



IFAD Results Series Issue 3

RESULTS FROM THE FIELD

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The purpose of the Results Series is to document in a succinct manner the results and lessons emerging from IFAD-funded programmes and projects, and make them easily accessible to policy and decision makers, development practitioners, researchers and others. The Series is a means to ensure that IFAD's extensive experience may inform the design and implementation of policies and operations in the agriculture and rural sectors now and in the future.

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Abbreviations and acronyms

BRFP	Belize Rural Finance Programme
CFA	Community Forest Association
DANIDA	Danish International Development Agency
GEF	Global Environment Facility
IFAD	International Fund for Agricultural Development
IOE	Independent Office of Evaluation of IFAD
MKEPP-NRM	Mount Kenya East Pilot Project for Natural Resources Management
OFID	OPEC Fund for International Development
READ	Rural Empowerment and Agricultural Development Programme
PAFA	Project d'Appui aux Filieres Agricoles
READSI	Rural Empowerment and Agricultural Development Programme on Sulawesi Island
RFSADP	Rural Financial Services and Agribusiness Development Project
UTaNRMP	Upper Tana Catchment Natural Resource Management Project
WRUA	Water Resource Users Association

Introduction

IFAD works to create the social and economic conditions that can transform rural areas into places of prosperity and hope, where women, men, young people and the most marginalized community members can build decent livelihoods.

Fundamentally, IFAD places poor rural people at the centre of its investments and activities, recognizing them as active partners, not as passive beneficiaries.

The results and lessons highlighted in this third issue of the Results from the Field series demonstrate what can be achieved when poor rural people are empowered to grow, process and sell more food, increase their incomes, and determine the direction of their own lives.

In Belize, credit unions expanded access to financial services in rural areas across the country by intensively targeting the poorest and most vulnerable people, especially women and youth. Despite low economic growth in the country overall, rural people benefited from access to credit and other financial services. They were able to develop small businesses and improve their livelihoods.

In Indonesia, through a public-private partnership, smallholder cocoa farmers got access to the newest technologies, improved cocoa seeds and markets. They realized higher yields and increased their incomes, which meant that they were able to build more economically viable businesses. Economic development in rural communities led to lower poverty rates and, as livelihoods improved, positive social change followed.

In Kenya, community-led approaches were introduced to balance natural resource management, conservation and development in the Mount Kenya ecosystem – a UNESCO world heritage site of outstanding importance. Degraded landscapes and river basins were regenerated, livelihoods were improved and conflict over resources was reduced. The significant impact of the project has been scaled up to cover the Upper Tana catchment area, which is home to 5.2 million people and provides water for half the population of Kenya.

In Moldova, young entrepreneurs were given incentives to engage in the agriculture sector, which ultimately led many to return from urban areas to re-establish themselves in their rural villages and towns. The combination of credit and capacity-building in marketing, planning and managing businesses generated significant opportunities for investments and self-employment for young entrepreneurs. They established start-up businesses that ultimately contributed to the rural economy and created additional employment opportunities.

In Senegal, traditional ideas were changed about the importance and economic viability of certain crops grown by women and young people. Crops such as millet, corn, sorghum and cowpea had been produced almost entirely for domestic consumption,

As a United Nations specialized agency and international financial institution, IFAD provides financing in the form of loans and grants to developing countries. It currently funds 220 programmes and projects in 98 countries across Africa, Asia, the Near East, Eastern Europe, and Latin America and the Caribbean.

and were considered to have limited commercial value compared with groundnuts. However, once they were selected for income generation, the knowledge and expertise of the women and young people became crucial to the success of the value chains. This in turn increased their social and economic standing.

IFAD-supported projects get results. As these experiences demonstrate, IFAD-financed initiatives help to increase agricultural production and productivity and give small farmers better access to markets and services. But IFAD does more than that – it also helps to transform rural communities socially and economically, promoting better employment, especially for rural youth, gender equality and inclusiveness.

Belize: Poor rural families get access to financial services through local credit unions

In the small Central American country of Belize, a public-private partnership with local credit unions ensured that poor and remote rural families had access to rural financial services. Through capacity-building activities and extensive efforts to reach the most vulnerable communities, credit unions were able to expand their operations and provide targeted services to women, young people and very poor households. With access to credit and other financial services, these families were able to develop small businesses and improve their livelihoods.

Belize is a small upper-middle-income country on the Caribbean coast of Central America with a population of approximately 359,000 people. Belize has undergone

Rural Finance Programme

Total programme cost:
US\$5.64 million

IFAD loan:
US\$3 million

Government contribution:
US\$730,000

Central American Bank for
Economic Integration (CABEI):
US\$1.91 million

Duration: 2009-2017

Directly benefiting:
5,703 households



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significant economic transformation over the past two decades, mainly due to the growing tourism industry and the commercial oil discovery in 2005. Tourism and agriculture are the main sources of income and employment. However, the country's small-size economy, high dependency on exports and imports, and exposure to natural disasters make it vulnerable to economic shocks (World Bank, 2016).

Rural poverty in Belize is high, with 44 per cent of the rural population living in poverty compared to 22 per cent of the urban population (Halcrow Group Limited, 2010). Young people are more likely to be poor than any other social group, especially in rural areas where more than 44 per cent of young people live in poverty. Limited employment opportunities mean that young men stay on the family farm working as unpaid labour, or find paid work as agricultural labourers during harvest time. Young women help their mothers with domestic tasks and family enterprises. Rural women tend to run informal, home-based microenterprises such as small-scale trading, retailing and food preparation, and contribute to agricultural and livestock production.

Access to credit and other financial services is limited in rural areas, and the commercial banking sector mainly focuses on large and medium-scale clients. This has hindered the economic potential of rural people, including smallholder farmers and small-scale entrepreneurs, especially women.

Credit unions in Belize have partly filled this gap and play a key role in facilitating access to credit, savings and other financial services in rural areas, especially for low-income families, self-employed people, and small businesses and microenterprises. With more than 60 years of operations in the country, credit unions have a broad membership of clients from different socio-economic backgrounds, giving them a sound understanding of the various markets, including rural markets. As such, credit unions have played a significant role in stimulating the economy within the communities where they operate. However, outreach by credit unions to very poor rural households has traditionally been weak. While many credit unions have the potential to expand their operations in rural areas, they can do so only with adequate training and support.

The programme

The Belize Rural Finance Programme (BRFP) aimed to address this situation by improving the quality and reach of rural financial services for smallholder farmers and poor rural women and men. Implemented between 2009 and 2016, the programme was based on the rationale that inclusive and sustainable rural financial services, tailored to the needs of poor farmers and small rural enterprises, was key to increasing the incomes and assets of small farmers and rural populations.

The programme used a public-private partnership approach and identified the credit unions as a means to deliver improved financial services. Based on their long operating experience, location across the country, and their involvement in a wide array of economic activities at the member level, credit unions were seen as natural partners in extending financial services to the rural poor. Credit unions partnered with public institutions such as the Development Finance Cooperation, the Women's Department and the Department of Youth Services to implement activities.

The programme worked with six credit unions, strengthening their institutional capacity to expand credit operations to rural areas, diversify their financial services, and adapt them to the needs of poor households. The credit unions were able to borrow from a rural credit fund established by the programme to increase their capacity to lend to poor clients in rural areas. In addition, the programme delivered training and technical assistance to the credit unions, as well as to the Belize Credit Union League, which provided guidance to its member credit unions and oversaw the implementation of the programme. The training programme focused on areas such as computerization, governance, product marketing to strengthen recruitment efforts of new credit union members, and how to develop financial products targeted to poor clients in rural areas.

Field officers were hired by the credit unions to improve outreach to the poorest and most remote rural households. Many field officers spoke local languages, such as Garifuna, Q'eqchi', Mopan and Yucatec Maya Q'eqchi'. This was a critical step in reaching people from rural communities who would otherwise have been excluded from the programme. They made repeat visits to these families to explain face-to-face the credit scheme and to assess the families' eligibility. Individuals deemed eligible, who were willing to join the credit unions, received a matching grant and were able to open savings accounts and buy shares. Members could then access financial services, including credit, for activities related to agricultural production, or to support and expand their rural enterprises.

The programme had a strong focus on the particular disadvantages faced by women and young people in accessing financial services. It worked closely with the Women's Department and the Department of Youth Services to provide training to credit union employees to make them more aware of the specific issues related to young clients and women. BRFP facilitated focus groups with women and young people to better understand issues pertaining to their access to and use of credit and to ensure their participation. The programme also offered them training in financial literacy and microenterprise development. A comprehensive "Gender Manual for Credit Unions" provided guidance on how to achieve gender equality in financial services, and a sexual harassment policy framework was approved by the boards of the majority of credit unions.

Results

The Belize Rural Finance Programme was implemented during a period of low economic growth in Belize due to a decline in oil and commodity prices, shocks in the export sector, higher food prices and shifts in exchange rates that reduced competitiveness. The poverty rate stayed above 40 per cent throughout the programme period and food insecurity also remained high. However, the programme was successful in putting in place a system that gave poor rural people direct and inclusive access to financial services across the country.

Credit unions strengthened their operations and improved outreach to poor rural people

Building the institutional capacity of the credit unions has led to improved governance, enhanced strategic planning and greater corporate discipline in their day-to-day operations. This has ensured higher standards of accountability and compliance,

and has contributed to improved results for the credit unions. Enhanced outreach and a more customer-focused approach has also helped credit unions to grow, strengthening their sustainability. There has been a shift in the attitude of the credit unions towards poor rural people that has reshaped their business model. All six credit unions now see poor rural people as viable clients who can save and borrow.

Poor families were enabled to improve their livelihoods through access to financial services

Improved services and outreach by the credit unions meant that poor rural households, including the poorest and most vulnerable, were able to gain access to financial services, often for the first time. With the support of the field officers who visited the families and assessed their eligibility, 9,357 new members joined the credit unions, taking out a total of 7,471 loans. Although these numbers were lower than planned, the programme’s focus on vulnerable groups produced good results. Thirty-five per cent of new members were classified as very poor – mainly subsistence farmers and landless agricultural workers – and 39 per cent of loans were taken out by these members.

Poor rural families took out loans to develop and expand rural farm and non-farm businesses, to buy equipment for enterprises, and to improve their homes and farms. For example, some families installed solar panels, which allowed for more efficient cooking, a healthier indoor environment and proper lighting so that children could study for school. Families also used the loans for irrigation schemes and to improve drainage on their land, and for on-farm training activities, which led to changes in cropping patterns, increased yields and improved quality of agricultural products.

Improved access to financial services for women and young people

Special attention to women and young people and specific initiatives to engage them led to significant benefits for both groups. Fifty-seven per cent of new credit union members were women and 17 per cent were young people, many of whom had previously not had access to savings and other financial services. Women received pre-financial training conducted in English, Spanish or Q’eqchi’, aimed at introducing the basic concepts of financial literacy. Young people were offered training in how to set up and run microenterprises.

Improved awareness of gender and youth issues by credit union management and staff resulted in the introduction of gender-sensitive practices, such as keeping women’s financial information confidential and eliminating the assumption that a woman’s assets could be used to guarantee her husband’s loans.

Based on its significant results, the programme received the IFAD Gender Award for the Latin America and Caribbean region in 2015.

Challenges and solutions

It was originally planned that another initiative, the European Union-funded Belize Rural Development Programme II, would provide business development support, such as business planning, agricultural extension services and market linkages, to credit union customers who had taken out loans for their enterprises.

However, due to a shift in the scope of the European Union-funded programme and a delay in the implementation of BRFP activities, it was not able to provide the agreed support, which left a number of viable businesses that had taken out credit union loans at risk of failure.

While some of the credit unions were able to provide business support to clients on an ongoing basis, other credit unions provided only ad hoc advice and microfinance support. The BRFP programme management unit stepped in to fill the gap – designing modules for financial literacy training and basic business planning – and worked with the Belize Credit Union League, the Department of Youth Services, the Women’s Department and the Small Business Development Centre to deliver the training.

Working through the credit unions to deliver financial services to poor rural people had many advantages, but also posed some challenges. For example, the requirements for standardized reporting posed difficulties, as most credit unions had their own internal systems and procedures. As private businesses, the credit unions were focused on markets with the potential to offer the greatest revenue and growth. Nevertheless, a close working relationship with the programme management unit and other implementing partners ensured a strong, continued focus on outreach among poor rural people.

Scaling up

The Belize Rural Finance Programme scaled up to the national level some of the positive experiences in rural finance of an earlier IFAD-funded project in the country. The Community-Initiated Agriculture and Resource Management Project (CARD) had demonstrated that credit unions could play an important role in rural areas provided they receive adequate support.

The BRFP has shown that this collaboration can be highly replicable, especially considering that there is now existing knowledge and implementation capacity across a broad range of partners. However, as emphasized by the midterm review of the programme, replication of programme initiatives would need to ensure better integration of complementary enterprise development and business support services to aid both agricultural and non-agricultural enterprises in proper planning, budgeting and operation of their businesses and support linkages to markets.

Main lessons

- *With the right support, poor rural people can be viable clients.* In Belize, poor people living in rural areas have traditionally not had reliable or secure ways to save money, build assets or transfer funds. The commercial banking sector has focused on large and medium-scale clients, while rural small entrepreneurs and poor households have had only limited access to financial services, if at all. Geographical remoteness, limited capacity of financial service providers, low levels of education among potential clients, and a perception that the poor could not be viable clients have contributed to this situation. This in turn has had a negative impact on the economic development and growth of rural areas. However, the experience of BRFP has shown that, with the right support and training, poor people can become viable clients who save and borrow money, invest funds profitably and repay their loans.

- *Outreach and follow-up are critical to reach the poorest communities.* The outreach work of field officers to the poorest rural families and the most vulnerable members of the community was central to the success of the programme. The field officers often made difficult trips to the most remote rural locations. They promoted programme activities, educated poor households and gained their trust, recruited thousands of new credit union members, and facilitated millions of dollars in loans. The employment of women as field officers, and people who spoke some of the local languages, helped in outreach to indigenous and women clients.
- *A public-private partnership approach is an effective way of delivering financial services to rural communities.* While the Government of Belize played a vital partnership role in the implementation of the programme, BRFP was largely private-sector driven. The use of credit unions to channel the programme activities was an effective way of delivering financial services. The programme was able to benefit from a well-established network of credit unions, which had a sound understanding of rural markets and a broad membership of clients from different socio-economic backgrounds. The institutional capacity-building of the credit unions helped reshape their business model and ensured that credit unions were able to expand their operations and develop their services to target the needs of the poor. The close collaboration among implementing partners and the involvement of institutions such as the Department of Youth Services and the Women's Department supported the broad outreach among marginalized groups.
- *Complementary business and enterprise development support must be integrated to ensure sustainable impact.* It is crucial that rural financial services are complemented by the provision of business and enterprise development support services to clients. Specific activities related to business and enterprise development were not included in BRFP's design because they were to be provided in collaboration with a European Union-funded programme. When this strategy failed, it left many clients at risk of default. Developing partnerships and alliances with ongoing programmes and existing institutions, and promoting collaboration with these on delivering business and enterprise development support services, is therefore important to ensure that clients receive the appropriate support to build their businesses and enterprises.

Conclusion

Poor rural households in Belize have traditionally had limited access to rural financial services. The commercial banking sector has focused mainly on large and medium-scale enterprises and poor rural people have not been perceived as viable clients. This has had a negative impact on economic development and growth in rural areas.

The Belize Rural Finance Programme introduced a public-private partnership with the country's credit unions to facilitate access to credit, savings and other financial services in rural areas. Through institutional capacity-building, credit unions were able to reshape their business model, expand their operations and develop their services to target the needs of the poor. Intensive outreach and follow-up activities,

including hiring field officers who spoke the local languages, ensured that remote households, very poor people, women and youth were able to access and benefit from the financial services provided by the credit unions.

The results show that with the right support and training, the poorest and most vulnerable people can become viable clients who take out and repay their loans and invest funds profitably. The programme also highlighted the importance of combining rural financial services with appropriate business and enterprise development support services and the need for partnering with ongoing programmes and existing institutions to deliver such services.

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Rural Empowerment and Agricultural Development Programme (READ)*

Total programme cost:
US\$23.59 million

IFAD loan: US\$20.11 million

IFAD grant: US\$0.23 million

Government contribution:
US\$3.25 million

Duration: 2006-2015

Directly benefiting:
20,125 households

* Programme phases:

- Phase 1 – 2006-2014
- Phase 2 – 2017-2022

Indonesia: Poor farmers increase productivity and incomes through access to improved crops, new technology and markets

In the poor and remote region of Central Sulawesi in Indonesia, an IFAD-funded programme used an integrated economic and social development approach to support poor and marginal farmers and increase agricultural productivity. A public and private partnership gave the farmers access to new technologies and improved crop varieties. The resulting higher yields led to increased incomes and helped reduce poverty in the villages. Families had more secure access to food and were able to send their children to school.

Indonesia is a fast-growing, lower-middle-income country with the fourth largest population in the world. Since the late 1990s, economic growth has led to significant poverty reduction: the number of people



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living below the national poverty line dropped from 18.2 per cent in 2002 to 10.9 per cent in 2015 (ADB, 2004 and 2017). Despite this achievement, the pace of poverty reduction has slowed, and it is estimated that 25 per cent of Indonesians have fallen into poverty in the past three years. More than 62 per cent of Indonesia's poor people live in rural areas.

Agriculture is the main source of income for the majority of the poor. The country's 17,500 islands offer strong agricultural potential, and Indonesia is a leading producer of palm oil and a major global producer of rubber, copra, cocoa and coffee. The majority of Indonesia's farmers (68 per cent) are smallholders operating on less than one hectare. Smallholder farmers generally lack access to quality inputs and services, such as higher-yielding crop varieties, good quality fertilizers, financial services, extension, technologies and mechanization. While this situation is improving, small producers are still not able to fully benefit from markets due to lack of information and access to finance, inability to meet market requirements, limited storage and cold-chain infrastructure, and lack of collective organization.

The island of Sulawesi has some of the poorest provinces in the country, in particular in Central Sulawesi where poverty rates are above the national average. Central Sulawesi has long suffered from localized civil conflict and recently increased incidences of terrorism and insurgency. Rural development in Central Sulawesi is constrained by the difficult geographic conditions, particularly in the upland areas where isolated rural households have limited access to external markets and social and productive services due to poor infrastructure. Cocoa is the main cash crop in Central Sulawesi, followed by coconut, but productivity is hampered by ageing trees, pests and diseases, as well as lack of access to inputs such as fertilizers and rural finance.

The programme

The Rural Empowerment and Agricultural Development Programme (READ) in Central Sulawesi started implementation in 2008. The programme was designed to stimulate economic activity and improve natural resource management in rural areas of Central Sulawesi Province where, at the time, more than 25 per cent of the population lived below the national poverty line. The aim was to improve the livelihoods of 15,000 poor rural families living in 150 villages by increasing agricultural productivity, setting up new off-farm enterprises and developing agriculture-related infrastructure.

A midterm review in 2011 identified opportunities to improve the programme's performance by strengthening its poverty focus and enhancing farm production and off-farm activities. The review recommended significant changes that led to a shift in focus away from construction of village infrastructure to activities that aimed to increase agricultural productivity and incomes. Measures were also put in place to ensure that the poorest members of the communities, including women, were able to benefit.

The programme used an integrated approach that linked community empowerment and agricultural productivity using a farming systems approach, whereby poor farmers and entrepreneurs participated in crop- and enterprise-specific groups. The programme focused on four key food and cash crops – cocoa, coconut, rice and maize. Farmers received comprehensive packages of support, including improved seeds, mechanization, seasonal finance and technical support. Farmers and entrepreneurs in the groups also received technical training and learned how to plan and manage

their activities and invest resources collectively. Efforts were made to involve women through activities such as vegetable production, establishment of homestead gardens, small livestock production and off-farm enterprises.

Local village facilitators were recruited to support the communities. Together with agricultural extension workers, the village facilitators provided training and helped ensure that villagers were able to adopt new farming technologies. They linked villagers with different programme initiatives, ensuring that the poorest members of the communities were included. They also facilitated social change, for example, by promoting equal participation by women and men in decision-making.

In some villages, leadership and oversight groups comprising village leaders, extension workers and village facilitators were established to ensure that programme initiatives were implemented successfully. These leadership groups also contributed to a wider understanding and improved coordination of the programme activities among the villagers.

Partnerships with the private sector in each of the selected commodities were an important part of the programme and helped improve the quality of technical extension services. One example was a partnership agreement between MARS Chocolate and the Government of Indonesia designed to boost the smallholder cocoa sector by supporting local cocoa farmers to adopt better cocoa farming practices and improve production. MARS Chocolate provided technical assistance and training for smallholders, improved cocoa genetics and agronomic support, as well as access to premium markets through their supply chain.

Results

Despite initial delays and a short implementation period, results show that the programme contributed to improved livelihoods in the communities. Increased agricultural production and productivity, improved infrastructure, and access to services and technologies helped reduce poverty in the villages. The programme benefited more than 20,000 families, and 40 per cent of the households moved out of poverty.

With higher yields, household incomes and food security increased

The programme introduced a comprehensive agricultural productivity package, ensuring that farmers had access to appropriate technology, improved seeds, farm machinery and equipment, and seasonal finance. In addition, the programme focused on selected key food and cash crops and provided extension services to the village groups working on these crops.

As a result, crop yields increased significantly compared with farms that did not receive any programme support. READ-supported farmers achieved 193 per cent higher yields for cocoa and 500 per cent for coconut, while rice and maize farmers achieved 60 per cent and 33 per cent higher yields than non-READ farmers. This improved agricultural productivity resulted in increased incomes for 83 per cent of households, and families were able to improve their houses and send their children to school. Higher household incomes and better access to nutritious foods such as vegetables meant that families had improved food security for longer periods of the year. Ninety-five per cent of READ-supported families enjoyed greater food security, compared with 85 per cent among non-READ families.

Partnerships with the private sector improved farmers' skills and agricultural production

By partnering with the private sector, the programme was able to ensure improved services to farmers. The partnership with MARS Chocolate facilitated under READ was a pioneering public-private partnership in the agricultural sector in Indonesia, and provided training to 978 farmers, including 65 village cocoa "doctors" (cocoa agronomists). In addition, the company provided improved cocoa genetic material and supported the construction of three cocoa development centres and 97 village cocoa clinics, which functioned like extension centres.

Farmers were able to improve their technical and management skills, and received better advice on agronomy, soil treatment, drainage and inputs. As a result, soil quality improved and cocoa yields increased by 250 per cent by the end of the programme. Yields are expected to further increase in the coming years by up to 700 per cent. The private-sector partnership also meant that farmers and their enterprises were better linked to commercial markets. Overall, it contributed to revitalizing the smallholder cocoa sector, which had suffered from falling productivity.

Communities were empowered to support their own development

The programme's participatory approach motivated communities to engage more actively in the development of their villages and influence policies that affected their lives. With the support of the village facilitators, villagers were able to plan and implement their own activities, which in turn resulted in greater confidence and improved skills. For example, poor community members, especially women, developed the skills and confidence to speak in public and learned about household financial management.

Traditionally, it is rare for women to participate in economic activities and decision-making in Central Sulawesi. Encouraged by the programme, at least two women's groups were formed in each village to develop homestead production, such as vegetables and small livestock, as well as off-farm activities, including food processing, handicraft-making and small village shops. Some women's groups made significant income from poultry, vegetables and enterprises, which meant they could afford to send their children to school and improve their housing conditions. By the end of the programme, 492 women's groups with more than 8,000 members had been formed and 51 per cent of all programme participants were women.

Challenges and solutions

READ had a challenging early period of implementation. Prior to 2011, the programme spent considerable resources on community infrastructure and had a focus on agriculture and enterprise-related investments. Poor villagers were underrepresented in many of the village committees (UPDDs) – a village institution responsible for managing programme resources, including infrastructure and revolving funds. In some cases, village elites dominated these committees, capturing resources and making investment choices that did not benefit the poorest in the communities. One of the main shortfalls in the early implementation period was the failure to recruit the non-governmental organization service provider, and this in turn delayed the recruitment of village facilitators to guide the community mobilization, socialization and investment selection process.

A number of changes were made following the midterm review of the programme in 2011 to strengthen the focus on agricultural activities and community empowerment, in particular to ensure that resources reached poor farmers directly and that women were involved in both on-farm and off-farm activities.

Additionally, after 2011 the programme paid greater attention to key food and cash crops and introduced packages of support to smallholder farmers to improve productivity. The infrastructure component was significantly downsized and funds were reallocated to agricultural productivity and market access activities. Only infrastructure related to agricultural productivity, such as agricultural roads, irrigation systems, land drainage and crop-drying facilities, was funded.

The programme's improved performance after 2011 and its timely completion served as a milestone for facilitating a closer cooperation between the Government of Indonesia and IFAD.

Scaling up

Based on the programme's good results and its successful approach to community-driven agricultural and rural development, the Government of Indonesia has shown strong commitment to scaling up the programme. This is in line with its efforts to improve farmers' welfare, food security and rural poverty reduction. Following the completion of the first phase of the READ in 2014, the central government replicated the READ approach using its own resources in West Nusa Tenggara and West Kalimantan provinces.

The programme approach will also be scaled up under the new IFAD-supported Rural Empowerment and Agricultural Development Programme on Sulawesi Island (READSI). READSI expands the use of the READ approach across all of Sulawesi Island. The new programme will provide technical training and comprehensive input packages, and will improve access to key services such as financial services and markets through partnerships with the private sector.

New partnerships will be developed with the private sector to improve the profitability of cocoa farming, along the lines of the partnership with MARS Chocolate piloted under the READ. The new programme will use IFAD's public-private-producers partnerships (4Ps) model, which promotes the partnership role of small producers and supports their access to markets. Through these partnerships, the aim is to develop modern service delivery models by strengthening both public and private service delivery. Services delivered within the supply chains will be upgraded, including developing the capacity of existing private service providers and training new ones to deliver high-quality, affordable services; expanding the cadre of private and public extension professionals; and strengthening the role and capacity of the technical line department for district estate crops.

Main lessons

- *Combining empowerment and technical support for market access is an effective approach to improving livelihoods of poor and remote rural communities.* When bundled together, activities for empowerment and technical support can be mutually reinforcing, especially for remote poor rural communities who lack both confidence and technical skills. As many of the poor villagers did not have adequate capacity to implement the programme activities, the combination of support, including the establishment of crop and enterprise-specific groups, technical training and productive inputs, enabled poor farmers and entrepreneurs to participate in agriculture and enterprise-related activities, encouraged them to adopt new technologies and empowered them to improve their livelihoods.
- *Village facilitators play a critical role in ensuring inclusive and equitable community participation.* The READ local village facilitators ensured a high rate of community participation in the programme activities and played a crucial role in facilitating access by the poorest villagers to the groups and programme activities. As seen during the early implementation phase, in some areas elite capture of programme activities and resources meant that poor people did not participate in or benefit from the programme. The village facilitators made it possible to address social issues such as equal participation in decision-making by women and poorer members of the community. The involvement of village heads in the programme's decision-making processes was important to ensure buy-in from the community, as well as for sustainability of programme results. The use of a local non-governmental organization for community facilitation services with considerable previous experience also contributed to the effective and smooth implementation of the activities.
- *Focusing on a few key food and income crops and offering comprehensive technology packages contributed to higher productivity.* Selecting a few food and income crops meant that the programme could focus its support and provide a comprehensive package of improved seeds, mechanization, direct access to financing and technical support. As a result, farmers saw increased yields and incomes in a relatively short time. The focus on vegetables and homestead gardens not only ensured the involvement of women in economic activities, it also helped to improve the food and nutrition security of these women and their families.
- *Involving the private sector strengthens service delivery and facilitates access to new technologies and access to markets.* The partnership with MARS Chocolate provided a new model for technical service delivery to farmers that complemented the existing government extension system. This meant that farmers could benefit from access to the newest technology, services, linkages to secure markets, innovation and knowledge on how to improve crop management. Overall, the partnership generated significant improvements in livelihoods for the farmers and ensured that their businesses could become more economically viable. Involving a strong commercial partner such as MARS Chocolate also supports future sustainability and can revitalize sectors that have suffered from falling productivity, as it did with the smallholder cocoa sector in Indonesia.

Conclusion

The Rural Empowerment and Agricultural Development Programme in Central Sulawesi helped to revitalize the smallholder cocoa sector in Indonesia. It piloted a public-private partnership with MARS Chocolate to provide small cocoa farmers with the newest technologies, improved cocoa seeds and access to markets. With this support, cocoa farmers realized higher yields and increased incomes, and were thus able to build more economically viable businesses. In turn, this helped to reduce poverty and increase food security in poor rural communities. The programme's integrated and inclusive approach to improving livelihoods was highly successful and led not only to economic development, but also to positive social change. With the support of local village facilitators, poor and marginalized villagers, including women, were able to participate equally in programme activities and to enjoy the benefits.

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Kenya: Communities balance environmental conservation and equitable economic development to protect the Mount Kenya ecosystem

On the slopes of Mount Kenya, an IFAD-supported project brought communities together to equitably manage natural resources, helping to protect livelihoods and sustain properties of the Mount Kenya National Park and surrounding forest reserve for future generations. Degraded landscapes and river basins were regenerated, livelihoods were improved and conflict over resources was reduced through carefully selected project activities designed to balance local conservation with development needs.

Situated in the heart of Kenya is Africa's second largest mountain, Mount Kenya. Encircling the peak, the Mount Kenya National Park and surrounding forest reserve

Mount Kenya East Pilot Project for Natural Resources Management

Total project cost:
US\$25.7 million

Total IFAD financing:
US\$16.7 million

IFAD loan:
US\$16.7 million

Duration: 2002-2012

Directly benefiting:
60,000 households

Cofinanciers:
Global Environment Facility:
US\$4.9 million



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combines agriculturally fertile lands for growing tea, coffee, tobacco and cotton in the lower regions with uninhabited Afro-alpine zones and highland forests. Snaking through the national park, forest reserve and surrounding areas, the Tana River provides 50 per cent of all Kenya's hydropower and supports agriculture, fisheries and livestock production, making it a vital natural resource and strategically important to Kenya's economy. The Mount Kenya ecosystem is a UNESCO world heritage site of outstanding local, national, regional and international importance, and its beauty and biodiversity make it a unique habitat.

However, in the early 2000s, the impact of climate change and the growing intensity of human activity were threatening to devastate this valuable resource. Climate change had reduced the amount of rainfall in terms of intensity, period and distribution, thereby affecting the timing and frequency of floods in the rainy season, while the mountain's glaciers had melted, reducing them in mass by 92 per cent and causing floods downstream. Human activities such as overgrazing, clearing forests for agriculture and illegally syphoning of water higher up the river had exacerbated land degradation, water loss and soil erosion and encouraged landslides. Uncontrolled tree cutting by tea industry factories, private sawmills and charcoal producers rapidly accelerated the deforestation. These practices pushed sediment and silt from the mountain's tributaries down the Tana River that in turn polluted the river, lowered the availability of water downstream, and reduced the flow of water during dry periods.

Although the rich natural resources of the Mount Kenya ecosystem have the highest agricultural potential in Kenya, the soil erosion and limited water supply reduced the productivity of the land for farming. This lowered incomes for local communities, increasing poverty and food insecurity. As land productivity diminished, farmers continued to use the same inefficient farming methods and more forest needed to be cleared to generate an income, creating a negative spiral of poverty and land degradation.

The combination of fewer income-generating opportunities with a rising population in the productive areas of the ecosystem increased the risk of conflict as natural resources became more scarce. At the root of this conflict was the absence of a credible governance mechanism and administration to manage and evenly distribute resources. As farmland increasingly encroached into natural habitat, large animals including elephants raided cropland for food, which pushed humans into conflict with nature. In short, the degradation of the national park, forest reserve and surrounding areas had reached a tipping point.

The project

In response, the Government of Kenya and IFAD worked together to design a project to address the underlying causes of poverty and food insecurity, while working directly with local communities to improve management and conservation of the area's natural resources. In this way, the project aimed to stop the spiral of land and water degradation due to overuse and unsustainable management practices. The Mount Kenya East Pilot Project for Natural Resources Management (MKEPP-NRM) was implemented from 2004-2012, and targeted 580,000 of the poorest people and those most at risk of falling into poverty, particularly women, in the then five districts (now part of three counties) on the eastern slopes of Mount Kenya. IFAD-financed activities focused on improving rural livelihoods, while the Global Environment Facility (GEF)

financed ecosystem management activities in the protected areas of Mount Kenya, which contain flora and fauna species of global conservation significance.

Uncoordinated water use and intense soil erosion were major factors in the degradation of the ecosystem and a continuing source of conflict between communities in the protected areas. Illegal or inequitable water extraction, land rights and boundary issues, and tensions between pastoral and agricultural communities all needed to be resolved by the community. In response, the project brought together all the communities living in the project area into associations and committees that would address these issues in a coordinated way.

The project formed community-based Water Resource Users Associations (WRUIAs) to develop and implement plans to facilitate fairer access to water for local communities, remove illegal water extraction systems, and provide training in conflict resolution to manage disputes. These associations then supported landowners and communities to manage their water use efficiently and equitably, and assisted them in building partnerships with local water departments. Local water departments were also trained to measure and conserve water and resources, and communities were sensitized so that individuals could become more aware of how their land and water use was contributing to resource degradation.

Similarly, Community Forest Associations (CFAs) were formed and strengthened within a 10 km radius from the forest reserve and national park boundary to develop and implement forest management plans aimed at sustainable forest management, reforestation and wildlife protection, and support smallholders in finding alternative sources of income. It was vital to prevent soil erosion dragging more earth from riverbanks and roads into the river. To achieve this, seedlings were planted along the river, roadsides, farmland, springs and wetlands, and on hilltops where forests had been cleared. Once fully grown, the trees' roots will compact the loose earth and increase the rainwater absorbed by soil, preventing a build-up of silt in the rivers.

The entire community was involved in this process, with schoolchildren being encouraged to "adopt" and plant trees via a school greening programme, and local farmers were enlisted to grow the seedlings needed to line the 265 km along the river. River banks and springs could then be developed to prevent additional sediment entering the river, improving the flow of water in the dry season.

MKEPP-NRM worked with local administration and community-based organizations to identify local development needs and develop action plans to resolve development issues. Each community formed a committee of local stakeholders to select the populations, areas and ecological zones for the project to focus on. These committees were then trained in skills such as group constitution and by-laws development, bookkeeping, conflict management and leadership to increase their ability to plan and manage their community's activities.

The project facilitated Farmer Field Schools, where farmers were trained in, and taught each other, new techniques and technologies to improve the sustainability of local agriculture and improve their productivity. New higher yield crops and breeds of animals, such as poultry and goats, were introduced. Farmers learned innovative ways to conserve water and improve soil quality, often themselves going on to become trainers in the school, promulgating lessons across the project area.

MKEPP-NRM also aimed to reduce the conflict between humans and nature in the national park. Wildlife fences were set up along the national park boundaries to prevent elephants from running across farmland and raiding farmers' crops, which could potentially lead to human and animal injuries and fatalities. Additionally, forest towers were built to protect the forests from forest fires and halt illegal forest activities, such as illicit logging, and support Kenyan wildlife.

Results

In the Mount Kenya region, more than half a million people have benefited from a more productive, equitable and sustainable use of natural resources. The MKEPP-NRM community-based approaches improved people's access to water, incomes and farm productivity, improved community cohesion and built participation in environmental conservation. The Mount Kenya National Park and surrounding forest reserve have been regenerated, thereby improving biodiversity conservation.

Involvement of the community increased environmental awareness and reduced conflict

MKEPP-NRM enabled communities to take charge of local development issues by building awareness of environmentalism and by building their capacity to better manage local natural resources. The WRUAs and the CFAs provided a forum for managing the conflicts caused by the lack of a coordinated response to water and forest resources management. By forming and strengthening local institutions and making them legal entities, the users associations ensured that when conflicts did occur, they could predominantly be resolved through negotiation and agreement rather than violence. By securing their legal status, MKEPP-NRM enabled the associations to assist in regional water and forest management coordination and supported authorities to manage and commercially supply water to their communities as the forest services were sustained. Altogether, the project's community focus has created a notable positive change in attitudes and capabilities towards resource management and conflict resolution.

Engaging schoolchildren created a new culture of conservation

By including children from 1,177 schools in the planting of trees, the project was able to instil the importance of tree planting for conservation in a generation, potentially protecting the Mount Kenya ecosystem against future degradation. The influence of the school greening programme extended to families, teachers and parents, with many families influenced to begin tree planting at home. The success of the school greening programme led to a long-term, nationwide government strategy to encourage environmental conservation in the young generation, who make up approximately 80 per cent of the population in Kenya (UNDP, 2013).

Preventing land degradation helped mitigate the effects of climate change

The project had an important impact on environmental conservation and climate change mitigation across the ecosystem, with important consequences for Kenya. Planting seven million seedlings helped to regenerate the forests, prevent land degradation, and helped to reverse the effects of climate change.

CFAs oversaw the rehabilitation of 3,050 hectares of degraded forest land, planting of 266,916 indigenous plants on the riverbanks and hilltops and thereby minimizing soil erosion and increasing the tree cover. This secured many kilometres of riverbanks and roadsides, preventing soil erosion and the polluting of rivers, and supporting the government in its target to reforest 10 per cent of Kenya.

Increased access to clean water improved health and incomes

Forest rehabilitation, conservation of the riverbanks, springs, wetlands, hilltops and roads, in combination with the work at the community level to improve access to water and installing irrigation systems, fundamentally changed lives across the community. Typically, women and children as young as 5 years old had to walk between 1 and 6 kilometres to collect water. Improving the water supply, quality and irrigation shortened the distance needed to carry water home, and reduced the people (mainly women) and time needed to collect it. Furthermore, having cleaner water reduced incidences of water-related disease for over a third of the people in the communities. Improved water quality and flow gave farmers access to more and cleaner water, more consistently across seasons, thus increasing harvests and incomes. In general, the soil and water conservation had positive effects on farmers' productivity, enabling farmers to increase their crop yields by 65 per cent and improve their incomes.

Building solar-powered wildlife control fences protected wildlife and reduced human-animal conflict

The wildlife control fences protected crops from being trampled and eaten. Instead of standing guard at night in their fields, farmers could sleep at home – which had a direct effect on their well-being. Children could walk to school without fear of encountering larger wild animals such as elephants. In turn, the local wildlife was no longer threatened by farmers angry at the encroachment on their land. Building the fences improved the forest cover, minimized forest produce and wildlife poaching, controlled grazing, improved crop diversification and farm-based incomes, improved food security, and also enhanced a harmonious working relationship between the government agencies mandated to manage protected areas and the local communities. Together, these changes increased the value of the land.

Introducing new sustainable farming technologies increased incomes and food security

New and improved farming methods that were introduced through the Farmer Field Schools helped farmers across the project area to produce more food, which improved their incomes and led to greater food security. Incomes from crops increased by 71 per cent and from livestock products by 55 per cent. Farmers learned how to plant kitchen gardens, conserve water, and how to improve animal fodder and soil fertility. Farmers were also trained on how to improve animal breeds, which improved protein production. Overall, 90 per cent of farmers taking part in the Farmer Field Schools experienced reduced incidences of hunger.

Challenges and solutions

Two of the main challenges faced during project implementation were local attitudes towards conservation and land rights. Traditional perceptions of the river as a “God-given” asset that could be used at will meant it was initially difficult to persuade local communities to change their practices. Conservation was viewed as the responsibility of the government, not of communities and individuals. This meant that conservation needed to be balanced with supporting activities that improved people’s livelihoods in the area.

To address the challenges, MKEPP-NRM worked with the local community and forest associations to create farming zones around the new forest plantations. A key feature of the project’s coordinated, community-based approach to conservation was the organization of exchange visits among communities along the river to build understanding of the varying needs of each community and thus promote cooperation on resource management.

Across Kenya, there has been a shift from pastoralism to sedentary agriculture; land ownership has changed from predominantly communal to individual; and the land available for grazing has been reduced as private land and fenced off. These changes have created an uncertain regulatory environment around land rights, and the limited land resources in the project area needed to accommodate diverse communities. Pastoralists and livestock farmers who had traditionally travelled over grazing lands unhindered came into conflict with sedentary farmers over land access. These issues were particularly difficult around the watershed, with unclear ownership and boundaries making it difficult to ensure individuals and communities had equitable access to water.

To address this issue, MKEPP-NRM brought together local communities and relevant government agencies to improve and simplify land rights in the Mount Kenya area. The project also brought new mapping technologies to the communities, so that they could map and store geographical data along the rivers. This helped the project to gain a better understanding of the complex relationship between physical, cultural and economic factors affecting river and forest management, enabling community-led associations to make better informed decisions on resource management. Together, these practices helped to resolve some of the land rights issues.

Scaling up

From the beginning, MKEPP-NRM was designed as a pilot project to try different community-based approaches to natural resource management. The impact of MKEPP-NRM on the ecosystem of Mount Kenya led the Government of Kenya to scale up the project’s activities in a new IFAD-funded project covering a wider area: the Upper Tana Catchment Natural Resource Management Project (UTaNRMP). The Upper Tana project area covers more than 17,400 km² of land. It is home to 5.2 million people and provides water for half the population of Kenya.

The scale of the Upper Tana project is significant because by covering a wider geographical area the project is able to overcome some of the challenges that were faced in MKEPP-NRM. By improving natural resource management in 24 river basins and tributaries of the four MKEPP-NRM river basins, the project is able to understand and respond to the entire ecosystem of Mount Kenya and the neighbouring Aberdare national parks, forest reserves and surrounding areas. This improves community cohesion as it enables land and water-use issues between sedentary farmers upstream

and the pastoralist downstream of the rivers to be more effectively managed across a larger area. The ability to resolve resource management issues was further strengthened as many more WRUAs and CFAs were developed for the Upper Tana catchment. These had been new to Kenya at the time of MKEPP's inception and were later embedded in the laws of Kenya, strengthening their authority within the communities and improving their capacity to manage natural resources effectively.

UTaNRMP continues the environmental protection that MKEPP-NRM began, concentrating on the most degraded land and supporting those communities most in need, but as the project area expanded, different ecosystems needed specific support. To address this issue, UTaNRMP matched natural resource management activities to the unique ecosystems along the river basins. The main agroecological zones in the project areas include tea, coffee, cotton and tobacco and millet growing areas. UTaNRMP concentrates on activities that respond to environmental conservation, food security and income generation. The Farmer Field Schools that were used in MKEPP-NRM to demonstrate technologies have also been continued and expanded in the new project, encouraging the spread of knowledge about new technologies and techniques across the agroecological zones. The Kenya Agricultural and Livestock Research Institute has also been involved to improve soil fertility, seed bulking and crop trials to improve farm unit productivity and enhance food production and security.

Main lessons

- *Community approaches to development are essential to natural resource management.* MKEPP-NRM demonstrates the symbiotic relationship between development and the natural world, highlighting the importance of building projects that support human and environmental development for sustainable futures. The entire community needed to buy into the project and each individual needed to play a role in regenerating the Tana River basin to reduce poverty and improve food security. Indeed, an uncoordinated approach to resource use and extraction had been a major catalyst in the destruction of the Tana River basin and declining economic development. MKEPP's capacity-building approach to community development empowered communities to create a shared vision of their development by providing the tools and knowledge to create action plans, and then crucially, the skills and support to implement them. Eventually, the community approach to resource management became a way of life in the project area that could be sustained beyond the duration of the project.
- *Strong governance and community participation build a path to peaceful dispute resolution.* Establishing good governance structures and instruments, combined with community planning and monitoring, reduced conflicts in community projects. The allocation of water resources had the potential to trigger ethnic conflict in the project area, and at the heart of communities' resource conflict was the lack of clear governance structures or a strong dispute resolution process. Similarly, taking a community approach to human-wildlife conflict enabled the community to enhance their quality of life and improve animal welfare.
- *A business approach to conservation should be embraced.* The project had to balance the need to improve conservation with the need to improve smallholder livelihoods in order to reduce poverty and improve food security.

By focusing on environmental activities that also led to more productive farms and communities, the project was able to achieve both. Farmers adopted environmental conservation activities that directly benefited their livelihoods, as demonstrated by their willingness to take on the seedling production for the tree planting because it provided extra revenue. Similarly, in the Farmer Field Schools, farmers engaged best in activities that were not only environmentally sustainable, but also improved productivity.

Conclusion

A combination of climate change and human activities had degraded the rich natural resources of the Mount Kenya National Park, forest reserve and surrounding areas. Local communities needed to come together to build an approach to natural resource management that would balance local conservation with improved livelihoods and food security. Through community-led associations and committees, MKEPP-NRM was able to support the communities to rehabilitate the forest and provide fairer access to cleaner water across the project area. This community approach helped to change attitudes across the project area, demonstrating how individual actions could impact others along the length of the river, helping to foster a sense of environmentalism and instilling knowledge in schoolchildren for the next generation. As MKEPP-NRM was scaled up into a larger project, the development agenda continues, helping to rehabilitate and preserve the rich flora and fauna of the national park and forest reserve and improve community livelihoods through better food security and higher incomes.

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Republic of Moldova: Rebuilding the agricultural sector creates opportunities for farmers and young rural entrepreneurs

Starting in the late 1990s, IFAD's operations in the Republic of Moldova have focused on transforming the agricultural sector. After years of decline and reduced agricultural production, farmers and rural entrepreneurs are now improving their productivity and incomes through enhanced access to rural finance, better infrastructure and integration into agricultural value chains and markets. New opportunities have been made available for young rural entrepreneurs, who are increasingly able to make a profitable living in rural areas and play an active role in rebuilding the agricultural sector.

Moldova is a landlocked country with a population of approximately 3.5 million people. Economic growth has been steady since the late 1990s, but has slowed in recent years; the country is still one of the

Rural Financial Services and Agribusiness Development Project

Total project cost:
US\$39.3 million

IFAD loan:
US\$19.3 million

IFAD grant:
US\$0.5 million

Government contribution:
US\$1.5 million

Beneficiaries' contribution:
US\$11.7 million

Duration: 2010-2016

Directly benefiting:
8,000 households

Cofinanciers:
DANIDA: US\$4.5 million
Participating financial
institutions: US\$1.77 million



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poorest countries in Europe with 9.6 per cent of the people living below the national poverty line (World Bank, 2016a). Poverty is higher in rural areas where 18.8 per cent of the people are poor (World Bank, 2013).

Before Moldova's independence in 1991, the agricultural sector played a key role in the country's economy. Moldova was considered the vineyard and market garden of the former Soviet Union, supplying the Soviet Union states with high-value products such as tobacco, grapes and wine, and fruits and vegetables. Following the break-up of the Soviet Union and the subsequent economic decline, the agricultural sector collapsed. Collective and state-owned farmland was distributed in small and often fragmented plots to former agricultural workers, many of whom had little technical capacity or interest in farming the land and no access to markets. A drastic reduction in agricultural production and exports led to a decline in the share of agriculture in gross domestic product from 36.5 per cent in 1989 to 14 per cent in 2014 (World Bank, 2016b).

Today, the agricultural sector is dominated by smallholder farms. More than half of these farms cultivate less than 0.5 hectare, while 95 per cent of all farms are less than 3 hectares (World Bank, 2016b). The majority of smallholders are subsistence farmers with few opportunities to engage in commercial farming and make an income.

The country's fertile soil and good climate for agricultural production, as well as an increasing demand for agricultural commodities, mean that Moldova has the potential to produce high-value agricultural products for the export market and regain its comparative advantage with regard to farming and agro-food products. However, the commercial banking sector has traditionally been reluctant to give medium- and long-term loans to the agricultural sector. The demands for collateral are substantial – often up to 250 per cent of the loan amount – making it impossible for most small- and medium-scale farmers and entrepreneurs to meet the requirements.

This constraint means that agricultural and other rural enterprises are unable to boost their operations or start up new businesses, which especially impacts young farmers and entrepreneurs. With limited employment opportunities, many young people are leaving rural areas to seek better livelihoods in urban areas or abroad. In addition, the agribusiness sector is limited by inadequate knowledge and technology, low prices for produce, lack of access to markets and producer organizations, poor physical infrastructure, and vulnerability to climate change. To address these constraints, investments are needed in agricultural production techniques, equipment and processing facilities, as well as investments to build and maintain rural infrastructure.

The project

Since 1999, IFAD's operations in Moldova have followed a common approach, addressing rural poverty and rebuilding the agricultural sector by channelling credit through commercial banks to farmers and rural entrepreneurs and improving small-scale rural infrastructure. The Rural Financial Services and Agribusiness Development Project (RFSADP), which was implemented between 2011 and 2016, was the fifth project funded by IFAD in the country.

In line with other IFAD-financed projects in Moldova and given the need to transform the agricultural sector, RFSADP targeted farmers with small and medium-sized enterprises, who already had the skills and opportunities to enter commercial farming, and economically active microentrepreneurs. Most of these people were cultivating their own land, were likely to have a higher education and had access to remittances. Many of the farmers were also renting land from poorer households that were not able to farm the land themselves. By targeting these relatively well-off groups, it was expected that benefits would reach poorer farmers and landless people through increased employment opportunities and demand for services in rural areas.

The project also had a strong focus on young entrepreneurs. By securing external funding from the Danish International Development Agency (DANIDA), the project was able to support young entrepreneurs' (18-30 years old) access to rural finance with grants to complement loans from commercial banks. The grants reduced the requirements for collateral and hence allowed young entrepreneurs with limited assets to borrow from the banks and from local savings and credit associations. Young entrepreneurs were also trained in how to develop business plans.

Besides rural finance and small-scale infrastructure, the project introduced support to small producers through market and value chain development. Farmers were organized into small groups in various value chains, including vegetables, table grapes, sugar-beet, sheep, dairy and honey production. To link these producer groups to processors and buyers and improve their access to markets, the project introduced contract farming whereby farmers produced agricultural goods for specific buyers in set quantities at prearranged prices. At the same time, this arrangement ensured that agribusinesses had a stable supply of produce that met their quality standards. Through study tours and training in new technologies, quality standards, processing and marketing, farmers learned to improve their produce so they could market their products more effectively and export to both domestic and international markets.

In response to a series of climate-related events in the country – droughts in 2003 and 2007, and floods in 2008 – RFSADP introduced conservation agriculture to enable farmers to deal with the climate conditions. Conservation farming is increasingly regarded as an important approach to climate change adaptation, with techniques to improve soil fertility and capacity to preserve moisture, reducing the need for fertilizers and making agriculture more resilient to climate change. But the switch from conventional farming to conservation agriculture requires access to hardware, as well as to support services, knowledge and information. The project established demonstration plots that were used as platforms for transferring technology to farmers through training in conservation agriculture principles. International study tours were also organized to introduce farmers to best practices.

Results

IFAD's operations in Moldova have contributed to economic growth and poverty reduction in rural areas. The new initiatives introduced by RFSADP, including value chain development, conservation agriculture and a strong focus on young entrepreneurs, combined with access to investment loans and improved rural infrastructure, resulted in increased production and higher incomes for rural families.

Access to credit and technology allowed farmers to improve production and incomes

Improved access to rural finance through investment loans helped farmers improve agricultural production. More than 80 per cent of the loan amounts were invested in production assets such as high-value fruit trees and vegetables, field crops, livestock products, honey, and farm machinery and equipment. The remaining loan amounts were invested in facilities for processing and packing and warehouses with cold storage.

As farmers invested in production assets and improved their agricultural practices, production increased. Fruit production increased by 21 per cent, table grapes by 25 per cent, and open-field vegetable production increased by 266 per cent. This led to higher incomes, for example, for table grape production, which increased sixfold compared with farmers without project support, and beekeeping production, which resulted in ninefold higher incomes.

With new technology and approaches, farmers were able to improve agricultural practices and increase their incomes. Farmers adopted integrated pest management techniques, water-efficient irrigation systems to mitigate droughts, and advanced practices for orchard management, including the use of hardy varieties resistant to pests, diseases and frost. Farmers practising conservation agriculture witnessed an average increase of 17-25 per cent in productivity of crops (wheat, barley, maize, sunflower and soy). At the same time, fuel consumption decreased from 95.4 litre/hectare to 64.7 litre/hectare, and the overall costs per hectare decreased by 5 per cent. Production areas using conservation agriculture in Moldova have increased from 45,000 to 150,000 hectares.

Young entrepreneurs built successful rural businesses and created job opportunities

Commercial banks in Moldova have traditionally been reluctant to lend money to young people, which has made it difficult for young rural entrepreneurs to start new businesses and invest in the agricultural sector. With the funding from DANIDA, the project was able to provide young entrepreneurs with grants to complement investment loans from banks. Almost 25 per cent of all loan clients supported by the project were young entrepreneurs, and the loan amount taken out by these young entrepreneurs accounted for 47.6 per cent of the total loan amount provided through the project.

The combination of credit and capacity-building in marketing, planning and managing businesses generated significant opportunities for investments and self-employment for young entrepreneurs. Many of the young rural people who had moved to urban areas to pursue education and careers decided to move back to the rural areas and start up new businesses. Out of 445 young entrepreneurs financed by the project, 322 started new businesses. These young entrepreneurs took out loans and applied their knowledge to start farming businesses, buy farming equipment, and invest in storage and processing facilities. Many now run successful smallholder businesses, such as producing high-value vegetables and fruits, cattle farms and small livestock production, beekeeping and honey production, and providing services for other farmers, including mechanized services and collecting and storing milk.

With access to finance, young entrepreneurs were able to expand their businesses and hire more staff. Full-time employment in these companies increased by 25 per cent and temporary employees increased by almost 150 per cent. Family members also benefited from employment opportunities, with 31 per cent more family members working for companies created and run by young entrepreneurs.

Local savings and credit associations also provided medium-term loans to 1,285 small businesses and microentrepreneurs, 40 per cent of whom were women, to help them develop small-farm activities and increase their family income.

Value chain development led to better access to markets

The value chain approach adopted by the project created linkages between producer groups, processors and buyers. In total, 15 product-specific producer groups were established, including in sheep cheese production, open-field vegetable production, table grapes and honey production. Contracts between producers and buyers, combined with technical assistance and study tours, have enhanced the quality of the products to meet quality standards, ensured higher productivity and regularity of supply, and increased producer groups' access to export markets, including the European Union markets.

Challenges and solutions

IFAD's operations in Moldova have traditionally focused on both small and medium-sized farmers, including those who are relatively well-off and who would not otherwise be targeted by IFAD-funded projects. But given the need to transform the Moldovan agricultural sector after years of decline and reduced agricultural production, the focus on medium-sized farmers has worked well. Poorer farmers who received land during the transition period after independence owned mostly small and fragmented plots and had very little technical capacity or interest in farming their land. Hence, focusing on the larger landholdings with capacity to invest in the sector made sense from the perspective of revitalizing Moldovan agriculture.

Nonetheless, RFSADP made a number of efforts to involve the more vulnerable households and smaller farmers. The support to value chain development was also an attempt to get small farmers to come together and work in producer groups, and thereby strengthen their bargaining power in markets. The work done on increasing access to rural finance included credit to microentrepreneurs through local savings and credit associations and 85 per cent of the clients owned less than 5 hectares of land. Likewise, the focus on young entrepreneurs was an effort to engage an otherwise excluded group in the rural economy and 30 per cent of the young people supported by the project owned less than 5 hectares.

Scaling up

RFSADP was the fifth project funded by IFAD in Moldova and followed the main approach adopted by previous projects in the country. However, RFSADP also introduced new initiatives, including contract farming to support value chain development, conservation agriculture, and provision of loans for young entrepreneurs to start new businesses.

IFAD's sixth and seventh projects in Moldova, the Inclusive Rural Economic and Climate Resilience Programme (IRECRP) and the Rural Resilience Project (RRP), respectively, build on the experience of RFSADP and continue the efforts to increase the capacity of farmers to adapt to climate change by teaching farmers the principles and techniques of conservation agriculture. New initiatives supporting conservation agriculture in Moldova have also been explored by the World Bank and the Food and Agriculture Organization of the United Nations.

IRECRP and RRP are also scaling up the support to young entrepreneurs. The success and high demand of this support under RFSADP confirm that involving young people in the agricultural sector and giving them an opportunity to build their own businesses and contribute to the rural economy is a priority for IFAD's operations in Moldova. DANIDA is again providing support to IRECRP to fund matching grants, which will enable young entrepreneurs to take out loans. The age limit has been adjusted to 18 and 35 years (up from a maximum of 30 years), allowing especially young people who return to rural areas to have better access to investment finance.

Main lessons

- *With the right support, young people can build successful businesses and make a profitable living in rural areas.* One of the main priorities for the project was the involvement of young people in the rural sector. With limited employment opportunities, many young people had been leaving rural areas to seek better livelihoods in urban areas or abroad. By securing funds from DANIDA, the project was able to support young people's access to investment loans and provide them with training. The support was welcomed by young entrepreneurs who saw this as an opportunity to return to rural areas and start small businesses. With their knowledge, ideas and interest in new technologies and farming methods, these young people are now playing an important role in rebuilding the agricultural sector in the country. Access to new opportunities also helped stem migration, as young people can build profitable livelihoods in rural areas for themselves and their families.
- *Focusing on smallholders and medium-sized farmers also brings benefits to the poorer farmers and landless households.* The project experience shows that, given the right context, support to better-off farmers and entrepreneurs who have the capacity to invest in the rural sector can help increase agricultural growth and employment that will benefit poor households. In line with previous projects in Moldova and the Government's priority to rebuild the agricultural sector, the RFSADP focused on smallholders as well as medium-sized farmers who were able to enter commercial farming. Although IFAD traditionally targets poorer households, this approach worked well in the Moldovan context and benefited poor farmers and landless households. Many of the poorer farmers own plots that are too small and fragmented to generate enough income. They were able to make an income by renting out their land to larger farmers and, as new job opportunities were created through the investments in the rural sector by the larger landholdings, they found paid employment on medium and large farms.

- *Combining a value chain approach with access to rural finance can result in significant improvements in farming practices, production and incomes.* The combination of rural finance and value chain development can help rebuild the agricultural sector in a sustainable and inclusive way by creating new opportunities for different actors from a broad segment of the rural population. Value chain development was a relatively new and much needed initiative in the Moldovan agricultural sector. The contract farming initiative enabled farmers, including small and young farmers, to join producer groups. They received technical assistance directed towards improving farming practices and enhancing the quality and quantity of their production, which improved competitiveness and access to both domestic and international markets. At the same time, farmers were able to invest in productive assets that helped them increase production and incomes, while investments in cold-storage and processing facilities benefited other farmers in the area.

Conclusion

Over the years, IFAD's operations in Moldova have contributed to economic growth and poverty reduction in rural areas. While the growing influx of remittances and the recovery of the Russian market have been a significant factor in Moldova's economic growth, IFAD's focus on facilitating access to rural credit and supporting farmers and entrepreneurs to enter commercial farming has helped rebuild the agricultural sector.

RFSADP introduced additional initiatives that were highly relevant in the Moldovan context and created new opportunities. The focus on young entrepreneurs was successful in facilitating young people's access to credit and supported their engagement in the agricultural sector. A number of start-up businesses were established by these young entrepreneurs, which contributed to the rural economy and created additional employment opportunities. With new livelihood options, young people returned from urban areas to re-establish themselves in their rural villages and towns.

The project supported both small and medium-sized farmers and entrepreneurs, including farmers who were relatively well-off. Supporting these groups, however, brought a number of benefits to poorer farmers and landless households, especially through the creation of new jobs. The establishment of producer groups was also a way for smaller farmers to enhance the quality and quantity of their production, enabling them to market their produce. In addition, investments by medium-sized farmers in warehouse and cold-storage facilities, and packing and marketing services benefited other farmers and helped revitalize the agricultural sector and prepare it for domestic and international markets.

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Senegal: Increasing household food security by building inclusive agricultural value chains

In the Groundnut Basin of Senegal, smallholder farmers, rural women and unemployed rural youth have experienced improved household food security and increased incomes through a systematic approach to building diversified agricultural value chains. These key stakeholders participated in the identification and development of the project, thus increasing their engagement in sustaining its achievements.

Senegal, the western-most country on the African continent, has a long history of political stability and multiparty democracy. With highly developed financial and industrial sectors, shipping ports that serve as a hub for the region, and diverse mineral reserves including those recently discovered for crude oil, the country has the potential to become one of the strongest economies in Africa.

Projet d'Appui aux Filières Agricoles (PAFA)

Total project cost:
US\$30.887 million

IFAD loan: US\$14.89 million

IFAD grant: US\$267,000

Beneficiary contribution:
US\$1.7 million

Duration: 2010–2016

Directly benefiting:
37,734 households

Cofinanciers:

GEF grant: US\$5 million

OFID grant: US\$9.03 million



However, Senegal's gross domestic product has been in decline for more than a decade due to the general global economic crisis and high fuel prices, but also to lower investment in the country. This has impacted heavily on agriculture, the backbone of the nation's economy.

In the face of these challenges, Senegal has launched a number of plans to accelerate economic growth, the latest aiming to transform the country into one of Africa's most successful economies by 2035. By that time, the Government aims to achieve self-sufficiency in crops, including rice and onions, millet, sorghum and corn. It will also develop the value chains for fruits and vegetables, and will optimize and expand those for groundnuts.

Agriculture is essential to Senegal. It is a major export earning sector through cash crops such as groundnuts, sugar cane, mangoes and melons, and it is the principal source of economic activity for the majority of the population. More than 60 per cent of the population of 15.5 million is engaged in agriculture. The majority run small-scale family farms that account for more than 95 per cent of agricultural production in the country.

Smallholder farmers face significant difficulties: irregular and insufficient rainfall, reduced soil fertility due to overexploitation of the land, a lack of appropriate and modern farming equipment, as well as insufficient access to agricultural inputs and technical assistance from extension services. Additionally, smallholders have poor access to markets, and the lack of post-harvest storage and processing facilities leads to significant post-harvest loss. All these challenges have had a serious effect on the value chain for agricultural production, resulting in economic hardship and a decline in household food security, particularly in rural areas.

In the regions of Kaolack, Diourbel, Fatick and Kaffrine – together known as the Groundnut Basin of Senegal – poverty levels at the start of the last decade were at about 65 per cent and a majority of households were affected by food insecurity. Farmers were facing a collapse of the market for groundnuts, an important cash crop for the country, caused by a sharp decline in world prices. Farming as a source of income was losing its attraction due to the dependence on this one crop. Fewer young people were taking up farming, preferring instead to migrate to urban areas or out of the country and leaving behind an ageing smallholder farming community that was increasingly less able to move out of poverty.

Gradually, attention shifted to the earning potential of cottage industries such as domestic poultry rearing and vegetable growing, mostly undertaken by women, and to crops that, until then, were grown mainly for domestic use, such as millet, corn, vegetables, fruits and the hibiscus plant, used to produce a drink called *bissap*. There was also a growing interest in sesame seeds and cashew nuts, which had been marginally cultivated, but which were well-suited to the agroecological conditions of the Basin.

The project

In this context, the IFAD-funded Project d'Appui aux Filières Agricoles (PAFA) started implementation in 2010 in the four regions of the Groundnut Basin. The project aimed to sustainably improve the livelihoods and incomes of about 32,000 households in the Basin by integrating family farms into profitable and diversified value chains.

Focusing on food security and specifically targeting vulnerable groups including women and youth, PAFA's comprehensive approach covered agricultural

diversification and market access at the local level, the development and structuring of value chains in the Groundnut Basin, and ensuring that smallholder farmers had access to rural finance. Improved food production was expected to lead to increased yields, which would ensure better household food security and nutrition. Households would also be able to earn an income by selling the surplus produce.

The project used a broad and inclusive targeting strategy. Working through farmers' associations as the key entry point, it identified the most vulnerable households in terms of food insecurity. The households then detailed what challenges they faced as smallholder farmers in obtaining sufficient yields, and selected the crops and agricultural activities that they wished to improve. Millet, sorghum, sesame seed, cowpea, rice, corn and hibiscus as well as domestic poultry rearing were chosen. All were crops and activities with which participants were familiar, and PAFA focused on building value chains for these.

The project provided support to farmers' groups by distributing tools, fertilizer and pesticides, as well as improved and certified seeds, through their associations. Farmers also received technical advice on the best combination of inputs to ensure increased yields, and how to plan clear and realistic production targets. Farmers' associations thus became a key link in the development of value chains for these crops, enabling their members to access farming inputs and technical and financial support, and facilitating the sale of surplus produce.

Recognizing that each group had different interests, capacities and strengths, the project used different approaches to reducing food and income vulnerability among women, young women and men, as well as among other socially marginalized groups. For example, women were supported with equipment to process the local drink *bissap* in commercial quantities. Young men were trained as family farm advisers to provide smallholders with immediate technical assistance, in particular to help them adopt new approaches and technologies. Since improved preparation of locally grown crops was considered an important factor for better household nutrition, young women were taught food preparation and cooking methods by chefs and owners of local hotels and restaurants, with the aim that these new skills would be transferred to the women's groups.

PAFA's targeting strategy was particularly successful for the development of domestic poultry rearing. As an activity that requires little physical movement or exertion, it was ideal for older women and the physically challenged. These groups were provided with high-quality breeds and supported in the construction of improved coops. They received technical assistance from the family farm advisers and veterinary services on a regular basis. Technology by way of solar-powered incubators (which were themselves an invention originating in Senegal) was introduced. Through trainings organized by the farmers' associations, group members learned how to prepare improved feed using locally sourced cereals and products and to maintain high levels of hygiene and quality.

Another aim of the project was to improve and strengthen the often fractious relationship between farmers' associations and market operators made up of traders, processors and exporters of agricultural products. This relationship was formalized with contractual arrangements aimed at predicting and regulating both the supply of products to the market and the prices farmers could expect for them. The project also established technical groups in the communities and trained members for oversight and support to the farmers' associations and market operators. The technical groups provided quality

control of agricultural products, market and weather information, and technical advice to smallholders and helped to settle any disputes that arose between the two key actors.

Lack of access to finance was a key obstacle for smallholders, many of whom did not have a bank account. Without their own saved capital, or the opportunity to obtain loans from financial institutions, they were unable to pay for seeds, inputs and technical assistance. To address this problem, the project introduced through the farmers' associations a reducing financing model whereby new farmers received grants equal to 80 per cent, 60 per cent and 40 per cent of their total costs over three years to pay for agricultural inputs and technical assistance. With increasing sales from each harvest, smallholders became less and less dependent on these grants until, by the fourth year, most of them were completely self-funding. In addition to this model, farmers ensured they had enough inputs for the next season by paying a third of their harvest to their associations to serve as cashless payment in advance.

Results

PAFA has achieved significant successes among the farmers in the Groundnut Basin. By the end of the project in 2016, more than 37,000 rural households, including about 23,000 women and 13,000 young people, were enjoying improved food security, higher incomes and generally better living conditions. Before the project got under way, 70 per cent of households experienced a hunger gap of up to 3.5 months each year. By the end of the project, more than 80 per cent of households had sufficient food throughout the year, and infant malnutrition had fallen from 38 per cent to 22 per cent. In addition, with increased incomes, many farmers have either repaired their homes or constructed new ones, and they have also been able to buy agricultural inputs, pay school and hospital fees, and even invest in small-scale enterprises. PAFA has served as a model for value chain development in Senegal and in other projects in the West Africa subregion.

The quantity and quality of food supply to households increased

A planned approach to farming methods supported by the farmers' associations led to higher yields for farmers. About 16,300 farmers in 317 groups received farming packages as well as extensive technical advice on the best combination of inputs for the crop and soil to ensure increased and high-quality yields. This was complemented with careful planning, application and monitoring. By the third year of the project, this approach had resulted in the doubling – in some cases tripling – of yields of cereals and legumes, with a corresponding increase in nutrition levels of households in the project area.

Domestic ventures became significant economic enterprises

Not only did the protein intake of households improve considerably with the development of domestic poultry rearing, but by the end of the project this activity had established itself as a profitable income earner for members of the groups who focused on it. In Kaolack, for example, the participating groups sold more than 12 tons of meat, amounting to 36 million FCFA (approximately US\$62,500). In addition, about 280,000 eggs were hatched by the solar-powered incubators. This was an achievement boosted largely with the introduction of sturdier breeds such as the Rhode Island Red, which considerably improved levels of productivity and disease resistance.

Of particular note has been the development of an enriched flour based on local corn, millet, sorghum and palm oil, which has led to a significant reduction in infant malnutrition. The flour has been taken up by local and international non-governmental organizations, including Plan International as well as the national agency for improved nutrition, and was packaged and sold in supermarkets and pharmacies in Senegal. The project also supported a number of private-sector collaborations by linking smallholder farmers to commercial entities, such as the contract set up with Nestlé to supply millet for the manufacture of Cerelac®.

Traditional perceptions of certain crops and gender roles were changed

The decision by smallholders to grow millet, corn, sorghum, *bissap* and cowpea to improve food security and generate incomes shows how PAFA succeeded in changing traditional ideas about the economic viability of certain traditional crops. These crops had been considered household staples, produced almost entirely for domestic consumption, and were considered to have limited commercial value compared to groundnuts.

These crops are traditionally grown by women and young people and once the crops were selected for income generation, the knowledge and expertise of the women and youth became crucial to the success of the value chains. This in turn increased the women and young people's social and economic standing. Hence, by targeting women and youth and other vulnerable groups as key stakeholders, the project gave them the opportunity to select the activities with which they were most comfortable, and at the same time to tap into their local knowledge about these crops. This resulted in increased production and incomes.

During the six years of project implementation, production of these crops increased by 49,720 tons, representing a total net additional income of 852,707 FCFA (approximately US\$1,500) for participating households.

An innovative financing model reduced dependence and increased financial autonomy

The financing model used by the project helped to reduce the dependence of smallholders and their associations on project funding. As yields increased as a result of improved farming methods, most farmers were able to pay for their own inputs without the support of the project after three years. By the end of PAFA, 88 per cent of the producer organizations were financially self-reliant. This had an incidental effect on access to finance because farmers opened bank accounts to deposit both the grants they received and their earnings from sales of surplus yields. As their creditworthiness improved, financial institutions were more willing to lend to smallholders, which in turn led to greater availability of financial services in rural areas, such as mobile banking points on market days.

Promotion and consumption of local produce increased

The initiatives by PAFA to increase the consumption of locally produced food such as rice was very successful. Young women who were trained in improved preparation and cooking methods shared their new skills in their women's groups, thus contributing to reduction in overall household malnutrition as the women put into practice what they had learned in group meetings. Two restaurants specializing

in locally sourced produce were opened on a pilot basis, and in two years employed and trained 74 young women and men as food preparers and cooks. In addition, cookery programmes showcasing local produce were launched on radio and television. The increase in the consumption of local produce encouraged farmers to plant more and therefore make more profits from the value chains that had been created for these crops.

Challenges and solutions

Some farmers were reluctant to get involved in the project due to the traditionally low regard they held for some of the crops selected for income generation. Indeed, in some instances, farmers reserved the least fertile sections of their land for PAFA crops. The project team held workshops to provide farmers with information on the income-generating potential of the crops. Farmers were eventually convinced by the impressive yields that resulted from the use of precise input combinations, high-quality seeds and organized planting schedules. By the second season of harvests, most of them had allocated more land for PAFA crops.

In some cases, tensions emerged between farmers' organizations and market operators as a result of non-adherence to contracts, regarding product quality and delivery, or delayed payment for deliveries. Both parties first worked to resolve problems or, failing that, sought arbitration by the technical group providing oversight. Interest by the farmers' organizations and market operators in strengthening their contractual partnerships was boosted with the introduction of a gold standard reward system for the highest performing pairs.

Scaling up

Many of the initiatives to scale up PAFA's successes have come from project recipients themselves, which reflects their level of engagement in the project.

For example, a women's group in Fatik, which was initially formed into a farmers' association, has established an agribusiness enterprise, both as a market operator for the rice value chain and also to set up income-generating activities to reach more women. Similar agribusiness groups have been set up by other associations, some aimed at forming young farmers' cooperatives, others as training centres for improved agricultural practices, particularly in domestic poultry rearing and post-harvest preservation techniques. These enterprises are gradually transforming themselves as viable local companies, able to support their communities beyond the duration of PAFA.

Another group of farmers' associations (who themselves had been supported in this way) put together enough money to provide new entrants with initial funding, certified seeds, fertilizers and technical advice, thus replicating PAFA's diminishing grants model. Almost 4,000 new households were brought into the project in this way, and they cultivated over 5,000 additional hectares of grains and legumes.

A new project, the PAFA-Extension, started in November 2014 and expands the project to five regions of Senegal. It builds on the successes and lessons of PAFA, particularly its inclusive targeting strategy. This new project is broadening the development of value chains established during PAFA, and is introducing new value chains, for example, for small ruminants, which are farmed predominantly by women.

Mid- and micro-scale enterprises are planned to provide more income-earning opportunities for the youth, and the capacity of the various actors will be strengthened through a more targeted training system.

Other IFAD-supported value chain development projects – in Benin, Mauritania, Côte d’Ivoire and The Gambia – have drawn heavily on the experience of PAFA and its beneficiaries, including the targeting approach of mobilizing farmers’ organizations to identify the most vulnerable people and select their own interventions.

Main lessons

The experience from PAFA shows the high socio-economic impact of taking a comprehensive approach to supporting smallholder farmers with input packages and technical assistance, as well as access to markets and financial support. The following lessons can be drawn from the project:

- *Use an incremental approach to building value chains – this increases smallholders’ confidence and commitment.* PAFA’s immediate focus was on household food security and the methods by which it could be improved. Once improved production methods had ensured this objective and provided a surplus, the project then set up systems to guarantee access to markets and support value-added marketing of the surplus. Smallholders appreciated the structured method because it provided a logical progression by which they could see how their contribution was important for the overall success of the project.
- *Involve the target community in formulating the project – it strengthens their resolve to make it work.* PAFA used an inclusive approach to reach and actively engage vulnerable men, women and young people. The project met with them to identify and agree on challenges they faced in producing sufficient food, and then worked together to develop solutions. The opportunity that was given to these groups to select their own crops and to discuss their role in improving food security made the project more relevant and its interventions more applicable to their situations. It also allowed the project to tap into their local knowledge about these crops and build on that knowledge with support and training, resulting in increased production and incomes for those engaged in the value chains.
- *An innovative financing model can contribute to financial autonomy and sustainability.* The financial support provided by the project for the purchase of farming inputs and technical assistance was structured in such a way that producers, over the course of three years, received a proportionately lower grant balanced by their own increased earnings. In the fourth year, they received no grant at all, but most had by then begun to earn enough to afford these inputs. In addition, once their harvest was in, farmers gave an established share of it to their organizations. This served as cashless payment to purchase farming inputs in the following crop year. By embedding financial self-sufficiency as a project objective right from the start, target groups are motivated to work towards autonomy and post-project sustainability.
- *Clear rules of engagement encourage collaboration.* Farmer’s associations and market operators benefited from the contractual relationships that were laid out and which served as a point of reference for their interaction. Conflict arising from the perception that one group was taking advantage of the other was reduced significantly.

- *Young people can make an important contribution when given a role.* Young people actively took up the challenge of their new roles as family farm advisers and increased the willingness of smallholders to move into areas and methods of cultivation. Their contribution showed that when they are well organized and properly motivated, they are an invaluable resource in introducing new ideas and developing their community.

Conclusion

In Senegal's Groundnut Basin, rural poverty and food insecurity had been spreading due to a decline in the global groundnut market. Farming was losing its attraction as a source of income and young people were leaving rural areas to seek new opportunities in the cities or abroad. To address this situation, PAFA worked with the local communities to diversify agricultural production and integrate farmers into profitable value chains. With an inclusive targeting strategy and a comprehensive approach, the project provided support to the most vulnerable and food-insecure smallholders, resulting in higher incomes, improved food security and reduced infant malnutrition.

The project involved smallholders themselves, and in particular women and youth, in selecting the crops and activities for value chain development. This ensured that project activities remained relevant and contributed to the sustainability of the project beyond IFAD and partner funding. It also lent value to domestic activities that were otherwise considered to be less important and allowed the project to tap into local knowledge, which in turn improved production and raised the social and economic status of women and youth.






This focus on vulnerability and food security, combined with the project's sustainable approach to value chain development, contract farming and market access, has resulted in significant achievements for smallholder farmers in the project area. PAFA's strong social elements have strengthened the ability of women, youth and smallholder farmers to improve their livelihoods and increase their resilience against poverty, and serve as a best practice for other projects across the region.

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