

## RURAL FINANCING AND AGRICULTURAL LENDING IN DEVELOPING COUNTRIES

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### Abstract

Establishment of an effective rural financial system in developing countries has been much discussed over the past decades. During this period, developing countries are undergoing through drastic changes of the agricultural sector, accompanied with decline in agricultural credit supply for borrowers. Lack of access to formal credit and to full financial intermediation services impedes agricultural development and force many rural people to still rely heavily on informal financial arrangements. These sources may be beneficial in some respects but cannot be a substitute for effective banking services.

Issues of high risks and costs are the main attributes of the rural finance markets within the developing countries. Namely, rural financing face distinct challenges that are related to the specific nature of farm production and are associated with the granting of rural and agricultural credits. This paper provides an introduction to the key elements of success in the expansion of lending to rural areas. The problems of high risks and costs are specific issues for agricultural finance and they are concerning both clients and lenders. The first section identifies the common risks in agricultural production that may impact clients' repayment capacity. In its second section, this paper concentrates on the specific issues of lending to agricultural producers. Major attention is given to an assessment of the specific cost and risk barriers that formal lenders face in agricultural lending. In the conclusion remarks, particular attention is given to those aspects that facilitate a better cost and risk management in agricultural lending.

**Key words:** Rural finance; agricultural lending, agricultural lenders, rural finance markets, cost reduction, risk management

### Introduction

Establishment of an effective rural financial system in developing countries has been much discussed over the past decades. During this period, developing countries are undergoing through drastic changes of the agricultural sector, accompanied with decline in agricultural credit supply for borrowers. From other side, common characteristic for developing countries is that in past public policies and investments, industry and services were favored over the agricultural sector. As a result, today there is an evident discrepancy in development of urban and rural areas. In developing countries, the general need for mobilization of financial resources and multiply potentials of rural economy is well recognized. However, development of rural and agricultural financial markets is not an easy task. Being an integral segment of a developing economy, rural financial markets often share similar environmental challenges such as an inhospitable policy, legal and regulatory framework, lack of adequate collateral,

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lack of registered credit history, lack of market information, and income variability among potential clients as any other financial markets<sup>1</sup>.

Additionally, rural areas have some unique characteristics, which make their finance real challenge. By definition, rural areas are remote, low population density spaces, where the distance between clients is great and transportation networks are often poor. In same time, majority of rural population in developing countries still heavily depends on agriculture as a main source of income. The fact that agriculture is widely considered more risky than industry or trade makes the prospect of rural and agricultural finance even more daunting and low income levels of rural and farm households tend to practice impracticably small financial transactions. Issues of high risks and costs are the main attributes of the rural finance markets within the developing countries and in this paper they are explored both from lenders and borrower perspective.

The paper is structured in two sections. The first section identifies who are typical potential clients for rural and agricultural loans and what kind of financial services they need. This paper argues that production, followed by market and price risks are the major factors that may impact clients' repayment capacity. Sources of repayment as well as eligible collateral offers will also be discussed. In addition, rural and agricultural markets have some unique characteristics that impede the supply of finance and the ability of rural households and enterprises to access the financial services they need and they will be integral part of this section.

In its second part, this paper will focus on the distinct challenges that are related to the specific nature of farm production and are associated with the granting of rural and agricultural credits. This section concentrates on the specific issues of lending to agricultural producers. Major attention is given to an assessment of the specific cost and risk barriers that formal lenders face in agricultural lending.

In the conclusion remarks, particular attention is given to those aspects that facilitate a better cost and risk management in rural finance and agricultural lending.

## **Material and method**

This paper examines the rural economy and the rural financial markets in developing countries. The principal objective of the paper is to present in a concise manner, problems of high risks and costs concerning both clients and lenders of rural and agricultural loans. Based on a separate observation, the intention is to explore, both from lenders and borrowers perspective, how they perceive and react to subject matter. The paper primary draws on literature review on rural financing and agricultural lending in developing countries and a desk review of activities in projects related to the subject. Finally, some concluding remarks are provided.

## **Results and discussions**

### **Cost and risks associated with rural clients (borrowers)**

Potential clients for rural and agricultural credits/loans are complex and overlapping blend of rural households, small farmers, agribusinesses and off-farm enterprises. Regarding the primary performed activity, they can all be directly farm and agriculture related businesses

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<sup>1</sup> OECD: "Agricultural Financial and Credit Infrastructure in Transition Economies", Proceeding of OECD Expert Meeting, Moscow, 1999, OECD, 1999, p.16-19.

(input suppliers, farmers, producer groups, local traders and processors); not directly related or non-agriculture related businesses, as well as non-rural agribusinesses (agri-processors, distributors, and exporters located in urban and peri-urban areas). In addition to the variety, potential clients need various financial services. For provision of working capital to finance immediate needs (seasonal needs for inputs, labor and production services), short-term loans are preferred. When capital investments are needed (fixed asset or land acquisition) long-term sources of capital are required. Agriculture enterprises and rural households need other financial services too. Deposit and money transfer services enable rural households to manage crises or to react to a sudden business opportunity, and insurance helps them with risk mitigation from natural and weather disasters, crop failure, transport hazards, family emergency.

The repayment ability of rural and agricultural clients mostly depends on availability of sources for repayment. Typically, sources of repayment for rural and agricultural loans include:

- Crop harvest or sale of animals;
- Sale of processed product to buyer/exporter;
- Microenterprise income;
- Household members' salaries and other earned income;
- Remittances or domestic money transfers;
- Sale of assets.

A typical rural and agriculture finance client is also specific regarding the offered formal collateral. Land, crop harvest, animals, farming equipment, houses and household appliance or personal assets are the usual forms of collateral offered when applying for rural or agricultural loan. In developing countries these types of collateral are sources of many potential problems. Due to unsolved issues with land titling (denationalization, inheritance), land and houses cannot be seized and thus are not accepted as collateral. In many developing countries juridical system is still very ineffective and reluctant to enforce legal contracts, while the settlement of the disputes is a long and slow process. Additionally, many developing countries still don't have lien laws or movable property registers, so the equipment is not accepted as collateral.

Major cost increasing issue is geographic location of rural areas. The dispersion or distance to urban center where most of the financial institution are located increases the transaction cost (transportation and opportunity costs-lost labor days) for the borrower. Rural and agricultural clients are usually located in remote areas, with poorly developed roads or other public infrastructure that negatively affects access to financial institutions and increases the transaction costs.

Generally speaking, rural population face some unique risks and each of these risks could lower the anticipated income and negatively affect their standard of living, ability to provide for themselves and their families, ability to build capital and ability to access financial services they need. Lion share of agriculture in rural economy makes the situation even worst. Namely, risks and uncertainty are pervasive in agricultural production and are considered to be more serious than in most non-farm activities. The severity of risks which rural population meet, vary with the type of the economic activity or farming system, the physical and economic conditions, the prevailing policies, etc., but they are always in close relation with

the organic nature of agricultural products and are generated by the production and the market<sup>1</sup>.

*Production risks:* Weather is major and most pervasive factor causing these risks. A single weather event (drought, excessive rainfall, earthquake or other disaster) affects many people in an area. Alongside with weather is the unpredictable impact of pests, diseases and calamities on agricultural production. Rural households often rely on informal strategies to cope with risk, but these can break down when correlated catastrophic losses take place. This is especially true for less-experienced and ambitious farmers and businessman and in many cases it negatively affects their ability to secure future loans. Additionally, farms and rural households are vulnerable to the cyclical or seasonal nature of the agricultural sector, regardless if their primary activity is agricultural or non-agricultural. Namely, in different time of the year rural clients have different repayment capacity. Generally, harvest season is always a period of positive revenue, while the time before the harvesting is characterized with scarce liquidity. Production losses are also impossible to predict. They can have serious consequences for income-generation and for the loan repayment capacity of the borrower.

*Market and price risks:* Agricultural enterprises are subject to uncertainties in the future market value of their produce and their future income, due to cost and price volatility in local, regional and global markets. Price uncertainty due to market fluctuations is particularly severe where information is lacking and where markets are imperfect, features that are prevalent in the agricultural sector in many developing countries<sup>2</sup>. The relatively long time period between the decision to plant a crop or to start a livestock enterprise and the realization of farm output means that market prices are unknown at the moment when a loan is granted. This problem is even more acute for perennial plants because of the gap of several years between planting and the first harvest. Consequently, the effect of these risks is negatively affecting all other agriculture related businesses as well as non-agricultural rural households and enterprises.

#### Cost and risks associated with rural finance and agricultural lending institutions

One of the biggest challenges that rural and agricultural lenders face, is the problem of high costs that are associated with the granting of small loans. In fact, loan administration costs do not vary by loan amount. By definition small loans are less profitable for a lender, and in the same time, financial transaction costs are high for borrowers. Beside this principal problem, financial institutions also face distinct costs and risks that are related to the specific nature of agricultural production and are associated with the granting of rural and agricultural credits. Typically costs occur because of:

*Dispersed clients:* Long distances between communities and the inadequate rural transportation facilities in many developing countries increase the costs of loan appraisal, loan monitoring and enforcement of loan repayments<sup>3</sup>. In order to lower the transaction cost, lenders use mobile loan officers and/or branch offices but they still have expenses for staff transportation or rural branch network maintenance and supervision. Additionally, decentralization of field operations might be effective in reducing the transaction costs, but in many developing countries their success depends on the local environment, infrastructure conditions and the management skills of the financial institution.

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<sup>1</sup> Robert Peck Christen and Douglas Pearce: "Managing risks and designing products for agricultural microfinance", IFAD publications, august 2005, p.8-10.

<sup>2</sup> Von Pische, John D., Dale Adams and Dordon Downald: "Rural Financial Markets in developing Countries: Their Use and Abuse"; Johns Hopkins University press, Baltimore, 2004, p. 255-261.

<sup>3</sup> Gurgand M: "Rural finance institutions-their outreach and sustainability"; Savings and Development, 20,2, 2006, p.129-166

*Seasonality and loan term structure:* The seasonal nature of agricultural production and the relative long periods before crops can be harvested and sold have direct implications for the financial transaction costs of the lender. Seasonality is also reason for rural and agricultural loans to be often repaid in unbalanced installments. Instead of regular monthly instalments, lenders usually receive one or two loan repayments and thus have more difficult monitoring of repayment capacity and willingness. Moreover, an uneven distribution of the agricultural lending operations over the year increases the fixed costs of personnel to the extent that earnings from lending may not be sufficient to cover them. For rural and agricultural lenders liquidity requirements are also seasonal. High seasonal loan demand increase the price of loanable funds, while in times of low demand, excess liquidity needs to be invested in low or non-earning assets. Seasonal character of the production makes turnover in agricultural sector to be slower compared to other sectors, meaning that financial institutions serving agriculture sector need more working capital.

*Heterogeneity of rural activities:* The diversity in farm and non-farm income-generating activities of rural households requires better knowledge of the rural household financial situation. Loan officers have more information than may be needed in the case of urban lending. This can extend the bank staff time (and expenses) needed for loan appraisal. It may also require the setting of individual loan repayment terms. But providing highly knowledgeable staff is costly and thus rural and agricultural lenders have more expenses for training agricultural loan officers.

Regarding the risks, generally speaking, financial institutions face four major risks<sup>1</sup>:

- *Credit or loan default risk*-refers borrowers who are unable or unwilling to repay the loan principal and to service the interest rate charges;
- *Liquidity risk*-occurs when a bank is not able to meet its cash requirements. Mismatching the term of loan assets and liabilities (sources of loan able funds) exposes banks to high liquidity risks;
- *Interest rate risk*-risk that a loan will decline in value as interest rates change;
- *Foreign exchange risk*-defines exposure to changes in exchange rates which affect international borrowings denominated in foreign currency.

### **Concluding remarks**

Despite all efforts dedicated to development of effective rural financial markets in developing countries, it is firmly believed that there are really not “best” practices that can be applied to all circumstances. Instead, the development of better rural and agricultural lending technologies is seen as a dynamic and ongoing process that guides the lending institution towards meeting the specific demands of the rural clientele and each participant in the process must be fully committed.

Having on mind specifics of rural areas in developing countries and the nature of agriculture, best recommendation for potential clients in to invest in acquiring of risk management techniques and practices. In that manner they will improve their credit worthness and repayment capability, and thus will have better access to needed financial recourses. Managing of external risks through agricultural insurance is strongly recommended too. During the application procedures, borrowers should also insist to be given clear information on the financial conditions of loans and loan repayment obligations. Additionally, group

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<sup>1</sup> B. Klein, R. Meyer, A.Hannig, J. Burnett, M. Fiebig: “Better Practice in Agricultural Lending”; FAO, December 2003, p. 27-33

borrowing (through entity such as a co-operative) or through joint liability or solidarity groups (individual borrowers who are organized in groups) are definitely ideas to consider. Namely, in both cases, group members are collectively responsible for the full and timely repayment of the loans.

Regarding the specific cost and risks that rural and agricultural lenders face, there are some practices that could significantly improve the situation. Recommended ways to reduce the high costs of rural and agricultural loans include standardization of loan products and lending procedures. Main idea is to offer only a few highly standardized loan products. In a same time, since loan officers are expected to serve large number of clients, this approach will increase their productivity and reduce the staff costs. In addition, loan appraisal should include a thorough assessment of the borrower loan repayment capacity and his credit worthiness. Also, external risk factors of farm production should be taken into account. Regarding the risk management, an assessment of the specific risks that are associated with different agricultural production activities is essential in determining the potential risk exposure of lenders. Other recommendations include:

- Collaboration with organizations which know farmers well, reduces client information costs and risks of lenders;
- Agricultural lending should start in production zones that present low risks. Operations can then gradually be expanded to more risky areas;
- Close monitoring of markets and exposure to lending risks is essential for agricultural lenders;
- Close contacts between the lender and the borrower are conducive for an atmosphere of mutual trust that improves credit discipline;
- Agricultural lenders as part of their risk management strategy need to monitor policy and market changes that affect their agricultural clientele;
- Agricultural lending institutions should be free of political interference in their daily management.

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## РУРАЛНО ФИНАНСИРАЊЕ И ПОЉОПРИВРЕДНИ ЗАЈМОВИ У ЗЕМЉАМА У РАЗВОЈУ

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### Резиме

О успостављању ефикасних руралних финансиских система у земљама у развоју се много расправљало током протеклих деценија. Током овог периода, земље у развоју пролазе кроз драстичне промени у пољопривредном сектору, уз пад пољопривредних кредита за снабдевање произвођача. Недостатак формалних кредитних линија и комплетних финансијских услуга посредовања, омета развој пољопривреде и принуђује становнике руралних области да се и даље ослањају на неформалне финансијске аранжмане. Ови извори могу бити од користи у неким аспектима, али не могу бити замена за ефикасне формалне банкарске услуге.

Питања високог ризика и трошкова, главни су атрибути руралних финансијских тржишта у земљама у развоју. Наиме, финансирање руралних области прате специфични изазови проузроковани самом природом пољопривредне производње са којима се подједнако суочавају и зајмодавци и дужници. Овај рад даје увод у кључне елементе успеха у ширењу пласмана кредита и зајмова у руралним областима. Први део идентификује ризике у пољопривредној производњи који могу утицати на клијентову способност отплате. У свом другом делу, овај рад се концентрише на специфична питања кредитирања пољопривредних произвођача. Посебна пажња посвећена је процени специфичних трошкова и ризика којима се суочавају формални кредитори руралних области. У закључку, наглашени су аспекти који олакшавају решавања проблема везаних за високе ризике и трошкове повезаних са пољопривредним кредитима и зајмовима.

**Кључне речи:** рурално финансирање, пољопривредни кредити, кредитори и зајмодавци у пољопривреди, рурална финансиска тржишта, смањење трошкова, управљање ризиком.

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