our users really enjoy watching the videos to learn about different practices. This was particularly useful during COVID because many instructors couldn’t make it to the field,” says Visal Kith, Agrinovation’s CEO. The original Instructional videos were produced through ASPIRE, but Chamka has multiple NGOs knocking on their door to disseminate content through the app, acting as an unexpected revenue source.

The direct agricultural expert dial-up service is by far the app’s most popular feature. “If a farmer has an issue, they can use the online chat messaging service to talk to extension officers directly”, says Visal. “They can record an audio message and send photos to show the problem. It’s quite a valuable leap for farmers, because before it would take much longer to get that type of service. Now they can get a response in a few hours.”

Chamka has trained over 600 commune extension workers across the country to help farmers use the app; it is also promoted through fairs and events. “This helps us get continuous feedback. We’ve changed a lot over time. For example, at first, IFAD required a lot of data to register, like age, gender, ethnicity, location etc. Now we only ask for their name and phone number. We’ve also added more images and allow comments so that the app is more interactive.”

The more farmers use the app, the more useful they find it, and the more features they use. About 9000 users are currently using the Farmer Diary app, which helps to calculate operational costs and income to determine farmer profit. “I don’t think they were really tracking before”, says Visal.

The eventual goal is still to buy and sell through the platform. “Farmers are a bit scared to buy online, and they need to bulk buy to get the free delivery option. So we’re also working with produce buyers who can use Chamka as an aggregator and to vet farmers for product safety.”



Commune extension workers play a vital role in teaching people how to use the app.



8

Finance

Finance

From grants to challenge funds and loan facilitation, IFAD offers a wide range of financial tools and training to help farmers build stronger businesses and strengthen Cambodia's agricultural value chains.

The TSSD project for example provides **group revolving funds** to their livelihood improvement groups (LIGs), which acts as seed money to invest in initial set up costs for an income-generating activity of their choice. Paired with financial management and business literacy training, groups have a high repayment rate and are able to avoid the cycle of debt so often caused by high-interest borrowing from loan sharks.

Similarly, the **Value Chain Investment Fund** offered through the AIMS project invites farmers to co-invest in a technology to boost their production. The project offers 30 per cent, the farmer brings the other 70 per cent (up to US\$3,000). The idea is to get first movers to try out a business idea that demonstrates return on investment and can be easily replicated by others. In some value chains, such as chicken, the project has been able to remove the grant component entirely as farmers have been so successful at creating profitable business models.

Finally, multiple projects help farmers improve their credit rating with banks and MFIs by either acting as a **guarantor** directly (as in the case of encouraging renewable energy technology investments), or by helping producer groups access group loans that are considered less risky by financial institutions.



Sor Sum worked as a seasonal labourer in Cambodia and Thailand for over 15 years before she came across the TSSD project. At the time, her daily earnings were roughly US\$5 per day over 3 to 4 months' of annual work — US\$500 to US\$600 a year. What she earned, she spent on breakfast and the rest she would use to buy food for her family waiting at home. The rest of the year she survived on her extended family to support her and her two children.

In 2014, a life-changing opportunity came through village when commune officials went from house to house informing villagers of a project called the Tonle Sap Smallholder Development Project (TSSD). “I was hopeful that if I joined one of the LIGs that I would manage to find a solution to my income issue”, says Sum.

Sum attended multiple meetings and training sessions on livestock and vegetable production, and with help from the small loans she could access through her group's revolving fund, was able to invest in creating a space for chickens, pigs, a small vegetable garden and a one hectare cassava plot. She also farms rice on the stretch of land behind their house for household consumption. “The more I attended, the more confidence I had that I had taken the right road”, shares Sum.

Sum is now a proud chicken farmer and very active LIG member with over 400 birds. She has learned how to vaccinate her own chicks and produces her own chicken feed. Her contracted sales from chicken farming alone bring her a steady monthly net income of US\$250. “I am no longer ID Poor,” she boasts happily.

Sum has truly engaged with the project and continues to do so. Armed with bookkeeping and business literacy skills, she knows how to submit business plans to access credit through the group (typically seed money of US\$240 or loans at an interest rate of 1-2 per cent per month). “Our group is waiting on a chicken feed production machine to reduce labour”, she shares.

Her small vegetable garden also doubles as a pilot plot for the project, not to mention a source of nutrition for her elderly mother and children. “My life has really changed so much for the better!” Sum says to herself as she looks into the distance. As have the lives of 650,000 other households along the Tonle Sap River Basin who have engaged with the TSSD project.





Chickens have become Sum's primary source of income.

“ Improving the livelihoods of poor and smallholders cannot be done only through one project. The programmatic approach that IFAD uses provides considerable opportunities to leverage and build synergies among projects and enhance their impact, helping farmers to maximise output, strengthen their enterprises and fully integrate into the agro-market value chain as permanent actors. ”

Meng Sakphouseth

Country Programme Officer for Cambodia & Country Director for Mongolia

Key Partners



FINNISH
GOVERNMENT





Investing in rural people

IFAD is an international financial institution and a United Nations specialized agency.

Based in Rome – the United Nations food and agriculture hub – IFAD invests in rural people, empowering them to reduce poverty, increase food security, improve nutrition and strengthen resilience. Since 1978, we have provided more than US\$23.2 billion in grants and low-interest loans to fund projects in developing countries. Last year, IFAD-supported projects reached an estimated 130 million people.

www.ifad.org

© IFAD 2023