

# SUPPLIER CREDIT MECHANISMS

Agricultural finance for small farmer enterprises



This handbook is produced by International Advisory, Products and Systems (i-APS) and is part of a series of learning products supporting farmers worldwide with best practices in the area of agriculture development.

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# Supplier Credit at a Glance:

- Access to agricultural finance can enable increased output, income, constructing human capital, and create demand for other goods and services. It can also develop a credit culture among farmers.
- Small farmers face different constraints to be able to access financial services.
  Location issues, risks such as natural risks, lack of human capital, and absence of credit culture are the most important factors.
- There are different types of agricultural finance for small farmers. Each method has advantages and disadvantages. Studies have shown that microfinance institutions (MFIs) and value chain finance (VCF) are effective instruments.
- A specialized agriculture credit system requires constructing branches of lending institutions in rural areas, a well-trained loan officers, a community level board, and an apex body.

# SUPPLIER CREDIT MECHANISMS

#### LEARNING OBJECTIVES

- Understand basic concepts of agricultural finance.
- Understand the importance of agricultural finance for small farmer's enterprises.
- Understand the types of agricultural finance for small farmer's enterprises.

#### ROLE OF AGRICULTURAL FINANCE FOR SMALL FARMERS

- Finance is viewed as a production input to acquire other inputs such as seeds, fertilizers and pesticides in order to increase the output of basic crops and livestock products.
- Poverty Alleviation: Arab countries, as well as Sub-Saharan Africa (SSA), are not on track to eliminate extreme poverty by 2030. Moreover, according to Brandsama and Chaouali, in the Middle East and North Africa (MENA), access to financial services by poor people is 2 percent. In general, the majority of farmers in rural areas have low incomes with limited access to loans. To overcome this barrier, agricultural finance has the potential to reach significant numbers of needy farmers and to maximize the benefits of access to finance sources. Ultimately, this access increases their incomes, enhances their production and assists in constructing human capital by generating self-employment demand for other goods and services (e.g. nutrition, health, and education)<sup>1</sup>.
- In the long-term, promoting a systematic agricultural finance culture among small farmers would assist in savings and deposits and the potential to participate in the decision-making process and building finance records for small farmers.



#### DIFFICULTIES FOR SMALL FARMERS TO ACCESS FINANCIAL SERVICES

The main reasons for poor access to financial resources by small farmers are<sup>2</sup>:

1. Places of residence, as well as population densities, increase transaction costs for financial institutions because the majority of farmers live in the countryside. Credit institutions

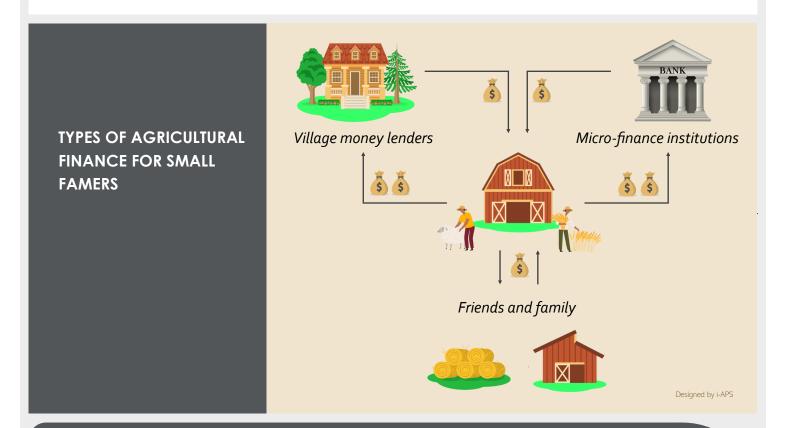
concentrate on urban areas where there is little distance between the institution and customer.

<sup>1</sup> Note on Poverty and Conflict in Arab States Khalid Abu-Ismail February 2020 <sup>2</sup> Challenges for African Agriculture Jean-Claude Devèze 2011



#### DIFFICULTIES FOR SMALL FARMERS TO ACCESS FINANCIAL SERVICES CONT'D

- 2. Climate: Agriculture is a risky business since returns from farming are unpredictable due to drought, distribution of rains, price fluctuations of inputs and output, pests and diseases.
- 3. Lack of human capital from local areas increases management costs of financial institutions.
- 4. In many rural areas, populations may treat loans as a grant or entitlement from the government (political factor).
- 5. Conflict.



### FAMILY AND FRIENDS

Known as "informal insurance," borrowing from family and friends is widespread in traditional agriculture. Extended families serve as a source of borrowing. The primary purpose of this kind of loan is to spend it in stressful times without incurring an interest rate payment that could prove troublesome later.

In the MENA region, among 55 percent of farmers who obtained loans, only 7 percent borrowed from formal sources. This indicates that borrowing from informal sector is prevailing in the region, accounting for 48 percent. Most borrowing is directed to cover basic needs. It has been estimated that only 9 percent is borrowed to run farming activities.<sup>3</sup>

<sup>37</sup>Credit for agricultural development Khandker, Shahid 2021

# VILLAGE MONEY LENDERS

In this method, wealthier families in a particular village lend to low-income families for consumption in a critical time. Payment and interest rates are high for borrowers, which can be dangerous. This method of credit tends to decline when institutional credit is able to be obtained.



# **MICRO-FINANCE INSTITUTIONS (MFIS)**

Micro-Finance Institutions, or MFIs, lend small amounts of money to large numbers of smallholder entrepreneurs for a short period of time with a special focus on marginalized groups, such as women. These loans are often granted in a flexible manner, i.e. they avoid institutional constraints that traditionally prevent small

farmers from accessing financial services. Experience shows that smallholding households are able to repay their loans with interest rates. MFIs provide creative methods that can be used to substitute collateral<sup>4</sup>. For instance, small farmer groups are distinguished by strong social relationships. MFIs treat this social capital (members share common ethic values and liability for repaying loans) as assets to be used as collateral, such as in countries including Bangladesh and Bolivia<sup>3</sup>.

Since 2011, the number of borrowers increased by 92 percent and financial resources increased by 88 percent for the same period.



# **Global Trend in Microfinance:**

Source: Convergence Microfinance Barometer—2018, MEDICI Research, www.goMEDICI.com

<sup>4</sup>Agriculture for Development the World Bank 2008

#### **MICRO-FINANCE INSTITUTIONS (MFIS) CONT'D**

In the MENA region, microfinance plays a modest role in supporting agricultural smallholders. For example, rural borrowers represented only 14 percent of total active borrowers. This implies that microfinance in MENA is concentrated in urban areas, while in countries like Bangladesh and India, rural borrowers have the highest share. The share of women as borrowers is estimated at 36 percent, indicating a gender gap in the region<sup>5</sup>.

MFIs have some limitations, such as volume of loans, high costs, and high-interest rates. Although MFIs play a considerable role, their small loan size is seen as inadequate to improve the standard of living for the targeted group. High borrower costs are caused by the process of managing small loans to a large number of people. This is expensive compared to the small number of large loans. Finally, while the interest rate is often higher when compared to commercial banks, it is still lower than the interest rate charged by informal money lenders as explained above.



## VALUE CHAIN FINANCE

Value chain finance has the potential to increase access to agricultural capital and inputs. Usually, a value chain refers to an overall system starting from the production of a certain product through processing and marketing. Value chain actors are farmers, traders, processors, wholesale/exporters, and the final customer.

Each actor in the value chain can benefit from financing. In the case of farmers, they need working capital to buy inputs to complete the cultivation process. Unfortunately, they are often met with limited financial resources. Based on the relationship in the chain, the farmer would be able to obtain funds from internal value chain finance such as the trader (figure 3) or from an external value chain finance such as the trader (figure 3) or from an external value chain finance such as financial institution (figure 4) using the business relation in the value chain as a base to get funds. In this case, a farmer has better access to the financial resources that they need. This system of finance introduces some benefits. For example, actors exchange information (level of required production and prices) and provide services upon request, such as traders supplying harvest labor for farmers.

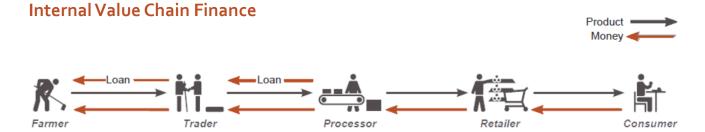


Figure 3: Internal Value Chain Finance (Trade Credit), Source: IIRR et al, 2010

<sup>5</sup> MAKING MICROFINANCE WORK IN THE MIDDLE EAST AND NORTH AFRICA Judith Brandsma and Rafika Chaoual 1998



#### VALUE CHAIN FINANCE CONT'D

In the trade credit method a trader provides the farmer credit in the form of a small loan to buy inputs for production purposes. Credit may be in cash or in-kind (fertilizers). Alternatively, a processor (to guarantee product supply) may finance the trader to assist their ability to bring product to the processor's firm. Substantially, farmers manage to repay the loan to traders since with guaranteed product supply, they stand a better chance at selling their products.

# **External Value Chain Finance**

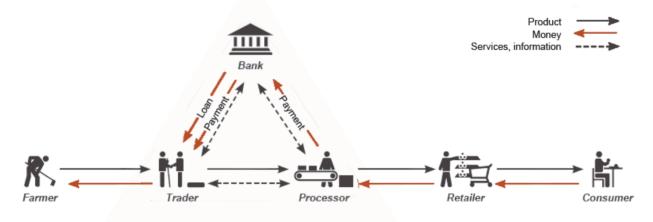


Figure 4: External Value Chain Finance Source: IIRR et al, 2010.

In this method, the source of funding is from outside the chain actors and normally for long-term loans. Initially, all parties have to agree on a) product to be produced; b) the amount of loan; c) communication procedure; and d) risk management. A bank lends money to the trader, which in turn supports the farmer. At the end of the season, the processor buys the output from the trader through the bank (i.e. the processor pays the bank, which in turn deducts the amount of loan plus interest rate and pays the trader).

VCF can be adapted to different contexts. One form is known as warehouse receipts. In this procedure, farmers deliver their output to a warehouse and get a receipt in return. This receipt can be used as collateral if farmers are interested in applying for a loan and cannot wait for payment. This system is useful for cooperative agencies that want to store their products until prices rise, in case farmers have to wait for payment from buyers<sup>6</sup>. In leasing, a company performing agricultural activities rents a capital (equipment) to the farmer for a specific period of time based on an agreement. The company remains the owner of the capital until total payment is made by the farmer. In this case, the farmer would acquire the assets. VCF could be also designed based on financial enhancement instruments such as loan guarantees. In this way, in order to lower risk payment to the borrower, a third party to the loan would provide a guarantee (figure 3). Insurance is also used as one of risk mitigation products and serves as a tool for VCF.

<sup>6</sup>VALUE CHAIN FINANCE Beyond microfinance for rural entrepreneurs 2010 Royal Tropical Institute IIRR



#### VALUE CHAIN FINANCE CONT'D

In this case, many firms have to pay a scheduled payments to an insurer company, which may compensate firms for losses, such as those due to natural disasters.

The effects of the VCF system have been studied widely. In Tanzania, an assessment of an organic cotton project found that the productivity and income of the famers increased substantially. In Kenya, tea farmer income increased significantly. The price of tea increased from 0.13\$ per kilogram to 0.38\$. In Rwanda, a rice project applied VCF, which led to increasing productivity by 30 percent because farmers were able to buy inputs such as fertilizers. Moreover, they received a higher price for the rice sold. As a result, many farmers were able to invested in transportation (bicycles and motorbike) and managed to become owners of small rice mills.<sup>7</sup>

## SELF-HELP GROUPS AND FINANCIAL COOPERATIVES

Self-help groups are initiated by their members and because of this, coherence is assured. An example of a self-help group is the Rotating Savings and Credit Associations (ROSCAs). In this simple method, specific group members meet on a regular basis and collect a fixed amount of money. During the meeting, they decide

who will get the money based on a lottery process. This money assists members to invest or buy equipment and meet other needs.

Another well-organized group is known as Accumulating Savings and Credit Associations (ASCAs). Here, savings or contributions are collected from members regularly without immediate distribution. Usually, funds are deposited in a rural bank institution until members state they want to borrow. In one Indian State where this method was studied, results showed that the associations reached 2.2 million members and borrowers were able to access capital inputs supported by the bank.<sup>8</sup> These methods are commonly used by women in a wide variety of contexts, most commonly called women's saving and loan associations (WSLAs).

The financial cooperative is seen as a promising credit institution. It has the potential to provide members with a modern form of management. Moreover, transaction costs are lower when compared to financial institutions. A study in Ethiopia demonstrated that cooperative credit for small farmers led to a larger effect in terms of technology adaptation.



<sup>7</sup> VALUE CHAIN FINANCE Beyond microfinance for rural entrepreneurs 2010 Royal Tropical Institute IIRR

<sup>&</sup>lt;sup>8</sup> Agriculture for Development the World Bank 2008

#### SELF-HELP GROUPS AND FINANCIAL COOPERATIVES CONT'D

Additionally, some groups have managed to use their savings as a powerful instrument for funds, which can lead to improving the lives of the poor in specific areas. Figures 5 & 6 provide the structure of cooperatives in two different areas.

# Example of group management structure

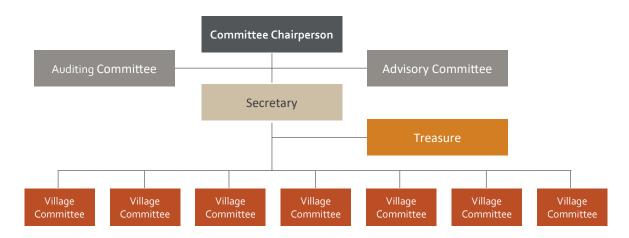


Figure 5: Klong Pia Savings Group management structure. Source: Worakul, 2006.

The group has members of 10 villages. All villages are represented in the form of The Management Committee (MC) which in turn is responsible for collecting savings periodically, examine loan requests and loan repayment. The MC is divided into subgroups such Auditing Committee (AD) with special focus on financial items and an Advisory group which provides advice to committee members without intervening in AD activities.

# Example of village bank network

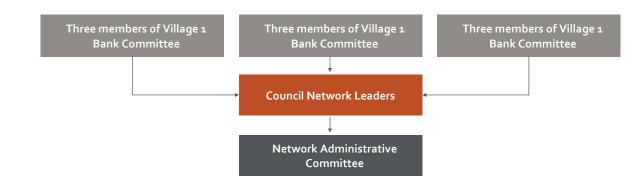


Figure 6: Structure of the Village Bank Network for Mutual Care in the Dok Khamtais. Source: Worakul, 2006

#### SELF-HELP GROUPS AND FINANCIAL COOPERATIVES CONT'D

The Dok Khatami's Village Bank Network includes a member of 37 village banks in Phayao province in northern Thailand. Its main goal to improve the standard of living for rice community members and their families. In the management system, each village is represented by three members. Then, members elect Council of Network Leaders, who are in charge of policy formulation such as rules of collecting savings and loan services as well method of profit distribution mechanism. The Administrative Committee acts as a managerial body to conducting plans that have been set up by the Network Council Leaders. The Administrative Committee is further disaggregated to perform particular duties. For example, there is a subcommittee for loan services, another for agricultural services and one for training and capacity building for members.

## INFORMATION TECHNOLOGY

In this method, mobile phones are used for banking activities by purchasing inputs and transferring funds. The use of mobile phones helps minimize transaction costs and reduces the need for financial institutions to have a physical presence in local communities. However, it requires good communication infrastructure. It has been studied in South Africa and the Philippines and used in many countries.<sup>7</sup> In sub-Saharan Africa, the number of cellular subscriptions is estimated to be 764 million. In the MENA region, farmers who used mobile financial services accounted for two percent, while in sub-Saharan Africa that number is estimated at 16 percent.<sup>8</sup>



## **KEY FEATURES OF A SPECIALIZED AGRICULTURAL CREDIT SYSTEM**

Four features are vital to providing finance to small commercial farmers as below<sup>9</sup>:

#### 1. Many Local Branches:

Famers should be able to engage in the financial system. Moreover, it is important for local branches to build relations between loan officers and borrowers.

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<sup>&</sup>lt;sup>7</sup> Agriculture for Development the World Bank 2008

<sup>&</sup>lt;sup>8</sup> Credit for agricultural development Khandker, Shahid 2021

<sup>&</sup>lt;sup>9</sup>Agricultural Development and Economic Transformation Promoting Growth with Poverty Reduction\_John W. Mellor 2017

#### KEY FEATURES OF A SPECIALIZED AGRICULTURAL CREDIT SYSTEM CONT'D

## 2. The Loan Officer:

It is essential to have well-trained staff with technical knowledge in agriculture in addition to a solid background in accounting, farm budgeting, and rules of loans. The loan officer is responsible for all financial processes starting from the application of a loan to repayment.

## 3. A Community Level Board:

A primary step to establish a specialized agricultural credit system is to establish a local board including knowledgeable farmers and female representation. This would lead to sustainability and ensure sound loans for the customers and, to some extent, improve repayment. It may also add social pressure on the loan branch to continue its services. Representation of women is crucial because literature demonstrates that they are committed to repaying their loans and have sole responsibility. For example, women spend loan money on items as agreed when compared to men who are less likely to do so. Evidences from Grameen Bank in Bangladesh showed that there is a positive correlation between gender and the rate of repayment. When women represent the majority of members, the rate of repayment is 99 percent.<sup>10</sup> In Kenya, findings from a study on saving constraints and microenterprise found that women's savings are increased when they had an opportunity to open a bank account, and consequently, they were able to spend more on their business at rate ranging between 38 to 56 percent<sup>11</sup>.

### 4. An Apex Body:

The role of the apex body is to raise funds for the branches to increase the quantity of lending and to help solve obstacles.

- **Transaction Costs**: expenses incurred when buying or selling a service. For example, in MFIs, transaction costs include: formation costs per loan (interview and observation based), training, appraisal costs, documentation, loan utilization check, monitoring and account opening costs, etc.
- Interest rate: the proportion of a loan that is charged as interest to the borrower, typically expressed as an annual percentage of the loan outstanding.
- **Collateral:** items or property given to the lender to execute claim for recovery of loans from the borrower as protection against defaulting.

<sup>&</sup>lt;sup>10</sup> VALUE CHAIN FINANCE Beyond microfinance for rural entrepreneurs 2010 Royal Tropical Institute IIRR

<sup>&</sup>lt;sup>11</sup> The promise of microfinance and women empowerment Dina Pomerans Feb 2014

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Data collection at a livestock market in the MENA region (Photo Credit: i-APS)

i-APS Agriculture and Food Security work focuses on implementing practical, relevant and innovative solutions for more efficient and sustainable agricultural production to enhance local food security, income, and nutrition.



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