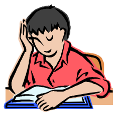
LESSON ONE

The challenges of agricultural lending

Objective: to increase your awareness of the particular risks and costs associated with agricultural lending and the important characteristics that an agricultural loan officer needs.



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1. THE RISKS

i) Moral hazard

In any lender-borrower relationship, there is a general problem of moral hazard that is the result of specific personal characteristics and decisions of each individual borrower. In this regard, farmers do not differ from any other borrower group in terms of information, incentives, monitoring and enforcement problems associated with the lending process.

Firstly, it is obvious that the lender does not have the same information as the borrower. The latter knows exactly what his/her own management capacity is and how the loan will be used. The lender does not know the potential borrower to such an extent. In rural financial markets, information about low income loan applicants is particularly difficult to obtain.

Secondly, even if the loan applicant frankly shares all relevant information for the credit decision, his/her future actions cannot be fully predicted. Therefore, it is crucial for financial institutions to apply incentives so that borrowers behave in such a way that repayment is assured.

Thirdly, the farmer may decide to change his/her economic behaviour, invest the money elsewhere or simply move to another part of the country. Many subsidised agricultural credit programmes tried to manage this risk by imposing very costly regular monitoring of the borrower. Finding cost-efficient methods of monitoring borrowers is a particular challenge in agricultural lending.

However, there are other risks beyond the general behavioural risks of a borrower. This second category of loan loss risks is associated with the agricultural sector or agricultural production. It refers to factors external to the farmer's repayment attitude.

ii) Farming is a risky business

Crops may fail, weather influences the productivity and sale prices fluctuate and are difficult to predict when the crops are planted. If productivity is lower than expected, farmers may not be able to repay loans. These risks and many other aspects of agricultural risk will need to be identified, measured and actively managed in order to stop lending institutions turning away from this clientele. Let's look at the various external risk categories that need to be taken into account in agricultural lending.

Production and yield risk

Agricultural yields are generally uncertain, as natural hazards such as the weather, pests and diseases and other production calamities impact on farm output. Even slight changes in weather conditions - less rain than usual - can seriously impact on farm production. Pests and diseases may spread quickly, leading to a loss of part or all of the crop's produce. The soil quality of the plots as well as their location also significantly influence productivity and yield risk.

Experienced farmers know the specific risk profiles for their agricultural products and try to manage these risks. Strategies applied by many small farmers include diversification of products to outweigh the risk of losing all production. Many small farmers can be considered as risk-averse, i.e. not venturing into new crops in which they are, as yet, inexperienced.

Weather impact is managed through various approaches. For example, irrigation systems may limit the risk of drought. Greenhouse production - among other benefits – can limit the risk of frost damage and increase overall productivity significantly. On the other side, however, modern farm technologies can also increase the risk exposure of a farmer if they are poorly managed.

Approaches to the management of the risk of pests and diseases include the use of insecticides or other chemical products. Animal illness and mortality can likewise be managed through vaccination and strict hygiene precautions. Contacting agricultural extension services or veterinarians for advice may also complement the farmer's personal knowledge and experience in production and yield risk.

For all these risk management techniques, the experience of the small farmer is the core requirement for good results. The risk of inappropriate management is part of production risk. Accordingly, prudent lending decisions need to be based on an assessment of the management capacity of the farmer.

Seasonality of agricultural production provides an additional risk. People invest work in the present for a return in the form of a harvest several months in the future. If a harvest is insufficient to see people through to the next one, they are weakened by malnutrition and in extreme situations can die from starvation. A particular feature of the seasonality risk is the fact that if in a given season part of or the full harvest is lost, new planting often has to wait until the start of the following season. In addition, funds for investing in agricultural inputs for a new production cycle may not be available. Satisfying the repayments scheduled for a current seasonal loan may become impossible, if other sources of income cannot be mobilised.

Price and market risk

Price uncertainty due to market fluctuations is particularly significant where market information is lacking or scanty, or where markets are imperfect – features which are prevalent in many developing countries. The relatively long period of time between planting a crop or starting livestock activities and the realisation of farm output implies that market prices may change from what has been projected. This problem is particularly relevant for longer term agricultural activities, such as perennial tree crops like cocoa or coffee, as several years lie between planting and first harvest.

Price fluctuations may be particularly severe in export markets. Over-production, however, may also considerably influence domestic market prices. In many countries, price uncertainty has increased with liberalisation of agricultural marketing. As opposed to the earlier system of para-statal marketing boards with fixed prices, agricultural prices today fluctuate freely in many countries. Private buyers rarely fix a blanket-buying price prior to harvest, even though inter-linked transactions for specific crops have become more common. These arrangements almost always involve the setting of a fixed price or a range of prices prior to planting.

Market risk also includes the potential losses involved in marketing agricultural produce. Transportation is a major challenge in many rural areas. Substantial losses may also occur due to a lack of appropriate storage facilities. Lower quality of badly stored produce usually reduces prices.

Lack of diversification

Price and market risk, as well as production and yield risk, is higher for farmers concentrating on a single crop or livestock activity. Accordingly, many farmers apply risk diversification techniques alongside risk mitigation techniques to reduce these risks. Complementing market-oriented production with subsistence farming is one particular safety-net arrangement, which provides survival measures if yield, production, price and market risks diminish the profits made.

Small farmers' annual incomes often depend to a large extent on one main crop. This is particularly challenging if harvests are no more frequent than semi-annually. The situation becomes even more difficult if the farmer's plot is very small. Accordingly, an alternative strategy for diversification is the generation of additional income between seasons by engaging in off-farm activities. This can be essential for farmers that are engaged in high-risk agricultural production, e.g. facing a continuous threat of droughts or floods.

While diversification of agricultural production is a commonly applied technique, the resulting effect on reducing income insecurity is often insufficient. Small farmers have a long history of going through bad years when cash income comes close to zero, and good years, in which only a small surplus is generated. As income risks directly affect the potential performance of an agricultural loan, the lack of sufficient diversification and risk mitigation remains a major challenge for agricultural lending.

iii) Politicians may add to the risk

Political interference in agricultural markets is a common feature to be found in many developing countries. Price intervention is popular for example, as low food prices are in the interest of urban consumers. Abolishing price ceilings for basic food products in former socialist states led to severe social unrest. Accordingly, stabilising these prices has been a common feature of political interventions in many countries. On the other hand, fixed prices for agricultural produce are also frequently used by governments to ensure a certain level of income for small farmers.

Changes in policy and state interventions can have a severely damaging impact on rural financial markets. Agricultural lending has, in fact, a long-standing history of political intervention and distortion, which has significantly contributed to the lack of interest from commercial banks in lending to farmers. Promising debt cancellation is a common feature of populist political campaigns and is enormously damaging to financial service providers. Even well-intentioned credit programmes for specific target groups and regions can also substantially distort prudent agricultural lending activities.

Have a look at this case study:

Political Risk in Thailand for the Bank for Agriculture and Agricultural Co-operatives

A key component of the last presidential electoral campaign of Thaksin Shinawatra was a three-year debt suspension for farmers. The debt relief programme allowed Thai farmers to stop loan repayments and interest payments for a period of three years. This was going to affect the Bank for Agriculture and Agricultural Co-operatives (BAAC), the largest Thai lending institution servicing rural households, quite badly. In order to reduce the envisaged negative implications on their financial situation, BAAC’s management negotiated with the government and achieved the following results:

- Only farmers who borrowed less than 100,000 Baht (2,300 USD) and who have never had any legal action taken against them by BAAC in the past, are eligible for the debt suspension programme.
- The Thai government must compensate BAAC for all lost interest payments during the three-year period.
- Borrowers who opt for the debt suspension programme are not allowed to obtain any new loans from BAAC.
- Borrowers who decide to repay their loans before the 3-year due date of the programme will be promoted to a better credit rating category.

Around 50% of BAAC’s active borrowers, i.e. 1.1 million farmers registered under the debt suspension programme. However, the negative impact of the programme was largely off-set by stimulating on-time repayment by appropriate incentives and charging any additional costs and potential losses to the government.

Based on Haberberger and Wajananawat (Bangkok Post October 2001)

Unfortunately political intervention in rural financial markets often generates market distortions which have long-term effects on both the borrowers' willingness to repay loans under commercial terms and the commercial lenders' willingness to approve new loans. Government intervention, accordingly, can create exactly the distorted market environment it wishes to solve.

iv) What about collateral?

If a borrower does not repay on time, a lender must enforce the loan payment. In traditional bank lending, collateral is used to compensate for the potential loan loss. Traditional collateral, however, is rarely available from small farmers. Also, legal procedures to use collateral are often cumbersome and costly. Designing enforcement in an efficient way is another challenge to control loan loss risk in agricultural lending.

Small farmers rarely possess land titles which can be used as loan collateral by banks. Land is the most accepted asset for use as loan collateral, because it cannot be removed but can generally be transferred at a specific market price. Small farmers' land, however, may have a very limited value if there is no land market. Land registration is often imperfect in developing countries, so land titles may be unavailable or costly to obtain.

Here are some examples:

Land as Collateral in Latin America
In Brazil, land is not the subject of a mortgage unless the farmer has a second piece of land of his own. Alternatively, only half of the land can be used for a mortgage. In Bolivia, the law does not permit the pledging of small plots of land for a mortgage. This forms part of the agricultural law reform which intends to protect farmers from becoming over-indebted. At the same time, it adds to the exclusion of small farmers from access to loans. If farmers possess a small piece of land in Honduras, land titles are very difficult to obtain as county borders are not clearly defined throughout the country. The National Institute of Agriculture, however, can only extend land titles for land that is used exclusively for agriculture and is bigger than 1 ha. Small farmers therefore find it difficult to obtain legally certified property rights from their county administration.

In order to respond to these constraints, lenders often need to find alternative forms of collateral such as livestock and equipment, even though they may incur higher risks. Personal guarantees are also often applied as an alternative to "real" collateral. Group guarantees are used in agricultural lending. These approaches are based on the functioning of social control, mutual trust and joint liability.

The best approach may be to concentrate on preventive measures in securing loan repayment. These measures put less emphasis on the provision of collateral and more on the importance of basing loan decisions on a detailed appraisal of the applicant. In addition, loans should be designed in such a way that they stimulate repayment, i.e. by providing access to higher amounts of future loans in case of timely repayment or the possibility to obtain parallel loans.

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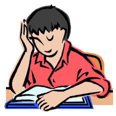
1. *What risks impede agricultural lending? Is there a relationship between the risks of agricultural production for the farmer and the risk involved in lending? What additional risks exist for lenders?*

2. *Which of the following affect production risk:*
   - *concentration on one crop;*
   - *soil quality;*
   - *livestock diseases;*
   - *weather changes;*
   - *lack of water;*
   - *farmer experience?*

3. *Identify the most important factors that influence price and market risk of the five major agricultural products in your country.*

4. *How do politicians influence moral hazard? Have they affected rural financial markets in your country?*

5. *What are the limitations on land as collateral in your country?*



2. THE COSTS

Lending to small farmers can be a costly business. Clients are often widely dispersed, and long distances have to be travelled by loan officers and/or customers. Providing small loans is also more costly than lending large amounts, as the costs of loan appraisal, monitoring and follow up do not decrease with the size of the loan. Lending costs are mainly fixed costs.

The key factors in determining lending costs are the need to collect detailed information about the potential borrower and to be able to do close monitoring. Information is vital in assessing and managing risk. Good client information can serve as a partial substitute for lack of real collateral and as a means to counter moral hazard. However, in rural settings it is often particularly difficult to obtain good information.

Let's have a closer look at some of the factors influencing agricultural lending costs:

i) Lack of credit history information

There is a general absence of credit history information as few financial institutions offer the possibility for rural people to generate track-records with them. Also there is an absence of credit reference bureaus in rural areas to store information on borrowers.

Beginning a relationship between the agricultural lender and a client, therefore, is particularly costly and involves substantial “start-up” information costs. The lender must capture at first-hand key information from the borrower, which requires time and experienced staff. After establishing a track record with the agricultural lender, the information costs diminish. In order to achieve these economies of long-term relationship, the financial service provider must have an appropriate client information system and a comprehensive database which tracks customer performance and their economic activity profiles.

ii) Lack of farm records

Small farmers usually have a low level of formal education and are not used to keeping documents or filling in record books. Consequently, the loan appraisal must often be based on information obtained by interviewing the potential borrower.

iii) Individuality of farm households

The heterogeneity of production conditions and the unique combination of farm and non-farm economic activities of each farm household, calls for a thorough, highly individual approach to loan appraisal. This tailor-made approach to rural finance, catering for the complexity of farm households by employing specific loan appraisal techniques, product design and repayment schedules, is rather cost-intensive.

iv) Farmers’ sensitivity to client transaction costs

Small farmers are particularly sensitive to client transaction costs such as travelling to bank offices. Particularly in peak agricultural seasons, for example during the planting and harvesting period, they face a heavy workload, which makes it difficult for them to spend time and money on visiting financial institutions. Successful agricultural lenders therefore often offer door-step services and visit clients at their homes and in their fields. Consequently, agricultural loan officers travel extensively. This implies high costs for transport, staff and other additional incidental costs such as accident insurance.

Other rural financial intermediaries try to get closer to the customer by maintaining an extensive branch network. Establishing sales outlets in rural areas can lower the transaction costs for the borrowers, but increase administrative costs for the financial intermediary. Balancing both cost sides is a major challenge.

v) Seasonality of agricultural production

Agricultural production cycles mean that the agricultural lending business is highly seasonal. Given the fact that seasonal agricultural activities are very time-sensitive, loan appraisals must be carried out within a short period of time and timely loan disbursements must be ensured. Consequently, agricultural lenders must adjust their institutional capability to these changes in workload during the year. There might be a need for additional, temporary staff in financial institutions during peak periods while in other months a reduced workload in agricultural lending must be off-set by other lending activities. Cost-effective staff planning is therefore a challenging endeavour.

vi) Cost reducing strategies

Given these complex risk structures and high administrative costs, efficiency is essential in agricultural lending. Thus, implementing streamlined policies, procedures and tools is a must. However, standardisation of lending procedures has to be balanced by the need to match the requirements of a diverse farmer clientele and the variety of economic activities within each farm household. The following list summarises various approaches that help to reduce administrative costs in agricultural lending while maintaining a healthy loan portfolio:

- Decentralisation of lending decisions to branch staff and loan officers.
- Delegation of parts of the loan appraisal, disbursement and monitoring procedures to intermediary organisations that are in close contact with the borrowers, e.g. community groups/associations, business development centres, etc.
- Definition of borrower eligibility criteria which will assist in eliminating applicants who will be unable or unwilling to repay at the earliest possible stage of the loan appraisal process (see lesson 3).
- Using a standard loan appraisal form with standard assessment indicators (see lesson 4), which may be computerised.
- Reducing transport costs by using motorcycles.
- Applying appropriate route-planning to avoid excessive travelling.
- Using incentive systems for loan officers and branch staff to stimulate operational efficiency.

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6. *Summarise the key cost drivers in agricultural lending.*

7. *Review measures to reduce administrative costs in agricultural lending. What implications do these measures have on default risk?*

3. THE LOAN OFFICER

The knowledge, skills, experience and personality of the loan officer are the key to success in agricultural lending. Good loan officers are the "engines" that drive financial institutions. Loan officers should be in charge of the full loan cycle, i.e. they should be responsible for a loan all the way from the initial client visit until it is completely recovered. This has several advantages:

- The loan officer is accountable for his/her own loan portfolio. If a loan becomes overdue, the loan officer who recommended or approved it carries the responsibility. He/she cannot blame others for being responsible for a bad loan and cannot delegate problem loans to other staff members.
- Loan officers are the "human face" of the financial institution. They should establish a personal relationship with each borrower, which is particularly important for rural people. Confidence and mutual trust can only be established on a personal basis. The loan officer's personal knowledge of clients is also important as credit decisions are not only taken on the basis of "hard facts", but also the officer's judgement of repayment willingness and management capacity.
- As we have already noted, rural lenders rarely have access to credit reference systems – or if they do, these systems give little or incomplete information about farmers' credit histories. Therefore, the loan officer who builds up an "institutional memory" of clients is particularly important in rural contexts.
- In addition, a track-record of background information on the specific characteristics of farming activities in a branch area can be built up with the support of the loan officers.

So, to be effective, agricultural loan officers need some quite specific skills, knowledge and personal qualities. For obvious reasons, the details of loan officer job profiles vary from institution to institution and from regional context to regional context. However, let's look at an example of how one institution specified what it expected of its agricultural loan officers:

1. Loan officers must be ready and willing to spend the majority of their time outside the office, working in the field. They should be able to cope with uncomfortable working conditions in a rural environment.
2. Loan officers must have good communication skills. Since little to no written documentation is available in farm households, key information must be obtained by talking to people. Therefore, the ability to speak the local language or dialect is crucial. Loan officers must also be good listeners and able to detect inconsistencies.
3. Loan officers must be able to make sound judgements and find it easy to take decisions.
4. A basic knowledge of agricultural production is required. Practical experience is more important than theoretical knowledge. Thus a university degree in agricultural economics is not essential unless combined with experience of working on farms.
5. Loan officers must be willing to work flexible hours. Farmers are used to starting work very early in the morning and rural markets often take place on weekends, so loan officers will have to ensure their work plans fit the time frames of rural life.
6. Loan officers must have basic accounting skills and be able to carry out calculations quickly when they start. However, experience with loan appraisal, including cash flow projections and balance sheets, will be built up on the job.
7. Loan officers should have a motorcycle driving licence, as most clients cannot be reached by public transport or walking.

It is quite a challenge to be an agricultural loan officer!

8. *Do you agree that "loan officers are the engine of a financial institution"? Why do people think so?*

9. *Can you define five key skills and personal characteristics that you think a loan officer in your institution should have?*

10. *How important is formal education when hiring loan officers for agricultural lending?*

11. *What are the advantages or disadvantages of training former agricultural extension workers as loan officers?*

In the next lessons, we will use an imaginary financial institution, AGLEND, and an imaginary client, Pedro Crespo, to illustrate many of the points we are making. AGLEND will be represented by this symbol:

Although AGLEND is based on a real life institution, it is important to remember that it is not a model or blue print for all situations. It simply provides you, the reader, with a concrete example to study and from which you may be able to develop solutions that are appropriate to your own context.

Pedro will be represented by this symbol:

We will tell you a little about each of them to round off this lesson.

AGLEND is a financial institution that was founded in the early nineties as a microcredit NGO. In the beginning, its target clientele were micro- and small entrepreneurs in the urban area. However, since the majority of the population in the country live in rural areas, AGLEND started to diversify its portfolio and provide individual loans to rural households in its third year of operations.

AGLEND took a gradual approach by starting to serve rural entrepreneurs outside the agricultural sector first and then, one year later, moving on to farm households and agricultural production. To do this AGLEND altered its lending technology that was originally designed to serve an urban clientele.

AGLEND started its agricultural lending operations in the valleys where good irrigation systems and physical infrastructure were present. From there, it moved on to other regions and now also operates rural branches in the tropical lowlands, the coast and the highlands.

The farm households that get loans from AGLEND primarily produce cereals (maize, wheat, rice etc.), coffee and vegetables. There are also a considerable number of cattle producers (dairy and meat production). However, the majority of borrowers obtain additional income from off-farm economic activities.

AGLEND started with one basic loan product, an “equal monthly instalment” loan. However, they are now introducing more flexible loan terms, allowing repayments with varying amounts and less frequent repayments.

At present, AGLEND’s average loan size is USD500 for crop production and USD1,000 for cattle breeding.

Pedro Crespo

The family Crespo farm at Eagle’s Peak, which is a small place located in an Andean valley, around 15 km away from the district capital. Pedro and his wife, Maria, have 3 children, aged between 15 - 20 years, who live with them on the farm. The only daughter will marry soon and leave the farm. The two sons work occasionally as construction workers in the district capital as does their father Pedro.

The family owns 4 hectares of very fertile land. Two hectares are used for wheat production, one for sunflower and one for maize. In addition, Maria has a small garden close to the house where she cultivates vegetable and flowers that she sells at the market in the district capital.

The family owns two oxen that are used primarily for ploughing. There is also one milk cow and a heifer. In addition, Maria takes care of five hens. The milk and eggs are used just for family consumption and are not sold.