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Case Study

Rural Finance Innovation Case Study

**Buyer and Supplier Credit to Farmers:
Do Donors have a Role to Play?**

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Introduction

Traders, processors, input suppliers, and exporters are the primary source (alongside moneylenders) of credit to poor agriculture-dependent households. These buyers and suppliers provide credit to farmers as part of input supply and product purchase transactions. They overcome key constraints to lending to farmers—for example, high operating costs, lack of client information, and risk associated with agricultural activities—by linking credit to the provision of other services, such as input supply (fertilizer, seeds etc) and technical advice. In many cases, they also tie credit to subsequent sale of produce. Even in those rural areas where financial markets are shallow and poorly developed, product-market credit may be widespread.

Yet the range of financial products provided in product-markets by buyers and suppliers is narrow. It primarily consists of seasonal credit and short-term advances. Smaller or more remote farmers may have limited market options, may be dependent on a few traders with less favorable credit terms, or may not have access to product-market credit at all. Increased trader activity can lead to credit being provided on better terms. If financial service providers also enter the picture, then the range of financial services available to agriculture-dependent households will also be increased. For small farmers to be good credit risks, they need the technical services, inputs, and sales agreements that form part of the relationships of product market credit, however. If credit is offered by financial institutions rather than through the product-market, then those financial service providers will need to be sure their farmer clients still have access to those non-financial inputs and services.

There is a case for donors to help address product and financial market failures that limit the access of the agriculture-dependent poor to the financial services that they need. Yet any donor intervention in product and financial markets risks distorting or damaging those markets. A complementary, and critical, area for donor support is improving the enabling environment for rural financial service provision.

Buyer and Supplier Credit in Product-Market Systems

Product-market credit is at least as important to farmers as loans from formal or informal financial institutions, but instead is provided by input suppliers, retail traders, itinerant traders, wholesalers, processors, and exporters. Four out of every five rice mills surveyed by the Food and Agriculture Organization (FAO) in India offer advance payments to farmers to cover input costs, with around one half of the total value of the crop covered by such arrangements. Of the fruit and vegetable traders in India surveyed, more than half give credit (in cash or in kind) to farmers. Total amounts outstanding ranged from \$200 to \$1,000 for each trader (Shepherd, 2003). CGAP mapped agricultural markets in Mozambique and found lending arrangements between farmers and commodity-trading companies to be widespread and a critical source of commercialization advances (de Vletter, 2003). In Zimbabwe the number of smallholders who receive input loans from Cottco, a large cotton ginner, exceeds the number of clients of any microfinance institution in the country (Gordon and Goodland, 2000).

Buyers use credit to help secure produce of sufficient quality and quantity. The credit from buyers enables farmers to purchase required inputs. Traders also often tie the credit to sales

agreements.¹ Offering credit as part of trading relationships helps build client loyalty and (mutual) dependence, and reduces the cost of client selection and monitoring over time. Buyers for supermarket chains use input credit to increase their influence over production processes and to ensure quality and food safety standards are met. Local retail stores make advances to farmers during the growing season on the basis of income from future harvests, in the form of goods on credit, or loans for consumption and other household needs.

Product-market credit may be in cash or in kind (mostly in the form of agricultural inputs such as seeds and fertilizer). Credit in the product-market system is closely linked to transactions, and this is evident in the length of typical credit arrangements. They range from just a few days (for stocks from suppliers to traders) to the entire growing season (for input credit to producers). There is often no explicit rate of interest, although rates as high as 5% per month are quoted for input loans from rice traders to farmers in the Philippines (Shepherd, 2003). The average monthly interest rate for in-kind credit to farmers, from traders in the Sindh region of Pakistan, is 5%, charged over six months (the growing season) (Smith et al, 1999).

In lieu of an interest rate, farmers may instead be expected to accept a discount on the price paid for the produce. Traders may also require farmers to extend credit, in return, by accepting delayed payments on purchase. This can result in farmers receiving credit from traders at the start of the season, and then providing credit to traders in turn at the end of the season. In the case of rice farmers in India, loans “from farmers” account for about 30% of the financing requirements of small traders, and involve an implicit interest rate of between 2% and 4% a month (although typical periods are only 15 to 30 days) (Shepherd, 2003).

“Side-selling” (breaking a purchase agreement with a credit provider to sell to another buyer) is common where there are a large number of buyers in a product-market. The existence of many buyers also means that farmers may have alternative sources of credit for the next year, thus making default on credit arrangements less onerous for farmers. In some cases side-selling is so widespread that traders have even stopped providing production credit for certain crops, for example the case of widely-grown and traded crops such as wheat, maize and beans in parts of Chile (Conning, 2000). Where farmers rely on fewer sources of credit and inputs, such as in less accessible rural areas, or for crops with only a few principal buyers, side-selling is less common.

Product-market financial arrangements can be characterized as follows:

Contract farming and outgrower schemes. Contract farming is where a processor or other buyer provides inputs on credit (cash or in kind), linked to a purchase agreement. Repayment of the initial input credit is deducted when the farmer sells the produce. Outgrower schemes are a more integrated form of contract farming, whereby agribusiness has greater control over smallholder production: smallholder producers basically offer their land and labor in return for a package of inputs and extension services.

A key to the success of input credit is how well the credit provider can ensure the repayment of the loan—often through agreed purchase of the output. Contract farming and outgrower schemes reduce the risk of side-selling to other producers by building formal contractual relationships

¹ Also referred to as ‘interlocking’ - providing inputs on credit on the basis of the borrower’s expected harvest.

with the farmers. Similar techniques to those used by microfinance institutions to promote client repayment are also used by some contract farming schemes, such as group liability, close monitoring, and developing strong company-farmer trust.

Box 1. Contract Farming by Supermarket Chains: Hortifruti and CSU

Hortifruti is a wholesaler that supplies the majority of fresh fruit and vegetables to a supermarket chain, Corporacion de Supermercados Unidos (CSU), in Costa Rica. Hortifruti has a pool of about 500 growers in Costa Rica, Honduras, and other countries where the supermarket operates. It works closely with those growers, providing financing, technical assistance in production, post-harvest handling, and packing materials. In return, the farmers sign contracts guaranteeing to sell to Hortifruti. The contract specifies the production calendar, the volume required, and the quality of the produce.

Source: Alvarado and Charmel, 2002

Trader credit. Trader credit can be in the form of inputs provided to farmers or as cash or in-kind advances, based either on repayment at harvest or on agreed purchase. About 75% of trader lending in the Sindh region of Pakistan is in kind, primarily seeds, fertilizer, and pesticide (Smith et al., 1999). Most rice traders in the Philippines offer inputs for production on credit, and sometimes rice as well for family consumption (Shepherd, 2003).

Traders use personal contacts and existing trading relationships as a substitute for collateral, and to reduce the risk of side-selling. Traders may insist on a year of largely cash-based transactions (often funded by moneylenders in the absence of product market credit) before offering credit to farmers, based on their observed performance. In rural Pakistan generally lend to farmers (landowners) under several conditions, and these conditions are also more widely applicable to trader finance (with the exception that explicit interest rates are not always charged):

- Credit should be linked with both input supply (lending in kind) and output (tied to the sale of produce)
- The farmer has to reliably produce a marketable crop surplus
- The farmer must be prepared to pay interest
- Mechanisms must exist that establish the creditworthiness of the farmer, such as personal knowledge of the farmer, and/or having guarantees from trusted third parties. (Smith et al., 1999)

Processors may also channel credit through traders, rather than directly to farmers. Two-thirds of Indian rice traders surveyed by the FAO traded on a commission basis, with funding from millers. Processors may also make use of interlocking credit arrangements with traders to secure farmer produce. Marketing agents (*padhys*) in the Sindh receive credit from cotton gins, on the basis of agreed later sale to those gins (these are known as *cabaro* contracts). The agents provide credit to farmers for inputs, and recover the loans when they purchase seed cotton from the farmers for onward sale to the cotton gins (Dorward et al., 1998).

Is There a Role for Donors?

A role for donors may be justified if there are market failures that result in the poor being excluded from financial services or dependent on a narrow range of credit products and too few

providers. This is the case for many poorer or more remote farmers, who have restricted or unfavorable access to credit from product-market actors and/or financial service providers.

Supplier and buyer credit arrangements facilitate the functioning of product markets, stimulate increased farm productivity through access to inputs, and are accompanied by other “embedded” market services,² such as extension advice. Farmers can also benefit from the market access that credit-based relationships with buyers brings. Yet the volume of credit provided by buyers and suppliers is limited by their own access to funds, and in the case of processors by their processing capacity.

Product-market credit is short-term and transaction-related, and lacks transparency. It is not designed for financing longer-term investments in equipment or property to expand operations, improve quality standards, or start-up new activities. It also does not match well with the range of financial services needed by rural households, which require deposit facilities, access to transfer payments, and credit products for household and emergency needs as well. Donors could fill this critical need by helping build a stronger rural financial sector, with expanded outreach by financial service providers. Financial institutions are also more likely to have the capacity (in terms of reporting systems, financial knowledge, and so on) to be able to scale-up credit provision.

The true cost of credit is difficult for farmers to ascertain, with discounted prices, delayed payments, and other mechanisms used by credit providers instead of or in addition to interest rates. Credit provided by financial institutions is more transparently priced, and can be “unbundled” from an overall package of inputs provided to farmers. Donors can play a role in helping create the conditions for financial service providers to play a more active role in agricultural finance.

Weak or difficult-to-enforce financial and commercial contracts, and lack of available information on potential clients, mean that market players have to rely on trust and/or geographical proximity. This restricts the scale at which market system participants can operate, and concomitantly the range of financing options open to farmers. Donor-supported measures to improve the operating environment for financial service providers and for agricultural product-market participants, seem justified.

There is therefore a potential role for donors in addressing deficiencies in product market credit, if market distortions can be avoided, and also in promoting financial-systems development. Work by CGAP, the International Fund for Agricultural Development (IFAD), the Inter-American Development Bank (IDB), the FAO, GTZ, and others has resulted in relevant lessons learned and emerging approaches that can guide donor responses. Direct intervention in markets is still risky though. An important complement or alternative for donors—that would avoid the risk of damaging markets—is improving the enabling environment for financial services and product-market transactions.

² Embedded services are those provided as part of wider market transactions. In addition to credit, other important embedded services are technical advice and information provision (e.g., on market quality requirements or prices).

Programming and Policy Options

Improved Access to Buyer and Supplier Credit

Intermediaries can develop or broker links between small farmers and buyers and suppliers. An intermediary could facilitate credit transactions and other embedded technical and advisory services. It could also help farmers organize themselves into market-oriented producer associations or cooperatives. The intermediary might even offer temporary financial guarantees to help providers overcome any perceived risk of dealing with small farmers.

The starting point for any credit arrangement between participants in product-markets is the development of a business relationship. These can take some time—and cost—to foster. It also requires initial networks or contacts, which can exclude many smaller and more marginal farmers from access to buyer and supplier credit. The successful experiences of local NGOs (such as FAIDA in Tanzania, supported by Dutch SNV), agribusiness development centers (e.g., ZATAC in Zambia, supported by USAID), and consultancy firms (such as Fintrac in Honduras), point to a legitimate role for a third party to broker business relationships for small farmers.

By forming associations or cooperatives, small farmers can improve their market position. If they together improve the scale—and quality—of their production, they may be able to access better market channels with higher returns and volume, and associated credit arrangements, and they can also present a more attractive credit risk. Producer associations help lower transactions costs for processors and other buyers because they can deal with one party rather than many scattered, individual farmers. Similarly, the cost and complexity of distributing inputs to, collecting crops from, and keeping records on an association is much lower. Extension and technical support services to increase or enhance small farmer production to meet buyers' requirements, can be provided more efficiently to one entity rather than to individuals. The association itself can help hold its members to quality and production standards. Formalized associations and cooperatives also allow for more effective contracts and contract enforcement, which can decrease the risk of side-selling.

Many private processors and exporters have recognized the potential offered by producer associations. Outgrower associations are widely promoted by agribusiness companies in Mozambique, for example, as described in Box 2.

Box 2. Producer Associations Linked to Processors and Exporters

Outgrower associations have been promoted by processors and buyers in the cotton sector in Mozambique since about 1998. The creation of associations is stimulated by 5% premiums paid on prices. (Although when cotton prices slumped last year, premiums were not always paid.) Association sizes generally range from 20–40 members. Lomaco, a cotton gin company, and Mocotex, which has now taken it over, have initiated hundreds of producer associations in recent years in the districts of Montepuez, Balama, and Namuno. Other companies have followed this lead, including a US tobacco company, Stancom, which works with 50 farmers’ “clubs.”

V&M Grain Company is a leading domestic agribusiness company in Mozambique. V&M offers interest-free advances to small and large traders, as well as to umbrella groups of producer associations (such as fora or unions). An overall repayment rate of 98% is reported. Advances to producer associations are based on 50% of the crop value at an agreed price, with no other collateral arrangements, and are provided for up to 20 days. The umbrella groups use a portion of the advance to collectively transport their produce to a warehouse, and the rest of the advance is distributed to producer associations who further distribute it to their producer members. Loans average between \$5,000 to \$10,000. Approximately 10% of the overall value of trade is reportedly lost in side-sales, where the advance is taken from V&M, but goods are sold to someone else.

Sources: de Vletter (2003); CGAP Agricultural Microfinance Provider Profile: V&M (forthcoming, 2003).

Producer associations in Mozambique noted several disadvantages with processor and trader credit, however. Advances can lock associations into an agreement that may not be optimal in terms of the prevailing market situation. Funds may not be available in the early part of the trading cycle, resulting in missed opportunities either in terms of prices or supply availability. Only short-term loans are provided. Often traders arrive late for produce that they know has already been purchased, but farmers are still held responsible for any deterioration in produce as a result of the delay (associations often do not have adequate storage facilities). One-off donor subsidies to associations towards the cost of constructing warehouses, or basic processing facilities, can help small farmer associations add value to their produce, secure better prices, and cope with such buyer practices.

Smaller and more marginal (i.e. less attractive) farmers may also need technical services and training in order to set-up effective associations. These higher up-front costs may well be more than private sector actors are prepared to pay. Donor-funded support to cover these costs can therefore have beneficial impact. Donors should contract specialist intermediaries, such as the Cooperative League of the USA (CLUSA) and ACDI/VOCA to give just two examples, to provide training, systems support, and other initial assistance to farmers wishing to create producer associations. CLUSA’s approach to helping create and strengthen producer associations in southern Africa, and linking them to credit and markets, uses decentralized field staff who give on-site training, consultation services, and support to producer associations. They also use participatory training that teaches the skills necessary to operate market-oriented associations, such as managing budgets and contracts.

Box 3. Linking Small Farmers to Export Markets: Agriflora in Zambia

Agriflora in Zambia is an example of small farmers being linked to export markets through farmer associations and focused donor support. Agriflora is a private exporter of flowers, fruits, and vegetables to the European and Australian markets. The company runs its own farms in Zambia and also buys produce from nearby farmers, both small and large. In 2001, Agriflora had annual sales of \$30 million and extended input credit to 7,000 Zambian small and large farmers.

CLUSA helped set-up the farmer cooperatives to make small farmers more attractive to Agriflora. Three hundred smallholders in eight cooperatives now have supply contracts with Agriflora. Funding from NORAD helped cover the initial costs of forming the cooperatives and establishing collection centers with a refrigerated container and input store for each cooperative. Agriflora extends input credit, using the group-guarantee methodology, to the cooperatives. Access to irrigation credit totaling \$600,000 has been facilitated by Agriflora in conjunction with USAID and the Zambia Agribusiness Technical Assistance Center (ZATAC).

Source: Interview with Jacob Mwale, Agriflora (2002); CGAP Agricultural Microfinance Provider Profile: Agriflora (forthcoming, 2003).

Supporting increased levels of buyer and supplier activity and competition can result in improved access to credit, at better terms for farmers. Traders who operate in remote regions or who deal with poorer clients may not be seen as attractive clients by wholesalers and input suppliers due to their low trading volumes. As a result, they may not be offered inventory on short-term credit. Access to inputs for farmers, and to credit arrangements for those inputs, is dependent, to a large degree, on the level of trader activity in their area.

CARE developed its AGENT program in Zimbabwe to stimulate trader activity in less-favored rural areas; and this program has since been copied both by other NGOs and by the private sector. The AGENT program compensates for market failure and demonstrates that small traders (and indirectly the small farmers that they trade with, too) can be viable market-system participants. Small-scale traders were viewed as unattractive and risky by input distributors and wholesalers, and this lack of supplier credit available to small traders restricted their viability. The resulting low density of traders led to unfavorable prices for farmers, who had to pay double the prices for inputs, even for distances as low as 100 km from supply sources. The AGENT program built up a network of rural traders that gives access for smallholder farmers to input and output markets on improved terms, with credit as the vital market lubricant.

Box 4. Building Trader Networks: AGENT in Zimbabwe

A temporary *guarantee scheme* is used initially to attract wholesalers/distributors and convince them to give traders inventory on credit, which is backed by this guarantee. AGENT also works with traders to advance their business skills. Assistance and guarantees are then reduced and gradually eliminated, and traders are expected to develop independent commercial relationships with suppliers after one agricultural season of trading.

Since 1995, a total of 580 traders have been set-up and linked to the private sector, and 60% were fully absorbed into the private sector distribution network. Farmers have also benefited from the increased product range offered through the program, such as a wider variety of seed and fertilizer, basic processing and irrigation equipment, and general construction materials. Zimbabwe Fertilizer Company (ZFC), the largest fertilizer manufacturer in Zimbabwe, has since launched its own input distribution system modeled on the AGENT program. Eleven private-sector companies have worked with the program and have subsequently continued to work with the AGENT traders. Other NGOs have also adopted and adapted the AGENT model and developed their own schemes for the benefit of smallholder farmers.

Sources: Pearce D, 2002, AGENT Case Study, Market Access Elective Case Study, BDS 2002 Training Course; Sharma D, 2002, 'AGENT, CARE Zimbabwe. Overview', Note to Author.

The Rural Enterprise Agribusiness Promotion Project (REAP) is a CARE program in Kenya that helps small farmers gain access to markets through a range of services and interventions, including the use of credit guarantees. Smallholder farmers are organized into legally registered production units with their own management capacity. The donor-supported REAP program provides resources to help the farmers establish irrigation infrastructure, and offers input supply and technical assistance to enable them to deliver produce that meets export market standards. A Central Management Unit (CMU), created by the REAP project, provides services to the production units for a management fee. These services include technical production assistance, negotiating input and output market links (farmer units sell through the market system, not through the project), and facilitating access to credit. The CMU runs a loan fund (the “Input Supply Loan Fund”), which either directly provides loans to farmer units or guarantees credit from private-sector buyers and processors. The private sector is eventually expected to deal directly with the production units without this guarantee. The loan fund enables farmers to get more flexible and diverse loans in addition to standard seasonal input credit (for example, longer-term irrigation infrastructure loans).

The REAP example further illustrates the potential of grouping small farmers into cohesive units or associations, and also serves to emphasize the close relationship between financial and non-financial services in agriculture. Non-financial technical and advisory services are needed to improve the attractiveness of small farmers to credit providers. While non-financial and financial services are both necessary for agricultural lending to be viable, they should be operationally separated in order to improve efficiency, transparency, scale, and the range of financial services available to small farmers.

Promoting Financial Service Provider Involvement in Agricultural Microfinance

Financial institutions are specialized in providing financial services, whereas traders and processors lack the expertise and systems to do so as effectively. By unbundling credit from input-supply transactions, credit products can be made more transparent and efficient, with explicit interest rates and terms. This encourages more competition to improve credit product design and farmers get more choice. Buyers and suppliers may be able to set-up specialized financial service entities to conduct credit operations. More active involvement of financial service providers (such as credit unions, banks, or microfinance NGOs) develops and deepens rural financial markets, making a more diverse range of financial products available to agriculture-dependent households.

Increased financial institution activity in rural areas could also benefit farmers indirectly through traders and processors being able to borrow larger amounts at better terms. Eased liquidity constraints for traders and processors could translate into increased competition for farmer supply, and therefore to improved credit access and terms.

It can be difficult to completely separate financial and non-financial services to farmers. Financial institutions may, as a result, lose access to the non-financial components of buyer and supplier relationships that improve the farmers' creditworthiness and make lending feasible (such as access to technical and production advice, sales agreements, and client information held by buyers). Product-market actors, on the other hand, may lose a key mechanism used to "guarantee" a supply of produce from farmers.

Links between financial and product-market actors offer a way to harness the respective advantages of both. Such arrangements can lower the selection and monitoring costs for the financial service provider, and also reduce lending risk. Through the involvement of buyers, processors, and/or input suppliers, financial institutions can help ensure that clients have a sales outlet, timely access to the required inputs, and appropriate product-related advice. These linkage arrangements open up support options for donors—either through intermediaries, agencies specialized in market development, or directly to financial institutions. Linkages can take various forms, including:

- A specialized NGO or consulting firm developing embedded services and stimulating market linkages through a temporary donor contract
- Brokers that either provide or facilitate access to non-financial inputs (including marketing) to small farmers, and negotiate access to credit on behalf of those farmers
- Agents that select and monitor clients on behalf of a financial institution through a contractual or ownership arrangement, and either directly provide or facilitate non-financial inputs to the selected client farmers.
- Partnership arrangements between processors and financial institutions
- Producer associations as clients of financial service providers.

Specialized firms or NGOs can stimulate embedded services in product markets, link-up farmers to sources of finance, and improve their attractiveness to both financial and product-market credit providers. Short-term contracts from donors to specialized intermediaries can have positive impacts on long-term access to credit for farmers. But for this to occur, the intermediary

should not take the easier short-term route of providing its own services directly to farmers. Rather, they should develop the capacity of existing market actors to provide enhanced embedded services, and create linkages for small farmers to new (financial and non-financial) service providers.

Fintrac is a consulting firm that has specialized capacity in market linkages and supporting embedded services. USAID subcontracted Fintrac in Honduras to develop market linkages and embedded service providers in the watermelon-market system, for the benefit of small farmers. Fintrac linked farmers to commercial bank financing and to improved product-market opportunities. A domestic bank now lends to these farmers for inputs and labor, on the condition that the farmers join Fintrac's technical assistance program (which increases yields and quality). Fintrac negotiates fixed-price contracts with processors and foreign buyers, and the farmers purchase crop insurance (which is facilitated by Fintrac). The long-term sustainability of these linkages will depend on whether actors in the watermelon market system (input suppliers, transporters, and buyers) continue to provide higher quality inputs and technical advice. If the improved yields, profitability, and sales contracts are sustained, then the farmers should continue to be attractive to financial service providers.

Intermediaries can also play a more sustainable broker role within the market system, by linking small farmers to markets, inputs, and credit. An example of a product-market service provider that works directly with farmers, and facilitates access to financial institution credit, is Critecna in Peru:

Box 5. Interlinked Financing Arrangement: Critecna in Peru

Critecna is a firm that works with small cotton farmers. The farmers sign a management contract with Critecna, which buys and markets their produce, and provides inputs relatively cheaply. Critecna also links them to financing sources. Prior to its involvement, poor repayment by farmers was endemic, and financial institutions were wary of financing farmers. Critecna now negotiates loans on behalf of the farmers, with the farmers providing loan guarantees in the form of land.

Critecna subtracts loan payments and fees for technical assistance and management at point of sale, and then splits net profits equally. Interest on loans is 24% from the bank, with a balloon payment at harvest. Total costs, including Critecna services, raise the loan cost to an effective interest rate of 30%. Critecna is reportedly profitable, with very high repayment rates in most years.

Sources: Alvarado, et al (2000); Wenner (2001).

Financial institutions can use contractual or ownership arrangements with providers of product-related technical assistance, to ensure that small farmer clients receive the inputs and advice needed to be good credit risks, and to lower their costs of selecting and monitoring them. Banco Wiese in Peru had such an arrangement with a technical assistance provider, CES Solidaridad. CES Solidaridad (an NGO) acted as an agent, or broker, for Banco Wiese since 1994 (although a recent takeover of Banco Wiese has stopped this scheme). CES Solidaridad selected and provided technical assistance to groups of two or three farmers located close to each other (to reduce supervision costs), and Banco Wiese provided the loans. CES Solidaridad gave the bank confidence in the clients and compensated for its lack of skill (and high cost) in identifying and assessing small farmer clients. CES Solidaridad took a 2.5% commission for each loan, and an

additional 1.5% after successful loan repayment. Banco Wiese charged a 26% interest rate. The bank took the primary risk, and asked clients for collateral/hipoteca as a guarantee. This scheme had excellent repayment performance, and by 1998 had an outstanding loan portfolio of more than \$3 million (Alvarado et al., 2000).

A similar example is Sogebank in Haiti, which has over 5,600 active clients after three years and is still expanding.

Box 6. Specialized Loan Service Company: Sogesol in Haiti

Sogebank created a specialized loan-service company, Sogesol, in order to move into micro-lending in a viable manner (i.e. flexible and low cost, compared to the bank's conventional operations). Sogesol's staff originates and manages loans that are booked by Sogebank. Sogesol's revenue is a variable fee equal to credit revenues minus funding cost, transaction fee, loan provisions, and support service fee. In order to adapt this model for agricultural microlending, an agricultural loan-service company could also provide (directly or indirectly) extension services to farmer clients, in addition to client selection and monitoring.

The IDB gave a \$300,000 grant to fund feasibility studies, staff training, and the design of Sogesol. A consulting firm, Bannock, wrote the business plan, and Accion International, an NGO, developed the information systems, procedures, and lending methodology for Sogesol, as well as hiring and training staff. Accion International is also an investor in Sogesol through its Gateway investment fund.

Source: Boisson (2001).

Agricultural processors and financial service providers can also act in partnership. A newly emerging partner arrangement between a financial service provider and a processor firm is the one between PRIDE AFRICA and Monsanto, in Kenya. This pilot scheme has focused on maize, and to date has only worked with a very small number of farmers (20). Monsanto identifies farmers and organizes them into small groups—almost like solidarity lending groups. Monsanto's demonstration/field workers then provide training and technical assistance to those groups. Farmers are required to make a savings deposit (loan collateral) of 25% of the loan requirement (approximately US \$25), with PRIDE AFRICA. The interest on in-kind input loans—disbursed through selected traders/stockists—is a flat rate of 25%, with a balloon repayment of consolidated principal and interest after harvest (generally a four-to-six month period). Disbursements are made in two tranches, in line with when farmers need inputs (Ayee, 2002).

Donor support for this pilot program has been a small start-up grant of \$45,000. Scaling-up the program this year (to 500 farmers) may require more donor support, as may the additional plans to introduce savings deposits and to introduce an electronic information system linking farmers to price information and market opportunities. The scheme will also diversify from maize to horticultural crops.

Allocating lending risk between financial and non-financial service providers can be a challenge for linkages. If the financial institution takes all the lending risk, without a mechanism (whether contractual, or through fees based on repayment) to ensure that its partner or agent is in some way also held responsible, then such linkages and partnerships may fail. Banco Wiese, for

example, took the lending risk, but made CES Solidaridad's fees partly contingent on full client repayment. In the case of Critecna, the client farmers offer their own land as collateral to the bank, and the agent, Critecna, uses its good reputation, based on effective technical services and marketing, to help facilitate access of farmers to bank loans.

Donors can also promote linkages through producer associations, which can have the additional advantage of an enhanced negotiating position, compared to individual small farmers, in market or financial transactions. Offering financial services to producer associations can lower costs (one large client rather than many small ones), and associations may also have more acceptable collateral. This approach is used by ACDI/VOCA throughout the former Soviet Union, with partner financial institutions providing retail lending to farmer cooperatives, and also wholesale lending to credit cooperatives with farmer members. A further example is GAPI, a financial institution in Mozambique that has initiated lending to farmer associations supported by CLUSA.

Box 7. Producer Associations as Clients of a Financial Institution: GAPI and CLUSA in Mozambique

GAPI offers investment and working capital loans to fora (federations of associations) of small farmers and small and micro-enterprises. There are approximately 300 farmers in each forum (30 per association; 10 associations in each forum). GAPI collaborates with CLUSA to set-up and register these fora, with registration costs covered by donor funding. Loans are secured through a solidarity group-like guarantee between the participating fora. The fora can borrow any amount, sanctioned by the group, based on their needs. Loan monitoring is done through credit-management committees formed at the forum level and CLUSA/GAPI representatives.

Each fora on-lends to its member associations, who collect the produce from their individual members and other area farmers and deliver it to the forum in return for the loan. About 80% of the profits from the sale of produce are handed back to the associations—the remaining 20% of the profits are kept by the forum as interest payments and to cover expenses. An interest rate of 3% per month is charged for these loans on a declining balance. The length of the loans is between three and four months. Repayment is flexible—interest is due monthly, and the principal can be repaid anytime. A total of \$93,600 was disbursed to 24 fora during the first trading season in 2002, and \$34,000 was disbursed to 13 fora in the second trading season that year.

Sources: de Vletter (2003); CGAP Agricultural Microfinance Provider Profile: GAPI (forthcoming, 2003).

Lending by GAPI to producer associations in Mozambique supported by CLUSA has opened up other, longer-term forms of commercialization credit that allow associations to choose their markets. Compared to trader and processor credit, GAPI loans are not tied to a sales agreement, loan amounts are flexible, and loan terms are longer.

An alternative to financial institutions providing production credit to small farmers is processors and wholesalers creating financial entities in order to secure efficiency, specialization, and scale advantages in providing finance. Some processors in Mexico are transforming their lending operations into non-deposit taking financial institutions (“SOFOLLES”) dedicated to agricultural finance, with support from FIRA, the Bank of Mexico-coordinated Agro-Fishing and Rural Infrastructure Fund (Buchenau, pers. comm.). Trisan S.A., a wholesaler of agrochemicals in

Costa Rica, formed Financiera Trisan as a finance company in 1987, in order to provide quicker and lower cost access to finance for farmers and retailers:

Box 8. A Supplier setting-up a Finance Company: Financiera Trisan, Costa Rica

Financiera Trisan developed a credit card for those retailers of agricultural inputs and individual agricultural producers that it supplied that had predictable cash flows. The credit card was intended to lower transaction costs and increase credit sales volumes. This scheme has allowed Trisan S.A. to evolve from providing supplier credit to providing a wider range of finance through a credit card that can be used with a range of rural merchants (including input stores, petrol stations, auto repair shops). Financiera Trisan developed two types of cards: *Agrimax*, for input retailers and farmers with regular income (30 day billing cycles are offered), and *Maxicuenta*, for farmers who have good credit and seasonal cash flows (allows balloon repayments after harvest)

This credit card scheme was successful: by 1999, Trisan had over 3,600 credit cards in the field, and the Agrimax card had loans outstanding of \$4.7 million. However, two factors have caused Trisan to rethink its credit card business: a government debt pardon scheme hit repayment severely, and the Superintendency for Banks (SUGEF) deemed that Trisan's administrative costs and delinquency rates too high for banking industry standards, and needed lowered. Repayment levels have plummeted after the introduction of the debt pardon scheme; delinquency rates reached as high as 25%, and are still around 15%. Since 1999 over 2,200 accounts have been written-off.

As a result, the company has been gradually shifting the Agrimax card into a smart card based system. The smart card product is more flexible with regard to interest rates, loan term, and repayment schedule, enabling Trisan to provide different models of credit (unlike the standardized Visa model followed earlier) and better manage lending risk. The volume of smart-card based credit has risen from 8.5% in 2001 to 13.7% by September 2002 and the delinquency rates on these accounts are reported to be less than a third of the traditional card.

Sources: Wenner (2001), CGAP Agricultural Microfinance Provider Profile: Financiera Trisan (forthcoming, 2003), and Communication with Trisan Director.

While the necessary communications and electricity infrastructure for introducing credit card schemes may not exist in less favored rural areas, pre-approved credit lines can still offer easier and quicker access for short-term finance than individually-approved loans. By establishing finance companies or other such specialized financial service entities, processors and wholesalers can offer credit more efficiently and transparently, and their knowledge of the product-market and links to non-financial inputs and services may give them an advantage over other financial service institutions.

Improved Operating Environment for Financial Services

While targeted support for individual models and linkages can be effective, a more systematic response is to improve the operating environment for financial and product-market operations. Donors can work with governments, the private sector, NGOs, and communities to build an enabling environment for product-market credit providers and for formal and informal financial institutions. Government interference in agricultural markets has been reduced by the elimination of parastatals and a reduction in direct subsidies, but political influence over agricultural credit is still a threat and inhibits involvement of financial service providers in agricultural lending. Weak

legal and judiciary systems make enforcement of financial and commercial contracts difficult or expensive, client information is not easily available, and infrastructure and services in many rural areas are deficient. These factors have inhibited financial institutions from entering the field, have forced farmers to overly rely on transaction-related credit through product-market relationships, and have also contributed to problems with strategic default on tied credit arrangements.

More streamlined and affordable collateral registration procedures, with functioning pledge and property registries, would make increased lending outside of tied credit arrangements and existing trade relationships more feasible. The risk of side-selling within such arrangements could also be reduced, with crop liens easier to enforce, and a more credible threat of executing any collateral. The capacity of courts to process claims, and any bias towards the debtor rather than the creditor, would need to be addressed in parallel though.

Mechanisms for sharing client information can enable providers to lower their default risk. A credit bureau could be designed to facilitate the exchange of negative client lists between both financial and non-financial credit providers, for example. If credit providers can find out if clients have defaulted in previous years, they can better prevent side-selling, and clients have more incentive to honor contracts in situations where there are many competing buyers.

An improved framework for agreements between buyers and small farmers can lead to more favorable credit arrangements for small farmers. For example, standard contracts, mechanisms for conflict resolution, regulations for collective bargaining, and legislative amendments to existing contracts, can all be effective.³ One way of achieving better terms for market relationships is by supporting organizations that represent farmers, such as NASFAM (see Box 9).

Box 9. Improved Market Position for Small Farmers: NASFAM in Malawi

NASFAM, the National Smallholder Farmers' Association of Malawi, is an umbrella association for farmers' clubs and associations (with over 90,000 members in total). Through advocacy and negotiation for institutional reforms to promote market access, NASFAM has been able to renegotiate the terms of market involvement for small farmers in crops such as tobacco and vegetables.

Small farmers now have standard contracts with buyers and transporters. Fair entry onto the tobacco-auction floor was negotiated on their behalf by NASFAM. Small farmers are now represented in the tobacco-industry associations, which gave them a voice in formulating the liberalization policies and new commercial deals. NASFAM also taught the small farmers how to negotiate with buyers.

Source: Pearce D, 2002, NASFAM Case Study, Market Access Elective Case Study, BDS 2002 Training Course (unpublished).

Price and yield risk are structural constraints to lending to farmers without diversified income sources. The World Bank's Commodity Risk Management Group is working to make risk

³ These measures were also recommended in the Norwegian Agency for Development Cooperation's *Private Sector Development in Zambia, 2002*.

management instruments for price and weather risk that are available mainly through international markets, more accessible. Pilots have been established with farmer cooperatives, and negotiations are underway with trading companies. Hedging options that reduce a credit provider's exposure to loss from default caused by bad weather or price fluctuations could allow financial institutions to extend the proportion and scale of their lending to agriculture-dependent households.

Better transport and communications infrastructure leads to easier access to information and lower transport and operating costs. In addition to requesting donor support for cooperative development and to longer-term credit, Agriflora in Zambia also suggests that donors helping fund the construction and repair of infrastructure (irrigation, roads, etc.) would lower their costs of working with small farmers in many areas. At present, Agriflora is limited to buying from farmers in easily accessible areas.

Guidelines for Avoiding Market Distortion and Limits to Donor Involvement

A central dilemma for donors seeking to enhance small farmer access to product-market credit is how to avoid distorting markets with their interventions. Supporting specific companies or private individuals to enable them to establish or extend credit can be beneficial to smallholders in the short-term, but it may give that company or individual an unfair market advantage and hurt competition. Guidelines to reduce or avoid market distortion in donor support include:

- Focus on farmers that are poorly integrated into product-markets, but which could be viable market participants if underlying constraints or market failures are removed. This can develop and/or extend markets, rather than risking distortion to existing markets.
- Use subsidies (grant, technical assistance, training etc) to build provider capacity, not to subsidize the cost of services or loans to farmers. Any benefits from subsidies that distort prices tend to be captured by those with more resources and influence and are not sustainable over the long term.
- Reduce (and end) subsidies over time. There has to be a clear end to any financial support, and that support should be contingent upon measurable and achievable objectives.
- Make support available through transparent selection criteria. Financial support should be open to more than one entity, and future support should be dependent on reaching agreed performance objectives.

While linkage arrangements between financial and product-market actors can capture the respective advantages of the services provided by each, donors should be careful not to support linkages in which the terms of credit provided are not transparent, or that lock farmers into unfavorable credit and purchase arrangements. Restrictive linkage arrangements can result in the potential for increased transparency and competition being lost. Farmers benefit from buyers having to compete for their supply on the basis of non-credit factors such as price, efficiency, and on-time payment. Financial institutions could “pre-qualify” a number of input and technical assistance suppliers that it views provide sufficient quality services to farmers to reduce the risk of lending them to an acceptable level, rather than insisting that farmers deal with a specified provider.

Measures to improve the enabling environment for credit provision are less likely to cause market distortion than direct engagement with product and financial market actors. By improving infrastructure, services, information availability, and the functioning of collateral and property registries, the overall conditions for financial intermediation can be improved, and competition stimulated.

Donors need to be creative in finding ways to engage with private sector actors in product markets. Private companies have shown flexibility in including poorer farmers in credit-based transactions, as illustrated by Critecna, Agriflora, and V&M. Yet donors may face restrictions on directly supporting companies, due in part to the issue of benefits from public money potentially being captured by individual companies through improved profits and market position. An alternative if so, is to fund specialized providers that have proven their availability to support market development. CLUSA, CARE (through the AGENT and REAP programs), and others profiled in this paper demonstrate the effective role that such providers can play.

Conclusions

Buyer and supplier credit is the primary source of finance for agricultural production in many countries. Yet the range of financial services offered within product-markets is very narrow, and poorer and remoter farmers may be excluded. Donors can support the extension of buyer and supplier credit to such farmers by promoting embedded services in product-markets, brokers and intermediaries, and the development of market-oriented associations of small farmers.

Product-market credit is not a substitute for financial markets. Financial service providers offer more transparent credit than do most buyers and suppliers, can offer loans to a larger number of clients due to having more appropriate systems and procedures, and can also offer a more diverse range of financial services. Yet in order to overcome the risk, operating cost, and informational constraints that have limited their involvement in agricultural lending to-date, financial service providers may need to establish linkages with suppliers and buyers; either directly or through intermediaries. Processors or suppliers that are able to set-up finance companies that offer credit to farmers may have an advantage over financial institutions as a result.

Donor funding to market actors and to intermediaries risks distorting competition and incentives. Patient and longer-term support to improving the operating environment for financial service provision in areas dependent on agriculture can avoid such distortion, and moreover can have systematic and far-reaching impacts. A more positive enabling environment can enable the extension of financial services to poorer and more marginal farmers through both product-market and financial market providers.

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