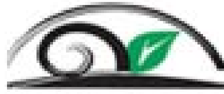

Paving the Way Forward for Rural Finance
An International Conference on Best Practices

Case Study

Agricultural Lending Practices:
Methodologies and Programs

Financing term investments in agriculture: A review of international experiences

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***Abstract:** This paper discusses the main findings of research conducted by FAO on term finance for agriculture. It summarises the main lessons from a number of case studies of providers of term loans, leasing and equity finance for small- and medium-scale farm related investments. The first section briefly introduces the background of the research and highlights the main challenges and hot spots for providing agricultural term finance. The subsequent section illustrates the financial technologies used by the case study institutions to manage risks and transaction costs. The final section points to the crucial role of donors in supporting rural financial institutions and their clients to expand the financial frontier for term finance in rural area, and highlights some avenues for support.*

PART A: INTRODUCTION AND BACKGROUND OF THE RESEARCH

Many investments in agriculture and related downstream activities such as farm machinery, irrigation, land purchase, post-harvest and processing facilities require larger capital investments, which amortise over several years. Other investments, such as the establishment of tree crop plantations, are characterised by long gestation periods. The availability of suitable term finance products which can be adjusted to the amortisation period of the financed asset greatly enhances the ability of farmers to carry out investments. Term finance comprises debt instruments such as term loans and leasing, equity instruments such as term savings, third party equity and venture capital, and combined instruments such as savings-cum-loan products.

However, there has been a decline in lending to agriculture, including term loans, since the mid-1980s, following the general disenchantment of many donors and governments using the "old paradigm" of directed agricultural credit. Since then, many agricultural credit projects have been phased out and many agricultural banks were liquidated in the context of financial sector reforms in many developing countries. This decline has not yet been compensated by other providers of finance. Even in those countries which have implemented financial sector reforms following the "new paradigm" of financial market development, the availability of formal finance, and especially term finance to smaller farmers, is still extremely limited or non-existent. There is a growing consensus amongst donors and practitioners that microfinance with its current focus on small, but highly profitable short term activities is unable to respond to many of the financing requirements and opportunities related to agriculture, and particularly to those requiring larger amounts and longer maturities.[1]

Despite all this, since the departure from the "old paradigm", agricultural term finance has been a widely neglected topic. This can be attributed in part to the dismal performance of term lending under the "old paradigm" of directed and subsidized credit and the success of microfinance under the "new paradigm" which focuses on non-agricultural activities. However, the absence of viable term finance arrangements limits the abilities of entrepreneurial farmers to undertake term investments to enhance the scale or productivity of their farming operation or to exploit new market opportunities. From an aggregate perspective, this may result in slower pace and more uneven patterns of technology adoption and farm enterprise diversification. This weakens the potential of the agricultural sector to contribute to rural development and poverty reduction and respond to the challenges of an increasingly competitive environment.

[1] Even flagships of successful rural and microfinance such as BRI in Indonesia which have made substantial progress in mobilising deposits even in rural areas, focus their lending operations on short term non-agricultural purposes, mainly in urban and peri-urban areas.

The continuing paucity or agricultural term finance has prompted FAO[2] in collaboration with the World Bank[3] to readdress the topic by taking stock of the existing experiences. Given resource limitations and the scarcity of relevant literature, no attempt has been made to develop a comprehensive picture of term finance arrangements around the world. Instead, a pragmatic approach has been chosen by identifying a number of interesting case studies which illustrate how a variety of rural financial institutions (RFIs) have tackled the provision of term finance for agriculture.

Case studies have been conducted in Bolivia, Ghana, India, Indonesia, Madagascar, the Philippines, South Africa, and Thailand. They include different types of RFIs such as agricultural development banks,[4] rural banks,[5] mutualist financial institutions[6] and financial NGOs and other RFIs.[7] The experiences of other RFIs have been assessed through literature review and interview with management and staff.[8] Some experiences of non-financial institutions such as agri-business companies, equipment suppliers and projects in the provision of term finance to farmers have also been reviewed.[9] Summary reports on some of the case studies are presented in the Annexes. A more detailed discussion of the findings and the full version of the case studies are contained in the final report to the World Bank and can be made available on request. [10]

Constraints and challenges for the supply of term finance

The scarcity of examples for successful term finance arrangements in agriculture highlights the **intrinsic** difficulty of this activity as compared to other fields of banking. Agricultural term loans are particularly risky, since they combine the particular risks of agricultural lending[11] with those related to longer terms.

Credit risks increase, since estimating trends in prices, costs, market demand and technical progress becomes more difficult over longer time horizons and the likelihood of systemic risk increases. Accordingly the margin of error inherent in loan appraisal increases proportionately to loan maturity. There is also the risk of technical failure of the investment, e.g. through breakdown of machinery. Finally, larger amounts and longer terms increase moral hazard risks. In practice, banks often respond to these risks by restrictive collateral requirement which many farmers with profitable projects can not meet

***Portfolio risk*:** In view of the larger amounts involved, defaults on term loans have a greater impact on the portfolio quality of a lender. This may lead to higher costs for loss provisioning and affect the rating of the RFI in the capital market, increasing the costs of funds. In order to

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[2]Agricultural Management, Marketing and Rural Finance Service (AGSF) and Investment Centre Division (TCI).

[3] Agriculture and Rural Development Department II, Africa Region.

[4] BAAC (Bank for Agriculture and Agricultural Cooperatives, Thailand) and Land Bank (South Africa).

[5] Rural Bank of Panabo (Phillippines).

[6] Caisses Mutuelles d'Epargne et de Crédit Agricole Mutuels (CECAM, Madagascar), MRCB in India.

[7] Agrocapital, Caja Los Andes, CIDRE and ANED (Bolivia), BASIX (India).

[8] Equity Building Society, rural based SACCOS and Kenya Cooperative Bank (Kenya), BRI (Indonesia), FECECAM (Benin), Credit Rurale de Guinée (Guinea), BNDA (Mali).

[9] Outgrower schemes for oil palm and rubber in Ghana and Indonesia, South African Sugar Association (SASA).

[10] Financing Term Investments in Agriculture: Volume 1: A Review of Relevant Experiences; and Volume 2: Case studies, can be made available on request from the author (frank.hollinger@fao.org)

[11] Examples are the high incidences of systemic risks related to climatic or economic factors or increased moral hazard. risks due to larger loan amounts in combination with inappropriate collateral and often a poor credit culture.

contain portfolio risks, lenders have to limit the share of agricultural term loans in their portfolio. This applies even more if instruments for managing systemic risks such as crop insurance, irrigation or price risk management tools are absent. In case of small RFIs, this may severely restrict the number of term loans in their portfolio.

Risks related to asset liability management: In view of the poor development of capital markets in developing countries, RFIs often have only limited access to longer term funding sources. Transforming short term liabilities into longer term loan assets is a high risk activity and managing liquidity risks, interest rate risks and (in case of international borrowing) foreign exchange risks requires considerable skills.

Transaction costs: Regarding transaction costs, the picture is less clear-cut: On the one hand, the need for more comprehensive appraisal and supervision of larger investments loans imply additional transaction costs.[12] On the other hand, there might be considerable economies of scale in administering larger loans with longer maturities, as compared to short term and micro-loans. Whether the aggregate transaction costs of term loans are below or above the costs of seasonal or micro-lending, may depend on the capability of the lender to establish cost effective procedures for accessing and evaluating information, supervising borrowers, which will be discussed in the next section. Finally, transaction costs might decrease to the extent a lender specialises in term finance and thus by the number of term loans in the total loan portfolio.

Constraints and challenges for the effective demand for term finance

Under the “old paradigm”, absence of term finance was mainly considered as a supply side problem. The channelling of subsidised funds through agricultural banks and cooperatives has often been used as a shortcut for meeting the assumed credit needs of certain target groups or predefined physical investment targets.

The widespread failure of these approaches is *inter alia* attributable to the fact, that many of the risks and transaction costs, which constrain the supply of term finance, do also have an impact on the effective demand.[13] Even experienced farmers with good management skills may be affected by technical failure of the investment: wells may fail, cattle may die or machinery may break down during the critical periods of the agricultural calendar. These risks increase if new technologies or farming activities are to be financed for which the spare parts and other support services might not be readily available and farmer have limited management experience. In view of the absence of insurance markets, farmers have few options to manage systemic risks affecting physical production (droughts, floods, pests, etc.) or profitability (e.g. sudden price declines for produce, increasing costs of inputs, etc.). They normally respond through diversifying into a number of farm and non-farm related activities on a small scale.

Long-term loans are thus a double-edged sword for farmers: on the one hand, they significantly shorten the time period which would be required for farmers to “save up” in order to self finance lumpy investments. Moreover, by allowing farmers to anticipate a part of the projected incremental cash flow to finance the investment costs, the availability of term

[12] Supervision is particularly important if the asset financed has a significant impact on the borrower’s cash flow und thus repayment capacity or serves as main collateral for loan repayment
[13] Effective demand refers to: i) the willingness of farmers to invest their own resources in agricultural term investments; and ii) their ability to repay term loans at cost covering interest rates.

loans might be critical to enable farmers without sufficient side income to invest in lumpy assets with long gestation periods or significant economies of scale. On the other hand, they translate into long-term debts with constant repayment obligations in a high risk environment. Even in case of involuntary default, farmers may lose their assets provided as collateral or their reputation in the community.

Finally, effective demand for term finance is shaped by the profitability of agricultural investments and the macroeconomic environment: The profitability of the agricultural sector is squeezed by high transaction costs, which, by increasing the costs of inputs and services and reducing farm gate prices, impact like a tax on all rural activities. Macroeconomic conditions affect the effective demand and the supply of term finance equally. High and volatile inflation rates make longer term financial planning virtually impossible and drive interest rates to a level beyond the profitability of agricultural term investments. Interest rates are particularly critical for the effective demand for term finance, since the financial costs for the borrower increase exponentially in relation to loan maturity. Small changes in real interest rates may have a decisive impact on the financial viability of investment projects and thus the ability of the client to repay a loan without running into serious risks of decapitalisation. Therefore, the basic assumption underlying the micro-finance industry, that access to loans is more important than its price, is not easily transferable to term finance. Finally, the legal and institutional framework has an impact on the financial frontier for term finance: It determines which type of rural asset can used as collateral and also impacts on the transaction costs related to the registration of these assets as collateral and their foreclosure in case of default.

PART B: MAIN LESSONS FROM THE CASE STUDIES

The case studies represent diverse types of RFIs with different institutional backgrounds: some of them started as microlenders with an urban orientation and eventually diversified into rural and agricultural lending as a response to increasing competition in their previous markets.[14] Others were established in rural areas following the closure of agricultural banks and credit programmes and ventured into term finance to overcome the inability of their conventional micro-finance technologies to meet the financing requirements of more advanced clients, especially those closely linked to the agricultural sector. These comprise both credit-based[15] and savings-based[16] institutions. Despite the differences regarding the types of institution and their agronomic, economic and socio-cultural environments, some interesting lessons can be learned on financial products and procedures developed to manage risks and cut transaction costs. The case studies also shed light on the critical importance of the external environment and public policy support for the emergence of successful and sustainable term finance arrangements.

Importance of a gradual approach

Introduction of term finance products to farmers requires considerable changes in the management of RFIs and their operational procedures. New financing products and technologies have to be introduced and adjusted in order to optimise their ability to manage the specific risks and transaction costs of term finance to farmers. Additional challenges regarding the management of assets and liabilities and the portfolio quality have to be

[14] Examples are Caja Los Andes (Bolivia) and Rural Bank of Panabo (Philippines).
[15] CIDRE (Bolivia), Agrocapital (Bolivia), ANED (Bolivia), BASIX (India).
[16] CECAM (Madagascar), MRCB (India), Caja Los Andes (Bolivia).

mastered. This may imply considerable training needs for existing staff or even the recruitment of additional staff.
The case studies suggest this can best be mastered by adopting a gradual approach. A good knowledge of local conditions and agricultural and rural economics eases the loan appraisal process and helps to understand better the underlying reasons in case of loan default. Good relations with local authorities and community leaders are also important for screening of farmer borrowers and to instil a good loan repayment discipline. Close contacts and long-term relationships with clients are important in order to reduce the financing risks and to lower the costs of obtaining client information and the supervision of borrowers. Lenders should master agricultural seasonal lending first and establish a good farmer and rural clientele base before venturing into agricultural term finance. Though a gradual approach may take time, it helps to minimise losses during an initial trial and error period and is crucial for maintaining the sustainability of the lending institution and optimising demand based term finance products. The selection of suitable regions and offer of a range of demand based financial services and products are two important features of a demand based strategy which will be discussed in some detail below.

Selecting suitable regions

A useful strategy is to start to develop an appropriate agricultural lending technology in regions with a high agricultural potential that present the lowest risks. Once the financial technology is proven, operational efficiency is satisfactory and a pool of profitable clients has been established, the financial institution may gradually expand into other regions.

Most case study institutions operate in regions in proximity to markets and processing enterprises which are well-endowed with basic rural infrastructure such as irrigation and farm-to-market roads. Non-financial support services such as input supply, extension and spare parts for machinery, etc. are normally available. The prevailing credit culture is a further important criterion: lenders tend to avoid locations where other financial institutions have experienced problems with loan repayment. Finally, market research must have revealed the existence of an identified number of farmers with proven skills and investment opportunities, who do not have access to appropriate funding source.

Competition is also an important factor for the selection of regions. A low degree of competition from other financial institutions facilitates assessing the client's debt situation and increases the scope for non-registered rural assets as collateral. Moreover, farmers are less likely to default since they have a stronger incentive to maintain a good relationship and a sound reputation with the lender.[17] But if competition for the better clients builds up also in rural areas, then there is the danger of some clients engaging in multi-borrowing.[18] Over-indebtedness can be the result. Better communication between financial institutions or even the establishment of credit bureaux can help avoid such situations.

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[17] CIDRE has experienced better repayment performance for term loans in more marginal areas, where farmers do not have access to other comparable funding sources. BAAC which has achieved a nationwide outreach also benefits from its position as only formal provider of term loans. The attractive loan terms and the flexible collateral requirements are highly appreciated by rural borrowers.

[18] In Bolivia, high competition in urban areas has prompted some microfinance institutions like Caja Los Andes to diversify into high potential peri-urban and rural areas, which have been underserved since the liquidation of the former state owned agricultural bank. However, several RFIs are now concentrating on the same lower risk areas and increased competition resulted in multi-borrowing of farmers from different sources. Only regulated RFIs have access to the credit bureau at the superintendence of banks while NGOs are important providers of credit. This has limited the feasibility of collateral substitutes such as unregistered titles of land and other rural assets.

More marginal areas further from the cities are only served in a few cases, where, due to agro- ecologic conditions and perishability of the produce, processing enterprises are located in production areas. Geographical isolation can protect the lender from competition, especially if a product requires immediate processing after harvesting. Under such circumstances, even long-term loans for establishment of tree crops such as oil palm, tea or sugar cane may be feasible.

Offering a range of products

For a number of reasons, it is important to offer a variety of financial products including deposit facilities, short-term production and multi-purpose loans and different term finance products. There are important complementarities between savings and short-term loans and term finance products for both RFIs and farmers:

Attractive savings facilities help farmers to accumulate equity to self-finance investments in new activities or to adopt new technologies on a pilot scale before venturing into larger investments funded through debt financing. This allows them to gain management experience and build a track record which facilitates access larger loans with longer maturities for expansion. Moreover, deposit facilities help farmers to accumulate funds in order to make the required equity contribution or down-payments for a term loan or a lease.

Larger term investments often also increase the working capital requirements of the farmer and thus the demand for short term loans. Short- term loans are sometimes directly used to finance term investments, especially those which can be expanded gradually or require staggered disbursements over several periods.[19] For example, the planting of tree crops might be financed by the rolling-over of short term loans under certain circumstances if the farm household has sufficient income from other sources. Using short-term loans for investment purposes might be indicated in unstable environments with high and fluctuating interest rates and for the financing diversification into new and risky activities.

Easy and reliable access to deposit facilities or short-term loans for production or emergency purposes helps farmers to better manage their variable farm household cash flows and to become used to making frequent small loan repayments. Access to emergency loans, credit lines or overdraft facilities may also have an indirect effect on the ability of rural households to self finance investments in productive assets: some of the funds which would normally be kept idle or liquid in order to cope with emergency situations or for unforeseen expenditures, can be used to finance risky start-ups or to complement term loans.

Savings and short-term loans can also help RFIs to screen potential applicants for terms loans. They also strengthen the ties between RFI and farmers and may contribute to enhancing mutual trust within a long-term relationship. This may allow RFIs to relax loan application criteria, for example in regard to collateral, terms and amounts.

The potential for innovative term savings products has not yet been exploited by most RFIs, since most (voluntary) deposits are mobilized as demand deposits combining high liquidity with low returns to the borrower. Term savings products could be designed as savings-cum-

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[19] Asset accumulation through the repeated use of short-term loans is most common in areas where smallholders form part of an organized cash crop sub-sector (e.g. for coffee and tea in Kenya) and where the access to agricultural input and output markets is assured and extension services are also provided.

loan products where a savings plan would enable farmers to apply for a term loan at less stringent conditions. This would, however, require RFIs to ensure that the deposits are safe and that savers receive a positive real return, in particular, on term deposits

Choosing the most appropriate term finance instrument

Three different instruments have been used by the case study institutions to finance term investment in agriculture: term loans, leasing and equity finance.

Term loans are the most widely used instrument since they can finance a wide range of investment purposes and allow a considerable degree of flexibility in designing disbursement and repayment modalities.[20] Moreover, the concept of lending is better known and more readily understood by term finance providers and farmers than is the case with leasing or equity finance. The main bottlenecks relate to the need to fix the repayment schedule based on assumptions at the time of loan appraisal and the difficulties of responding to unforeseen changes, and the need for some tangible collateral, especially in case of longer terms and larger amounts.[21]

Leasing is a popular mechanism in developed countries for financing productive assets such as farm machinery and equipment. The principle of separating the ownership rights from the user rights of an asset has two main potential advantages. Firstly, it may substitute for additional collateral and, secondly, it may provide tax benefits, depending on legislation. In developing countries it is the first of these that is likely to be important.

However, there are considerable difficulties in using leasing for farmers and informal enterprises, particularly in rural areas. In many respects, lessors face similar constraints to lenders, e.g. related to access to long-term funding sources and cash-flow based lease appraisal. Due to the absence of collateral, the need to supervise lessees frequently becomes critical, resulting in high transaction costs. Only two examples could be identified of financial institutions which managed to tackle these constraints for term financing, in these cases for farm machinery, equipment, irrigation pumps and livestock.[22] However, there were additional features to reduce risks, such as high down payments and a focus on leasing new equipment. Both increased the financial cost for farmers, and thus reduced outreach.

Equity finance has two key advantages over both leasing and loan finance: First, it can be adjusted more flexibly to volatile conditions in agriculture and changing profitability and liquidity positions; and second, the investor participates in the management of the enterprise.l This reduces moral hazard problems caused by asymmetric information and helps to provide additional management inputs.

However, there are several difficulties in using equity finance and venture capital in the agricultural sector. Appraisal and monitoring of equity investments require specific skills and are time-consuming and costly tasks. Thus, equity finance is only attractive and feasible for larger enterprises such as agri-business or plantation companies using formalised measures

[20] Transactions can be carried out in cash or in kind, grace periods, the repayment schedule can be adjusted to the cash flow generated by the investment, etc.
[21] In some developing countries, leasing has tax disadvantages, as interest is not subject to VAT, while lease payments, which include interests, are subject to VAT.
[22] ANED in Bolivia and CECAM in Madagascar

for bookkeeping and disclosure of financial statements. Even those large-scale businesses are not considered attractive enough by commercial equity investors, since the profitability of agriculture and agri-business does not compare to other economic sectors, when adjusted for sector risks.

Still, there is an incipient interest by development-oriented state or donor-sponsored institutions in using equity finance as a development finance tool to foster vertical integration of smallholder production with downstream activities, accepting lower than average profitability.[23] In two of the case studies, equity finance has been used as a means to capitalise joint ventures between farmers or workers and private investors in agri-business.[24] Though the evidence does not yet allow stronger conclusions about the success of this approach in terms of financial sustainability, real empowerment of farmers and the conditions for reliability elsewhere, the mechanism seems promising when carefully used.

Selecting clients for term loans and leasing

Role of groups: Most case study institutions provide term loans or leasing to individual farmers. Farmer groups play important roles in screening and supervising clients, procuring inputs and marketing outputs (Rural Bank of Panabo, ANED), or as joint liability mechanisms (BAAC). Only one case study institution (CIDRE) provides loans to pre-existing farmer groups to finance larger scale investments such as irrigation schemes and storage facilities for milk. These investments remove critical constraints related to production and marketing and enhance the scope for subsequent loans to individual farmers with a sound repayment performance.

Income sources: Farmers with a variety of income sources from farm and non-farm related activities are normally preferred clients for term loans. Diversified income sources allow more frequent instalments for loan repayment, reduce the need for a grace period and provide an alternative source for loan repayment in case of lower than anticipated profitability of the investment activity. More specialised farmers receiving their income from one or two main agricultural activities may have difficulties to access loans from RFIs. Exceptions are farmers who form part of a commodity chain characterised by single channel marketing outlets or natural monopsonies which allow making deductions at source for loan repayment (see section on interlinking below).

Experience: Most lenders mainly finance the expansion or renewal of existing activities thus ensuring the client has relevant management experience[25]. The extent to which previous experiences are pre-requisites for a loan, depend also on the size of the investment and the quality of collateral. For smaller equipment, such as power tillers or irrigation pumps, prior working experience requirements are less stringent as long as farmers receive training in their proper use and maintenance.

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[23] This approach was adopted by the Commonwealth Development Corporation (CDC) from the 1960s until the early 1990s to finance agro-industries combined with Nucleus Estate Smallholder schemes in many African and Asian countries in commodities such as sugar, coffee, tea, oil palm and others.

[24] For example, in the Philippines a rural bank has used a venture capital approach to capitalise rice mills as joint ventures with rice farmers. While the banks paid in the initial capitalisation, the farmers gradually purchase shares through deductions from the rice sales proceeds eventually buying out the bank. In South Africa, equity finance is being used for the capitalisation of empowerment projects in a land reform context, in the form of joint ventures between commercial farmers and landless farm labourers in the production of high value export crops.

[25] Start-up finance might be acceptable, if a loan applicant has gained experience as workers on other farms or plantations.

Markets for incremental produce: Loan applicants should have identified marketing outlets. Marketing risks may be lower, if proven farm enterprises are financed, since marketing channels do already exist. However, care has to be taken if a larger number of term loans are provided for a specific activity, since the increase in productivity and output can lead to oversupply, declining prices and even default.[26] Vertical integration is the best way to ensure marketing for incremental produce especially if the processor has a stake in the financing of farm level investments either by providing loans directly or by guaranteeing loan repayment to a bank.

Collateral requirements for term loans

Compared with conventional banks, the case studies show that there is scope for using collateral substitutes such as joint liability mechanisms and co-guarantors, and liens on produce for smaller term loans. Though collateral substitutes have no market value they can be effective in guaranteeing repayment if the farmer has a long standing relationship with the lender and if there are few other sources of finance at comparable terms. Other forms of collateral like warehouse receipts are only of limited use for term loans.

However, as amounts and terms increase, there will be a need for additional collateral. Even if the financial institution considers the foreclosure of collateral only as a last resort, a credible threat of possible loss of assets is important in order to demonstrate the seriousness of the financial institution and to set the basic standards for a good credit discipline behaviour of borrowers. For the same reason, the case study institutions have occasionally taken recourse to legal actions, even if the involved transaction costs exceeded the value of the seized assets. A proper securing of larger term loans with tangible collateral is also necessary from the financial supervisory perspective of the national monetary authorities in order to ensure the health of the overall financial sector

In view of the limitations inherent in the use of conventional collateral (high costs and delays in creating charges, foreclosing and selling), most institutions combine traditional collateral with social collateral. The use of non-traditional collateral like pledging of farm assets and household goods might become problematic in areas with increased competition between banks because farmers may pledge the same asset to different lenders.

Selecting viable term investments

RFI mainly finance investments whose technical and economic feasibility under the specific local or regional conditions has already been proven. In these cases, non-financial support services are usually in place reducing the risks of failure of the investment, e.g. through technical breakdown.[27] The role of RFI lies more in the scaling-up of proven existing activities and technologies, rather than in financing the introduction of new technologies or the diversification into new enterprises. Start-up finance is generally restricted to farmers who can repay the loan out of their existing income, normally from a variety of sources, and who can provide tangible collateral.

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[26] ANED experienced increasing problems of default after the rapid expansion of leasing of irrigation pumps for vegetable production, since the increased production resulted in declining prices in the limited local markets.

[27] For example, farm machinery and equipment are less risky to finance in an environment, where a certain “machine culture” exists and spareparts and repair facilities are readily available, even during peak seasons. In case of tree crops, the availability of quality planting material, extension, fertiliser and pesticides contributes greatly to reducing the risk of failure of the plantation during the immaturity period.

The type and size of the financed investments depend on the characteristics of the lender such as its size, appraisal skills, access to refinance facilities, and on the quality of the available collateral. Most RFIs prefer to finance smaller term investments in order to avoid the concentration of portfolio risk in a few loans and to maximise outreach. Depending on the country and institution, most loans to individual farmers are below US$ 10,000, and only few institutions provide larger loans. These are either large RFIs like BAAC or Land Bank of South Africa with a nationwide coverage and access to a number of funding sources or RFIs which specialised in financing specific types of investments like ANED or CIDRE[28].

The cash flow of the investment has also an important impact on the “bankability” of an investment: most lenders prefer financing investments with no or short gestation periods and a relatively even cash flow. This applies for example for dairy cows or multipurpose equipment which can also be hired or rented out and produce a regular income flow. Only three case study institutions are able to provide long term loans with a grace period for investments with long gestation periods like tree crops.

Investments with significant impact on reducing risks and enhancing profitability related to production and marketing might also be attractive from the lender’s point of view. Irrigation allows farmers to switch to high value crops or to intensify existing production by increasing the number of cropping seasons and protects against draughts. Storage systems can enhance product quality, reduce losses and may allow farmers to sell their produce outside the peak season. These investments may enhance the scope for subsequent deepening and broadening of rural financial markets[29]. However, they often require specific appraisal skills and technical knowledge and large amounts of capital which are beyond the scope of most RFIs.

Finally, the collateral value of the asset financed is also an important criterion. Depending on the legal and institutional environment, investments in land are less risky since they have a high collateral value. This may even apply to farm machinery if it can be properly registered, insured and if a second hand market exists.

Appraising term loans

A good loan appraisal technique is the key for enabling RFI to filter viable proposals out of a number of loan applications. Good loan appraisal techniques allow RFIs to switch to cash-flow lending instead of basing their lending decision mainly on the quality and amount of collateral provided thus expanding the “frontier” of term lending in rural areas.

Loan appraisal methods vary amongst the case study institutions. Some institutions like Caja Los Andes, Rural Bank of Panabo and Equity Building Society use a conservative approach for assessing the repayment capacity of the client: they only consider the existing cash-flow of the farm household plus the incremental expenses related to the investment without taking into account the projected incremental income generated by the investment. This reduces the credit risks related to failure of the investment or fungibility of money in the farm household. Further advantages are lower costs for loan appraisal and supervision of borrowers.

While this approach would be suitable for financing consumption goods, it is not fully appropriate for financing productive investments. Investment loans should include a proper

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[28] ANED’s leasing portfolio is composed of a number of leases of new tractors with a cost of around US$ 20.000

[29] The example of CIDRE has already been mentioned.

investment appraisal and take into account the expected incremental income and expenses in order to structure the repayment schedule. Basing appraisal decisions solely on the existing cash flow would confine the availability of term loans to a minority of farmers with high and diversified existing income. This would limit the developmental impact of term loans since a number of viable investment projects, particularly those including lumpy assets, would remain unfunded.

Most case study institutions carry out a more comprehensive appraisal of the farm household cash flow taking into account both the existing plus the projected incremental cash-flow. The appraisal of investments, including the projection of incremental cash-flow, is more risky and requires specific skills of loan officers, credit committees and branch managers. It is important to base the estimated incremental cash-flow on conservative assumptions. The extent to which the estimated incremental cash flow should be considered in deciding on the loan amount and determining the loan repayment schedule depends on: i) the experience of the financial institution in appraising loan applications for investments, ii) the experience of the farmer with regard to the proposed investment, iii) the types of the collateral provided and iv) the risks related with the investment.

Generally, the "consumption loan-approach" is indicated for financial institutions which are gradually diversifying into agricultural term-lending but have not yet developed the necessary skills to appraise more complex investment proposals. It may also be appropriate for small term loans or to finance start-up investments in new technologies or activities with no proven track record. The investment loan approach can be adopted by more experienced lenders and is particularly important for financing investments which alter the farm income significantly, such as irrigation technology or purchase of land. Successful term lenders have accumulated an internal pool of knowledge and information on technical production parameters, price ranges of main inputs and outputs, other specific risk factors and market trends. They use relatively simple standardised appraisal methods for small term loans and more comprehensive loan appraisal methods as terms and amounts increase.[30]

Structuring loan repayments

The borrower's capacity to repay term loans depends on the extent to which the schedule of loan repayments has been adjusted to the cash flow of his farm household including the investment. The maturity of a term loan depends on the total investment costs in relation to the annual farm household cash flow taking into account possible gestation periods of the investment[31]. However, other parameters such as the inflation and interest rates, the quality of collateral and the type and maturities of funding sources are also important determinants for ability of RFIs to offer term loans. Most case study institutions only offer loan terms up to five years. Only three of them (BAAC, Land Bank and MCRB) are able to offer long-term loans (above five years) and grace periods of several years, e.g. for tree crop development[32]. Grace periods exceeding six months are rarely available. In these cases, the lenders usually

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[30] For example, BAAC uses a simple cash-flow analysis for small term-loans below 500,000 Baht (around US$12,000). For loans between 500,000 Baht and 1 million Baht (US$12,000 to US$24,000) a more comprehensive cash-flow analysis is carried out accompanied by a feasibility study. For larger term-loans above 1 million Baht (above US$24,000) additional indicators are calculated (NPV, IRR and B/C) and a sensitivity analysis is also carried out.

[31] Most lenders limit the loan repayments to a maximum of 30 percent of the farmer's annual income.

[32] These institutions are specialised in agricultural lending and have several decades of experience, a long-established client base and a stable and diversifies funding source.

insist in the payment of interests to ensure a minimum regular contact with the borrower and educe moral hazard risks.

Medium-term loans may not be appropriate for funding larger investments where a major reorganisation of a farm (land development, tree crops) and gestation periods are involved. In these cases, the repayment capacity of the borrower increases over time. This trend is increased by inflation which reduces the real costs for the borrower if loans are not indexed and repayment is made in equal nominal instalments over several years. Though the preference of most lenders for shorter terms might be understandable on moral hazard grounds and to reduce uncertainties, it may increases the risk of default if the repayment schedule is poorly adapted to the borrowers' cash flow. According to successful providers of medium term loans such as the Bolivian case study institutions, lack of access to longer term funding sources has been the main constraint for offering longer terms for viable borrowers.

The frequency of loan repayments is another important issue: Frequent repayments might be preferable from the lenders' point of view since they reduce moral hazard risks and ease liquidity management. However, they might only be feasible in case of investments which create a steady cash-flow[33], or for farmers with additional counter cyclical sources of income, which can be used for loan repayments. However, farm households which depend to a large degree on seasonal income require more flexible treatment[34]. Finally, the high transactions costs for borrowers must be considered, especially in rural areas when repayments at the financial institution itself involve travelling long distances.

Setting interest rates

The level of the interest rate is crucial both from the lenders' and from the borrowers' perspective. Lenders need to cover costs of funds, operational costs and a provision for expected loan losses and a profit if expansion of operations is envisaged. On the other hand, the level of interest rates has a great impact on the financial viability of agricultural investments.

As mentioned earlier, there might be some scope to offer term loans at lower interest rates than short-term loans due to economies of scale in appraising and administering larger amounts. Though term loans require a more sophisticated appraisal and periodic supervision, only one appraisal is needed over several years. Increasing loan amounts and longer maturities may thus lead to declining overall costs of loan appraisal and administration. Thus, risk primes are more important determinants of the level of interest rates fort term loans than transaction costs. However, as mentioned above, risks can only partly be internalised by increasing the interest rate: high interest rates may undermine the repayment capacity of borrowers, attract high-risk clients and thereby increase the credit risk. There appears to be an upper level of interest rates which can be charged for term loans. If risks are perceived as being too high, lenders tend to tighten collateral requirements or do not grant term loans at all instead of raising the interest rate.

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[33] For example dairy cows, tea, farm machinery and transport equipment

[34] ANED, Caja Los Andes and Agrocapital offer the option to vary the amounts and periods of the payment instalments according to the cash-flow throughout the year. Repayment can be made every 2, 3, 4 or 6 months. Different instalments may apply in cases where there are a main and a second harvest, or certain periods with increased household expenditures such as payment of school fees. Generally, the borrower has the option to prepay instalments, thereby reducing his total financial costs.

In practice, most RFIs apply lower interest rates for term loans than for short term loans. However, care must be taken to avoid huge interest rate differentials between both loan types in order to minimize the incentive for loan diversion. Larger and more experienced institutions like MRCB, BAAC and Land Bank offer comparatively low interest rates even while receiving few or no subsidies. Moreover, different interest rates apply according to the risk profile of the client: Clients are placed into different risk categories, based certain criteria such as track record, equity contribution and quality of collateral provided. First time borrowers or farmers with poor collateral have to pay a risk prime, but may get subsequent loans at better conditions. Moreover, most RFIs offer performance based interest rate rebates and refund a part of the interest payments after successful repayment.

Regarding the structure of the interest rate, fixed interest rates are generally preferred since they facilitate the appraisal of term loans and the establishment of a repayment schedule. However, their feasibility depends on the structure of the funding source of the RFI and the macroeconomic environments: Fluctuating inflation and interest rates exposes the lender to a high level of interest rate risks if refinance facilities at fixed rates are unavailable. Thus, the interest rate may have to be revised periodically. In unstable environments, term loans are not advisable, irrespective of the interest rate structure.

Accessing suitable sources of funds

Most case study institution have benefited from concessionary funding sources such as capital injections to strengthen the equity base or access to long-term loans at low costs. These appear to be most critical in the initial stages of developing a term finance portfolio, since they partly compensate for the high initial risks and costs related to the introduction and testing of innovative products and lending procedures. It also avoids having to pass all the costs and risk primes to the clients via high interest rates.

The smaller and younger case study institutions still depend on long term external funds for their term finance portfolio. The larger and more experiences institutions such as BAAC and Land Bank have gradually been able to diversify their liability structure through mobilizing deposits and accessing capital markets through the emission of bonds. Government ownership might have facilitated this process by providing an implicit guarantee to the savers or buyer of bonds.

Ensuring the availability of non-financial support services

As mentioned above, the availability of non-financial support services has an important impact on risks and profitability of term investments. In some cases, RFIs have established cooperation with non-financial institutions like NGOs or equipment suppliers[35].

Other RFIs provide non-financial support services such as BDS, strengthening of producer organisation or extension either directly (CIDRE) or through specialised subsidiary companies (BASIX). The advantages of this approach are lower transaction costs and a control of the quality of the services provided. However, some support services for term investments require specific knowledge which FIs do not always possess or which might be costly to acquire. More importantly, there are related moral hazard risks if the farmers have not freely chosen the type of equipment, etc.

[35] For example, ANED in Bolivia has negotiated price discounts and after sales services such as prolonged guarantees against technical breakdown and sufficient availability of spareparts with suppliers of farm machinery and irrigation equipment. In other areas it works with farmers, who have been trained by a donor funded project in tractor operation and maintenance.

The co-operation with non-financial institutions like equipment suppliers would be more effective, if the latter would share a part of the credit risk. This would ensure the quality of the training and after sales services provided as well as an active participation in monitoring and supervision of borrowers. However, no such example could be identified. Vertical integration provides specific scope for the co-ordination between financial and non-financial support services, including input supply.

Using interlinked transactions

Interlinking credit disbursement in cash or kind with output marketing is a powerful tool to reduce the need for conventional loan collateral and to reduce transaction costs related to loan collection, especially in scarcely populated areas. It has been widely used by non-financial institutions like traders, marketing boards, cooperatives and contract farming schemes for providing seasonal inputs on credit to be recovered through deductions from the produce. Some RFIs provide loans to farmers with tripartite arrangements with marketing or processing enterprises to facilitate repayments through deduction at source.

Interlinked transactions are particular important areas, where other forms of collateral are unavailable, such as in most of Sub Saharan Africa. Though the main role of interlinking is the financing of seasonal working capital needs, it has been used in some cases for financing term investments such as the establishment of perennial crops. Examples are sugar cane growers in South Africa, tea growers in Kenya or oil palm growers in Ghana or Indonesia. There is also a number of mutualist RFIs in Africa which are providing different loan products including term loans to those farmers who are linked to certain export commodity chains[36]. However, only in exceptional cases it can completely substitute for conventional collateral in term lending[37].

Interlinked transactions, especially those involving longer term loans, require a de facto control of the lender over the output to avoid default through outside selling. However, these situations are disappearing, since monopolies related to domestic and export crops have been liberalised in most countries the wake of structural adjustment programmes. In the case of bulky and perishable crops such as palm oil or sugar cane, the need for immediate processing may place processors in a local monopsonistic position in certain areas. However, competition and freeloading are likely to emerge after some time. Another potential weakness of interlinked transactions is a danger of laxness in loan appraisal procedures, if lenders are too sure about repayments through automatic deductions at source. This may lead to over-indebtedness of farmers and declining portfolio quality.[38] Moreover, even a monopsony situation does not protect against default through crop failures or diversion of inputs.[39]

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[36] FECECAM in Benin, Kafo Jiginew and BNDA in Mali provide medium-term loans to cotton farmers; in Kenya, SACCOs and other RFIs such as Equity Building Society provide similar loans to tea, coffee and dairy farmers.

[37] The South African Sugar Association provides medium term loans of up to 7 years to smallholder farmers on communal land. This is possible because sugar cane is bulky and has to be processed within hours after cutting, ensuring the control of the mills over the output.

[38] The Kenya Cooperative Bank has financed a number of coffee factories run by marketing cooperatives. The availability of donor funds and the ability to deduct loan repayment at source have undermined scrutiny in loan appraisal and contributed to oversized projects in an environment of declining international coffee prices.

[39] Diversion of inputs are more likely, if in-kind provision of inputs is the only source of credit and farmers need liquidity for other consumptive and productive purposes.

Vertical integration through joint ventures where farmers acquire shares in processing enterprises may enhance the potential for using interlinked transactions for providing loans and non-financial services to farmers also for non perishable crops like rice. In the Philippines, the Rural Bank of Panabo finances rice mills as joint ventures with farmers through loan and equity finance. A tripartite arrangement between bank, mill and farmers secures the marketing of the produce and allows the provision of inputs and non-financial services such as extension. Production and medium term loans are recovered through deduction at source from the mill. Reliable access to these services and the purchase of shares create a long-term relationship and provide strong incentives for farmers to sell their rice to the mill and repay loans.

PART C: IMPLICATIONS FOR DONORS AND POSSIBLE AREA OF SUPPORT

The case studies show that innovative financing products and technologies have allowed RFIs to make some progress in extending the financial frontier of term finance to small farmers in rural areas. The combination of an enabling environment, a specific institutional mission and external support has been instrumental for these RFIs to successfully engage in term finance. The general paucity of term finance is not only attributable to adverse external conditions, but also to several entry barriers related to the supply side which prevent RFIs to engage in term finance: developing new products and procedures, training and recruiting specialised staff and accessing long–term funding sources imply additional costs. Moreover, the usual "trial and error" period related to the introduction of new financial products increases the likelihood of initial losses which many RFIs are not able or willing to afford. Thus, term finance is not an attractive activity for RFIs, especially if other less risky investment options like short term loans or treasury bills are available. Since the demand for short term loans in urban and peri-urban areas is far from being satisfied in most countries, a "laisser faire" approach is unlikely to result in increased levels of rural term finance in the nearer future.

The case study institutions have benefited from different types and levels of external support: some have been established with public funds with a specific mission to provide agricultural credit and have received considerable donor support for the development of term finance products. They comprise successfully reformed public agricultural development banks[40], but also rural financial institutions which started as NGOs.[41] Other case study institutions initially operating as microfinance institutions have been supported in diversifying their operations into rural areas including the development of agricultural term finance products for rural clients.[42]

However, such support has to be carefully designed and targeted in order to minimise distortions and avoid repeating the failures of the "old paradigm". RFIs should not be forced to engage in term finance and all support measures should be demand driven, gradual and performance based and must respect the autonomy of a financial institution. Moreover, support to financial institutions to develop term finance products has to be part of a broader rural development strategy. It should be complemented by measures to enhance the effective

[40] Crucial for the successful reform of BRI in Indonesia and BAAC in Thailand has been their ability to capitalize on sunk costs such investments in branch networks and staff training. Public ownership of well performing financial institutions may be regarded as an implicit guarantee by savers and thus contribute to their success in deposit mobilization as well as in emitting bonds.

[41] For instance, Agrocapital and CIDRE in Bolivia and CECAM in Madagascar

[42] FECECAM in Benin, Caja Los Andes and ANED in Bolivia, and BASIX in India

demand for term finance, manage systemic risks and improve the general macro-economic and business environment. Following, some areas of donor support will be highlighted.

Development and strengthening of financial institutions

Donor support is especially important during the initial phase, when a RFI starts developing term finance products: Many of the risks are still unknown in the start-up period and the RFI does not yet possess the skills to assess and manage them adequately. Moreover, lack of access to suitable long-term funds is another frequent constraint. Seed funding and technical assistance are required to encourage the development of term finance products, share the associated risks and avoid that all institutional learning costs are transferred to the clients via interest rates. A case could be made for a public good element inherent in setting-up viable term finance instruments in a country as part of the financial infrastructure. Many rural and agricultural term investments have important spill-over effects for rural development in terms of poverty reduction and enhanced competitiveness. Donor may assist RFIs in the following ways:

Developing appropriate products and procedures:

- Carrying out a thorough analysis of the potential demand for term finance
- Developing and pilot testing of suitable financial products and technologies which are geared to address specific high lending risks and transaction costs.
- Training of loan officers and staff of credit committees in the proper appraisal of loan applications; training in accounting, financial management and internal control to ensure a professional management and efficient operations of rural financial institutions during their start-up and consolidation phases.
- Introducing or upgrading the use of management information systems in order to improve individual loan tracking and overall loan portfolio management.
- Opening of new branches with suitable office facilities, introducing mobile banking units, streamlining operational procedures, thus enhancing the outreach potential of financial institutions in rural areas.
- Assisting the establishment of partnerships with non-financial institutions such as equipment suppliers, agri-business, NGOs and government agencies to ensure the provision of complementary services, tri-partite risk sharing arrangements and interlinked transactions.

Mobilization of long-term funds

The ability of rural financial institutions to support agricultural term investments depends to a large extent on the availability of long-term funds mobilized at affordable costs. Direct government or donor financial support in the form of long-term subordinated loans or equity will be especially important for young promising financial institutions during their consolidation phase.

Once, a term finance technology has been successfully introduced, the scaling-up of the term finance portfolio needs to be supported by enlarging and diversifying the sources of funds. Depending on the type of institution and the national circumstances, different avenues could be pursued: Savings based RFIs could be assisted in using a part of their core deposits for funding medium-term loans and in establishing common liquidity pools, for instance by constituting associations or federations of similar institutions. Support to fund mobilization

can take also the form of technical assistance coupled with guarantee mechanisms for developing and providing term savings deposit products, receiving credit lines from commercial banks or accessing capital markets through the issue of debentures and bonds. Through equity investments donors may strengthen the capital base of financial institutions together with the provision of technical assistance in specific areas.

Complementary measures for enhancing outreach and sustainability

In order to allow financial institutions to enhance the outreach of their term finance products, several constraints need to be addressed which limit the profitability of farm related investments and the borrowing capacity of farmers.

Improving basic infrastructure: The case studies show that RFIs are most likely to develop term finance products successfully in areas, which are well endowed with basic infrastructure and non-financial support services. Basic production and marketing infrastructure such as feeder roads, communication systems, markets and water supply greatly enhance the profitability of agriculture by reducing transaction costs. This increases also the scope for developing markets for inputs and outputs and for providing support services such as repair facilities for farm machinery and equipment, veterinarian services, or extension and BDS which, in turn, reduce risks and increase the profitability of agricultural investment. This highlights the crucial importance of donor support to enhance and upgrade rural infrastructure as pre-requisite for expanding the financial frontier for term finance.

Supporting farm diversification and innovation: The case studies show, that RFIs prefer to finance proven technologies and farming activities. Moreover, in several instances client farmers have benefited from training within development projects in the management of new technologies or enterprises. This suggests that donors can play an important role in transferring of new technologies and enterprise diversification. Some seed funding to farmers, possibly in the form of matching grants, might be required to enable farmers to adopt new technologies or activities, since RFIs can not be expected to finance risky start-ups to a significant extent. Relying only on self-finance by farmers would have undesirable distributional effects.

Supporting upstream and downstream activities: For the scaling-up of new technologies or farm enterprises, donors support for term finance should be coordinated with support to upstream and downstream activities: The first would include agri-business development and the establishment of market information systems, the latter support to developing a private sector based supply chain for inputs and investment goods, to ensure the availability of reliable and low cost technology and the related support services.

Improving access to information: This helps both farmers and RFIs to identify profitable investment opportunities and better assess risks and market trends. Examples are market information systems, market research for diversification options or information on new technologies or farm data systems. RFIs would also benefit from improved borrower information systems such as credit bureaus.

Training clients Assessing information is one thing, analysing it another. Thus it is important to strengthen the capacity of farmers to manage and analyse information through extension, BDS, introduction of record keeping and training in financial management skills.

Making risk management tools available: Innovative tools for managing systemic risks such as index and area based crop insurance or price risk management instruments such as forward contracts and put options could contribute to enhancing both supply and effective demand for term finance.

Ensuring an enabling legal and regulatory framework**:** While the importance of prudential external regulation and supervision of financial institutions cannot be disputed, care has to be taken to ensure that the existing regulatory framework takes into account the specific circumstances in which rural financial institutions operate to avoid discouraging them from providing financial services to rural clients. First of all, the loan loss provisioning norms for RFIs should be distinct from those applicable to financial institutions attending urban clients[43]. Second, RFIs should not be subjected to overly rigid minimum reserve requirements, especially if they have access to existing central bank refinance facilities or other external support to face situations of temporary liquidity shortages. The same applies for the limitations on the volume of unsecured lending or the mismatches between the maturity of assets and liabilities, as too strict controls may seriously inhibit term lending.
The availability and the quality of loan collateral from farmers is another important key issue. Measures to improve the situation include: (a) Broadening the range of rural assets which can be used as collateral; (b) strengthening contract enforcement mechanisms and making foreclosure easier and less costly by removing several procedural delays and permitting also non-judicial foreclosure; and (c) the creation of modern and up-to-date property registry systems to facilitate the creation and recording of charges on borrower assets by financial institutions. Moreover, the introduction of leasing is greatly facilitated by a conducive legal and tax environment.

Specific challenges

Providing long-term finance: While the case studies revealed that medium term loans of three to five years can be provided by different types of financial institutions under different environments, the provision of long-term loans for larger and long gestating investments remains the major challenge. Here, a stable macro economic and policy environment and a conducive legal and regulatory framework are most crucial to enhance the viability of long term finance. Moreover, access of financial institutions to long-term funds at low and stable costs is another precondition. In countries with a suitable land tenure regime and reasonable macroeconomic stability, the scope for enhancing mortgage lending could be explored.

Kick-starting arrangements: For larger investments and in less stable environments, the use of equity finance instruments such as specialised venture capital funds could be further explored. Small farmers can be integrated either through joint ventures with agri-business companies or within more conventional contract farming arrangements. The use of matching grants might be needed for the initial capitalisation of farmers' shares in joint ventures. They might also be considered to co-finance investments in irrigation or tree crop development if these are expected to have a high social and economic rate of return, but can not be financed by existing RFIs in a given region. Matching grants might be preferable because they clearly separate a grant element from a loan and thus do not push RFIs into unsustainable lending

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[43] This is because a default in the timely repayment of an agricultural loan may not necessarily mean that it becomes a bad or doubtful loan. Payment delay may be due to weather-related late harvesting or marketing problems arising from the availability of irregular transportation facilities or a weak market infrastructure. Also, external shocks such as drought, floods or pests beyond the control of the farmer may justify the rescheduling of agricultural term loans.

decisions or confuse borrowers about the seriousness of repayment obligations. Moreover, they can be structured in a way which attracts complementary loan finance from RFIs, e.g. by adopting sliding scale principles[44].

Reforming agricultural development banks: The case studies suggest that the size of a RFI impacts on its ability engage in term finance: Large institutions have advantages in managing portfolio risks through diversification across regions, economic sectors and clients while they can still achieve economies of scale in term lending operations which allow the development of specialised term finance products at attractive conditions. Amongst the case studies, BAAC and Land Bank of South Africa have by far the largest term finance portfolio including long-term loans and were also able to diversify their liability structure and access long-term funds in the capital market. The latter is a prerequisite for sustainable term finance and reduces dependence on governments and donor funds. Though most agricultural banks have shown a dismal performance due to management and governance problems, there are some promising examples showing the potential for reform. In view of the paucity of alternative options and their potential comparative advantages as term lenders, the scope for reforming some of the remaining banks should be further explored.

ANNEX: MAIN FEATURES OF CASE STUDY INSTITUTIONS

Rural Bank of Panabo (RBP), Philippines

RBP operates in Southern Mindanao in the Philippines and offers a wide range of products including salary and agricultural production loans, and equity finance for small- and medium-scale agro-industries. The latter was introduced in 1986 as the so called “corporative” concept[45] of equity-financed joint ventures in agro-processing. The key objective was to find a means by which small farmers could become owners of a rice mill, while avoiding the capital and management shortcomings of cooperatives. Through operation of a rice mill farmers would be able to obtain production and investment loans and repay them in kind by delivering *palay* (paddy) direct to the mill. As they are owners of the mill, farmers’ commitment to the facility is strengthened by the receipt of better selling prices and sharing in the dividends.

RBP established the rice mill as a joint venture company called Panabo Agro-Industrial Corporative or PAICOR. The bank together with its shareholders took an initial share of 55 percent. Only the bank paid up in full at the start, to provide the initial investment capital. The farmers paid their shares over a four-year period and continued to increase their shares through deductions from the proceeds of their paddy sales thus gradually buying out the bank. As shareholders, farmers are eligible for loans from RBP through PAICOR, primarily for crop inputs but also for medium-term investments. A key to the success of the “corporative” concept was the financial control of RBP over PAICOR and the quality of management provided during the start-up period. RBP has recently created a specific

[44] For example, the new land reform grant in South Africa increases in proportion to the matching contributions of the farmers, up to a maximum amount per capita. The matching contribution can also take the form of complementary loan finance. It might trigger loan finance by enhancing the equity contribution of the borrower and reducing the gearing ratio. In order to ensure proper investment and loan appraisal, the financial institution should carry the full credit risk.

[45] The term “corporative” has been used to describe the specific features of the joint venture partnership of combining elements of a cooperative with those of a corporation.

foundation with a purpose of replicating the corporative model, using the RBPs resources and a special venture capital facility, created by Land Bank of the Philippines.

Bank for Agriculture and Agricultural Cooperatives (BAAC), Thailand,

BAAC is one of the few examples of successfully reformed agricultural development banks and has achieved huge outreach while maintaining financial viability. After having experienced poor results with lending to small farmers through co-operatives, BAAC has developed an individual lending technology, based on joint-liability groups. Currently, around 5 million farmers (88 percent of all farm households) are borrower clients and 7.6 million have savings accounts. In 1999, 3.5 million farmers were members of 233 000 joint liability groups (JLBs). These are serviced by a dense and highly decentralized network of 586 branches and 882 field offices with a combined total of 13 082 staff.

Initially, BAAC provided mainly short-term loans, due to inadequate financial resources for term lending and a predominant loan demand for seasonal crop loans. Term lending was started in 1975. The growth of the latter has been facilitated by the availability of long-term international loan funds. More than 50 percent of the outstanding loan amounts of BAAC are classified as term loans. Although term loans are not the most profitable financial products of BAAC (which is reflected in the below average repayment rate), they are given a high priority by the institution as a development bank. The lower profitability of term loans has been compensated by high returns from other activities through internal cross subsidisation.

Caja Los Andes (CLA), Bolivia

CLA started in 1992 as a financial NGO called ProCredito. In 1995, it was the first micro-finance institution which received a licence from the Superintendent of Banks to operate as a private financial fund. Since then its loan portfolio has grown vigorously while maintaining a high levels of portfolio quality and operational efficiency. CLA is often quoted as a benchmark for other Bolivian micro-finance institutions.

The products offered by CLA include loans to urban and rural micro-entrepreneurs, gold-based consumer loans, savings accounts, time deposits and housing loans. The total outstanding loan portfolio at the end of 2002 was US$63 million. Some 41 223 borrowers had loans, with an average loan size of US$1 766. Competition in the urban micro-finance markets, and especially the advent of consumer finance companies, prompted CLA to diversify into rural areas. The rural loan portfolio now accounts for 10 percent of the total loan portfolio in 2002. It developed a specific cash-flow based lending technology, tailored to the requirements of farm households. Term loans are provided up to a maximum period of five years and a maximum amount of US$30 000. Approval is dependent on the farmer being able to service the loan from his existing cash-flow. During the recent economic crisis, CLA’s rural portfolio showed better quality than its urban portfolio, mainly based on a lower degree of competition and better credit discipline in rural areas.

Agrocapital, Bolivia,

Agrocapital was established in 1992 by USAID as a financial NGO to provide working and investment capital to qualified small- and medium-sized farmers and non-farm enterprises in rural areas in Bolivia. It was intended to fill the gap left in rural finance by both the closure of the state owned agricultural bank and the urban bias of other financial institutions. It provides short- and medium-term loans to individual farmers which are classified as commercial loans and micro loans. Commercial loans can be up to a maximum value of US$300 000, although they range mainly from US$5 000 to US$50 000, with the average loan size being

US$10 000. The maximum loan duration is five years. Commercial loans must be secured by real-estate collateral. Micro-loans require less sophisticated loan appraisal and no real-estate collateral. The maximum loan size is US$10 000 and the repayment period is up to two years. Loans less than US$5 000 can be secured with personal guarantees and by pledging non-registered assets. Specially trained loan officers have been recruited to supervise micro-loan products. The institution is seeking to be supervised by the Superintendency of Banks in order to broaden access to funds.

Some 63 percent of the outstanding loan amount has a maturity structure of between two and five years, which underlines Agrocapital's continuing focus on provision of term loans for investments. The loans are used mainly for investments in milk and vegetable production, irrigation, farm machinery, trucks and agro-processing. Approximately, two-thirds of total outstanding loans are secured by real-estate mortgage and one-third by personal guarantees (pledging of land and other rural assets). Its strong equity base and the recruitment of specialised loan officers with an agricultural background place it in a strong position as a term lender.

The BASIX-group in India

The BASIX-group consists of a non-bank financial institution and a local area bank which provide loans and a not-for-profit institution which provides technical assistance to rural clients. BASIX combines aspects of traditional banking and micro-finance technology in its operations. It broke bank orthodoxy by introducing cash-flow based instead of collateral-based lending. It also broke with MFI orthodoxy by not dealing exclusively with the poor. BASIX lends for agriculture, including term loans and decided that to be sustainable funding had to come increasingly from commercial sources. Agricultural-term loans are provided for irrigation pumps and wells, as well as for other farm and non-farm related investments, including housing.

Agricultural-term loans are extended directly to individual borrowers, the majority of whom own between 0.5-2 hectares of land. Although lending through equipment suppliers has been attempted, it has not yielded positive results. The BASIX Customer Service Agent (CSA) is recruited locally and has an intimate knowledge of the area and farmers. A term loan will typically only be given following several cycles of short-term lending. Collateral is sought only on loans which exceed US$1 087.

Mulukanoor Co-operative Rural Bank and Marketing Society (MCRB) in India

MRCB was established in 1956 as a multipurpose cooperative. MRCB has now almost 6 000 members, 115 employees, a loan portfolio of Rs.80 million (US$1.73 million) and a turnover of Rs.370 million (US$8.04 million). MCRB operates in 14 villages in Andhra Pradesh (AP). Half the village households here are engaged in farming and are therefore *eligible* to seek membership; some 75 percent have opted to become members.

Approximately 45 percent of its loan portfolio consists of credit for medium- or long-term investments. The cooperative's lending risks are minimised by the provision of integrated and interlinked input supply, credit and marketing services. In addition, borrower loyalty is ensured by sourcing lending from member deposits. MCRB lends only to its 6 000 members who own land and reside in one of the 14 villages covered by MCRB. The client base ranges from small farmers owning less than two hectares (more than 75 percent of the total) to large farmers cultivating more than 10 hectares of land. The majority of term loans for pre- and post-harvest equipment and for plantations such as citrus and mango are extended to the

larger farmer members. Small farmers borrow mainly for cattle, poultry, sheep and other allied activities. Well and well repair loans are distributed across the broad spectrum of members.

Over the 30 years of its existence MRCB has accumulated a large amount of fixed resources, though member shares. This is encouraged through attractive savings rates of 15 percent, whereas the interest rates on loans only amount to 16 percent. This small margin of intermediation is possible through cross-subsidisation from marketing activities.

Centro de Investigación de Desarrollo Regional (CIDRE), Bolivia,

CIDRE is a NGO which started agricultural term finance in 1995. It has adopted quite a different approach to the other Bolivian MFIs. Larger scale investments were deemed necessary to overcome major constraints related to production and marketing of agricultural products. CIDRE provides term loans to established groups of farmers for investments such as small-scale pump irrigation systems or milk cooling facilities. This type of group lending for productive assets serves as an entry point for individual lending for working and investment capital purposes.

CIDRE has benefited from its prior work as a regional socio-economic research centre. Thus it was able to acquire an intimate knowledge of the specific situation and constraints in different sub-regions, and established good-working relations with formal and informal local authorities. It has also benefited from accessing long-term donor funds on concessionary terms. It has been able to pass on the benefit of these favourable terms to its borrowers. CIDRE provides technical assistance and closely supervises investments (e.g. construction of irrigation schemes) and borrowers.

Asociación Nacional Ecuménica de Desarrollo (ANED), Bolivia

ANED is a non-regulated financial institution founded by 11 NGOs working with small farmers in different regions of Bolivia to provide complementary financial services. As such, it has access to concessional funds and enjoys a high degree of flexibility in developing innovative financial products for its target clientele. ANED now has 24 branches in eight of the nine regions in the country. The total loan portfolio at the end of 2000 was US$7.4 million. Slightly more than half of the outstanding amount (including the leasing portfolio) has terms between one and five years. Around 75 percent of the loan portfolio is for agricultural, livestock and agri-business activities. Over 90 percent of the portfolio is located in rural areas.

After long experience with group-based standardised micro-loans, ANED realised the limits of this technology for meeting the needs of its more advanced clients. It first tried to adapt its group lending technology for financing term investments for farmers, but lack of group cohesion and weak collateral led to high default rates. In response to this predicament, ANED introduced term loans and leasing products to individual farmers. Due to the absence of suitable collateral, term loans are limited to three years and a maximum amount of US$3 000, while leasing contracts can be up to US$40 000 for seven years. It is this potential for leasing that is the focus of this case study. The use of leasing to finance farm machinery and irrigation pumps overcomes typical collateral constraints. Close collaboration with equipment suppliers facilitates technical training and after sales services.

Caisses d'Épargne et de Crédit Agricoles Mutuelles (CECAM), Madagascar

The CECAMs are a federation of savings and credit co-operatives. In the early 1990s, with support from the French NGO, FERT, CECAM developed a leasing product for its members. Animals and animal-draft equipment, rural transport and post-harvest equipment are the main items financed. Prior to applying for a lease, the farmer has to become a member of the CECAM and build up a track record through short-term loans. In addition, he/she has to buy a share of at least 5 percent of the loan or lease amount requested. Furthermore, the applications have to be endorsed by local CECAM groups. These groups of 4-9 members are also responsible for supervising borrowers and leasees. The farmer can select the asset himself, but CECAM verifies its value and may conduct veterinary examinations in the case of animals. The farmer has to make a down-payment of 25 percent of the value of the leased item.

CECAM has provided 25 000 leases since 1993, for a total value of 20 billion francs malgaches. Leasing accounts for around 20 percent of the total outstanding portfolio. It has benefited from considerable donor inputs through technical assistance and long-term refinance on concessionary terms.

Land Reform Credit Facility, South Africa

The Land Reform Credit Facility is a wholesale lending facility providing long-term loans, with grace periods, to commercial banks and credit rated investors for financing empowerment projects and joint ventures between black and white farmers.

South African Sugar Association (SASA)

The South African Sugar Association provides a variety of loan products, including an eight-year sugar cane establishment loan, to black, small-scale farmers on communal land. Repayments are effected through deductions by the mills.

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