

# INVESTMENT IN AGRICULTURE

## Policy Brief #3

# Financing for Agriculture: How to boost opportunities in developing countries

Marina Ruete  
September 2015

## 1. Introduction

Access to finance is critical for the growth of the agriculture sector. The shift from subsistence to commercial agricultural production requires funds. However, in developing countries, where agriculture is a source of livelihood for 86 per cent of rural people (International Finance Corporation [IFC], 2013), financing for investments in agriculture is scarce, even for large investors. In Africa, less than 1 per cent of commercial lending is destined to the agriculture sector (IFC, 2013). Financial institutions are reluctant to accept the risks prevalent in the agricultural sector, such as droughts, floods, pests and diseases, or the transaction costs of covering large geographical distances. Consequently, although governments are now making efforts to attract investment for agriculture, the lack of understanding of the financial risks and opportunities in agriculture, deprives the sector of much-needed funds to boost production, processing and marketing.

This policy brief explores the financial needs of agriculture in developing countries and the instruments available to address these needs. We examine the challenges in obtaining financing for agricultural investments, the role of different actors, and the options for governments to enhance the legal and policy environment of the financial system to support agricultural development.

## 2. Challenges of Agricultural Financing

Similar to other sectors, those who invest in agriculture, particularly local farmers, but also foreign-owned plantations, processing factories, storage facilities or fertilizer companies, may need funds from third parties to carry out their businesses. However, in the current global financial system, a number of factors frustrate the development of solid financial services in rural areas in most developing countries. First, transaction costs in rural areas are higher than in urban areas due to a more dispersed population with weak infrastructure (International Fund for Agricultural Development [IFAD], 2009a).

Second, and more importantly, the risk factors inherent in agriculture often inhibit financial institutions from lending. These include production risks linked to natural hazards (such as droughts, floods and pests), farmers' weak ability to provide collateral (either because the farmer lacks title to land to offer as a loan guarantee or the value of the land may be too low) and the volatility of prices (IFAD, 2009a).

Third, the financial sector may not be sophisticated enough in some developing countries. The availability and innovation on sector-specific financial instruments and services is usually poor. Also, although financial services may be available, they may not be suitable for all types of agricultural activities, which will have diverse needs with respect to timing for disbursements, amounts and risks,



among others. For example, in seasonal farming, funding is needed in particular stages of the production process (IFAD, 2009a). At the same time, the offer of financial products may only be available to large-scale farming operations with sound track records, and therefore may not meet the specific needs of the client.

Finally, the lack of records and statistics on farming in developing countries makes assessment of credit suitability challenging for financial providers. This changes the conditions required to access financial products and undermines opportunities for profitable investment.

### 3. Who Needs Finance in the Agriculture Sector?

Agriculture encompasses a broad range of activities from small-scale farming to infrastructure projects to research and development. As a result, when referring to agriculture finance, the market clusters it in four groups. The groupings correspond to different approaches to addressing the needs of the sectors: (1) the needs of farmers and entrepreneurs, (2) the transactions between the actors along the value chain, (3) infrastructure needs and (4) generating knowledge to support the sector.

#### 1. Farmers and small agricultural

**entrepreneurs:** This approach is focused on the actors in the agriculture sector that need financing. Farmers and small entrepreneurs, like small supply companies, need finance to allow them to expand production and/or diversify products. This can include, for example, finance for inputs (such as seeds and fertilizers), production (such as machinery and equipment) and marketing (such as processing, packaging and transport) (Food and Agriculture Organization [FAO] & World Bank, 2013).

2. **Actors along the value chain:** The focus is on the links between different actors along a value chain. Agriculture entails a sequence of interlinked activities—transactions—in a chain that starts from the supply of seeds and fertilizers and finishes in the mouth of the consumers (IFAD, 2012). There are financial instruments specifically designed to strengthen these links between the actors along the value chain.

3. **Rural infrastructure:** Financing can be also concentrated on the infrastructure needed to carry out agricultural activities. The sector depends heavily on infrastructure such as rural transport systems, irrigation systems, water supply, sanitation, electricity, storage and telecommunication facilities. These projects are costly and require large amounts of financing.

#### 4. Research and Development (R&D):

This last approach focuses on financially supporting knowledge generation for the sector. This includes the generation of agricultural technology and new technical knowledge about products, processes and services for the sector (Anandajayasekeram, 2011). R&D also provides valuable knowledge to help producers prepare business plans for banks or other financial institutions, to support financial planning and credit assessment by financial institutions, and government planning in general.

## 4. An Overview of Financial Instruments for the Rural Sector

Different financial instruments respond to different needs in the agriculture sector. Within each of the four groups, the financial instruments depend on the level of sophistication of the financial system in each country, and the willingness of the financiers to take the risks in that particular market. Regulation and awareness programs also play a key role in the response to the financial needs. In addition to local financial institutions, foreign banks, development banks, governments and even actors in need of financial assistance, also provide financial solutions. This section describes some of the available financial instruments and initiatives generally used in different countries.

### 4.1 Direct Finance

Financing a particular actor of the agriculture sector is the traditional approach to financing in developing countries. This includes not only farmers but also other actors, such as input suppliers, processors, traders and exporters. All need financing to get food from the farm to the consumers. The following financial instruments are available:



- 1. Savings.** An informal financial sector exists in countries all over the world, particularly in least developed countries, and provides for basic access to finance. The financing comes from the actors themselves. In many countries, it takes the form of community savings and non-formalized group financing mechanisms. The *tontine*, for example, is a Senegalese rotating system of small-amounts savings and credit organized by small groups of people (Balkenhol & Gueye, 1992). In Ghana, women have formed groups, called *susu* groups, to finance among them agriculture activities with a system that distributes the responsibility of collection and payments among the group members (IFAD, 2000).
- 2. Inclusive finance (or micro-finance).** This instrument is slightly more sophisticated but still part of the informal financial sector. It is referred to as inclusive finance or micro-finance and has grown considerably in the last decade. The goal is to “expand access to affordable and responsible financial products and services by poor and vulnerable populations” (Principles for Responsible Investment, 2013). It includes savings, credit, insurance, remittances and payments and even guarantees to access finance. Micro-finance is particularly popular in developing countries. It has become so popular that specialized banks or units within financial institutions are also providing small loans and savings services, while accepting a wide variety of assets as collateral. The strength of microfinance institutions is the close contact with the community and, consequently, the understanding of the risk profile of customers.
- 3. Traditional finance.** Within the formal financial system, the term “finance,” which includes loans, leasing and equity finance (selling part of what you own to raise funds), is used to encompass the most common forms of finance for larger sums of money over longer periods of time. Finance can come from commercial banks, agricultural development banks, non-governmental organizations (NGOs), cooperatives or investors, in the case of equity finance. Recipients of these instruments can also benefit from support from government or international development banks (such as the World Bank and IFAD).
- 4. Leasing and factoring.** In a country with a more developed financial system, financial institutions also offer more complex and innovative financial instruments to farmers and entrepreneurs, such as leasing and factoring. Leasing is used to finance machinery, automobiles and equipment in agriculture. Factoring is when a company sells its invoices to a third party (the factor) at a discount in order to improve cash flow. These mechanisms aim to reduce some of the traditional lending risks of agriculture. They are an alternative option for borrowers with limited collateral and credit history, to be able to rent machinery, equipment and other assets related to production (World Bank, 2009).
- 5. Weather-based insurance.** This is an instrument that improves the chances for access to finance by insuring against bad weather. Although farmers prefer insurance for production loss, many financial institutions find the assessment too tedious and subjective. Weather-based insurance responds to objective parameters like rainfall or temperatures (World Food Program & IFAD, 2011). Farmers who can obtain weather-based insurance have better access to other forms of financing as well. This instrument will seldom be offered in countries that lack sound statistical information (IFAD, 2011).
- 6. Credit guarantee schemes:** This instrument also improves the chances for access to finance. These schemes “provide guarantees to groups that do not have access to credit by covering a share of the default risk of the loan. In case of default, the lender recovers the value of the guarantee” (Organisation for Economic Co-operation and Development [OECD], 2010).

The types of financing described above can be combined in many different ways in the same project, with the participation of different actors. For example, development banks can make loans to financial institutions, which can act as intermediaries to lend or guarantee producers who, at the same time, can be also financed by a local bank. This structure has been carried out, for example, by the Inter-American Investment Corporation in Latin America (2014).



## 4.2 Value-Chain Finance

Finance for agricultural value chains can be more indirect and is developed within the interlinked relations between suppliers, buyers, producers and banks. The focus of financing is on the business transaction between two or more participants of the chain, rather than direct financing of the farmer or entrepreneur. These transactions are financed to reduce costs and risk, increase efficiency and improve the credit profile of the actors in the chain by lowering lending risks. It is a holistic approach to financing the agriculture system. The different actors in the chain can be financed with different instruments and financial service providers.

In developing countries, informal financing is typically seen at the producers' end, while more sophisticated financing instruments are used at the other end of the chain (for example, exporters) (IFAD, 2012).

The systematized exchange of information among participants along the value chain through mobile phones has improved economic integration and cooperation. Mobile phones connect the financial partners along a value chain through telecommunications and cashless transactions. The

goal is to facilitate financing, marketing of products and information transactions among the supply-chain partners. For example, DrumNet system is a public-private project in Kenya that has improved the productivity of farmers by providing modern information technology to coordinate commercial networks (linking farmers to agro-processors and input suppliers) and providing better access to credit (International Development Research Centre, 2013).

There are two main types of value-chain finance:

1. **Internal finance.** This takes place between participants along the value chain based on their relationships, such as when a fertilizer company provides fertilizers and the farmer only pays the company after they have sold their harvest. This approach includes product financing, trade credits, input-supplier credits, marketing-company credit and lead firm credits.
2. **External finance.** This comes from outside the value chain—for example, a microcredit bank will cover the costs of purchasing the fertilizer for the farmer. This includes a range of different instruments, which are summarized in Box 1.

### Box 1: Glossary of Terms Used in Value-Chain Finance

#### 1. Internal Finance

- Trade credits: the trader pays the farmer for the goods in advance and the farmer agrees to repay at harvest time or another agreed time.
- Input supplier credits: the producer receives inputs from the supplier and repays them after harvest or another agreed time.
- Marketing company credit: a marketing company, processor or other upstream buyer finances the farmers or local trader in cash or in kind. The buyer then locks the price of its purchases. The farmer or trader gets access to credit, supplies and secured sales (IFAD, 2012).
- Lead firm credit: a large company finances its clients, for example, to increase their production.

#### 2. External Finance

##### Receivables financing:

- Trade-receivables finance: a financial institution buys account receivables or confirmed orders from a business advancing its working capital (IFAD, 2012).
- Factoring: a financial institution (factor) buys those invoices of business discounting commissions and fees, consequently advancing most of the payments to the person/company (Investopedia, n.d.).
- Forfaiting: used in exportation of goods, a financial institution (forfeiter) purchases the amount importers owe to the exporter in freely negotiable instruments, discounting commissions and fees and paying cash. The importer is obliged to pay its debt to the forfeiter (Investopedia, n.d.).

### Box 1: Glossary of Terms Used in Value-Chain Finance (continued)

#### Physical-asset collateralization:

- Warehouse receipts: a documented proof of the ownership, and specific characteristics of certain commodities stored in a warehouse. They “provide a secure system whereby stores agricultural commodities can serve as collateral, be sold traded or sued for delivery against financial instruments” (Giovannucci, Varangis, & Larson, 2000).
- Repurchase agreements (repos): short-term borrowing. A buyer receives securities as collateral and agrees to repurchase them at a later date. Commodities are stored with accredited collateral managers who issue receipts with agreed conditions for repurchase agreements and provide a buy-back obligations on sales, and are therefore employed by trading firms to obtain access to more and cheaper funding based on that security (IFAD, 2012).
- Leasing: used popularly to finance machinery, automobiles and equipment in agriculture. The lessee usually makes a down payment and can use the asset while paying periodic contributions. At the end of the term, the lessee may have an option to purchase the asset.

#### Risk mitigation products:

- Insurance: businesses make periodical payments to an entity (insurer) to partially or absolutely cover its losses from a particular adverse event.
- Forward contracts: sales agreement to buy or sell an asset for an agreed price and moment set at the time of the sale. It reduces the risk of adverse price movements in an asset (hedging) and can be used as credit collateral (IFAD, 2012).
- Futures: standardized forwards contracts traded in specialized futures exchanges.

#### Financial enhancement instruments:

- Securitization instruments: a business creates a cash flow of illiquid assets (for example, receivables) that are sold to a special-purpose vehicle (an entity insulated from the management of the business) that will issue securities backed by these assets. The amounts entering from the sale of these securities finances the business.
- Loan guarantees: a third party to the loan provides a guarantee to the borrower to lower the repayment risk.

Source: IFAD (2012), Investopedia (n.d.), Giovannucci, Varangis, & Larson (2000)

Figure 1 shows a variety of financial relations and linkages from inside and outside the value chain.

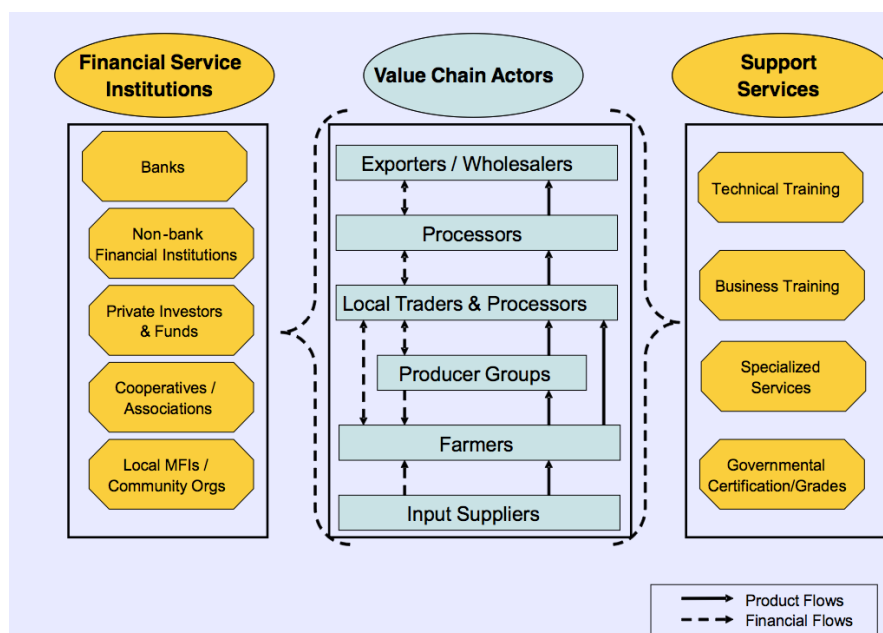


Figure 1: Financial relationships and support services that affect the value chain

Source: Using the Value Chain in Financing Agriculture, FAO (n.d.)



### 4.3 Infrastructure Finance

A well-functioning agricultural sector needs appropriate infrastructure such as: road networks to link isolated rural areas to markets; irrigation technology to reduce farmers' dependence on rainfall; storage facilities to protect harvests from weather and pests; telecommunications to ensure efficient trading, water supply and energy; among others. However, rural infrastructure is underfinanced all over the world (The Economist, 2014). Large-scale infrastructure, such as roads, is particularly in need of investment.

Traditionally large-scale infrastructure was largely funded by the public sector. However, governments have increasingly been experimenting with different funding options to finance infrastructure, including by enlisting the active participation of private sector partners and financial institutions. The participation of the financial sector in these projects requires a completely different set of skills from other types of lending, because it entails financing public assets (usually long-term financing) and, consequently, high risks.

The models of public-private partnerships (in which the private sector shares the project risks with the public sector in projects) range from donor-funded projects to entirely privately financed projects (FAO, 2008). Contractual arrangements include service contracts, management contracts, lease agreements, concessions, build-operate-transfer (BOT) investment models or, in some cases, the total ownership by the private partner of a certain infrastructure. Financing for these infrastructure projects comes in the form of debt, equity and other risk mitigation mechanisms and can be part of a pool of financing from banks, institutional investors, development banks, official development assistance (ODI) and governments (Bond, Platz, & Magnusson, 2012).

Small-scale infrastructure presents different challenges. Local markets, small-scale processing facilities, local feeder roads, small power generators, health centres, clinics and schools are key to rural development (Bond, Platz, & Magnusson, 2012). Apart from traditional financial actors, small-scale infrastructure has also been developed and operated by actors along the value chain who see a business in offering a package of services. For

example, trading companies provide producers with storage facilities to store crops before they are sold.

In some cases, cooperatives have also covered smaller infrastructure projects for a targeted number of users. For example, in India, the creation of infrastructure facilities is financed by the National Cooperative Development Corporation (Nabard, 2008).

### 4.4 Financing for R&D

Innovation and knowledge are other critical areas that need financing. R&D has resulted in numerous innovations for agriculture. EMBRAPA, for example, a state-owned company that coordinates the national agricultural research system in Brazil, has developed more than 9,000 technologies in Brazil. It has been key to the transformation of savannahs into agriculturally productive land (FAO, 2012). It relies primarily on public financing because of its public aim to provide innovative knowledge for the sector as a whole. However, it should not be constrained to public financing, given the interest of the private and financial sector in its results. Development banks have also financed R&D. For example, the World Bank has a track record of financing operating costs and capital investments of R&D in sub-Saharan Africa (Lynam, Beintema, & Annor-Frempong, 2012).

## 5. Who Finances Agriculture?

The diverse system of agricultural finance enables a wide variety of actors to be financiers. Different risks and instruments are covered by different actors. Farmers and small entrepreneurs play the most important role and are the first level, acting mainly within the informal sector (such as community savings systems) but also in more complex organizations, such as saving and credit cooperatives and unions or mutual credit guarantee schemes.

Cooperatives and credit unions play an important role in agriculture as self-help member institutions. Unlike banks, they have a non-profit status. Smaller cooperatives are well positioned to offer its members better access to financial institutions and investments.

Most private sector finance traditionally comes from local commercial banks, branches of foreign



banks and insurance companies. These institutions finance small farmers and entrepreneurs directly, facilitate microfinance schemes and finance large rural infrastructure projects. The most successful ones have in-house expertise in the agriculture sector and the capacity to diversify across geographic regions, economic sectors and agriculture sub-sectors (Agrifin Facility, 2010). However, infrastructure financing can include a combination of actors, such as private partners, financial institutions, national and local government, development banks or donors.

Development banks play an important role in agriculture finance by filling financial gaps in developing countries. They finance specific programs in the public sector, directly with local companies or through local banks acting as intermediaries because of their better access to the domestic market. For example, the Inter-American Development Bank (IADB) financed projects in 2004 and 2006 through PROSAP in the northern provinces of Argentina, with investments in irrigation, rural roads and electrification, and water management. The IADB has also financed

irrigation programs in Bolivia (2008), Brazil's Tocantins state, Guatemala, Guyana, Haiti and Jamaica (IADB, 2014).

## 6. The Role of Government in Financing Agriculture

Aside from private sources of finance, governments are also important sources of finance for developing country agriculture. Public financing can focus on particular actors, such as small farmers or enterprises; on particular issues, such as environmental protection and organic agriculture; or on particular geographic locations (See Box 2).

Other promising government initiatives include the creation of financial institutions in agriculture, whose regulations are usually defined by central banks. For example, the Agricultural Bank of Ghana, the Agricultural Development Bank Limited of Nepal, Banco Agrícola de República Dominicana and Bank Pertanian Malaysia are state-owned banks acting as major financiers in their countries. They are mostly supervised by other governmental agencies such as ministries of Agriculture or Finance (FAO, 2001).

### Box 2: Different roles of the governments in agricultural finance

#### Law 6973 – Argentina

Law 6973 provides financing for local producers in the Chaco Province in Argentina. Born as a joint initiative between the Government of Chaco, the local stock exchange, a logistics company and a financial trust company, the government fixes contributions to assist producers affected by droughts with a maximum amount per producer and an interest rate of 9 per cent. The government analyzes each case and instructs the financial trust company to grant the credit from a provincial fund to the producer.

The measure is tailor-made to the reality of the place, products, etc., and includes protocols (designed by the National Institute of Agricultural Technology) to modernize production in the province. Its aim is to finance producers that cannot access finance, promote economic and environmental sustainability, add value to the production and minimize risks.

A second program is the Rural Development and Family Farms Program in the provinces of Chaco and Entre Ríos. The program supports the adoption of new technologies and facilitates access to financing. It provides technical assistance and training in both areas as well as in group management and marketing.

With the assistance of the IADB, it grants: (i) 48 million in non-repayable contributions and technical assistance and (ii) 27 million for the leverage of a mutual guaranty company. It promotes the development of value chains of certain products and is also followed up by an agronomist in order to ensure compliance with the protocol (Subsecretaría del Gobierno de Chaco, 2013).

#### Law of the Fundamental Principles of the Agriculture Sector – Democratic Republic of Congo

Articles 56 to 59 of the Law for Investment in Agriculture create a national fund for agricultural development aimed at financing the sector. Its resources are constituted, among others, by government budget allocations, revenues from imports, donations and revenues from vegetable quarantines. The funds are then available for commercial banks and microfinance institutions to cover the funding of agricultural loans or guarantees for loans to farmers (Faolex, 2011).



## Box 2: Different roles of the governments in agricultural finance (continued)

### The Rural Infrastructure Development Fund (RIDF) in India

The RIDF addresses the lack of public investment in agriculture and rural development and is managed by the National Bank of Agriculture and Rural Development (NABARD) in India. Its initial capital was INR 20,000,000,000 (over USD 300 million) and was subsequently raised each successive year through public and private contributions. The RIDF has high social return and employment generation and a successful repayment rate (Mahajan, Sahai & Pasrija, 2007).

### Pagamento Antecipado de Exportacao – Brazil

The Brazilian government created a credit line program called Pagamento Antecipado de Exportacao (prepayment of exports). Producers' crops and production can be financed by foreign parties by sending money to Brazilian producers. The producer repays the foreign party with goods plus interest on the original loan (this may be paid in cash or with additional goods). An added advantage of this structure is that there is no income tax due on the interest payment (paid in either cash or goods) (Balduccini, Themudo & Akram, 2013).

### Thai Bank for Agriculture and Agricultural Cooperatives (BAAC) – Thailand

The BAAC is an agricultural development bank, known worldwide for its success in providing financial services to rural smallholders throughout Thailand. Up to 1999, it operated under a special law, which has put it under the surveillance of the Ministry of Finance. A shift towards the general banking supervision by the Bank of Thailand has since taken place (FAO, 2001).

Governmental intervention in agriculture finance is often directed towards managing risks in the sector. This includes:

- (i) Support to farmers in the form of payment of indemnities, reductions in social security contributions and exemption of taxes during periods of crisis in the sector (OECD, 2011) or subsidizing private insurance schemes. For example, Israel covers part of the insurance premiums of producers, and in Brazil, *Garantía Safra* was created as a disaster assistance program that compensates small-scale farmers for production losses following weather-related and other events (OECD, 2013).
- (ii) Creating credit guarantee funds or supporting credit guarantee schemes offered by private institutions through counter guarantees. The Mexican *Fideicomisos Instituidos en Relación con la Agricultura (FIRA)*, the Indian Credit Guarantee Fund Trust for Micro and Small Enterprises (CGTMSE) and the Nigerian Agricultural Credit Guarantee Scheme Fund are among the longest-standing agricultural guarantee funds in the world (FAO, 2013c).
- (iii) In the case where risk management is left to the farmer, governments can still support by providing information to the sector on potential risks.

Finally, the government can act as a facilitator without disbursing public funds itself. This role is especially significant in value chain finance, where the government can develop a business model to link the different actors that would benefit from financing one another (IFAD, 2012).

## 7. The Role of Government in Regulating Agricultural Finance

Policies to improve and attract agricultural finance come from different ministries, including agriculture, finance and economy. The number of governmental actors influencing agricultural finance makes its development more complex.

Financial regulation is critical for the efficiency of financing services and products, particularly to ensure optimal allocation of financial resources, minimize the transaction costs in financial intermediation and adapt financial institutions to changing environments (FAO, 2013a).

The regulatory framework governing the financial sector is twofold: (i) the government must provide enough openness and flexibility for the financial sector to offer the financial instruments needed for the rural sector and (ii) regulation should control abuses by financial institutions, such as offering unduly high rates or taking excessive risks with people's savings or investors' funds. Laws also





have to be coupled with efficient supervision of the financial sector.

Overregulation presents major problems for flexibility and innovation in finance. Some countries enact a single general banking law, assembling all regulations in one place, and this can lead to overregulation. However, most countries have a more flexible financial regulatory system, leaving the operational issues to decrees, statutory notes, circulars or simply the routine decisions of the supervisory institution. Unlike parliamentary or congressional legislation, the regulation of the executive branch is more easily amended and becomes more adaptable to the changing circumstances (FAO, 2012).

If the country aims to attract foreign or domestic financial institutions to agriculture, it must also offer an overall stable and efficient institutional environment that increases the confidence of financial institutions to invest in the country and sector. Weak land tenure systems and poor enforcement of laws and regulations affect the extent to which financial institutions will finance agriculture.

Economic regulation also affects agricultural finance. Commercial legislation, legislation affecting organizational forms and debt laws influence the decisions of financial institutions as to the products and services they may offer to the agriculture sector. Legislation regulating bankruptcy, tax, investment, foreign bank licensing, cooperatives, small and medium enterprises, civil codes and even the rights and obligations in the constitutions are key determinants for the financial sector of a country.

A few governments have chosen more interventionist measures, such as requiring the private sector to finance agriculture. The Indian government, for example, has imposed a mandatory target on domestic and foreign banks to provide 40 per cent of their lending to priority sectors. Among the priority sectors, a specific portion of lending has to be granted to farmers and small organizations of farmers (Reserve Bank of India, 2013). It also encourages banks to open branches in smaller cities to push the inclusive finance agenda.

Finally, governments can promote and help

organize the creation of institutions and partnerships between financial actors and can provide certifications, technical assistance and financial literacy to farmers and small entrepreneurs. For example, in Tanzania, the Rural Financial Services Programme pushed the creation of local community savings schemes and credit cooperatives (IFAD, 2009b). Beneficial partnerships can also be promoted to mitigate risks creating holistic solutions and enabling cost-efficient delivery of financial and nonfinancial products and services (World Bank, 2009).

## 8. Conclusions

Access to finance is a vital part of any developed agriculture sector, and drawing farmers and small entrepreneurs in developing countries into the financial system is far from accomplished. It is not mere coincidence that the countries with developed financial markets in the agriculture sector are the ones where the sector is also highly developed. This does not necessarily mean that only developed countries can have successful stories of agriculture finance. In fact, many of the examples cited above come from developing countries. It requires a combination of good laws, a specialized financial sector and profitable businesses of small and large farmers and companies in the agriculture sector.

Innovation in finance to solve the needs of the rural sector should not be limited to financial institutions. The government can play a proactive role by promoting laws and regulations with new financial instruments or even raising awareness of existing ones to bring them to the attention of the financial and agricultural sectors. Specialization in agricultural finance in the government and in the financial sectors is an important driver to its development.

However, financing is not a charitable activity; it is primarily profit driven. This necessarily means that all possible regulation and programs to attract financing must be realistic with the characteristics of the sector and the viability and rate of return. Managing the risks and understanding the opportunities of the agriculture sector is key for any successful policy or law. Thus, to attract finance and, consequently, investment in the agriculture sector, it is critical to strengthen both



the agriculture and financial sectors. This requires a coherent strategy with consistent regulation and policies that match the sectors' needs and in line with the realistic capacities of all the actors in both sectors.

Moreover, financial regulations must go beyond economic development. An effort must be made

to take a holistic approach to consider, among others, food security, poverty reduction and mainstreaming marginalized groups. The approach should include all interested parties—including the different ministries or agencies, as well as farmers' organizations and financial institutions—to create a win-win-win agricultural financing system.

---

## References

Adams, D.W. (1995). *Using Credit Unions as conduits for microenterprise lending: Latin-American Insights*. ILO Working Papers on Enterprise and Cooperative Development Department Poverty-oriented Banking. Retrieved from [http://www.ilo.int/wcmsp5/groups/public/@ed\\_emp/documents/publication/wcms\\_118277.pdf](http://www.ilo.int/wcmsp5/groups/public/@ed_emp/documents/publication/wcms_118277.pdf)

Agrifin Facility (2010, April). *Program Strategy*. Retrieved from: [http://www.agrifinfacility.org/sites/agrifinfacility.org/files/AgriFin%20-%20Strategy%20Document%20-%20Final\\_5.pdf](http://www.agrifinfacility.org/sites/agrifinfacility.org/files/AgriFin%20-%20Strategy%20Document%20-%20Final_5.pdf)

Anandajayasekeram, P. (2011, December). *The role of agricultural R&D within the Agricultural Innovation Systems Framework*. Conference Working Paper 6. Retrieved from <http://www.ifpri.org/sites/default/files/publications/ananda.pdf>

Balduccini, B., Themudo Lessa, T. & Akram, A. (2013, April 24). *Islamic finance expanding in Brazil*. International Finance Law Review. Retrieved from <http://www.iflr.com/Article/3196294/Islamic-finance-expanding-in-Brazil.html>

Balkenhol, B. & Gueye, E. H. (1992). *Tontines and the banking system: Is there a case for building linkages*. Poverty-Oriented Banking (INT/92/M01/FRG). Working Paper 2. International Labour Organization. Retrieved from [http://www.ilo.org/wcmsp5/groups/public/@ed\\_emp/documents/publication/wcms\\_118281.pdf](http://www.ilo.org/wcmsp5/groups/public/@ed_emp/documents/publication/wcms_118281.pdf)

Bond, D. L., Platz, D., & Magnusson, M. (2012, May). *Financing small-scale infrastructure investments in developing countries*. DESA Working Paper No. 114 (ST/ESA/2012/DWP/114). Retrieved from: [http://www.un.org/esa/desa/papers/2012/wp114\\_2012.pdf](http://www.un.org/esa/desa/papers/2012/wp114_2012.pdf)

Food and Agriculture Organization [FAO]. (2001). *Prudential regulation and supervision for agricultural finance*. Agricultural Finance revisited No. 5. Retrieved from <ftp://ftp.fao.org/docrep/fao/012/a0151e/a0151e00.pdf>

FAO. (2008). *Market-oriented agricultural infrastructure: Appraisal of public-private partnerships*. Agricultural Management, Marketing and Finance Occasional Paper 23. Retrieved from <ftp://ftp.fao.org/docrep/fao/011/i0465e/i0465e00.pdf>

FAO. (2012, November). *Trends and impacts of foreign investment in developing country agriculture*. Retrieved from [http://www.fao.org/fileadmin/templates/est/INTERNATIONAL-TRADE/FDIs/Trends\\_publication\\_12\\_November\\_2012.pdf](http://www.fao.org/fileadmin/templates/est/INTERNATIONAL-TRADE/FDIs/Trends_publication_12_November_2012.pdf)

FAO. (2013a). *An analytical framework for regulation and supervision of agricultural finance*. Rome, Italy: Rural Finance Learning Center.

FAO (2013b). *Agribusiness public-private partnerships country case studies*. Retrieved from: <http://www.fao.org/docrep/field/009/ar859e/ar859e.pdf>

FAO. (2013c). *Four case studies on credit guarantee funds for agriculture*. Retrieved from <http://www.fao.org/docrep/017/aq189e/aq189e.pdf>

FAO (n.d.). Power-point presentation. *Using the Value Chain in Financing Agriculture*. Retrieved from <http://www.cica.ws/pdf/marrakech/I-Calvin%20Miller-%20Value%20Chain%20IFAD.pdf>

FAO & World Bank. (2013). *Financing smallholder agricultural term investments*. Retrieved from [http://www.ruralfinance.org/fileadmin/templates/rflc/documents/6\\_financing\\_smallholder\\_web.pdf](http://www.ruralfinance.org/fileadmin/templates/rflc/documents/6_financing_smallholder_web.pdf)

Faolex (2011). *Loi portant principes fondamentaux relatifs à l'agriculture*. Retrieved from <http://faolex.fao.org/docs/pdf/cng109785.pdf>



- García, N. Et al (2013). *Financial Education in Latin America and the Caribbean: Rationale, Overview and Way Forward*. OECD Working Papers on Finance, Insurance and Private Pensions, No. 33. Retrieved from: <http://www.oecd.org/finance/wp33finedulac.pdf>
- Giovannucci, D. (ed.), Varangis, P. & Larson, D. (2000). *Warehouse receipts: Facilitating credit and commodity markets*. Retrieved from [http://www-wds.worldbank.org/external/default/WDSContentServer/WDSP/IB/2007/07/10/000090341\\_20070710160223/Rendered/PDF/401220Warehouse1Receipts01PUBLIC1.pdf](http://www-wds.worldbank.org/external/default/WDSContentServer/WDSP/IB/2007/07/10/000090341_20070710160223/Rendered/PDF/401220Warehouse1Receipts01PUBLIC1.pdf)
- International Development Research Centre. (2013). *Cellphones are improving agriculture in Kenya*. Retrieved from <http://www.idrc.ca/EN/Resources/Publications/Pages/ArticleDetails.aspx?PublicationID=147>
- International Fund for Agricultural Development (IFAD). (2000). Ghana: Rural Financial Services Project, 2000. Retrieved from <http://www.ifad.org/gender/learning/sector/finance/41.htm>
- IFAD. (2009b, October). *Rural finance: Small amounts making a big difference*. Retrieved from <http://www.ifad.org/events/microcredit/eng.pdf>
- IFAD. (2009a, August). *Rural finance. policy*. Retrieved from <http://www.ifad.org/pub/basic/finance/eng.pdf>
- IFAD. (2011, November). *Weather-based insurance in agricultural development: A technical guide*. Retrieved from [http://www.ifad.org/ruralfinance/pub/WII\\_tech\\_guide.pdf](http://www.ifad.org/ruralfinance/pub/WII_tech_guide.pdf)
- IFAD. (2012, November). *Agricultural value chain finance strategy and design*. Technical Note. Retrieved from <http://www.ifad.org/ruralfinance/pub/valuechain.pdf>
- International Finance Corporation. (2013). *IFC and agri-finance: Creating opportunity where it's needed most*. Retrieved from <http://www.ifc.org/wps/wcm/connect/44c74a0049585fb1a082b519583b6d16/IFC%2B%2Band%2BAgriFinance%2B-%2BGeneric%2BPresentation%2Bv-4.f?MOD=AJPERES&CACHEID=44c74a0049585fb1a082b519583b6d16>
- Inter-American Development Bank. (2014). *Investments in rural infrastructure*. Retrieved from <http://www.iadb.org/en/topics/agriculture/investment-in-rural-infrastructure-irrigation-drainage,2347.html>
- Inter-American Investment Corporation. (2014). *Products and services*. Retrieved from <http://www.iic.org/en/products-and-services/investment-products>
- Investopedia. Retrieved from <http://www.investopedia.com/>
- Law 11/022 Democratic Republic of Congo. Retrieved from: <http://www.3tamis.org/archives/Templates/0%203TAMIS%20Documents%20ADOBE/RDC%20Loi%20agriculture%20principes%20fondamentaux%2011%20022%202011.pdf>
- Law 6973 Argentina. Retrieved from: <http://www2.legislaturachaco.gov.ar:8000/legisdev/PDF/Ley%206973.pdf>
- Lynam, J., Beintema, N., & Annor-Frempong, I. (2012, June). *Agricultural R&D: Investing in Africa's Future – Analyzing Trends, Challenges, and Opportunities. Reflections on the conference*. Retrieved from <http://www.ifpri.org/sites/default/files/publications/astifaraconfsynthesis.pdf>
- Mahajan, V., Sahai, P. & Psrija, S. (2007). *Financing of rural infrastructure* (Ch. 3). In P. Kalra & A. Rastogi (Eds.). *India Infrastructure Report 2007*. Retrieved from <http://www.iitk.ac.in/3inetwork/html/reports/IIR2007/03-Financing.pdf>
- Nabard (2008, June). *Scheme for development/ strengthening of agriculture marketing infrastructure, grading and standardization*. Retrieved from [https://www.nabard.org/pdf/Agriculture\\_Marketing\\_and\\_Infrastructure\\_Grading\\_and\\_Standardisation.pdf](https://www.nabard.org/pdf/Agriculture_Marketing_and_Infrastructure_Grading_and_Standardisation.pdf)
- Organisation for Economic Co-operation and Development (OECD). (2010). *Facilitating access to finance: Discussion paper on credit guarantee schemes*. Retrieved from [http://www.ruralfinanceandinvestment.org/sites/default/files/45324327\\_pdf.pdf](http://www.ruralfinanceandinvestment.org/sites/default/files/45324327_pdf.pdf)



- OECD (2012, January). *SME and Entrepreneurship Financing: The Role of Credit Guarantee Schemes and Mutual Guarantee Societies in supporting financing for small and medium – sized enterprises*. Final Report. Retrieved from: [http://www.oecd.org/officialdocuments/publicdisplaydocumentpdf/?cote=CFE/SME\(2012\)1/FINAL&docLanguage=En](http://www.oecd.org/officialdocuments/publicdisplaydocumentpdf/?cote=CFE/SME(2012)1/FINAL&docLanguage=En)
- OECD. (2011, November). *Risk management in agriculture: What role for the government?* Retrieved from <http://www.oecd.org/tad/agricultural-policies/49003833.pdf>
- OECD. (2013). *Agricultural policy monitoring and evaluation 2013: OECD countries and emerging economies*. Retrieved from [http://dx.doi.org/10.1787/agr\\_pol-2013-en](http://dx.doi.org/10.1787/agr_pol-2013-en)
- Principles for Responsible Investment (2013). Retrieved from <http://www.unpri.org/areas-of-work/implementation-support/piif/what-is-inclusive-finance/>
- Reserve Bank of India. (2013, July). *Master Circular – Priority Sector Lending – Targets and Classification*. Retrieved from <http://rbidocs.rbi.org.in/rdocs/notification/PDFs/107010713PSLFL.pdf>
- Subsecretaría del Gobierno de Chaco. (2013, September). *Financiamiento para la Agricultura: Lanzan Operativo Única para Cereales y Oleaginosas*. Retrieved from <http://www.prensa.chaco.gov.ar/?pag=noticia&nid=28606>
- The Economist. (2014, March 22). *Infrastructure financing: A long and winding road*. Retrieved from <http://ww2.cfo.com/credit/2014/03/infrastructure-financing-long-winding-road/>
- United Nations (2013, September). *We Can End Poverty*. Fact Sheet Retrieved from: [http://www.un.org/millenniumgoals/pdf/Goal\\_1\\_fs.pdf](http://www.un.org/millenniumgoals/pdf/Goal_1_fs.pdf)
- World Food Program & IFAD. (2011, November). *Weather index-based insurance in agricultural development: A technical guide*. Retrieved from [http://www.ifad.org/ruralfinance/pub/WII\\_tech\\_guide.pdf](http://www.ifad.org/ruralfinance/pub/WII_tech_guide.pdf)
- World Bank. (2009, April). *Expert meeting on managing financing risk in agriculture*. Retrieved from [http://siteresources.worldbank.org/EXTARD/Resources/336681-1252501755087/Joburg\\_proceedings.pdf](http://siteresources.worldbank.org/EXTARD/Resources/336681-1252501755087/Joburg_proceedings.pdf)

## ACKNOWLEDGEMENTS

The IISD series of policy briefs on investment in agriculture is generously supported by the Swiss Agency for Development and Cooperation (SDC).

© 2015 The International Institute for Sustainable Development  
Published by the International Institute for Sustainable Development.

## INTERNATIONAL INSTITUTE FOR SUSTAINABLE DEVELOPMENT

The International Institute for Sustainable Development (IISD) is one of the world's leading centres of research and innovation. The Institute provides practical solutions to the growing challenges and opportunities of integrating environmental and social priorities with economic development. We report on international negotiations and share knowledge gained through collaborative projects, resulting in more rigorous research, stronger global networks, and better engagement among researchers, citizens, businesses and policy-makers.

IISD is registered as a charitable organization in Canada and has 501(c)(3) status in the United States. IISD receives core operating support from the Government of Canada, provided through the International Development Research Centre (IDRC) and from the Province of Manitoba. The Institute receives project funding from numerous governments inside and outside Canada, United Nations agencies, foundations, the private sector, and individuals.

### Head Office

111 Lombard Avenue, Suite 325  
Winnipeg, Manitoba  
Canada R3B 0T4

**Tel:** +1 (204) 958-7700  
**Fax:** +1 (204) 958-7710  
**Website:** [www.iisd.org](http://www.iisd.org)  
**Twitter:** @IISD\_news

### Geneva Office

International Environment House 2  
9 chemin de Balexert, 1219 Châtelaine  
Geneva, Switzerland

**Tel:** +41 22 917-8683  
**Fax:** +41 22 917-8054  
**Website:** [www.iisd.org](http://www.iisd.org)  
**Twitter:** @IISD\_news



**IISD.org**