



STRENGTHENING THE FAMILY FARM IN MEXICO

FAMILY FARMING FINANCING PROGRAM

Synopsis

Primary investors:

- Fideicomisos Instituidos en Relación con la Agricultura (FIRA)
- Ministry of Agriculture and Rural Development
- Local Savings and Credit Cooperatives

Value chain or sector: Rural and agricultural

Country: Mexico

Type of risk addressed: Business model risks of local savings and credit cooperatives lending to family farmers

Type of blended finance instruments:
Guarantees

Contributed by

Jorge Lara Alvarez, Fideicomisos Instituidos en Relación con la Agricultura (FIRA). FIRA is a second-tier development bank that offers credit and guarantees, training, technical assistance and technology-transfer support to the agriculture, livestock, fishing, forestry, and agribusiness sectors in Mexico.

Executive summary

In Mexico, local savings and credit cooperatives (LS&CCs) proved the ideal vehicle for channeling credit to family farmers. These institutions' socially minded origins and widespread presence in rural areas made them strong partners in an initiative designed to address the pervasive lack of access to finance among small-scale agricultural producers.

The Family Farming Financing Program—PROAF for its Spanish acronym—relied on a public guarantee scheme to stimulate private credit, in an example of the effective use of blended finance in agriculture. The key to the success of the program is that prior to its implementation, the public development institution FIRA (Trust Funds for Rural Development) provided technical support to the LS&CCs so that they could develop an agribusiness area and provide agricultural credit to family farmers. (These institutions had plenty of liquidity but had mainly been offering expensive consumer loans.)

PROAF has boosted the financial inclusion of family farmers by offering loans with lower interest rates, coupled with terms and credit amounts suitable to small-scale agriculture. Almost half the program's beneficiaries are women. Finally, PROAF triggered commercial lending by the LS&CCs in a sustainable way. Given the local importance of these intermediaries, the program has had a positive, measurable effect on the overall value of agricultural production.

Introduction

Family farming is central to agricultural production around the world. The Food and Agriculture Organization (FAO) defines this production system as all agricultural, forestry, fishing, pastoral and aquaculture activities that are managed and operated by a family. In developing countries, family farming is an essential tool for food security and poverty reduction; however, family farmers tend to lack access to financial resources and services that could help their businesses develop.

The FAO and the International Fund for Agricultural Development (IFAD) have placed family farming at the center of their 2019–2028 agenda, as a means to achieve the Sustainable Development Goals (SDGs) in a coherent, inclusive and collaborative manner. In fact, these agencies maintain that the development of family farming contributes to the achievement of all 17 SDGs, as family farming can increase the availability of nutritious, sustainably produced and culturally appropriate food, as well as play a key role in social inclusion and gender equity. Food systems built on family farming also promote rural services and small and medium-sized enterprises (SMEs) and increase urban/rural synergies throughout the agri-food value chain. The Smallholder and Agri-SME Finance and Investment Network (SAFIN) describes rural SMEs and family farming as key to lifting people out of poverty and boosting the economy.

However, one of the main barriers to the development of family farming is the lack of access to finance. According to SAFIN, this situation is associated with some characteristics of family farmers, including their high geographic dispersion, their lack of collateral and the often informal nature of their businesses. Other drawbacks include the lack of sufficient financial infrastructure in the areas where they are located, the relatively high cost of granting small loans and the presence of information asymmetries in rural financial markets.

Mexico has a deficit in financial services infrastructure compared with other members of the Organisation for Co-operation and Development (OECD): while the average number of bank branches in OECD countries is 27.1 per 100,000 adults, in Mexico this ratio is 14.1. And the difference is even more marked within the country: while Mexico City has 25 bank branches per 100,000 inhabitants, in Chiapas this figure is 7, according to Mexico's National Council for Evaluation of Social Development Policy (CONEVAL).

In this context, development banks play a critical role in promoting access to finance, as they can design and implement mechanisms that combine resources from diverse public and private actors (blended finance) to reach priority sectors. In their Global Action Plan on family farming, the FAO and IFAD recommend developing financial services that are tailor-made and accessible to family farmers. Family farming represents 81.3% of Mexico's rural economic units, according to government statistics. Yet only 5.5% of family farmers have access to credit, making a lack of finance one of the main problems of family farming in Mexico. Trust Funds for Rural

Development (FIRA, for Fideicomisos Instituidos en Relación con la Agricultura) aimed to change that. FIRA is a second-tier development bank that administers a diverse set of public guarantee and funding schemes to promote private financing in rural Mexico. In 2014, when it launched the Family Farming Financing Program, or PROAF (Programa de Financiamiento a la Agricultura Familiar), FIRA identified local savings and credit cooperatives as a strategic ally.

These institutions' social origins and widespread presence in rural areas made them natural partners. Initially, LS&CCs were conceived as mutual aid organizations established for people who shared a common bond and who could collaborate to save together; likewise, these organizations tried to provide accessible loans for their savers. In Mexico, LS&CCs date back to 1949, when a Catholic priest introduced the idea of promoting savings banks as a self-help mechanism for the poor.ⁱⁱ As a result, the first local savings and credit cooperative was established in 1951, in Mexico City. Since 1970, such cooperatives have been organized with almost total independence from the Catholic Church and have developed their own approach for delivering financial products, especially for disadvantaged people.ⁱⁱⁱ Mexico's president officially established these organizations as financial institutions in 1992; the beneficiaries were rural producers historically underserved by banking services.^{iv} In 2001, the Ley de Ahorro y Crédito Popular (Popular Savings and Credit Law) was adopted, which began a process of regulating the popular savings and credit sector. As of 2014, all LS&CCs were authorized and regulated by the same national banking regulator, the National Banking and Securities Commission (CNBV, by its Spanish acronym).

LS&CCs have a strong presence in rural areas of Mexico (Table 1). According to the CNBV Financial Inclusion Database, 53% of the country's municipalities do not have a bank or a LS&CC branch; LS&CC branches are present in almost 30% of Mexico's municipalities, and there is no bank branch in almost a third of these. LS&CCs are more common than traditional commercial banks in municipalities with a population under 15,000. In addition, local savings and credit cooperatives are more likely to offer financial services in socially disadvantaged municipalities (Table 2). For example, in municipalities where there is a LS&CC branch but no bank, the Human Development Index (HDI) is almost 10% lower than in those that also have bank branches. Municipalities with only LS&CC branches also rank lower on education and income indexes.

Table 1. Financial branches per type of population

Type of population	Average number of branches	
	Commercial banks	LS&CCs
Rural	0.01	0.08
In transition	0.21	0.24
Semi-urban	1.47	0.61
Urban	11.28	1.67
Semi-metropolis	78.97	4.87
Metropolis	192.58	13.25
Total	5.24	0.70

Source: Financial Inclusion Database 2015, CNBV

Table 2. Municipality development per financial branch availability

Financial branch availability	Number of municipalities	HDI (mean)	EDUI (mean)	TCI (mean)
With bank branches and LS&CC branches	499	0.72	0.60	2,651.85
With bank branches but without LS&CC branches	452	0.71	0.59	2,453.54
Without bank branches but with LS&CC branches	199	0.65	0.52	1,792.55
Without bank branches and without LS&CC branches	1,307	0.63	0.51	1,503.78
Total	2,457	0.67	0.55	1,934.97

Source: Financial Inclusion Database 2015, CNBV, and United Nations Development Programme (UNDP), 2018.^v

Blended Finance Approach

FIRA began implementing the PROAF initiative in 2014 but found it had to modify the program as originally designed. Under the PROAF 2.0 version, which began in August 2016, FIRA offers a first loss guarantee through a public guarantee fund called FONAGA, which was created to make it easier for farmers to get credit. FONAGA guarantees are provided by the Ministry of Agriculture and Rural Development (SADER), at no cost to the LS&CCs.

The FONAGA guarantees are provided on a loan-by-loan basis, as follows: 20% for long-term fixed investment loans; 10% for working capital loans to borrowers new to FIRA; and 5% for working capital loans for repeat borrowers. LS&CCs will always keep at least 20% of risk on their own books, ensuring an alignment of interests. The maximum amount to be backed per borrower is 33,000 UDI (the Spanish acronym for investment units) for short-term loans (approximately \$11,000) and an additional 33,000 UDI for fixed long-term investments. LS&CCs also have the option to purchase a second guarantee from a special assistance agricultural fund called FEGA.

As an example of how the loans work, in June 2018, through a local savings and credit cooperative called Caja Inmaculada, a family farm that grows alfalfa in Tolimán (Querétaro) received its first working capital loan for 36,000 pesos (approximately \$1,900 at the time), with a 10% FONAGA guarantee, at an annual interest rate of 26.5% for a period of 30 months. Then, in December 2018, this same family farm received a second loan, through the same LS&CC, this time for a long-term investment, with a 20% FONAGA guarantee, for the purchase of European heifers, at an annual interest rate of 27.39% and a term of 152 months.

Another example is a family farmer in Autlán de Navarro (Jalisco) who in March 2017 received, through Caja Popular Cristóbal Colón, his first loan for 85,000 pesos (\$4,500) for a long-term investment in meat production (with a 20% FONAGA guarantee) at an annual rate of 19.2% for 30 months. Then, in March 2018, this same family producer received a second loan, through the same LS&CC, this time for working capital (with a 5% FONAGA guarantee) for sugarcane production, at an annual rate of 20.9% for 28 months. This shows how the LS&CCs selected by FIRA are designing and placing financial products that adjust to the conditions and activities of family farmers.

This program design complies with the five points of Blended Finance 2.0, as it is tailored to suit both the participating LS&CCs and family farmers. It creates a strategic, sustainable alliance with shared responsibilities. PROAF has the potential, as discussed below, to increase private financing to a sector essential to sustainable development. Table 3 shows the years in which each LS&CC joined the program. PROAF 2.0 is still being implemented.

One PROAF success story is the Margarita Project, designed to improve the income and productivity of small family-run dairy operations in the state of Jalisco. This project has included support from multiple sources, for example for smart production technology (with resources from the Inter-American Development Bank); technical advice (resources from FIRA and the producers); training in marketing development (resources from the Regional Livestock Union of Jalisco); and PROAF financing (with a FIRA guarantee and resources from savings cooperative Caja SMG).

The beneficiaries are small-scale producers who predominantly employ family labor and, before joining the project, had about 13 cows each. From 2014 to 2019, the Margarita Project benefited almost 400 small producers, enabling some of them to triple their profits. The project's strategic corporate partner, Danone, buys the family farmers' entire production; at the time of writing, Grupo Bimbo was also expected to join this initiative.

Table 3. Participating LS&CCs by year of incorporation (cohort) into PROAF

2015	2016	2017	2018	2019
Caja Inmaculada	Caja Morelia Valladolid	Caja Popular Apaseo el Alto	Caja Popular Mexicana	Caja Popular Agustín de Iturbide
Caja Popular Cristóbal Colón	Caja Popular Cerano	Cooperativa Acreimex	Red Eco de la Montaña	Caja Popular Las Huastecas
Caja SMG	Caja Popular José Ma. Mercado			Caja Popular Tamazula
Caja Solidaria Dr. Arroyo	Caja Popular Santiago Apóstol			Unidos por el Progreso de Sayula
Caja Zongolica	Caja Solidaria Chiquiliztli			
Tosepantomin				

Source: FIRA

Implementation Process

FIRA found local savings and credit cooperatives to be an ideal vehicle for promoting agricultural loans in rural areas; however, the project did encounter a barrier. In 2014, 82% of the credit granted by the participating LS&CCs was consumer credit. This was because the cooperatives did not have, or had not adequately developed, agribusiness areas and production credit procedures. In fact, a government survey in 2014 found that the main reason rural producers did not apply for credit was the high interest rate; this was reflected in the consumer credit being offered. Liquidity was not the problem. LS&CCs tend to have ample liquidity because they capture savings from their members in greater proportion than their portfolio placement. At the close of 2014, their average capitalization level was 262%. (As a reference, the CNBV considers a 100% capitalization level to be adequate to cover risks.) Although the LS&CCs had the financial conditions needed to provide finance to family farmers, they did not have a mechanism for granting agricultural loans. FIRA intervened to fill in that gap.

Beginning in 2012, FIRA started to strengthen the processes in place for these cooperatives to design and provide financial products for the agricultural sector. The goal was to get LS&CCs to move into agribusiness loans instead of focusing almost exclusively on consumer credit. FIRA supported this effort through credit analysis and project evaluation methodologies. Between 2012 and 2018, FIRA provided training to two out of every three LS&CCs authorized by the CNBV, sometimes with the joint participation of the German Cooperative and Raiffeisen Confederation, the German Savings Banks Foundation for International Cooperation and the Instituto Nacional de Economía Social. FIRA also organized discussion forums in which cooperatives that had made the most progress in strengthening their procedures shared their experience with other LS&CCs, to serve as an example and give guidance to their peers.

Building on all these efforts, FIRA designed the Family Farming Financing Program. Through PROAF, FIRA provides participating LS&CCs with a guarantee of first losses, by using resources from the Ministry of Agriculture and Rural Development. The types of finance can be for working capital or for fixed long-term investment. FIRA complements PROAF with training and consulting services. To increase the program's probability of success, FIRA carefully selects the LS&CCs that can enter the program based on public criteria. The risks are then distributed in a sustainable and balanced way between FIRA and the LS&CCs, in line with OECD Blended Finance Principle 4. Finally, PROAF's design follows best practice recommendations for financial inclusion: it is a financial product that fits the characteristics and needs of the poor and is managed by a financial institution with a sound governance structure which is financially viable and interested in participating in underserved markets.

Under the eligibility criteria that FIRA established, LS&CCs interested in participating should have solid financial service delivery channels and credit procedures that allowed them to properly manage agricultural credit and would not generate administrative problems. The interested LS&CCs should already have sound practices in place for evaluating,

monitoring and recovering credit granted to family farmers. In addition, their portfolio of past-due loans needed to be at an acceptable level and be covered 100% by their reserves. Finally, they should be able withstand unexpected losses due to the potential risks involved in such lending activities.

In the first stage of PROAF, in 2014, FIRA created a first loss guarantee fund for each participating LS&CC. The fund was designed to cover 100% of the first defaults on the amount allocated by the LS&CCs until the fund was exhausted, so long as the loan portfolio was eligible. The fund reserve was made up of an amount equivalent to 7.5% of the initial balance of the guaranteed credit, with a contribution of 5% from the government agricultural agency SAGARPA (now SADER) and 2.5% from the participating LS&CCs with support from the Instituto Nacional de Economía Social. As a second protection, another guarantee (from a special assistance agricultural fund called FEGA) was offered with nominal coverage of up to 40% on the balances of defaulted loans not covered by the PROAF first loss fund. The formation of the first loss fund represented a new concept of guarantee that combined government and private resources, where participants would share the risk of the first defaults.

By October 2014, nine LS&CCs had authorization to participate in the Family Farming Financing Program. However, they were unwilling to contribute 2.5% of the portfolio balance toward the first loss fund. The main reason was that these loans were a new business for the LS&CCs and they did not wish to risk their assets for the guarantee fund when consumer credit already generated profits for them. Based on this experience, FIRA eliminated the first loss fund created under PROAF 1.0 and modified the design to what is now PROAF 2.0.

Impact

PROAF gives family farmers access to agricultural loans, often for the first time. From 2015 to 2018, the program benefited 21,707 producers, 61% of whom had never had credit with FIRA. The program also has a gender focus: 45% of the borrowers are women family farmers, and almost 80% of them are on the lowest rung of FIRA's credit classification system. In addition, PROAF triggered agricultural lending in municipalities with low financial penetration.

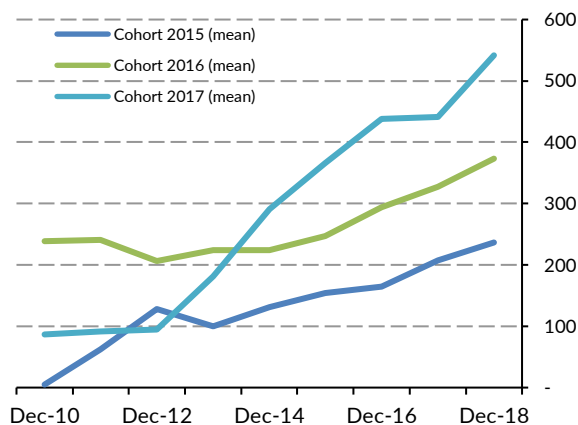
Of the total number of loans channeled to family farmers:

- half were invested in municipalities with very high, high or medium levels of marginalization;
- 3 out of every 10 pesos were invested in municipalities that lack traditional bank branches; and
- 7 out of every 10 pesos invested went to rural, semi-rural or semi-urban municipalities.

PROAF also helped local savings and credit cooperatives improve their operations. Prior to FIRA's intervention, these institutions' commercial credit portfolio was small. At the end of 2012, the commercial portfolio represented 20% of the total loan portfolio of the LS&CCs that joined PROAF in 2015, 2016

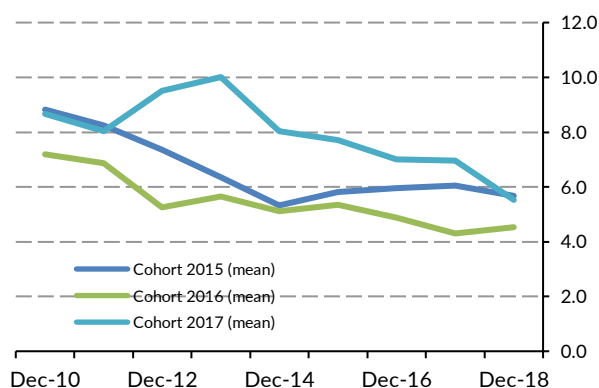
and 2017. From the time FIRA began working with them until 2018, their commercial loan portfolios grew at an average annual rate of 20% and by 2018 represented more than 34% of the total. During the same period, the institutions' delinquency rate decreased by 1.8 percentage points. These indicators are signs of healthy, sustainable growth.

Figure 1. Mean of commercial credit portfolio per cohort (millions of MXN)



Source: FIRA, based on data from CNBV

Figure 2. Delinquency rate index per cohort (percentage)



Source: FIRA, based on data from CNBV

The family farmers served by PROAF receive financing on terms that are appropriate to the activity they are carrying out. Although the amounts of credit granted are relatively small—the median amount of credit for working capital is 12,000 pesos and for fixed long-term investment is 30,000 pesos—the terms are appropriate to agricultural production credit. A study published in 2017^{vii} notes that in 2015, the interest rates charged by microfinance institutions in Mexico ranged from 19.2% to 119%, with 65.4% being the average. The PROAF rates for that same year ranged from 7% to 34%, with an average rate of 18.4%. In other words, the average rate of a PROAF loan was 47 percentage points lower than the average rate of a loan with a microfinance institution. In addition, the term of the loan with PROAF is adapted to the circumstances of family farmers; for example, for a working capital loan, the average term is 10 months and for fixed investment, it is 42 months.

Finally, PROAF has had a broader, measurable impact in the local economy. The program started operations in 2015 with six LS&CCs that had branches in 56 municipalities; by the end of 2018, that had grown to 13 LS&CCs with branches in 185 municipalities. A FIRA analysis that looks at the period from 2012 to 2018 suggests that PROAF increased the value of agricultural production by between 4% and 13%, which is statistically significant. (Study details are available upon request). The impact is greater when municipalities that only have traditional bank branches are excluded. These are conservative estimates, since there are municipalities without LS&CC branches that benefited from PROAF credit, such as when a beneficiary travels to another municipality to process his or her credit, for example.

FIRA has not established whether PROAF's impact on economic additionality is direct or indirect. That is, the impact could be due to the credit disbursed through PROAF (direct) or to an increase in local financial competition (indirect) to provide production loans to family farmers. However, the evidence suggests that PROAF has had a significant impact on the value of agricultural production.

Given the geographical distribution of the LS&CCs participating in the program and their importance locally, PROAF can make a difference in promoting the economic development of family farmers. This result is consistent with other literature indicating that access to finance increases economic growth.

Lessons learned

It is crucial to find the right channel to implement the program.

FIRA identified LS&CCs as the ideal conduit for providing credit to family farmers. This was because these institutions are located in rural regions where they represent the best, and sometimes the only, source of formal financing. They tend to have ample liquidity to provide credit to family farmers. And because the target farmers are often savers in LS&CCs, this decreases any moral hazard.

However, despite the strengths of the LS&CCs in offering credit for family farming, they had administrative, organizational and technical weaknesses prior to PROAF. These touch on several aspects: the lack of a business plan for agricultural credit; an inadequate system to manage new products; an absence of new methodologies to grant this type of finance; and a lack of personnel sufficiently knowledgeable about agricultural investment. PROAF revolutionized this situation through technical assistance and training provided by FIRA.

The LS&CCs added agricultural credit as a new line of business and developed their administrative systems to manage it. They also hired or trained staff with the appropriate knowledge to evaluate small investment projects common to family farmers. In addition, FIRA incorporated a gender perspective in rolling out PROAF to participating LS&CCs.

It is essential to design a program tailored to the needs of family farmers that combines resources from a variety of sources.

Besides identifying the local savings and credit cooperatives as the right channel to implement PROAF, FIRA designed an innovative intervention that included the participation of multiple actors. It provided training and strengthened the LS&CCs' entire agricultural credit process and set up a guarantee arrangement to cover the risk of possible defaults. The LS&CCs received support from resources provided by FIRA, the Instituto Nacional de Economía Social, the German Savings Banks Foundation for International Cooperation, and the German Cooperative and Raiffeisen Confederation.

The guarantee fund consisted of resources from the Ministry of Agriculture and Rural Development, and the loans were granted with capital from the LS&CCs. The combination of PROAF resources made it possible to address a fundamental development problem, the lack of finance for family farmers.

For PROAF to succeed, it has been essential that finance be tailored to the needs of family farmers and not restricted to primary farm activities. The program recognizes that most family farmers carry out a range of activities, such as growing their own food, raising animals, working for others or running small commercial enterprises, and that these may vary according to the season, market prices and other circumstances, such as climate-related events.

Although in theory this type of agricultural financing is profitable, financial intermediaries needed a nudge to enter a new market.

The evidence a posteriori suggests that the first version of PROAF would have been profitable; as of this case study, guarantee payments have represented 0.1% of the amount covered. However, the LS&CCs were not willing to use their resources for the guarantee fund. They needed a nudge to enter a new market, which in this case was a guarantee scheme at no cost to the LS&CCs.

Initially, the savings and credit cooperatives relied on FIRA resources to hire an external consultancy to generate products, methodologies, procedures and manuals adapted to the needs of family farmers. Now, however, some LS&CCs already have solid agribusiness areas that generate and manage client portfolios in family farming. Other LS&CCs still have external consulting services, but they are already paying for them with their own funds. This indicates that although the savings banks were not willing to pitch in with their own resources before—either for the guarantee fund or for training and other support activities—their agribusiness areas are now self-funded.

By strengthening the LS&CCs and promoting the program, FIRA created a public good. FIRA's main objective was the successful implementation of PROAF. However, by strengthening the LS&CCs and providing them with a guarantee scheme to

manage the credit risk of family farmers, FIRA opened the door for participating LS&CCs to provide new types of credit. The resulting increase in their agricultural lending has had an important impact in the municipalities where they intervened.

Development banking plays a major role in developing countries in promoting access to finance. Finance is a key element for economic growth,^{viii} since through it, society's savings are channeled towards investment in productive projects. However, in assessing the role of development banking, it is important to ensure that its actions are not crowding out resources from commercial banking, in other words that development banking does not compete for credit with private financial intermediaries.

FIRA, in its role as a second-tier development bank, strengthened the capacities of LS&CCs and, through PROAF, combined public resources (through the guarantee fund) and private resources (LS&CC capital for financing). This type of public-private partnership, according to international experience,^{ix} represents a more efficient use of public resources than a program in which the public sector directly grants credits.

Notes

- i. Imperial Zúñiga, R., "Las Cajas de Ahorro: Instrumentos de la Sociedad Civil." *Revista de Comercio Exterior*, Vol. 54, Núm. 7. 2004.
- ii. Mansell Carstens, C., "Las Finanzas Populares en México: el Redescubrimiento de un Sistema Financiero Olvidado." *Centro de Estudios Monetarios Latinoamericanos (CEMLA)*, 1995.
- iii. Imperial 2004, op cit.
- iv. Imperial 2004, op cit.
- v. The Human Development Index (HDI) is calculated by UNDP to estimate (by country, state and municipality) the population's level of human development. It is based on three aspects considered basic for human development: health, income and education. HDI estimate values range from 0 to 1, where a value closer to 1 indicates greater human development. The Education Index (EDUI) is based on average and expected years of schooling. Total Current Income (TCI) refers to annual household income.
- vi. Cotler, P., "Inclusión financiera en América Latina," *Inclusión financiera de pequeños productores rurales. Comisión Económica para América Latina y el Caribe*, Santiago, Núm. 147, 2017, pp. 31-57.
- vii. Aldasoro, B., "Estudio sobre las Tasas de Interés de Microcrédito en México." *International Finance Corporation (IFC), Triple Jump, PRONAFIM, Sparkassenstiftung für internationale Kooperation, Inter-American Development Bank (IDB)*, 2017.
- viii. Levine, R., "Finance and growth: Theory and evidence," in Philippe Aghion & Steven Durlauf, eds: *Handbook of Economic Growth*, 2005, pp. 865-934.
- ix. Autoridad Independiente de Responsabilidad Fiscal, "Evaluación del Gasto Público 2018. Proyecto 6 (RCI). Estudio Fortalecimiento de la Competitividad Empresarial," Madrid, 2019, pp. 19-20.

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About

This case study is part of an effort by the Smallholder and Agri-SME Finance and Investment Network (SAFIN), the Inter-American Development Bank (IDB) and the Organization for Economic Co-operation and Development (OECD) to document the use of blended finance to strengthen agri-SME finance supply.

Contact details

Bettina Prato
Senior Coordinator, SAFIN
b.prato@ifad.org

Yuri Soares Dillon
Unit Chief, IDB Lab
yuris@iadb.org