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Bridging academic research with field practice

RURAL FINANCE: INSIGHTS FROM THREE CONTINENTS

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Summary

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Introduction

Rural finance:

Insights from three continents

Sophie Wiesner, Manager Research and Development, ADA

In recent years, an enormous growth in global agricultural markets has led to a renewed interest in rural and agricultural finance and innovative developments in this domain.

What are these developments? What experiences exist throughout the world? And what can we learn from them in order to support a more sustainable rural and agricultural finance?

The present issue of Passerelles tries to shed some light on these issues.

In a first article, Massimo Pera from the Food and Agricultural Organisation (FAO) provides a global perspective on rural and agricultural finance, highlighting the most recent trends. He explains that formal financial institutions only play a limited role in the provision of services to agricultural businesses and rural households, resulting in a financing gap. This particularly affects smallholders, as well as small and medium-sized agro-enterprises, constituting the so-called missing middle. How to bridge this gap? The author argues that by adopting a value-chain approach, i.e. a systematic financing approach that takes into account all actors and their relations within a value chain, it is possible to develop innovative financial solutions and to serve the most excluded segments of the population.

Against the background of these global trends, the following three articles of the magazine focus on specific experiences in terms of rural and agricultural finance from three continents: North Africa (Morocco), Central America (Nicaragua) and South Asia (Bangladesh). The map and boxes on the next page provide some more information on these cases.

A recurring issue in all articles is the importance of social relations or social ties – across value chains, in groups of farmers and also between financial service providers and clients. In a last article, therefore, Luminita Postelnicu from "Mentis Consulting" and Niels Hermes from the University of Groningen provide some more details on the topic of social capital. The researchers explain how social capital, i.e. the resources embedded in social relations and social ties, can be used to facilitate the access to finance, especially in rural areas, and on how that access can foster entrepreneurship.

A link to further research on social capital and more content on the topic of rural and agricultural finance, including a statement by Jean Feyder, former Ambassador of Luxembourg to the United Nations, can be found in the media library on ADA's website http://www.ada-microfinance.org/en/media-library; and this is also where you can subscribe to the upcoming issues of Passerelles.

We wish you a pleasant reading!

Morocco

Juana Ramirez from ADA describes some of the opportunities and challenges involved in the modernisation of the Morroccan agriculture and the integration of extremely poor smallholder farmers into high-value agricultural markets. She provides some details on the Green Morocco Plan (GMP), a government strategy to strengthen the competitiveness of the agricultural sector, to ensure a more diversified and sustainable development of rural areas and to expand rural and agricultural finance. A lack of access to finance for viable agricultural projects is often associated with a lack of organization in the agricultural sector; so, the article also describes the so-called Economic Interest Groupings (EIGs) that organize value chain actors and especially farmers around sustainable agricultural projects.

Nicaragua

A group of researchers from Nitlapan and IOB (renowned research institutes in Nicaragua and the Netherlands) and ADA describe the coffee value chain in the municipality of La Dalia in Nicaragua. Their article explains how financial products and services that support traditional quantity-orientated supply chains favor large coffee producers and can have adverse effects on the territory; but it also explains how small coffee producers, integrated in new quality-orientated supply chains (for fair trade or organic coffee) can be better assisted through a so-called microfinance plus approach, combining financial and non-financial services.

Bangladesh

Marina Abboud from ADA deals with the experience of the non-governmental organisation Friendship in Bangladesh. Her article describes the unique and integrated approach of Friendship and how their microfinance model (with its Agriculture Based Income Generation Project, Fishermen Project, and Rural Electrification Project) is able to reach populations in the most vulnerable areas of Bangladesh. The specificity of the integrated approach is that it first addresses the most basic needs of the community and only progressively moves towards capacity building and microfinance, adapting its services to the context and evolution of the beneficiaries. This increases the effectiveness and efficiency of the interventions and also builds trust and strong relationships between the beneficiaries and Friendship that, in turn, facilitate the processes put in place.

Recent trends in agricultural finance:

New approaches to address and overcome main barriers and challenges

Massimo Pera, Agribusiness Investment Officer, FAO

Massimo Pera

Massimo Pera works as an Agribusiness Economist at the FAO (Food and Agriculture Organization of the United Nations), managing a programme aimed at facilitating sustainable and inclusive investments in the agribusiness sector of selected ACP countries. For the past 9 years, he has gained experience in the design and implementation of agricultural and rural financial programmes in developing countries mainly in Africa and Latin America. His assignment with FAO started in the Viet Nam office, where he worked for two years managing projects on agricultural value chains development, and access to financial services for smallholder farmers.

In recent years, there has been a renewed interest in agricultural finance and investments from the private and the public sector. The driver of such interest has been the so-called "silent revolution" that has occurred in the past decades in agricultural markets, leading to increasing investments into the sector at a global level. This revolution refers to the rise in global demand for food and to the subsequent response from the agribusiness sector in providing an appropriate supply. Still, it has been relatively silent, in the sense that it has been led by non-institutional and informal actors, and overlooked by most formal financial institutions, such as banks, microfinance institutions, and credit unions.

The global demand for food has risen because of population growth, a longer life expectancy, growing urbanization rates and changing diets due to greater purchasing power. The supply of food to meet this demand was made possible by an increasing average productivity of different commodities (mainly due to improvements in total factor productivity); and a growing agricultural capital stock due to an increasing long-term investment (FAO, 2012).

Rural and agricultural finance today

The questions that arise against this background are: where do these investments come from and who are the players that have provided funds and financing to all the actors along the value chains, including especially rural smallholders and agricultural small and medium enterprises?

Formal financial institutions are still considerably limited in their delivery of financial services to the agribusiness sector and agriculturally-dependent households, an issue that results in a rural financing gap limiting agricultural investments. This continues to significantly affect smallholders, their organizations, and those small and medium agro-enterprises constituting the so-called 'missing middle' in financial markets, which lack access to finance. This is due in part to the dynamics of agricultural value chains, which imply greater and more complex coordination among supply chain segments and service providers, necessary to manage effectively a wide range of risks. This, in turn, has caused a trend of under-investment in agriculture in developing countries, which means that existing technically and economically feasible investment opportunities are being forgone, mainly by micro, small and medium agricultural ventures. This trend in the sector persists because: 1) agribusinesses are dependent on biological processes and climatic conditions that are difficult to mitigate and insure against; 2) the sector faces fragmented input and service markets that can lead to failures in coordination among value chain agents, over which investors have little control; 3) agriculture has bulky, seasonal, and long-term financing requirements that financial institutions find hard to satisfy; 4) there are weak property rights for factors of production such as land and water; and 5) agriculture has a long history of political interventions that crowd-out the private sector.

Because of all these challenges in financing and investing in agriculture, in many developing countries the increased demand for agricultural financial services, motivated by the growth in agricultural markets, has not generally been met by formal financial institutions. The underserved agricultural financial market has been partially filled by non-financial actors within the value chain, such as wholesalers, processors, traders, and producer organizations, who are best able to identify and seize investment opportunities in the agricultural sector. These actors can fill the financing gap due to their unique informational advantage, resulting from their direct business engagement within the value chain. All these actors possess critical information advantages about the complexities of agricultural markets and the various dynamics between value chain actors, deriving from their unique perspective from within the field.

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Farmers in rural contexts usually lack the assets required by banks for longer-term loans. Even if they have sufficient land to collateralize, they may choose higher interest loans but which do not ask for their land as a guarantee.

The downside, nevertheless, is that the lack of financial specialization of these non-institutional actors has resulted in financial services which are expensive, neither diverse nor flexible, and available only to a small part of the rural population, linked to the respective value chains. The dominance of non-financial actors in growing rural and agricultural financial markets – together with the well-documented limitations of the financial services they provide – suggests that there are likely further agribusiness investment opportunities to be seized, especially by rural SMEs and smallholder families with inadequate access to finance.

An unmet demand

This dominance of non-financial actors in rural and agricultural financial markets is still pervasive, even though in recent years pioneering specialized service providers have begun to offer financial and business development services to SMEs and poorer rural households currently underserved or excluded, having recognized the business opportunities that agricultural markets present. Through this provision of coordinated financial and non-financial services, formal financial institutions and their partners have begun to properly assess advantageous returns on investment in smallholder agriculture, which makes the delivery of their services commercially profitable and sustainable.

However, increasing the provision of financial services to the agricultural sector is a challenging process. Despite the changes and innovations of recent years, agriculture is still perceived by commercial banks as a sector with high operational and transaction costs, lack of information for proper credit assessment, covariant risks (e.g. climate, pests), and low returns on investment. Traditionally, the banking sector has had little motivation to bear the expenses associated with developing a proper comprehension of the risks related to SME agriculture, and to extend its services to a high number of widely dispersed enterprises in rural contexts, in need of small loans. From the public sector side, agricultural lending programmes in developing countries have commonly given sub-par results, despite – and sometimes because of – high governmental subsidies. Agricultural development banks have been slow to innovate, often partly due to the governmental directives given to them.

Furthermore, despite some advances made by commercial and development banks in servicing the agricultural sector in few developing countries, there is still a dominating trend from the banking system to offer financial products which are unsuited to the needs of agribusinesses, especially smallholder families and rural SMEs. These actors require a blend of diverse and suitable complementary financial services in order to manage the seasonal business cycles necessary to stabilize their income and allocate in an optimal manner their capital, whether self-mobilized or borrowed. More familiarity with the clients' needs and inherent risks would be needed for the banking system to develop products and processes that provide adequate agricultural financial services to a broader range of rural clients, in a sustainable manner.

From the smallholders' side, the most common constraints affecting access to finance are usually poor credit history, low financial literacy and limited collateral. This last element stems from the fact that formal financial service providers, given the relatively small number of instruments they possess to mitigate lending risks in agriculture, tend to rely heavily on real collateral. Therefore, smallholder farmers in rural contexts usually lack the assets required by banks for longer-term loans. This issue is compounded by land tenure restrictions and other policies that were introduced to preserve the livelihood assets of the community, but at the same time limit the availability of acceptable collateral. Moreover, even if farmers possess sufficient land to collateralize low-interest loans, they may refuse them in favor of high-interest loans, which do not ask for their land as guarantee, given the land's attributed value as main source of sustenance. By improving the ability of formal lenders to assess the cash-flow generation potential in agricultural ventures, it would be possible to bring these actors to rely less on collateral as a risk mitigation tool, thus contributing to increase access to finance for smallholders.

The value chain approach

As hinted, all these challenges have increasingly been addressed by pioneering financial institutions, which have demonstrated that providing financial services to rural populations is both possible and profitable, when drawing on the informational

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There is a need to frame a dialogue between both private and public actors involved in agricultural finance and investment. These collaborations are key to find innovative solutions for fullfilling the needs of rural households.

advantage and specific expertise of value-chain actors and non-specialized financing agents. By adopting a value-chain financing approach, it is possible to develop innovative financial solutions to bridge the gap between formal financial institutions and value chain actors, thus overcoming the challenges in servicing underserved or excluded segments of the clientele within the agricultural sector.

The value-chain financing approach considers the collective set of actors and processes within the totality of the value chain in order to make financing decisions, instead of focusing on the single lender-borrower relation as conventional finance does. In other words, the approach adopts a systemic viewpoint that takes into consideration the organic collective of the business relationships within the chain, more than the creditworthiness of single actors. Value chain financing can be divided into internal finance (the financial flows among the chain actors), and external finance (the flows from financial institutions into the chain), as well as a combination of both.

Value chain financing is a structured and market-competitiveness approach that is meant to complement - and not replace - conventional finance, by increasing access to funds and reducing risk for all parties involved. Conventional financing, being focused mainly on the individual lender-borrower relation, incorporates additional risk born out of the absence of a comprehensive view of the links within the value chain. The lack of an organic view generates additional uncertainty, which makes it harder to assess and mitigate the risks associated with lending. Uncertainty also leads to a higher perception of risk associated to the agricultural sector, discouraging conventional lending from the start.

More involvement of formal financial institutions in the value-chain financing mechanism has been shown to expand financial options for agriculture and smallholder families, giving them a new array of more adapted, diverse, cheaper, and flexible financial products (Hernandez, 2015).

Adapted financial products and services

Among the most relevant financial instruments which have been developed through the adoption of a value-chain financing approach, are : (i) warehouse receipt finance, a mechanism to provide post-harvest financing to borrowers, who benefit from it in terms of management and mitigation of price risk; (ii) leasing, an alternative financial mechanism for agriculture that benefits smallholders and companies with inadequate collateral and credit history, which allows the farmers and SMEs to gain access to a variety of assets (usually farming equipment, vehicles, machinery etc.); (iii) index-based insurance (especially weather index-based insurance), developed to overcome some of the limitations typically faced by traditional insurance instruments in the agricultural sector (such as high transaction costs, lack of direct on-field information etc.); (iv) commitment savings, through which farmers have the option to store their savings in special accounts which impede withdrawal until a specified date, helping to address self-control problems of farmers relative to early spending; (v) receivables-based finance (especially factoring and reverse factoring), that enables producer organizations and SMEs to sell their account receivables at a discount to a third party (the factor, usually a bank or a factoring company), in exchange for immediate cash, offering two important services to financial institutions: the collection service of the accounts receivable and the assessment of the creditworthiness of the debtor.

This range of innovative financial instruments shows how farmers and SMEs need both general and specialized financial services. General financial services are services, which do not aim at facilitating specific economic activities within the household, but instead assist in managing all the activities performed (e.g. current savings accounts, life insurance, or consumer credit). Specialized financial services refer instead to those services which are designed to facilitate some specific activity, such as agricultural production, child education, and treatment of specific infirmities (warehouse receipts, leasing of agricultural machinery, savings account to finance university education, health related loans etc).

Poor rural households that are dependent on agriculture have a highly diversified portfolio of different income sources, which include both agricultural and non-agricultural activities, with the latter often being responsible for more than half of total household spending. In this respect, it is clear that specialized financial services in agriculture acquire greater relevance in developing contexts, since it has been shown by the literature that they foster GDP growth at country level in the agricultural sector, which carries a higher poverty-reducing impact, if compared to an

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Innovative financial instruments show that farmers and SMEs need both general and specialized financial services.

equivalent growth in non-agricultural sectors (Ligon & Sadoulet, 2007). Therefore, both general and specialized financial services play important – albeit different – roles in the process of socio-economic development.

What are the innovations?

The described financial instruments and the value-chain financing approach share a series of common characteristics.

First, they recognize the importance of the value chain structure in (i) facilitating credit supply; (ii) developing new products and services; (iii) filling information gaps which are common within these markets; (iv) developing compatible incentives for the fulfilment of financial contracts; and (v) mitigating risks

Secondly, the majority of recent innovations provides a comprehensive vision in overcoming numerous barriers at once, by proposing a multidimensional approach. Particularly, there is an emphasis on the need to ensure that an adequate combination of various financial services is provided (not just credit and, in particular, insurance), as well as effective technical assistance and adequate access to input and product markets.

Thirdly, they devote greater attention to the need to manage and mitigate risks, embedded in the financial products. Innovative instruments have thus been developed which, often through IT and digital innovations (geo-spatial tools, weather stations, credit-scoring advanced software, etc.), evaluate and monitor risks that prevent financial services from making a qualitative and quantitative leap forward in the role that financial services can play in agricultural investment and innovation.

Conclusion

The wide array of agricultural financial products – and other investment vehicles – that builds on the value-chain financing approach is on average more inclusive of poorer rural families dependent on agriculture. Nevertheless, achieving this higher level of inclusion is greatly conditioned by a set of pre-existing factors. These include the presence of enabling financial and agricultural environments, as well as the ability of a diverse set of stakeholders (such as formal financial institutions, producer groups, domestic and foreign agribusiness firms and public agencies) to develop win-win collaboration and partnership models which can pool and channel the individual strengths of these actors, with the aim of delivering flexible financial services and properly managing investment risk.

However, these innovative experiences remain the exception rather than the norm in the context of developing countries, as systematic partnerships between stakeholders face strong constraints that curtail their creation. These barriers relate to the significant transaction costs faced by the public and private actors involved, who operate in widely different professional networks and are incapable of recognizing the other parties' comparative advantages, thus finding it challenging to identify feasible collaboration models. As a consequence of this lack of collaborative efforts, the present-day scenario in agricultural investment remains one of the major underexploited opportunities.

There is a need to frame a dialogue between different categories of actors, involved in agricultural finance and investment, both public and private, in order to identify modalities of collaboration which can overcome present-day challenges to agricultural investment in the developing world. These collaborations are key to finding innovative solutions which can achieve a greater developmental impact, improve financial governance frameworks, and provide financial services which can effectively fulfill the needs of rural households, dependent on agriculture, as well as the small and medium agro-enterprises they participate in.

Such collaboration models can ultimately take the form of public-private partnerships, through which the private sector can draw on the expertise and public goods provided by public institutions in order to increase the number and the quality of services which can be offered to rural populations. The public sector, meanwhile, can greatly increase the development impact of its interventions, by using the knowledge acquired from private actors to tailor these interventions to market needs and requirements (e.g. variety, quality, quantity required by the markets).

SUCCESS STORY

Microleasing to equip farmers in Burkina

African producers encounter difficulties in accessing finance to invest in their farms. These problems are caused by the lack of guarantees in a credit application and by the specific risks that are inherent in the agricultural sector, which financial institutions are wary of.

Yet, modernising farms through the acquisition of production equipment is essential to farmers wishing to increase their incomes and to contribute to their country´s food security.
As they have no guarantees to access credit for conventional equipment, the objective of ADA is to provide farmers in Burkina Faso with microleasing services enabling them to employ high-added-value materials.

After a conclusive feasibility study carried out in 2012, ADA and RCPB decided to test the product through 12 of the network's credit unions, by introducing four facilities for farmers: tractors, pumps, tillers and versatile engines. To this end, a central competence center was set up, which consists of an agronomist and a mechanic providing the network with its technical know-how.

Today, 17 tractors are in use by producers who have joined the microleasing project since 2014. Smaller farmers have also benefitted from the machines via rental services. The loan portfolio has grown to 300 000 €.

For more information, please visit our website.

Saving drops of water and nurturing life:

Financing arboriculture projects and irrigation systems in rural Morocco

Juana Ramírez, Senior Project Officer, ADA

Juana Ramírez

Juana Ramírez works as Senior Project Officer within the Research and Development Unit at ADA, promoting financial inclusion in developing countries. She is responsible for coordinating research projects and action research events focused on green microfinance, rural outreach and innovation and measuring financial service providers (FSP) social performance. In the framework of developing partnerships with universities and research centers, Juana is currently involved in delivering a training module on Agriculture Value Chain Finance with the FAO.

Agriculture activities and the production systems developed around them have nurtured and enhanced human life on earth throughout the history of mankind. Nowadays, however, agricultural food production and water management are increasingly becoming global issues. Strong debates at the levels of governments, multilateral development organizations, private sector investors and local communities, do not always agree on the way forward to: combining the objective of protecting natural ecosystems while insuring food security and economic development for all. Meanwhile, significant degradation of land and water resources has been observed in recent decades; and the effects of global warming on agriculture as well as of agriculture practices on global warming are still not fully understood.

For countries like Morocco, where the agricultural sector represents the backbone of the economy, with over half of the active labor force working in farming, adapting to the impact of climate change in agriculture is of outmost importance, if not a question of survival.

This article presents public and private sector strategies to support sustainable agricultural development in Morocco. It explains the Group Crédit Agricole du Maroc (GCAM) model as a financial service provider strategy looking to adapt its service offering to different segments of farmers in the country. The article addresses the importance of developing efficient water management and soil conservation activities to ensure subsistence farming economic development, as well as environmental protection.

The first part outlines some of the implications of modernizing agriculture in Morocco, as well as the conditions required to better integrate extremely poor smallholder farmers into high-value markets. The second part looks at the organization of an agriculture economy, in different agricultural zones and markets, and at the role of Economic Interest Groupings. A third part addresses the establishment of a financial and technical assistance *support system*. This system is illustrated through the service provision model of the GCAM distribution network, in coordination with public sector initiatives.

1 Modernizing agriculture in Morocco: a public sector strategy backed by the private sector and a foreign demand for agricultural products

Confronted with the challenges of a globalized economy ruled by free trade policies and market liberalization, the Moroccan government needed a strategy to bring about solutions to the stagnation of the agricultural sector and fierce competition within international markets. Although Morocco's human development index has improved (0,426 in 1975 to 0,628 in 2014), the gap between urban and rural areas remains a large one[1]. The necessity of a strategy to fill the gap become apparent in both rural and urban areas: small farmers were increasingly vulnerable to climate change, the desert kept expanding and oasis systems degrading. As a result, populations and territories are at risk and there is a pressing need to find more sustainable ways of cultivating the land.

Poverty is a particularly rural phenomenon in Morocco - approximately 75 per cent of the rural poor depend on agriculture for their livelihood[2]. The incidence and distribution of poverty vary considerably among regions in relation to the quality and availability of natural resources. Coastal areas are generally better off and less affected by poverty, whereas mountain areas, steppes and arid south are home to most of the poorest Moroccans[3].

1 Human Development Report 2015, http://hdr.undp.org/en/countries/profiles/MAR

2 https://www.ifad.org/topic/farmersforum/overview

3 http://www.ruralpovertyportal.org/country/home/tags/morocco

> **“In Morocco, the sustainability of oasis systems is increasingly threatened. From the 15 million trees which inhabited the south Atlas oases and whose majority was represented by good varieties, there remain only 4 million trees, much of which are seedlings of variable and poor quality.”**
>
> El Khoumsi et al., 2014

The Green Morocco Plan is a government strategy launched in 2008. It aims at strengthening the competitiveness of agriculture and ensuring a fairer and more diversified economic development of rural areas. Its main objectives are focused on ensuring food security, adaptation of agriculture to climate change and sustainable growth of small farmers. The plan consists of two pillars conceived to support the development of a two-tier system.

On the one hand, it is progressing towards liberalization and modernization, but on the other, it claims to maintain the ‘social character’ and traditions of the Moroccan people and their agriculture. Consequently, the first pillar (Pillar I) focuses on large modern farms with the objective of consolidating a more efficient and industrialized agriculture. The plan represents 900 projects and 150 billion MAD (13.5 billion €) over ten years. The second pillar (Pillar II) focuses on smallholder and family farming. It aims to fight poverty through the implementation of 550 solidarity and technical assistance projects, for investments of 15 to 20 billion MAD (1.35- 1.8 billion €) over 10 years[4].

Even if the majority of farmers work fewer than five hectares, this accounts for only a quarter of the total cultivated land. Large farming units dominate the fertile areas and inevitably generate more substantial income, with earnings approximately nine times more than the average family farm (Ghanem, 2015). Many small farms face problems that make it difficult to increase their earnings, including ambiguous land ownership issues, a lack of infrastructure or access to credit, and poor technical and marketing support. Without registered land, small farmers cannot benefit from government programmes, and even with registered land, many programmes favour larger farms.

[4] Ministry of Economy and Finance, http://www.finances.gov.ma/fr

But what does the implementation of these two pillars means for smallholder farmers?

Modernizing Moroccan agriculture implies transitioning from growing wheat, barley and corn to growing more productive and perennial, native, and carefully selected “cash crops”, such as fruit trees. If cereals or grain crops are subject to volatile water availability which results in highly variable production yields, crops such as olives, almonds and dates are better suited for Morocco’s climate and natural resources. In fact, because the risk of desertification and low precipitation is significant, there is an increased interest in promoting arboriculture crops with the potential of both conserving and restoring soils. There is also a high demand for these crops in national and international markets. This makes agricultural conversion projects even more suitable in terms of sustainable economic development.

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> Modernizing Moroccan agriculture implies transitioning from growing wheat, barley and corn to more productive and perennial “cash crops”, such as fruit trees.

It is however important to stress that focusing on “cash crops” can also have its downside when trying to break dependence from foreign markets and volatile prices. Giving priority to specific cultures and production systems which are often export oriented is detrimental to a more holistic and diversified approach to agriculture and local development. This is the reason why entertaining an export-oriented approach should only be temporary and not exclusive. Priority should be given to investing resources and building capacity to sustain a long-term strategy, envisioning empowering domestic agriculture practices and markets.

Furthermore, policies should not overlook the potential of investing time and resources into strengthening food production ecosystems (such as organic farming) and independent producer organizations.

❷ Organizing farmers and structuring the agriculture sector: Economic Interest Groupings (EIGs)

The lack of access to finance for viable agricultural projects is often associated with a lack of organization in the agricultural sector. In the case of Morocco, the fragmentation of land in small farms leads to more complicated credit assessment, attribution and delivery processes. The high cost involved in advancing these procedures often discourages financial service providers from supporting the market. Information asymmetry and poor understanding of farmers’ living conditions also explain the farmers’ lack of financial track records. Farmers’ lack of physical guarantees impedes the application by financial institutions of conventional banking methods. As a result, small-scale farmers with insufficient technical and managerial skills have no financial means of modernizing their production systems.

A viable solution to this problem is to incentivize farmers to organize themselves into groups and work together around irrigated perimeters. Joint projects could involve different parties. The incentive would be to join forces in order to produce the quality and quantity required to be in capacity to supply larger agribusinesses or domestic markets on a regular basis. Collaboration among farmers could help allocate resources such as water, time, land and skills efficiently. In return, farmers would benefit from better sources of income and knowledge exchange, as well as for opportunities to be financed or apply for subsidies.

Organizing farmers and structuring the agricultural sector implies understanding the different functions and professions within an agriculture value chain. Understanding the specificities of local agricultural markets and the context in which farmers are embedded seems essential. The Green Morocco Plan is built under the principle of aggregation of actors and factors. The aggregation principle is understood as a tool for the development of the agriculture sector.

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Collaboration among farmers could help allocate resources such as water, time, land and skills efficiently.

The concept can be defined as the act of grouping different actors with complementary interests for them to work together or interact, in order to produce, transform and sell agricultural products. Different aggregation models will be the result of linking producers to markets. The consolidation of these partnerships is conceived as a way of structuring and organizing actors in the agricultural sector.

Win-win partnerships resulting from aggregation models are nonetheless the result of voluntary agreements between independent actors. They are based on trust and the ability of parties to fulfil contractual obligations. If the organization of farmers within cooperatives or producer associations can indeed be realized on a voluntary basis, it can also be incentivized by trainings, by providing access to productive resources such as land, water or equipment. Government or international organization initiatives looking to persuade farmers of the benefits of working together in a specific project, should keep in mind interventions that benefit all actors at stake.

Cooperatives or producer associations are naturally potential aggregators. They can provide technical and supervisory support to farmers, supply or administer inputs, pre-finance agriculture investments like irrigation equipment or simply shared storage space between farmers. A large-scale farm can also aggregate a number of small farms in order to create a common operation that is beneficial for all participants. Nonetheless, the key and critical factor is finding consent based on a long term goal or common purpose.

In the case of Morocco, different "Economic Interest Groupings" (EIGs) have been formed around fruit tree production projects. These projects are in general oriented to:

- Stimulate growth in the agricultural sector by moving from high water use and low-value cereal grains to low water use and high-value commercial fruit trees species.
- Reduce volatility of agricultural production and farm revenues by expanding the area of more commercial trees species better positioned to handle moisture stress.
- Protect the natural resource base by eliminating wheat production from hillsides and replacing it with trees that reduce erosion and conserve soil.
- Organize and link extremely poor, smallholder farmers to high-value markets[5].

[5] MCC Fruit tree productivity project : https://www.mcc.gov/where-we-work/program/morocco-compact#ma-enterprise-support-project1

Economic Interest Grouping[6]

A bill on Economic Interest Groupings (EIG), presented by the Ministry of Industry, Trade, Investment and the Digital Economy, was adopted in February 2015 by the House of Councillors in Morocco. The text aims to make the EIG a true economic and social development instrument as well as to harmonize national legislation with those international economic partners.

A GIE (Groupement d'Intérêt Economique) or Economic Interest Grouping (EIG) refers to a consortium of companies, foundations, organizations or institutes which are pooling their efforts in a formal way to achieve a competitive advantage.

Members can be moral or physical persons, but most partners within an EIG come from the private sector. However, the inclusion of public sector partners is not unusual. The financial management control in EIGs is performed in the same way as in commercial companies, but the EIG is not a commercial entity: its purpose is not to make profit but to pool resources for the development of the economic activity of its members. Therefore, an EIG cannot lead by itself to profit making or profit sharing, but must exercise an economic activity: the profit generated by this activity should be returned to members in the form of a service or an allowance.

An Economic Interest Group is therefore a grouping of individuals or entities which acquire a legal personality allowing members to share some of their activities and be united in regard to their debts. It is an intermediate legal structure between the company and the association, whose purpose can only be to prolong the activity of its members. Economic Interest Groups have the advantage of being subject to very flexible legal rules, particularly with regards to its share capital requirements, purpose (which may be civil or commercial) or organizational arrangements. In practice, the EIG is frequently used for sustainable cooperation between professionals interested in sharing costs.

At least 23 EIGs gathering farmer associations and cooperatives around the production of sustainable agricultural projects have been formed in the framework of the Green Morocco Plan. These groups contribute to structuring agriculture activities in different territories and build on community practices. Agricultural production among these economic structures is mostly related to dates, olives, figs and almond trees. There is also the production of honey, couscous, capers, saffron and roses.

If an enabling environment is necessary to create the right incentives for farmers to work together, people's traditions and customs, as well as relationships and habits should not be overlooked. This social tissue accounts for the social capital that fosters development through voluntary cooperation. The promotion of a juridical instrument like the "Economic Interest Groupings" is an example of an enabler for formalizing and structuring farmers' interactions within the agricultural world. However, other types of instruments are also required.

3 Supporting a sustainable agricultural economy requires a combined strategy of financial and technical assistance service provision

The financial sector can be defined as a support system contributing to sustainable economic development and long-term human prosperity. Therefore, although the financial sector alone does not constitute the only building block of a prosperous economy, its organization, principles and institutional performance have a significant impact on the evolution of economic activities, as well as on people's livelihoods and commercial interactions. Adapted financial systems are responsible for shaping appropriate transaction systems for the exchange of services and goods. The process by which agricultural goods and services are produced, sold, and bought, therefore depends not only on economic factors such as labor, land, capital and entrepreneurship, but also on the financial services infrastructure available, and the quality of this offer and system. Therefore, the organization and transformation of agriculture productive systems cannot be achieved without an efficient offer of financial services.

In the case of Morocco, lacks of capital, land or entrepreneurial skills have indeed undermined the development of the agricultural sector, and the absence of adapted financial services to efficiently intermediate between savers and borrowers was, until recently, a major obstacle as well. Allocating and channeling resources from the public sector through financial service providers has boosted adaptation processes for inclusive finance and motivated improvements to better serve smallholder farmers. The Group Credit Agricole du Maroc (GCAM) financial service provision model is an example.

[6] www.actualitesdroitohada.com (06.07.2015)

SUCCESS STORY

Supporting rural finance: testimony from Niger

Réki Moussa Hassan, General Director ASUSU (Niger)

ADA has been our partner for almost five years. We attach a great deal of importance to this relationship because ADA supports MFIs in their process of professionalization: it makes tools available to us and helps us in our capacity-building efforts. Two years ago, we were able to obtain funding from the LMDF thanks to ADA, and this was a very good thing as well. These funds have been used to finance our debt, which has enabled us to support the provision of services in rural areas and, more specifically, to provide funds to promote women's rights.

"

Successful agriculture projects require an enabling support system, combining financial and technical assistance solutions.

A concrete practice currently functioning in Morocco involves GCAM's distribution network and its adapted offer to different segments of the population active in agriculture. The Group divides the market in tree main segments:

- Agribusiness or structured export-oriented agriculture enterprises.
- Medium size enterprises or unbanked agriculture enterprises
- Smallholder farmers and subsistence farms.

Agribusinesses and bankable farms represent 10 per cent of the market; they are located in 22 per cent of the agricultural area and in 30 per cent of irrigated areas. These farms meet banking standards, they are target companies under Pillar I of the Green Morocco Plan, and the bank funds them in a commercial manner. The small and micro farms segment represents 40 per cent of the market and at least 600,000 farms. Income from these farms comes essentially from non-agricultural activities or other para-agriculture undertakings (such as selling non-agriculture products or working in crafting activities). GCAM serves this segment through its microfinance institution MFI, the ARDI Foundation, which strategically focuses on supplying rural areas.

In between microfinance and commercial banking targets are unbanked farms - a segment often referred to as the "missing middle". This segment which represents 50 per cent of the Moroccan agricultural market comprises 70 per cent of the agricultural area and 65 per cent of irrigated areas (CERCAM). Access to finance is difficult for this segment essentially because of a lack of guarantees. Before GCAM created a subsidiary, there were no suitable financial services on offer to address this segment's needs.

The bank has partnered with the State and advance its experience and staff's expertise to adapt financial practices and help channel resources for farmers to be able to finance their agriculture projects. GCAM and its distribution network of agents have developed a transaction system to be able to advance cash or provide credit to farmers on the basis of a contract approving subsidies for a viable agricultural project as collateral. Since under the supervision of government agencies such as the Agence pour le Development Agricole (ADA), subsidies operate as a repayment of an investment at a certain percentage, the advance on subsidies is a financial mechanism that operates to facilitate the farmers' investment to take place on time. On average, 80 per cent of investments are reimbursed for irrigation projects, for example. The investment of purchasing a tractor on the contrary, is only reimbursed up to approximately 35 per cent of the farmers' upfront investment[7].

In fact, the actual subsidy money is granted to the farmer after completion of the physical investment, when the bank issues "a transfer of liabilities note". The note ensures repayment once the subsidies are transferred to beneficiaries.

This system has been successfully implemented. It has fostered new dynamics between the government and financial players such as GCAM and its subsidiary TEF, and has encouraged the development of economic and commercial activities between institutions (public and private) and farmers. It can be argued that thanks to the banks' methodology to deal with subsidized projects, resources have been better allocated, and public funds to the agricultural sector have increased accounting for 170 million USD (149 million €) in 2008 to 340 million USD (298 million €) in 2014[8].

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[7] Fonds de développement agricole: Les aides financières de l' État, Avril 2015.

[8] Data from Centre d'Etudes et de Recherche du Crédit Agricole du Maroc (CERCAM)

Conclusion

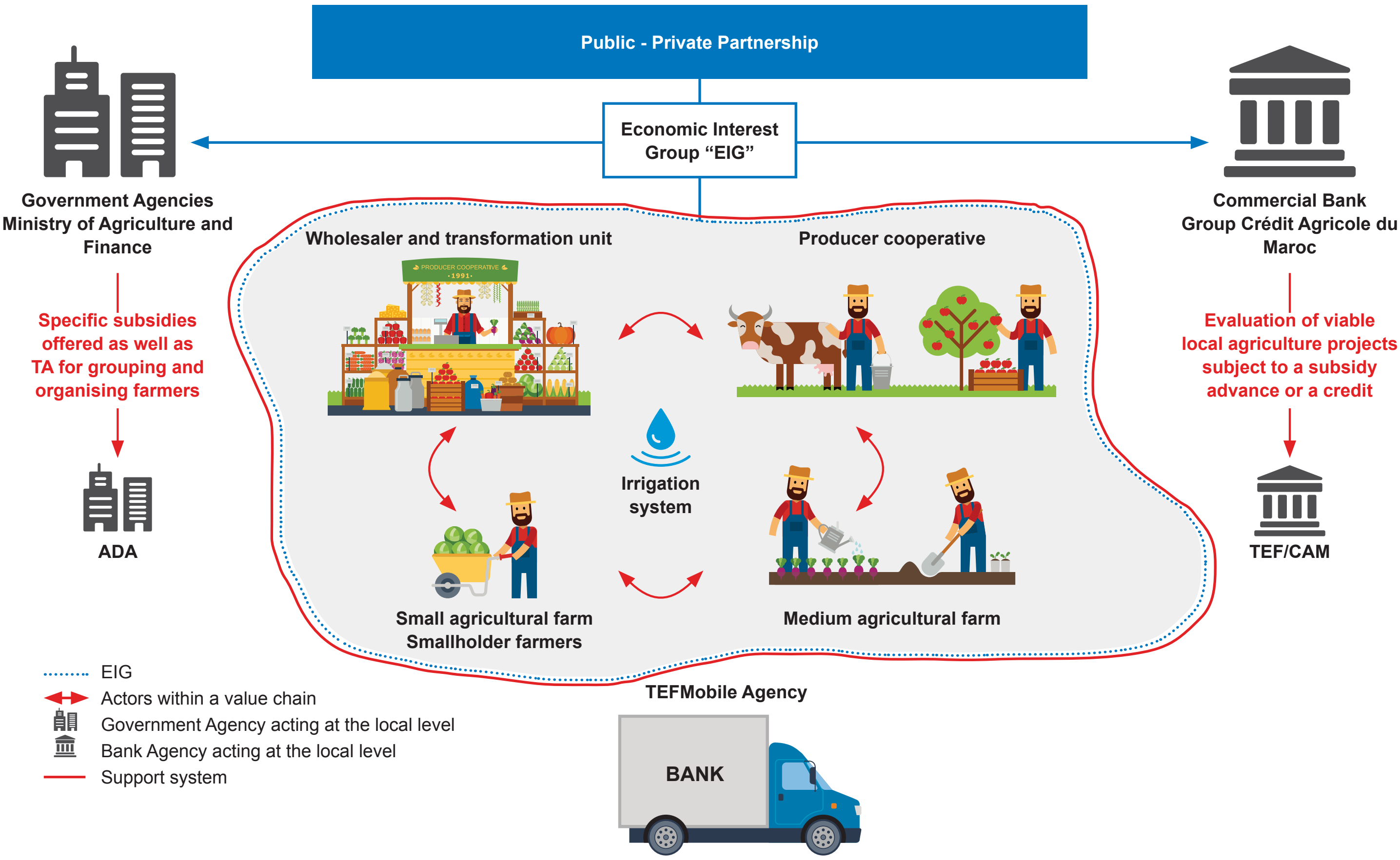
In conclusion, successful agriculture projects require an enabling support system, combining financial and technical assistance solutions such as mentoring, project conception, farmers' organization support and training. Only with proper allocation and combination of resources will productive agriculture ecosystems be able to bloom.

The Moroccan government has been able to better channel funds in territories were farmers are organized in productive groups. The legal form of the Economic Interest Group (EIG) facilitates this process and allows smallholder farmers to participate in larger-scale projects within different geographical zones. The infrastructure, built and developed thanks to the allocation of subsidies and the technical assistance provided by government units, also facilitates access to finance and drives more viable public-private partnerships.

Figure 1 provides an example of the mechanisms and service provision strategies that operate for an enabling support system to enhance agricultural development at different levels. The involvement of a commercial bank (here Crédit Agricole de Maroc or CAM and its subsidiary Tamwill El Fellah or TEF) in the evaluation of subsidy or credit applications complements the intervention of a public service entity such as the Agence pour le Development Agricole (ADA), whose priority is to incentivize project creation.

Complementary public-private services are the result of coordinated and value-added activities from public and private sector entities. Public sector initiatives building proper infrastructure and administrative services so as to provide coaching, encourage entrepreneurial skills, administer collective land and provide access to information and inputs are some examples. Financial service actors providing advice or coaching to farmers to enable them to put together financially solid applications for funding (credit or subsidy), is a form of complementary private sector support. The rigor with which the bank assesses the proposals constitutes an important asset; it helps identify good prospects and their value within the economy.

Figure 1: A support system for agriculture development



Planting the seeds of inclusion:

An alternative pathway for coffee production

This article was written by a working group on Microfinance Plus consisting of academics and professionals from a number of institutions: Johan Bastiaensen and Frédéric Huybrechs from the IOB-University of Antwerp; Manuel Bermúdez, Selmira Flores and Milagros Romero from the Nitlapan Research and Development Institute of Universidad Centroamericana, and Juana Ramirez from ADA.

What is Microfinance Plus?

Certain institutions go beyond just offering traditional financial products and services to give their clients healthcare, education, environmental programmes or support for production. This added dimension, which covers both financial and non-financial services, is usually called "Microfinance Plus".

Microfinance Plus is defined as a microfinance approach oriented towards the economic and social inclusion of the most vulnerable communities. Nevertheless, the high levels of poverty, the prevalence of weak institutions that are insufficiently developed and the lack of adapted public policies make the implementation of this kind of programme a challenge.

In 2015, Nitlapan Institute of the University of Central America, the Institute of Development Policy and Management of the University of Antwerp and ADA Luxembourg set up a research agenda on Microfinance Plus to try to understand the complexities of the territory, the development opportunities and the challenges facing Microfinance Plus in Nicaragua, more specifically in the municipality of Tuma-La Dalia. The study focuses on an analysis of the territorial dynamics and the experience of microfinance institutions that are committed towards a Microfinance Plus approach that rethinks the concept and the function of microfinance in combination with non-financial services (Sievers & Vandeberg, 2007). The analysis covers both the joint experience of Fondo de Desarrollo Local (FDL) and Nitlapan and that of other initiatives for financing, providing technical assistance and training to medium-scale coffee cultivation.

FDL and Nitlapan, inspired by the social inclusion approach of Microfinance Plus, jointly set up an initiative to provide credit and technical assistance to medium-scale coffee producers, with the aim to transform and improve the technology of the producers' crops so that they can increase their income and, consequently, their ability to pay. The information presented in this article comes from a database of 233 credit and technical assistance clients in the coffee production field of FDL in 2015 - of which 18% are women-; from interviews

with coffee producers (10), microfinance managers (2), coffee middlemen (4) and exporters (2); from a focal group with 10 producers and from four sessions with the main stakeholders from the area (experts from Nitlapan, credit officials from FDL, credit experts and managers in the municipality from ADDAC[1] and ODESAR[2], senior managers and the general manager of the Unión de Cooperativas Agropecuarias of La Dalia).

The article describes the socio-environmental tensions of the conventional coffee production model, the gap between theory and practice in the Microfinance Plus model, and the need for the model to consider different development pathways. The article also analyses the political, social and economic dynamics of the stakeholders in the coffee value chain in La Dalia (ADDAC, ODESAR and the Unión de Cooperativas Agropecuarias de La Dalia) in order to identify development strategies adaptable to the possibilities and preferences of the locals - especially subsistence coffee producers -, and thus go beyond a purely production-based approach. It also recommends redesigning credit policies to involve

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[1] Asociación para la Diversificación y el Desarrollo Agrícola Comunal, ADDAC, http://www.addac.org.ni/

[2] Organización para el desarrollo Económico y Social para el Área Urbana y Rural, ODESAR, http://www.odesar.org.ni/

both producers and other stakeholders in the coffee value chains, in the processes of negotiation and fair trade agreements. The article ends by presenting some recommendations to make progress towards more inclusive and fairer models of microfinance.

“

Coffee is the main export commodity from Nicaragua.

1 The conventional coffee production model and its socio-economic tensions

Coffee continues to be the main export item from Nicaragua and it is eligible for the highest incentives provided in the framework of agricultural policies and has greater coverage than other production sectors in the agricultural credit area. However, coffee production is faced by serious challenges, in particular vis-à-vis climate change: the temperature of the Earth and the oceans has grown at a fast rate in the last three decades (IPCC, 2014) and it is predicted that the area suitable for planting coffee in the country will fall significantly by 2050 due to a reduction in rainfall and an average temperature increase of 2.2 degrees Centigrade against the average annual temperature (Laderach, et al. 2010, 2012).

In this context, the export sector and the government are driving development plans for the coffee sector, including legal instruments such as the recent Law no. 853 for the transformation and development of coffee production (Asamblea Nacional, 2013)[3]. However, large-scale coffee producers and exporters favour the conservation of the high-tech monoculture coffee crop, mainly based on the use of agrochemicals and an exchange of bean varieties to maintain or increase the yield from the plants. This cultivation method is dominated by 10% of coffee producers in the country - 5 % large-scale and 5% medium-scale producers- (Mendoza, 2013). The method is considerably influential, and tends to standardise coffee production without account being taken

[3] This Law creates a Fund for the Transformation and Development of coffee production, consisting of resources from coffee exports, the yield from investments in the sector and other sources. It is designed to support the Natural Programme to Transform and Develop Coffee Production for coffee producers already existing when the Law came into force and who are registered in the RUCN. The value withheld from the producers per quintal (hundredweight) of coffee exported varies depending on the price of the beans. $1 is withheld when the price of the quintal is $140 or less, and up to $4 when the price exceeds $185 per quintal.

of the practices, needs and opinions of coffee producers who yield lower volumes and have smaller holdings.

To offset the lack of productivity and the vulnerability of the coffee leaf to pests such as rust, large-scale producers and exporting companies have therefore opted for the renewal of coffee plantations with the Catimor[4] variety - a rust-resistant plant that is made more productive by the fact that it is treated under a high-tech system that includes greater sun exposure. However, growing this variety of coffee implies a greater level of deforestation on the territory, a high level of investment in agrochemicals and it is not the best way to re-establish the balance of natural ecosystems (Huybrechs, et al., 2016). As a result, exclusive and unconditional support for this type of coffee production jeopardises the consolidation of coherent initiatives and alternatives for green microfinance (Ibid).

What is rust?

Rust is the main disease currently affecting the coffee plant. It is caused by the fungus Hemileia vastatrix. It spreads quickly, affecting the plant's leaves, leading to severe defoliation.

1.1. What does the data show?

An analysis of the portfolio of Microfinance Plus FDL-Nitlapan shows that 97% of producers who receive credit use the Catimor[5] variety.

Thus, the tendency towards renewal led by the big producers also affects medium-scale farmers because they partially adapt the production techniques of the Catimor variety to their own circumstances. For example, 71% of producers grow between 0.25 and 5 *manzanas*[6] of Catimor coffee in the shade, even though this variety is more resistant to sun exposure.

Furthermore, although they receive technical assistance from Nitlapan, producers have difficulty ensuring the high-tech treatment suggested - at least two fertilisations and two leaf protections per annum - and the investments in wet-stage infrastructure and post-harvest handling to guarantee quality. What are the reasons behind these difficulties? The lack of application of technical processes is often due to a lack of liquidity in critical periods according to the smaller producers or due to cultural resistance in the opinion of the technicians. Producer families cling to traditional coffee production methods - often within diversified agroforestry systems - and they argue that it is better to avoid getting into debt because of the risks involved, including pressure from banks and microfinance institutions. In addition, there is vulnerability to the climate, price volatility in the market and also poor level of governance of stakeholders in the value chain - including producers' cooperatives -, general mistrust and uncertainty, as nothing guarantees smaller producers that their investments will be converted into higher income.

1.2. Two coffee pathways

At least two development pathways coexist in coffee production: one of them dominant and headed by big producers and exporters i.e. owners of large tracts of land and with the capacity to produce high volumes - and another lower-level pathway consisting of small and medium-scale producers with limited land and resources that try to integrate into the productive pathway.

One pathway differs from the other with respect to the implementation of alternative production processes. Small-scale coffee producers located in areas at altitudes between 700-900 metres, for example, tend to diversify their production, combining coffee with bananas, citrus fruit, annato, cocoa and timber-yielding trees. Therefore, coffee is not their only source of income, although it may be the most important, especially in monetary terms. This creates a difference in comparison with the high-tech monoculture method and it becomes a lower-level development pathway (Bastiaensen, et al. 2015). Medium-scale and large producers also diversify their crops. However, they do so by creating separate areas per item[7], i.e. they apply the logic of the monoculture given the greater availability of land and their business approach. These differences are also reflected in the configuration of coffee value chains and they determine the creation of alliances among stakeholders.

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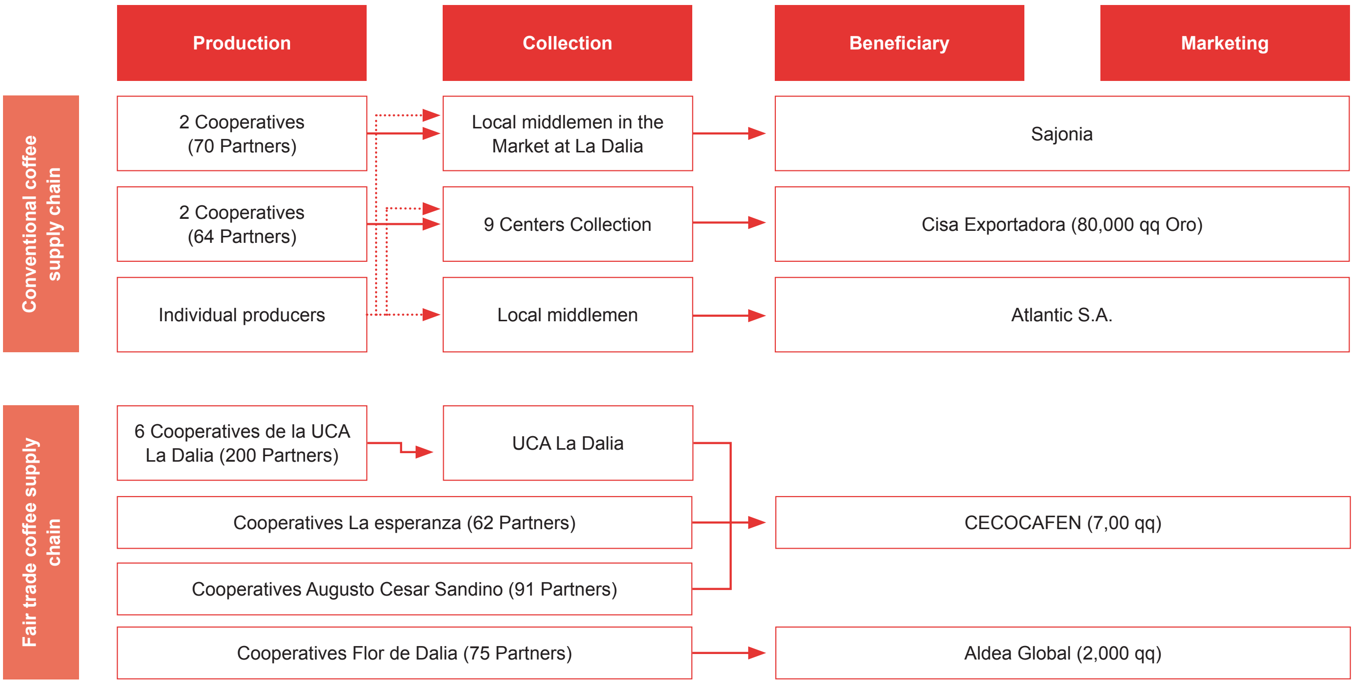
4 This variety is a cross between one known under the name of Caturra and the hybrid Timor -a natural hybrid of Arabica crossed with Robusta- to obtain a coffee that is more similar to Arabica that is grown in climates with low temperatures and high-altitude plateaux (see http://www.ico.org/es/botanical_c.asp?section=Acerca_del_caf%E9).

5 34% of these producers have less than 5 mzs of land, another 34% have between 5 and 10 mzs, 23% have between 10.5 and 30 mz and 8% land above 30 mzs.

6 One *manzana* is approximately 1.72 acres = 6,961 m^2.

7 According to Solórzano & Cáceres (2012), 30% of coffee-producing estates have coffee, 50% forests and 20% other crops.

Figure 1: Map of coffee supply chains in the municipality of La Dalia



Source: Based on Mojica, (2014) and data collected in the field by the authors.

❷ The coffee value chains

Based on the findings of Kaplinsky and Morris (2001), we identify two types of chains. In one value chain the key stakeholders are middlemen and coffee exporters who mainly target the conventional coffee bean market, in the other, we find middlemen and coffee exporters that seek to respect the rules of the Fairtrade market and produce speciality coffee.

As Figure 1 shows, the conventional coffee value chain is dominated by the main coffee exporter in the country, CISA. This company has a network of nine supply centres in the municipality and associated services (financing for loyal suppliers, agricultural inputs, technical assistance and information for coffee certification[8]). This network is mainly used by large producers (Chamorro, 2015). Sajonia and Atlantic S.A. also participate in this structure. In turn, the value chain for the Fairtrade market, has only two players: CECOCAFEN and Aldea Global. In contrast to CISA, they are neither major collectors in the municipality nor providers of inputs, but they provide technical advice for coffee supply at the level of cooperatives and have equipment for coffee drying that complies with certification regulations.

❸ Microfinance Plus for coffee production: a gap between theory and practice

Our study on Microfinance Plus by FDL found that technical assistance for credit allows microfinance institutions to improve their efficiency (reduction of transaction costs), reduce bad debt risks[9] and generate benefits for producers-clients in terms of financial education. In this way, the use of financial and non-financial services by the producer creates awareness around the importance of adopting good practices, reducing the risk of over-indebtedness and promoting good crop monitoring and management.

However, some practices observed come into conflict with the conceptual framework of Microfinance Plus, given that tensions emerge when financial and non-financial services are offered, such as those indicated below.

[8] Among these are Rainforest Alliance, AAA Sustainable Quality, Ecollaboration de Nespresso, UTZ Certified, Código de Conducta 4C and Programa C.A.F.E. Practices of Starbucks (Chamorro, 2015; Salinas, Acuña & Castillo, 2015).

[9] Also see the report by Marin, Paiz & Munguia (2015) on the evaluation of technical assistance in five credit zones of the FDL and the report by Maldidier (2015) on the systematisation of the Nitllapan's Microfinance Plus model.

"The use of financial and non-financial services creates awareness around good practices, reducing the risk of over-indebtedness."

3.1. Financial and non-financial services with an exclusively productivist approach

An exclusively productivist approach considers the agricultural product as a guarantee for the loan, and orientates technical assistance so that coffee plants produce more all the time, ensuring the physical supply[10] of agrochemicals and knowledge for managing the coffee plants: pruning, leaf stripping, shadow regulation and renovation. It assumes that the key lies in increasing volume, ignoring a complete analysis of the client's productive unit that not only produces coffee nor has coffee as the only source of monetary income. The productivist pathway of the coffee sector is dominant and exclusionary, as it disparages the potential of the lower-level small farmer pathway and does not open up to the possibilities for improvement in the more diversified small farmer pathway. Technical assistance staff is evaluated based on the targets of technical advice for a coffee plantation, when in practice they also give advice to clients on other crops that determine the quality of the totality of the production of the farming unit. Technical advice omits any connection to the coffee market, and does not lay the emphasis on the special attributes of coffee as a value-adding mechanism.

Overcoming this productivist approach means developing a fair trade value chain approach, paying attention to the differentiation of coffee - organic or other - based on an alliance with certified coffee buyers.

3.2. Lack of adaptability of credit services, combined with a strategy of subsidies for technical assistance that is not sufficiently differentiated

Financial products designed according to profitability strategies create restrictions for small subsistence producers, and the organisations do not realise that their interventions end up favouring those that have a greater ability to pay. Although the portfolio strategy of financial inclusion operators focuses on providing the poor with financial access, establishing placement goals based on the size of the loans and not on the number of clients reached per productive population segment creates tension and inconsistent assumptions. Official credit entities concentrate on placing portfolio to achieve their targets, without considering the exclusions that occur in practice with negative effects on territorial development. Furthermore, among coordinating organisations/ service providers and cooperation agencies there is a perception that technical assistance services should be free of charge due to the inability of small producers to pay. This assumption has perverse effects because on the one hand it leads to technical assistance services being unsustainable because they depend on external cooperation, and on the other hand, it favours coffee producers with more resources that can access subsidised technical assistance.

The FDL-Nitlapan initiative sets out to provide solutions for this problem by designing differentiated payment systems for technical assistance with good results, as even the smaller producers are complying with their payment obligations.

3.3. The negotiation process to offer adapted services is limited

The Microfinance Plus model implemented by FDL-Nitlapan includes a connection between three stakeholders: the lender (FDL), the technical assistance provider (Nitlapan) and the producers (the clients). On other coordination organisations (ADDAC, ODESAR, UCA-La Dalia), the structure also consists of three stakeholders: cooperation agencies, coordination organisations, and producers. In both cases the negotiation is limited from the producers' point of view - as shown in Figure 2 - because it fosters negotiation and the exchange of information among the supply side stakeholders without taking into account the producers (the demand side).

When credit is provided by FDL and technical assistance by Nitlapan, the relationship between the institutions and the producer is independent and involves a considerable flow of information and coordination to ensure the success and relevance of the model. Nevertheless, the restriction of useful information, knowledge and coordination can jeopardise the model and the interests of the producer.

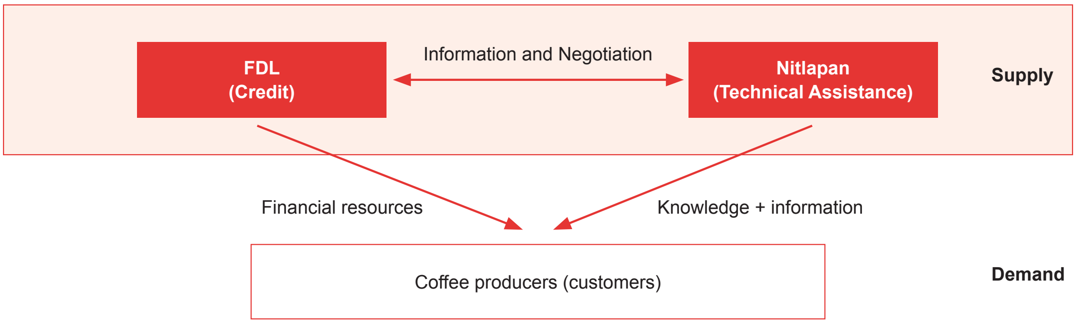
The kind of services that best respond to producers' needs and their approach to managing the productive system is not much discussed and not negotiated by the producers. In this relationship, the rules of the game operate, in principle, to ensure that the loan is paid back, putting a greater emphasis on the profits of the producers than on their development. Moreover, the coffee marketing companies are not involved in the negotiation process.

4 Recommendations for a more inclusive Microfinance Plus approach

What is needed is a Microfinance Plus design that reduces the gap between theory and practice and

[10] Here, we underline physical supply, because although a sum for the purchase of fertilizers and other products is usually included in the loan, producers do not always invest this part of the loan for the purchase of fertilizers and they use the money to cover other family needs. Based on this, FDL reached an agreement with CISA-Agro to provide producers that agreed an amount of agrochemicals , FDL paying CISA-Agro directly.

Figure 2: Synergy between Credit and Technical Assistance



fosters greater inclusion, based on critical analysis and negotiation with the segment of medium-scale producers, in order to accommodate alternative development pathways and the presence of other stakeholders in the coffee supply chains, operating in the territory. A more inclusive Microfinance Plus design requires:

> Research has a key role in designing inclusive financial products that can contribute to different development pathways.

4.1. Starting from an analysis of territorial dynamics

To do this, research is necessary, plus a more appropriate description of the context of impoverished families. A better understanding of the current social and environmental dynamics in the locality is needed, together with a better knowledge of local institutions (both formal and informal), the rules by which they operate and the processes that generate a lack of access to resources. These include historical processes of accumulation or de-accumulation by families, the advantages or disadvantages they encounter in commercialisation, their strategies for life and the effects of climate change. Research has a key role in designing inclusive financial products that can contribute to different development pathways. At the same time, microfinance institutions need to reinforce their structure with other kinds of public policies aimed at reducing the structural disadvantages and risks faced by producer families through climate change, getting closer to the reality of their clients.

4.2. Making alternative development pathways more visible

Overcoming the monoculture focus involves providing technical assistance and credit that tie in better with diversified production systems in which the importance of coffee varies, given that the range of products and services offered responds to the logic and preferences of impoverished and vulnerable groups in society. Identifying different pathways, some not so intensive in inputs and more diversified, with a better link to market and/or with eco-labels, could favour development alternatives for impoverished families in a resilience scenario in the face of climate change. An agro-tourism service could also be developed based on diversified production systems. For more information about the different routes of coffe production, please see the maps on the following page.

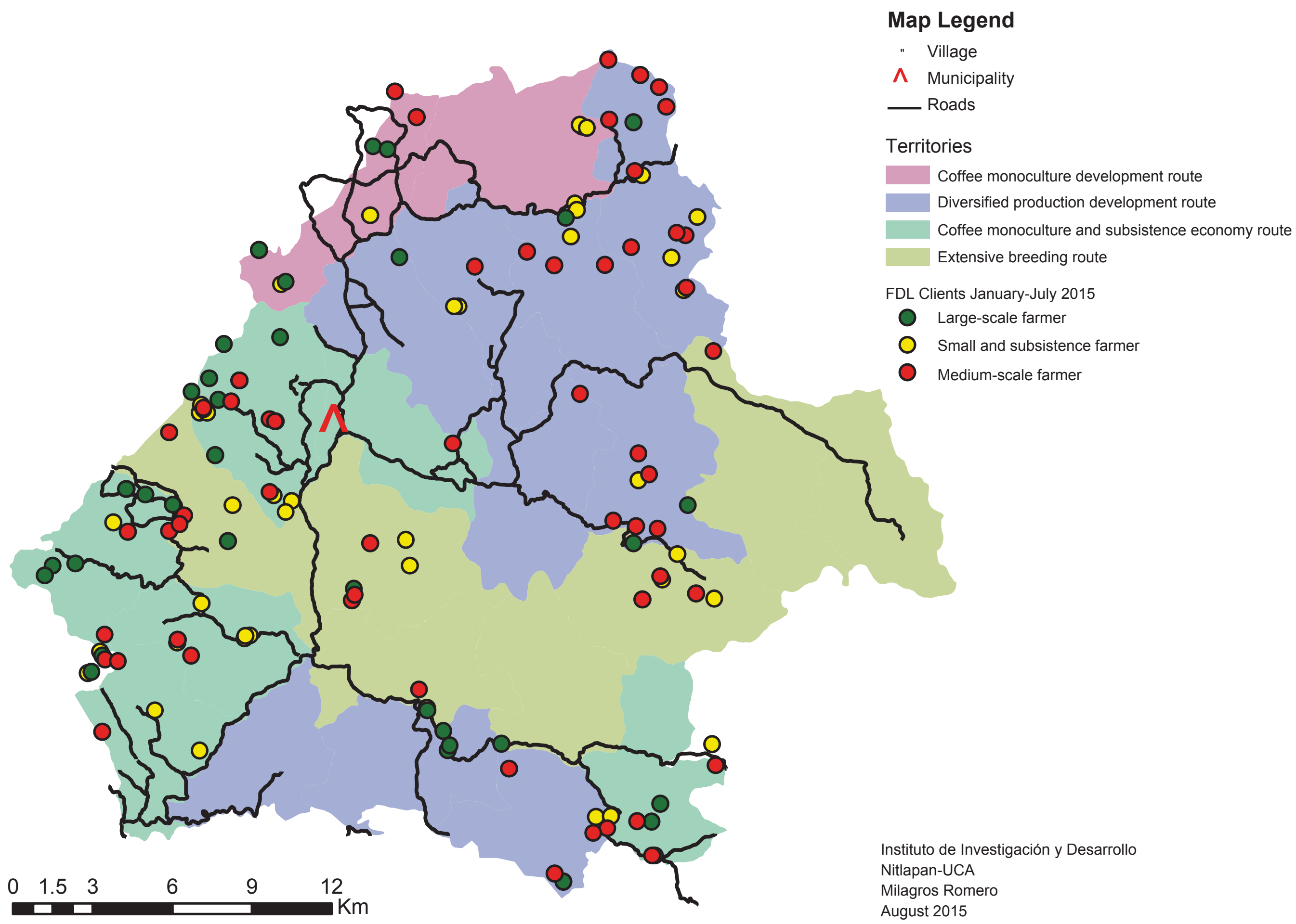
4.3. Adapting the offer of credit to the subsidy strategy for technical assistance

FDL's model has shown that impoverished families pay a part of the technical assistance and that others are in a position to pay 100%. Establishing differentiated subsidy mechanisms could be more sustainable for integrating credit and technical assistance, without dependence on resources from external cooperation bodies - which are increasingly scant. To differentiate subsidies from technical assistance it is necessary to work on the socio-economic characteristics of the producer families and not just on the sum of the loan. Likewise, the design of cross-subsidized financial products could be envisaged, where coffee-growing farmers or large-scale producers would subsidise the loans of the small-scale farmers. Microfinance institutions could co-finance the technical assistance, considering the advantages they obtain in terms of reduction of risk and transaction costs.

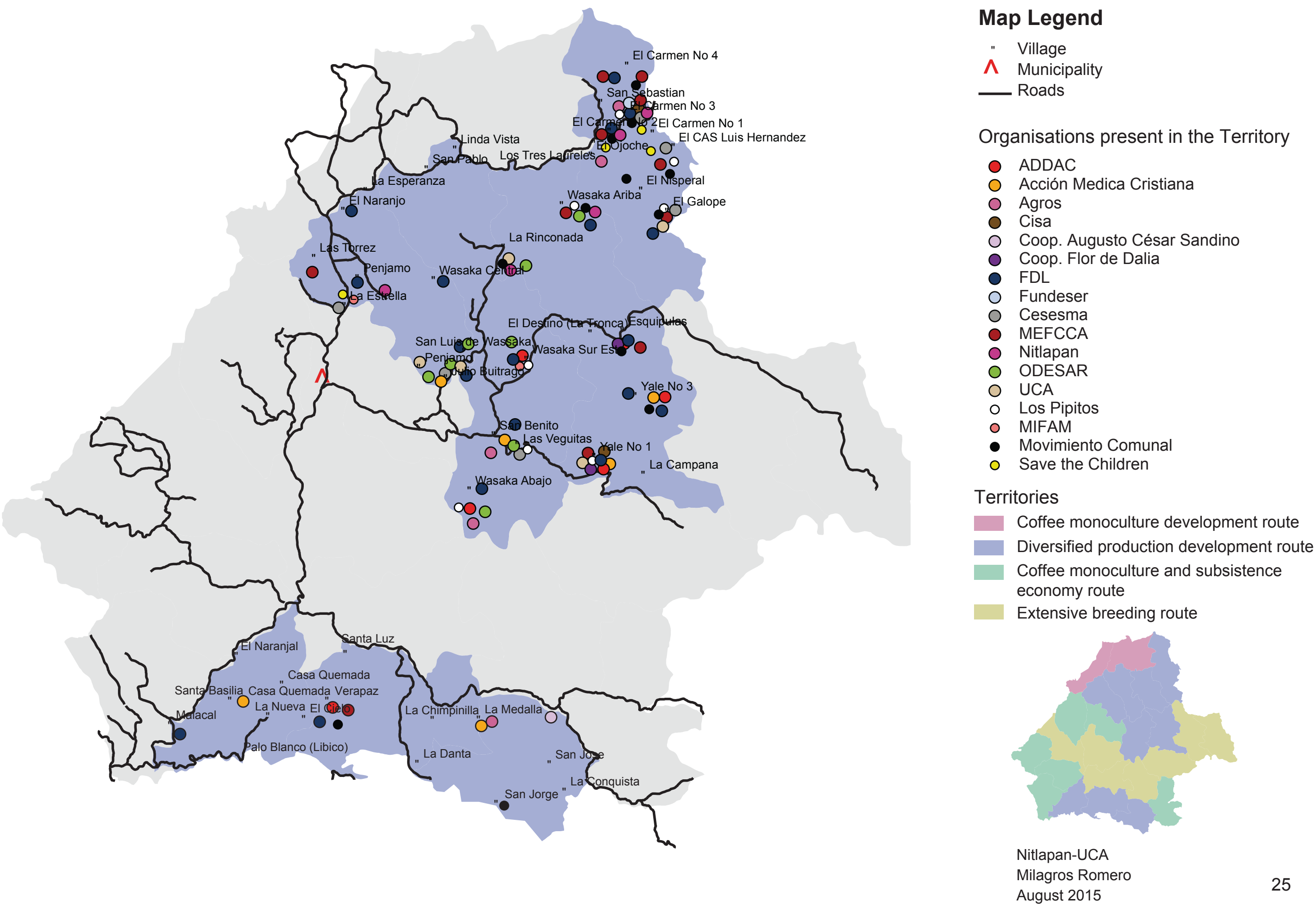
4.4. Connecting the ends of the value chain and the role of facilitators

Working within this perspective means creating trust to build strong alliances between medium-scale farmers organised in cooperatives and their buyers (including small coffee buyers-roasters abroad). Additionally, FDL, Nitlapan, ADDAC, ODESAR and the Unión de Cooperativas, by sharing a vision and support strategies for medium-scale farmers, could set up closer links among themselves and reflect on their approaches and processes instead of considering each other as competitors. Together, they could help strengthen the cooperatives to set up commercial contracts with small buyers-roasters that, even though they have less coffee storage capacity, work on placing coffee in niche markets where specific, differentiating attributes of the beans (organic, high-altitude, etc.) are worth paying for. They could also identify opportunities to give better placement to coffee from the area through eco-labels, coffee with a territorial identity that makes the most of the image of the nature reserve of Macizo de Peñas Blancas, or agro-ecology tourism on diversified plantations where coffee is also present.

Map 1: Categories of farmers and development routes in El Tuma-La Dalia



Map 2: Territories with diversified development pathways



Friendship:

A firm spot in the shifting sands of Bangladesh

This article was written by Marina Abboud, Senior project officer, ADA. It is based on “Friendship Bangladesh Microfinance activities analysis” - a mission report following ADA’s on-field observation visit to Friendship in Bangladesh in January 2016.

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Runa Khan founded Friendship to serve isolated communities forced to live on the fringes of Bangladeshi society.

Friendship[1] is a Bangladeshi non-profit organisation applying a unique, integrated approach to development. Operating since 2002 under the direction of its Founder and Executive Director, Runa Khan, Friendship was created to serve isolated communities forced to live on the fringes of Bangladeshi society. In 2016, Runa Khan also founded Friendship International, based out of Luxembourg. The network now also comprises entities in the Netherlands, UK, France and Germany.

Having initially focused on healthcare via its flagship project (the Lifebuoy Friendship Hospital - LFH) in 2002, Friendship soon deployed a number of other services to all the communities in its working areas, addressing a range of issues, from health and nutrition, to cultural preservation, climate change adaptation techniques and school education. On the one hand, Friendship believes that enabling communities and improving their living conditions and resilience requires more than just healthcare, and that development activities need to be envisaged as pieces of one coherent puzzle. On the other hand, it is equally clear to Friendship that bringing social and economic opportunities to people is only relevant if the people’s most basic needs have been met first.

Through the Sustainable Economic Development SED programme, Friendship has built a distinctive microfinance model, reaching optimal equilibrium at the intersection between context-specific product design and well-leveraged local context.

As project managers actively involved in the design, testing and delivery of innovative bottom-of-the-pyramid financial products and services, ADA’s staff was called upon to offer a detached, professional and constructive inquiry into the strengths and weaknesses of Friendship’s microfinance activities.

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[1] For more information on Friendship Bangladesh, please visit http://friendship-bd.org/, or alternatively follow Friendship’s blog http://www.friendship-bd.org/blog/.

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Prior to Friendship's intervention, farmers would mainly cultivate rice, making the area unattractive for investment.

1 Introducing Friendship's microfinance activities

Friendship's SED activities have grown out of the pressing need for increasing the self-sufficiency of the people in intervention areas. The SED programme was built to introduce opportunities for sustainable, income-generating activities through which beneficiaries can improve their financial situation and increase their ability to cope with unforeseeable events. These activities are further complemented with the provision of technical advice and vocational training.

The microfinance projects that fall under the SED Programme are the Agriculture Based Income Generation Project, the Friendship Fishermen Project, and the Rural Electrification Project, all of which combine their financial products and services with an access to technical assistance (design of standardized business models by local engineers, crop-specific trainings, costs and market price monitoring, etc.).

All three projects have successfully reached and carefully maintained a balance between offering the right financial product in the right context and doing so in a manner that empowers communities sustainably.

1.1. The Agriculture Project

Repeated flooding in the north of Bangladesh led to the presence of chars (nomad islands) which constitute an extremely unstable environment, but consist of a rich soil, offering a range of opportunities for agriculture.

Prior to Friendship's intervention, farmers would mainly cultivate rice, making the area an unattractive target for investment or financial support, with a risk profile directly affected by the lack of diversification and food security failure.

Launched in 2006, the Agriculture Based Income Generation Project (the 'Agriculture Project') was the first project implemented in the framework of the SED program. The aim is to facilitate agriculture-based livelihood development, food security and financial sustainability for the char dwellers. The programme also introduces novel techniques and crops to create more sustainable systems and ensure farmers' livelihoods and food security in the region.

Agricultural loan services are provided via three financial products (a Risk–Sharing loan to finance the production of rice, maize, wheat and jute, as well as cows; a Climate & Hazard loan to finance the production of vegetables, chilli and potatoes; and leasing to finance small agricultural equipment such as water pumps or power tillers).

1.2. The Fishermen Project

Following the 2011 cyclone which devastated the south west area of Bangladesh, Friendship set out to provide humanitarian support to the affected population, getting first-hand insight of pressing needs of the local people, particularly among the fishing community. Friendship therefore launched the Friendship Fishermen Project (the 'Fishermen Project'), which would focus on the needs of fishermen in the development of their activities. The area of intervention includes sea but also river fishing, each requiring specific techniques and equipment.

The aim of the Fishermen Project, initiated with Banque de Luxembourg, is to improve the livelihood of fishing communities by weaning them out of the age-old cycle of debt to the middleman (the Mahajan), and to provide them with financial support in order to strengthen and invest in their fishing. The Fishermen Project also provides them with technical assistance in mitigating the effects of natural disasters, and offers a canvas for organizing the fishing community.

The fishermen can have access to three types of loans, designed by Friendship to cater for their specific needs: the Liberation loan to repay middle-men or Mahajans (please see box: "Who is the Mahajan?" in page 29); the Operational loan to finance small fishing material such as ropes, anchors and cool boxes; and leasing to finance larger fishing equipment such as boats and engines.

1.3. The Electrification Project

Char areas of North Bangladesh do not have any infrastructures. The absence of electricity supply has led to households resorting to kerosene lamps, which are inefficient, dangerous, expensive, and have extensive health and environmental drawbacks.

What are Chars?

Chars are low-lying, flood- and erosion-prone islets adjacent to major rivers. They are formed by sediment caused by the constant deposit of sand. Due to the powerful flow of adjacent rivers causing their erosion, these islands are temporary. Their lifespan depends on the area or natural climate, but most chars are partially degraded every year.

There are two categories of chars:

- **semi-permanent chars, with a lifespan ranging between 5-30 years, they are continuously changing in shape due to riverbank erosion; and**
- **short lived chars, with a lifespan ranging between a few months and a few years (3, 5, 10), and where many people choose to settle for their very fertile soil, albeit temporary.**

Sirajbeg, one of the two chars which hosted the pilot phase of Friendship's Mobile Health Care System (e-health), was entirely wiped out 2 years ago after 15 years of existence.

The objective of the Rural Electrification Project (the ‘Electrification Project’) is to improve the beneficiaries’ quality of life by helping them shift from a dangerous light solution to a healthier, more sustainable one. The project, initiated with GDF Suez Foundation (now Engie Foundation), aims to install affordable solar home systems of good quality which can easily be dismantled if needed. These microgrids can light to up to four houses and are financed through a leasing scheme.

❷ Financial products designed from the ground up

One of the characteristics through which the SED program truly differentiates itself from other microfinance operators is the high level of quality, relevance and flexibility of the product design approach. The entire approach is driven by a willingness to obtain the most suited and most appropriate financial product; a level of requirement which calls for in-depth expertise and thorough pilot as well as roll-out phases with continuous awareness and adjustments until the needs at issue are effectively met.

Most loans introduced by the SED program have undergone a great deal of adaptations, which has the added benefit of having equipped the Friendship staff with a comprehensive view of - and natural sense for - best practices.

2.1. Loans with a purpose

SED loans are entirely tied to a specific, productive purpose and economic objective. SED products are designed to finance income-generating activities only.

In the Agriculture Project, for example, the SED program developed tools which accurately calculate the input needed to cultivate a given surface of a given piece of land with a given type of crop, thereby generating the exact loan amount needed to carry out the targeted yield.

Template business plans also exist which further facilitate the loan calculation and analysis. Together these tools and methods mitigate the risk of overindebtedness.

Since most of the larger MFIs in Bangladesh tend to lend regardless of the objectives and reasons behind the loan; their loan amount and repayment capacity calculations are arguably more superficial and not as reliable.

2.2. Old problems, new solutions

Friendship has not only opted for a product design approach which allows for flexibility and change; the NGO has also created microfinance products and services outside of conventional practices, never shying away from innovation and constant improvement. Because the operating context is so unpredictable, most Friendship loans have adaptable terms and conditions, and most products have been designed as a response to a specific, local issue.

Who is the Mahajan?

"Mahajan" is a Sanskrit term meaning 'a great man', and has a wide array of applications – a person is a Mahajan in relation to another having subordinate role or status. The term is commonly used in Bengali to refer to businessmen such as merchants, dealers, bankers and moneylenders. All creditors were Mahajans in the colonial and pre-colonial times, and they are still called Mahajans today.

Bangladeshi fishermen usually have a Mahajan, and their business and livelihood depends on the loans provided by him, albeit the extortionate terms of said loans; the Mahajan takes high interest and commission rates, and usually gets a priority cut on the fishermen's catch, which he purchases for a value which is well below market price. Under such conditions, the relationship is sustained by a vicious circle the fishermen cannot afford to exit.

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The liberation loan breaks the dependent relationship with the Mahajan and offers decent economic perspectives to fishermen.

2.3. The Risk-Sharing loan for agriculture

A good illustration of this is the agriculture loan. This loan does not apply any interest rate. Instead, Friendship takes an innovative approach, calculating a minimum profit expected to be earned by the beneficiary (the Minimum Theoretical Profit or MTP), from which the commission will be deducted.

In the early days of the SED program, the commission charged could be as high as 35% of the beneficiary's MTP. This was mainly thought to be appropriately in line with an age-old tradition according to which one third of one's harvest must go to the lender. However, the feedback from borrowers showed that they found the rate excessive.

Taking these considerations on board, Friendship decided to break up the 35% into the components below, introducing a risk-sharing approach, with increased advantages for the farmers:

- 24% go to Friendship (based on MTP)
- 2.5% go to the farmer's personal savings
- 2.5% serve as provision for repayment default
- 5% serve as provision for climate protection and price fluctuation

Should the farmer experience a loss due to a natural disaster or general price fluctuation, no repayment is required; the risk is shared. This model does not apply in case of negligence or mere unwillingness to pay. Strict criteria are applied in determining what qualifies as a natural disaster, to ensure that the staff and the communities and participating individuals have the same understanding of the scheme.

2.4. The Liberation loan for fishermen

Another good illustration is the "liberation loan": a one-off advance payment made by Friendship to the Mahajan in order to break the dependent relationship and offer decent economic perspectives to fishermen. The perpetual cycle of debt in which they previously found themselves made fishermen unable to make their business decisions or exercise any control over their fishing activities.

Although lending money to pay back another loan is rather unusual in microfinance, this approach is perfectly adapted to the fishermen's specific situation. Even after deduction of the liberation loan instalments, beneficiaries earn more than before; they are no longer obliged to sell their fish to the Mahajan and can now freely choose who to sell it to and for how much. One year down the line, fishermen can repay the loan, plan for their business and make their own production and commercialization decisions.

2.5. Solar Home Systems leasing and technical assistance

An electrical engineer was recruited with a view to ensure quality control, and monitor and execute maintenance as well as provide training for Friendship staff and beneficiaries on the Solar Home Systems. Given the high flood and erosion risks in char areas, all systems have been designed to be safely and fully taken apart by the beneficiaries in less than two hours and to be loaded on a small boat.

A team of technicians employed by Friendship takes care of the installation of the solar home systems in the beneficiaries homes and ensures a reliable after-sales service.

The leasing rate has been calculated in a way that it should not cost families more than what they would usually spend on kerosene for lamps.

A mid- to long- term knock-on effect of the project is that the skills acquired by the Friendship staff and the expertise of the engineer could also serve other programs within Friendship, should the installation of solar panels in dispensaries and schools be envisaged.

2.6. Product diversification

Technical assistance and training are also provided for the diversification of agricultural products, introducing new opportunities to rural individuals, the sum of which constitutes community and regional progress. On most northern land where Friendship is active, agriculture used to be focused only on rice. Nowadays, the possibilities to choose from have expanded. For example, Kurigram farmers were able to introduce peanut cultivation. With a deeper and wider understanding

of agricultural strategies and practices, farmers are generally more confident and better equipped to make their own business decisions.

Increased yield from improved cultivation knowledge and techniques has also created a more solid food security environment for families, who can now take a surplus of rice or start small vegetable gardening, for their own (thereby diversified) consumption.

3 A tough local context turned into unique assets

3.1. An integrated approach

Friendship's integrated approach provides beneficiaries with access to basic necessities and brings them a sense of belonging to a community; a win-win situation for the NGO and the clients, who share the pride of all things accomplished by the local people. As one Friendship beneficiary said, "What the government did not do for 50 years, Friendship did it in nine years".

The integrated approach makes all programs consistent with one another. Staff of all programs must, and do, cooperative extensively and exchange information. This approach also means that SED program clients must be beneficiaries of Friendship's other programs, and are therefore from populations living below documented earnings of BDT 3 000-3 500 (33-39 €) per month.

> SED program clients are living below documented earnings of 40€.

We were able to identify and deduce a number of strong advantages linked to this approach, namely:

- A generally increased effectiveness and efficiency of the SED processes. Because SED clients are already known to Friendship, the individual credit application process is made more straightforward and less time consuming, and the SED staff have a clear advantage as microfinance operators:
    - Each loan officer has extensive, inside knowledge of each beneficiary household: number and profile of household members, size and characteristics of land owned, skillset of the beneficiaries, repayment capacity, etc.
    - Each loan officer has a comprehensive view and understanding of the needs and challenges of the beneficiaries.
    - Communication with beneficiaries is extremely transparent.
- Internal and external coherence. Friendship's programmes address local needs in a specific order (most basic needs first, before progressively moving toward capacity building or microfinance), forming an intervention logic based on the evolving conditions and life steps of the beneficiaries. In the interest of the efficiency of aid in a larger sense, it is important to note that Friendship will only deploy efforts if, when, and where needed. For instance, the presence of other NGOs supporting education and school management in the Satkhira district (South-West Bangladesh) means that Friendship focus their efforts rather on the health and SED programs in that area.
- Better alignment between communication and action. Because the programmes are consistent with, and complement, one another, key health, social and other messages are echoed through all of Friendship's communication channels. Messages can be disseminated by the dispensary, by a loan officer, during a nutrition program session or at school.

The community is perfectly conscious of, and convinced by, the benefits brought by Friendship programs. The relationship between the communities and Friendship has therefore naturally developed into one of mutual trust, which is further strengthened by the fact that population density and word of mouth carry this trust over onto the entire community.

3.2. Trust and relationships as facilitators of processes

Embedded trust stemming from the integrated approach has a qualitative effect on the procedures and ground work carried out by the SED program. Because Friendship deals with beneficiaries whose communities they have already observed, analysed and worked with, the needs assessment and product delivery processes are already fed with the necessary evidence and checks.

Another strength of the SED program is its ability to maintain and strengthen any existing proximity and social relationship holding communities together. To do so, Friendship created the Friendship Char Development Committee (FCDC); a cooperative support system provided for villagers which encourages them to organize themselves in groups.

Through their other, basic needs programs, Friendship also have the opportunity to get a sense of who are the natural community leaders (and could be potential candidates for group leadership), and to get to know communities inside and out.

Through coordination by the loan officer, the system helps structure and disseminate services, awareness and an empowerment culture in a more efficient manner. Weekly meetings are particularly favourable to group discussion and beneficiaries also feel that the program creates a sense of community building and empowerment that no other program has managed to bring.

What is Social Capital?

Social capital refers to the resources that are embedded in social ties: who a person knows, what information those acquaintances can provide, and the extent to which those connections are able and willing to help the person in case of need.

Since the mid-1970 microfinance has been introduced as a financial innovation that enables poor entrepreneurs to have access to financial capital and human capital by pledging their stocks of social capital as collateral.

Social capital can be used as social collateral in various ways, and it has a real impact on the success of a business. To know more about why and how entrepreneurial success depends on social capital, please take a look at the next article (page 33).

3.3. Social capital and social collateral

The FCDC system is different from the solidarity group approach traditionally used by other “Big Four” MFIs in Bangladesh (ASA, BRAC, Buro, and Grameen Bank). FCDC members are neither jointly nor severally liable for the sums borrowed, but are individually liable to Friendship. So, Friendship does not exploit social capital as social collateral in the way in which the Big Four usually do. FCDCs comprise both female and male members so that the family member most able to earn a living and use the loan money adequately is identified, and a loan is given to that member.

However, the programs offered outside the SED program, as well as the trust and relationships built throughout, act as a form of social collateral. Clients want to remain involved in the collective effort to a point which motivates them to diligently repay the loan. This is true despite the fact that the delivery of Friendship’s other services is not conditional upon repayment of the SED loan; basic services will never be taken away from a person, but clients are naturally driven to make the system work.

Concluding remarks

Friendship's philosophy is rooted in the fulfilment of vulnerable people's basic needs before addressing others. The Health, Education and Disaster management programs are crucial in order provide the solid and stable basis on which to build other opportunities in char villages.

The success of Friendship's microfinance activities is intrinsically linked with prior development of these humanitarian and social services, which have evolved with the people, according to their priorities. Friendship's SED program is therefore extremely distinctive in that it ties in perfectly with the local environment and with the rest of the NGO's activities, providing stability and long-term perspectives to populations living on (often literally) shifting sands.

The value proposition of the SED program could be an inspiration to the microfinance community in Bangladesh, but also to the wider poverty alleviation sector. Indeed, should the Bangladeshi government envisage social security or other safety-net initiatives; much could be learned from Friendship's all-encompassing support system and integrated approach. Similarly, the specialist models developed by Friendship's agronomists and other engineers could serve as a basis for the development and improvement of agricultural and other national policies.

From a strictly microfinance product and services perspective, it is clear that Friendship's unique work ethics and methodology make it a particularly responsible microfinance player, extremely attentive to the impact its work has on beneficiaries and their communities, and who therefore never seizes to see the bigger picture of that impact.

Friendship on film

In the context of the run up to the COP21, Yann Arthus-Bertrand and Anastacia Mikova directed "Climate Change in Bangladesh" a documentary created specifically for Friendship, showing both the impact of climate change on the populations of Bangladesh and the work undertaken by Friendship to help people adapt to the consequences.

The film was first screened at the Musée de l'Homme (Trocadero) in Paris on 4th December 2015, at a side-event organized by Friendship at La Bourget on 5th December 2015, Paris at the fringe of the official conference, and more recently in Luxembourg where 500 people attended.

Watch "Climate Change in Bangladesh" here: https://www.youtube.com/watch?v=uRROicXXei4

Entrepreneurial success, social capital and microfinance

Luminita Postelnicu and Niels Hermes

Luminita Postelnicu

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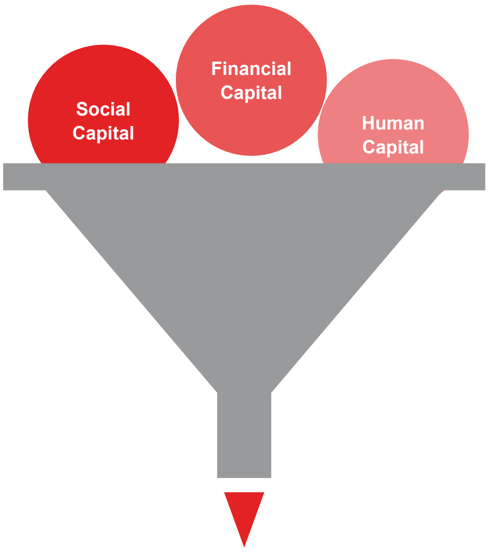
The success of entrepreneurial activities is determined by three types of capital: financial capital, human capital and social capital. Financial capital ensures the assets needed by entrepreneurs to start and run their businesses. Human capital refers to the set of skills, knowledge and experience that can be transformed into labor and, thus, into economic value. Social capital refers to the resources embedded in social ties – that is, who one knows, what information advantage those one knows can provide, and the extent to which one's connections are able and willing to help in case of need.

Individuals living in environments characterized by poor formal institutional frameworks and scarcity of resources usually lack financial capital and valuable human capital. Social capital is the only form of capital they can build themselves in such environments. This particularly holds for individuals living in rural areas. Financial institutions have usually lower coverage in rural areas, which makesborrowing difficult, even for individuals that would otherwise be creditworthy. Moreover, restricted access to new information and low quality of educational facilities reduce the opportunity for rural individuals to build valuable stocks of human capital. How can individuals living in these environments still become successful entrepreneurs?

Figure 1: Success of Entrepreneurial Activities



The starting point for how social capital can be important for entrepreneurs lacking financial and human capital is the notion that individuals usually share several ties with other individuals within (and possibly even also outside) the community (i.e. the village, neighborhood, etc.) in which they live. These ties form his/her social network. Social networks are patterns of social exchange and interaction that persist over time. Social ties embed access to tangible and non-tangible resources (e.g. trust, reciprocity and mutual support). These resources enable individuals to use these ties as informal risk insurance devices, that is, in case of need they can make use of these resources to overcome crisis situations. At the same time, ties can be used to collect information available within the network. Since two individuals are linked to each other through a tie, they may know about each other's behavior and this information may be shared with other members in the network of both individuals. The more the networks of two individuals overlap, the higher the potential of information getting diffused to other network members of both individuals. This is referred to as ties having information diffusion potential. The resources embedded in the ties, together with their information diffusion potential, make up the individual's social capital.

The fact that individuals have access to social capital may help them getting access to financial and human capital. Since the mid-1970s microfinance has been introduced as a financial innovation that enables poor entrepreneurs to have access to financial capital and human capital

Niels Hermes

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The fact that individuals have access to social capital may help them getting access to financial and human capital.

(e.g. when borrowing is combined with training programs, such as business training, financial training and other related training programs) by pledging their stocks of social capital as collateral.

Several different social capital based lending methodologies have emerged around the world. One of the most common methods is the so-called group lending model with joint liability. Group lending with joint liability gives access to credit as well as non-financial services (financial literacy, business trainings, education, health services, etc.) to groups of poor entrepreneurs. The main feature is that group borrowers are jointly liable for the repayment of each other's loans. This incentivizes them to use their social ties to screen and monitor their peers, to help with loan repayment in case of economic default, and to enforce repayment on delinquent group members.

Other common micro-lending methodologies that rely on social capital are village banks, community-managed savings and loan programs, and individual microloan programs. The latter one is a lighter form of social capital based lending in the sense that it still relies on social capital (that is, repayments are made in groups and in public areas, social relationships are identified and assessed by the loan officer, and in most of the cases guarantors are required), but it does not have the joint liability feature.

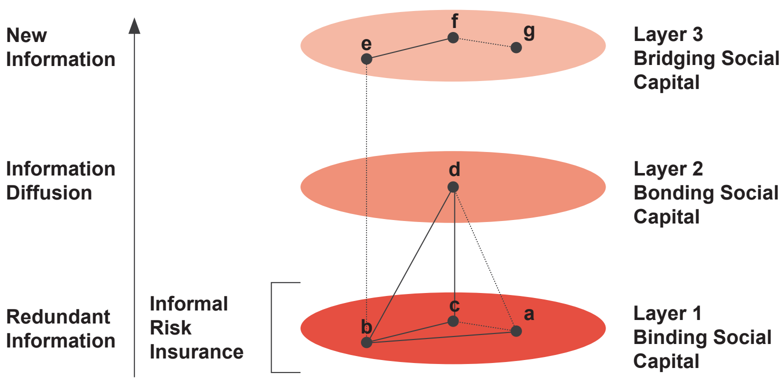
The stock of social capital of poor entrepreneurs may determine their success in repaying loans. Socio-economic theory suggests that the individual stock of social capital is typically structured in three layers.

The figure below describes the social capital of individual/borrower 'a' in three layers. The first social capital layer (so-called binding social capital) is formed by a's strong ties (that is, family members and very close friends). These ties act as his/her informal risk insurance arrangement; they are borrower a's "safety net", because individuals who are part of the first layer may help the borrower with financial and non-financial resources in case of need. The second social capital layer, known

as "bonding social capital", is formed by weaker ties to the friends of friends or the friends of family members. These individuals may interact with the borrower, but may not necessarily be willing to support her/him in case of need. The third layer, called "bridging social capital", refers to the entire community in which the borrower lives. Bridging social capital provides a borrower with a sense of belonging to the other members of the community even though they may not interact directly. When ties with the third network layer exist, they are always weak, that is, individuals belonging to this layer will most likely not support the borrower with resources during bad periods.

So, the ties forming the second and third network layer do not act as informal risk insurance devices, but they do give access to new information, that is, information that cannot be obtained from the members of the first network layer. What members of this first layer know is also known by the borrower, because of their close relationship. When it comes to providing new information, bridging ties are the most important, because they have access to information the borrower may not know. Having access to new information is important for entrepreneurs to become successful as it improves knowledge and gives access to new opportunities. Unfortunately, individuals living in rural areas usually lack the third network layer. They rely on their first network layer to cope with idiosyncratic shocks, but they typically lack access to new information. The information diffused within their

Figure 2: The three layers of social capital



networks is mostly redundant. While the stock of social capital accumulated by rural individuals in the first and the second network layer can be effectively used as social collateral in microlending, lack of access to information renders more difficult the access to new business opportunities.

In this sense, past research has shown that, indeed, poor entrepreneurs may become successful when they have access to microfinance. Their access to social capital enables them to successfully repay their loans by pledging their strong ties (i.e. the ties forming their first network layer) as collateral. At the same time, however, lack of access to new information and new opportunities, which is typically a problem for entrepreneurs living in rural areas, may hamper their business performance.

A large study we carried out among clients of Pro Mujer Mexico[1] and with the financial support of ADA reveals how the social capital of micro-entrepreneurs may be helpful for successful loan repayment. We explore an original dataset containing 802 mapped social networks of borrowers from Pro Mujer Mexico. We have two main findings. First, borrowers with stronger informal risk insurance arrangements are in better economic shape and have a higher capacity to pay than borrowers with weaker informal risk insurance arrangements. Second, borrowers who pledge valuable ties as social collateral have fewer repayment problems. These results suggest that social capital can be used as an effective device to ensure the microfinance success.

So, to conclude, successful microcredit programs reduce credit constraints for poor micro-entrepreneurs. Moreover, these programs may help them improve their stocks of human capital, especially when access to finance is combined with training programs, which are focused on helping these entrepreneurs to improve on their business and financial skills.

[1] See bibliography.

SUCCESS STORY

Financing young entrepreneurs in Togo

Working together with partner MFIs, the aim of ADA's project Young Entrepreneurs is to put in place financial services (loans and saving) and non-financial services (training, financial education, advice on company management, follow-up and support), that are adapted to the needs of young entrepreneurs wishing to start up a micro-enterprise or to expand it.

In Togo, the first micro-credits were disbursed in mid-December 2015 by FUCEC and by the end of February 2016, FUCEC had financed 115 young Togolese for an amount of 44 420 900 CFA (67 719 €), seven of whom received two credits: one for their activity's working capital and one for investment. This adds up to a total of 122 disbursed credits.

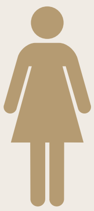
Twenty four of these young clients have been financed in order to help them to start up their activity (financing both equipment and working capital), for a total of 11 353 900 CFA (approximately 17 310 €).

Furthermore, 33 067 000 CFA (50 410 €) have been disbursed to 91 young people who have been able to use this money to boost their activity. Sixty six of these credits have been used to purchase equipment (24 513 000 CFA – 37 370 €) and 32 credits have been used to bolster working capital (8 554 000 CFA – 13 040 €). Almost half (46%) of the young Togolese who have received funding live in Lomé, the capital of Togo and more than half (52%) of the young people financed by the project are women.

For more information, please visit our website.

By the end of February 2016
44 420 900 CFA (67 719 €)

were disbursed to
115 young people



52%
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Entrepreneurial success, social capital and microfinance

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Notes

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