

Chapare
Development
Financing:
Options and
Approaches

FINAL REPORT

BY: JOHN H. MAGILL

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Contact: Steve Huffstutlar, Chief of Party

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Edificio Los Tiempos Piso 7
Telf. 252096, 251655, 257827, 530278, 530149 Fax. 232773
Cochabamba, Bolivia

PREFACE

This report is a revision of a preliminary report, "CONCADE Credit System: Options and Approaches," that was submitted in January 2000. It summarizes the findings and conclusions of field visits to Cochabamba in December 1999, and February 2000, and is designed to present an overview of the environment and options for offering financial services to CONCADE project participants and beneficiaries in the Chapare.

As a final report, this incorporates the findings and conclusions of three separate but related consultancies that were carried out to study various aspects of the need for, and approaches to, providing credit and other financial services through the CONCADE project. One consultancy, which covered a wide range of gender issues related to the project, examined options for providing financial and other services to poor women in the Chapare. A second consultancy examined the options and mechanisms for establishing a trust fund to facilitate credit to selected program participants. This consultancy, the third in the series, examined financing needs and options. The three reports produced by these consultants were:

Talentino, Tracey. "Final Report." December 1999.

Carballo, Manual, and Cespedes, Julio. "Estudio de Credito Rural Chapare." February 2000.

Magill, John. "CONCADE Credit System: Options and Approaches." January 2000.

Two other studies, one sponsored by GTZ and the other by CONCADE, also provide valuable insights into the financing requirements and options for the Chapare.

Rodriguez Moreno, Eduardo. "Proyecto Plan del Trópico de Cochabamba: Bases para un sistema financiero en el trópico de Cochabamba." Cochabamba: IP/GTZ, October 1998.

Foster, Charles. "Using Incentives as a Tool for Promoting Investment and for Strengthening Agribusiness in the Chapare (Bolivia)." Cochabamba: CONCADE, February 2000.

Taken together, these consultancies and studies provide the background for a recommended strategy for ensuring adequate financing in the Chapare to support the objectives of the CONCADE activity and ensuring the objectives of the Alternative Development Program.

Magill, John, "Chapare Investment Promotion Fund," April 2000.

EXECUTIVE SUMMARY

Although the original plan for the CONCADE activity did include an “investment promotion credit” to be used as an incentive for potential investors who would be willing to establish facilities in the Chapare, it did not include a credit component for production credit. The document noted that “. . . the need for credit shall be monitored from time to time through the NGOs/private companies and a production credit component could possibly be provided in the future.”¹ According to the statements for critical tasks A and C for SO #4 of the DAI contract, DAI was to:

- Conduct a research/assessment of credit needs for production and investment promotion in the Chapare: and
- If deemed appropriate and justified, develop and implement an investment promotion credit program upon USAID/GOB approval.

It has become increasingly apparent that many of the indicators cannot be achieved without some form of capital inputs. The extension services and research activities can produce the technologies for improving yields and production, but investment is required to put those technologies into practice. Investment can come from savings, but the general decline in income resulting from the transition to licit crops has created a cash shortage among the small farmer clients of the CONCADE program, necessitating a consideration of credit services for the region. The absence, until very recently, of any formal financial services in the region has meant that credit through formal channels has not been available.

Market for Financial Services

The market for financial services in the Chapare can be segmented into distinct client groups – individuals, associations, agribusinesses and others. The different segments have different financing requirements, and different relevancies to accomplishing the CONCADE activity’s objectives. The project does not need to work with all segments, and it does not have to meet all of the needs of any of these segments. CONCADE’s priorities lie with the agricultural production and marketing activities of the individuals, associations and agribusinesses, and CONCADE needs to focus on supporting the economic activities of these particular groups in order to ensure a permanent transition from coca production to licit crop production in the region.

Financial Service Needs

All of the key client groups have multiple financial service needs. Individuals need to have access to loans for a variety of purposes – including production credit, microenterprises, consumption smoothing and emergencies – and secure deposit facilities. Associations need access to transaction services and access to credit for investments and working capital. Agribusinesses need access to transaction and payments services, and access to credit for investments, working capital and factoring.

¹Terms of Reference, Attachment 8, Results Framework, p. 38.

The variety of financial service needs beyond the need for just credit services implies the need to develop general, broad-based financial services in the Chapare. A fundamental choice that must be made between confining CONCADE support only to financial services that are directly related to agricultural production and marketing, or allowing it to support broad-based financial service development in the region. The consulting team has concluded that, while CONCADE must necessarily place greatest priority on services and market segments that directly support its strategic objectives and intermediate results targets, general broadening of financial services in the region is both positive for the development of the Chapare and necessary if the achievements of the project are to become sustainable.

Channels of Financial Intermediation

Supplying credit and other financial services to the Chapare can take place through a variety of financial intermediaries – particularly banks, non-bank financial institutions, and NGOs. Each of these channels has specific strengths and weaknesses. Matching the financial service needs of the various client groups with appropriate channels of intermediation is necessary to achieve CONCADE's objectives.

Non-bank financial institutions and NGOs are particularly well suited to reaching individuals and special target groups (such as women), but generally lack the financial resources to meet long-term or seasonal credit demands of the agricultural sector or to respond to the financial service needs of larger agribusinesses. Several NGOs and non-bank financial intermediaries have either recently opened offices in the Chapare or intend to do so in the near future. However, none of these institutions is willing to take on large scale lending for agricultural production, each has its own specific target clientele which is not consistent with CONCADE's priorities, and taken together they are capable of reaching only a very small percentage of CONCADE's primary target audience of small farmers and microentrepreneurs.

Commercial banks have the resources to meet the credit needs of agribusinesses, and perhaps associations, but are not viable channels for reaching individual small farmers or microenterprises. Furthermore, commercial banks have been particularly reluctant to lend and provide other financial services in the Chapare – even to traditional clients – and provide only a limited range of loan products.

Reliance on traditional channels and mechanisms for providing financial services to the region will not be successful. Traditional approaches to meeting financing needs will not work in the region due to high risk, lack of interest by traditional financial intermediaries in servicing the Chapare, the absence of financial intermediaries in the Chapare, and stringent government regulations that make it risky for financial institutions to do business in the Chapare. A program to stimulate investments in the Chapare must be able to take high risks and be able to absorb a higher rate of loss than normal, and must be dedicated to serving the Chapare. To date these characteristics are not present in any of the financial intermediaries that have been interviewed.

Because traditional approaches to finance are not feasible, neither are traditional funding channels. The established government mechanisms for channeling resources donated to the Government of Bolivia (NAFIBO SAM and FONDESIF) are not sufficiently flexible to permit the risk and financial services that would be necessary to overcome the traditional impediments to providing financial services in the region. Centralized AID programs (like the newly established DCA), also are incapable of supporting the variety of incentive instruments that might be required or of accepting the high degree of risk that must be tolerated during the early phase of financial activities.

Mechanisms to Stimulate Financial Services in the Chapare

CONCADE has access to several mechanisms to stimulate the provision of financial services to the target client groups. These include: expansion of the investment incentive scheme used under the CORDEP project, establishment of trust funds to meet specific credit objectives, use of A.I.D.'s Development Credit Authority to access various loan guarantee instruments, equity funding, and direct management contracts for key facilities. Each of these mechanisms addresses a specific subset of the impediments to the provision of effective financial services in the Chapare. Blending strategies to encompass several of these mechanisms may provide the best strategy for achieving the activity's objectives.

Recommendation

CONCADE needs to directly manage funds for grants, investment incentives and credit to ensure that funds are used in the Chapare and that financing is sufficiently flexible to undertake the amount of risk and losses necessary to overcome the difficult obstacles to investment in the region. CONCADE should implement any credit funds through established financial intermediaries, providing sufficient incentives to stimulate on-going financial relationships between CONCADE clients and established financial intermediaries. Finally, CONCADE should devote most of its resources to the direct objectives of meeting production and marketing targets, but it should do so in a manner that supports the development of multiple channels of financial intermediation in the Chapare. This implies:

- C establishing a funds management unit within CONCADE to manage funds destined for grants, incentives and credit funds;
- allocating most of CONCADE's resources and efforts to meeting one or the other of the two priority program requirements – production or marketing – as determined by CONCADE; and
- C allocating a relatively small amount of funds to be channeled through selected NGOs and non-bank financial intermediaries that have *already* established a presence in the Chapare and that are engaged either in financial intermediation (savings as well as credit) or in reaching a specific clientele (such as women).

Most of CONCADE's resources and efforts should be focused on developing financial services that supports its immediate objectives. This involves finding ways to meet agricultural production credit needs and finance growing agribusinesses in the region.

Key institutions for channeling the more broad-based financial intermediation funds would include selected FFPs, credit unions and NGOs. The FFPs and credit unions have the ability to generate savings, and represent a more permanent approach to financial development in the region. NGOs have the ability to reach specific client groups.

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INTRODUCTION

Background

The CONCADE² activity is an integral part of the joint effort between the Government of Bolivia and the U.S. Government to eradicate the cultivation and trafficking of coca in the tropical areas of Cochabamba, and to substitute legitimate crops for coca in the region. The purpose of the activity is to “. . . assist the GOB and USAID in their efforts to eliminate illegal coca from the Chapare Region by the year 2002 through alternative development efforts consistent with coca eradication and law enforcement interventions.”

The activity addresses USAID/Bolivia’s special objective of “Illicit Coca Eliminated from the Chapare,” and its two Primary Intermediate Results of “Existing coca eradicated” and “Sustainable alternative development established.” The CONCADE activity focuses primarily on Intermediate Result 4 – “Sustainable alternative development established” – through four strategies:

- C increasing capacity for sustainable farm-level production of licit crops;
- C establishing sustainable market linkages;
- C strengthening alternative development organizations; and
- C stimulating private sector investment and agriculturally based industries.

Among the indicators targeted for the activity are:

- C increases in hectares planted in licit crops;
- C increases in annual per capita incomes from licit crops;
- C increases in marketed value of licit agricultural products;
- C increases in the value of exported licit agricultural products;
- C increases in annual yields of key licit crops;
- C adoption and application of new technologies by farmers; and
- C increases in agroindustries and agribusinesses doing business in the Chapare.

Included in the original activity design was \$4.0 million in grants to strengthen the producer associations, but not a credit component for production credit. The original activity plan also included a small “investment promotion component” to be used as an incentive for potential investors who would be willing to establish facilities in the Chapare, but did not contemplate a need for more extensive investment financing.³

As the “Results Package”⁴ noted, “Past experience has shown that credit for production purposes has not been successful among farmers in the Chapare. In some cases cash credit has been diverted to uses other than those for which it was intended, while in others the payback rates have been quite low.”⁵ However,

²Counter Narcotics Consolidation of Alternative Development Efforts in Bolivia

³*Ibid.*, pp. 38-39. The term “*investment financing*” is used instead of “*credit*” because other financing mechanisms – such as grants, equity investments, incentive subcontracts, and guarantees – might be better suited to meeting the objectives of the CONCADE activity than production credit *per se*.

⁴Attachment 8

⁵*Ibid.*, p. 38.

the document noted that “. . . the need for credit shall be monitored from time to time through the NGOs/private companies and a production credit component could possibly be provided in the future.”⁶

It has become increasingly apparent that many of CONCADE’s targets cannot be achieved without some form of capital inputs, and that continual financing is needed to sustain the transition from coca to licit crop production in the Chapare. The extension services and research activities can produce the technologies for improving yields and production, but investment is required to put those technologies into practice. Investment can come from savings or borrowing. The general decline in income resulting from the transition to licit crops has created a cash shortage among the small farmer clients of the CONCADE program, necessitating a consideration of credit services for the region. The absence, until very recently, of any formal financial services in the region has meant that credit through formal channels has not been available.

In recognition of the need to increase investment among the small farmer clients of the CONCADE activity, DAI/CONCADE has undertaken a series of consultancies to look at the needs for incorporating an expanded financing into the CONCADE activity, and for identifying an appropriate mechanism for implementing such a component. This report incorporates the findings and conclusions of the various consultancies; additional information is available in final versions of the other reports.

Alternative Objectives

A program to expand financing in the Chapare can have one of two major objectives: meeting project milestone targets, or establishing the base for long-term sustainable financial services in the region. While the two objectives are not mutually exclusive, the design of a credit program will clearly stress one or the other. Which is selected as the main objective will have a significant influence on the nature of the credit program that is designed.

A program focused on furthering project milestones will focus on (a) credit delivery and recovery, (b) increasing the production and sales of the five (or more as amended⁷) priority products, (c) limiting credit to farmers that are involved specifically in production of the priority products and then only for the production of those crops, and (d) channeling credit through revolving funds established in selected local associations. Savings will not be encouraged. The result will be a targeted credit program that promotes the short-run objectives of the CONCADE activity, but that does not build an institutional capability to respond to the financial service needs of residents of the Chapare in the future.

A program focused primarily on the development of long-term financial services for the Chapare will (a) assist in establishing multi-service financial intermediaries in the region, (b) stress savings as being as important as credit, (c) seek to service a broad variety of clients (not just farmers and agribusinesses), and (d) respond to a wide variety of client financial service needs (including microenterprise, consumption smoothing, educational expenses, health expenses and emergency credit needs). It will avoid channeling funds to producers through the rotating funds of existing associations. The result will be a more robust and sustainable economy in the Chapare, although the direct impact on specific project targets will be less obvious and results may occur over a longer period of time.

⁶*Ibid.*

⁷The original five priority crops were banana, pineapple, palm hearts, passion fruit and pepper. Plans are to add yuca, cattle and tea to this list in 2000.

AN OVERVIEW OF THE MARKET FOR FINANCIAL SERVICES IN THE CHAPARE

The Chapare is a transitional zone characterized by considerable migration of people, both in and out of the region. At the present time the zone is experiencing a considerable outmigration, and significant reduction in the population – from an estimated 200,000 as presented in USAID's SO and IR documents, to as low as 50,000 by some recent estimates. As a result, it is difficult to describe the market for financial services in the region with precision. Also, many Chapare residents are seasonal, living a part of the year in other areas. This mobility and constant flux in the size of the local population complicates any attempt to estimate credit demand or financial services needs.

The broad market for financial services consists of four conceptually distinct groups:

- individuals,
- producer groups or associations;
- agribusinesses and other intermediaries; and
- others.

Understanding the nature of these discrete sectors is essential for estimating demand for credit (especially related to project objectives) and the types of credit programs and other financial services that the project should support.

Individuals

Individuals – comprised of families engaged in farming, production or other activities – are one of the primary potential consumers of financial services in the Chapare. Many of these individual families migrated to the Chapare to engage in coca production, and are only recently turning to other economic activities.

Individuals have multiple needs for financial services, including (a) financing for agricultural production, (b) financing microenterprise and other non-farm productive activities, (c) financing consumption during periods of low income ("consumption smoothing"), and (d) financing emergency or other immediate needs:

- C Financing for ***agricultural production*** is clearly one of the major interests of the CONCADE project, as the farming families of the Chapare need financing in order to implement the recommendations of extension agents and produce a sufficient volume of quality products to sell in both domestic and export markets. Families engaged in the production of licit agricultural products – in particular, pineapple, palm hearts, banana, pepper and passion fruit – are the primary target beneficiaries of the CONCADE project.
- C Poor families, even poor farming families, typically engage in a variety of small-scale, non-farm-related economic activities. These include working as day laborers, cottage-industry production of food and other goods for sale in local markets, trading, and services. Microenterprise activities are becoming increasingly important in the Chapare, even for families that are primarily small farmers, and all members of the family may participate in these microenterprise

activities. Financing for *microenterprise activities* – usually for short-term working capital – is an important need for many families.

- C **Consumption smoothing** – meeting consumption needs during periods of low income (such as between harvests) – is another basic financial need of poor families. This is especially true for farm families with seasonal income. Although donor agencies have traditionally found it difficult to accept consumption as a legitimate use of donor-provided resources, the need to use external financial resources for "consumption smoothing" has recently become accepted as a legitimate use of financial resources in the development literature.
- C Individuals also need financial services for *emergencies* – medical services, educational expenses for children, weddings and other miscellaneous expenses.

In considering the financial service needs of individuals, several important factors must be kept in mind:

- The relevant economic unit is the family, and all of its related activities (economic and non-economic), rather than a single individual in the family;
- Rural families typically have multiple sources of income, of which agricultural production is only one;
- C Money is fungible, and it is impossible to distinguish or control the use of a single source of money into the family;
- C Families need savings services as much as they need access to credit. Poor families, even poor families in the Chapare, have savings, and need access to secure deposit facilities.

Individuals in the Chapare have multiple financial needs, of which agricultural production credit, although important, is only one. Although targeted credit may fill one of those needs, unless the others are also addressed the household economic unit may not be improved, and the family will shift funds internally in an attempt to meet the full range of household needs.

For most small farmers and microentrepreneurs, personal savings and loans from family, friends and other informal sector participants comprise the principal sources of financing. Many, if not most, of the small farmers participating in CONCADE-supported development activities have received substantial incentives to abandon coca production and have alternative sources of income. What is lacking is the ability to manage resources effectively because of the lack of stable sources of financing that meet the timing and scale of the agricultural production cycle.

Associations

CONCADE is constrained to working with groups that have signed "coca free" agreements with the GOB and that are certified as "coca free" by DEDECO. These agreements are in force between the GOB and several types of organization in the Chapare – producers' associations, sindicatos, cooperatives and unions of associations. The associations were originally formed during the CORDEP period (CONCADE's predecessor project) as a structured mechanism for working with producers.

Most of the associations have declined markedly during the past year, as CORDEP assistance ended and assistance under CONCADE was delayed. This decline is particularly noticeable in the areas of leadership, strategic vision, business purpose, and management of rotating funds. Some 91 organizations were recently surveyed by the CONCADE project. Of these, CONCADE considers only 12 – ASIPA, ASBA, ASPITROC, ASPROBACI, ASPROBAN, ASPROBAC, ASPROBATS, ASPROPI, ASPROCUT, APAMI, and APPITROCO – to be "advanced" institutions, capable of becoming self-sustaining through their business operations, having ". . . advanced in their development . . . to greater negotiating ability, improved yields with acceptable product quality, a certain capacity for marketing, and satisfactory income from operations."⁸ All of these will be provided technical assistance and other support designed to improve their operations, technologies and business ventures. The rest are classified as "less advanced," and will receive assistance designed to further their role as representative rather than business organizations.

As a legacy of earlier development efforts, many of the associations have operated *rotating credit funds* for their members. These funds have been in the form of agricultural inputs and supplies, which the borrowers are expected to repay in cash (or have deducted from their sales) at the time of marketing their products. Because of a history of donations, unclear instructions on repayment obligations, a lack of orientation for the management of rotating funds, reduced incomes from the transition to licit crops, and weaknesses in markets for licit crops, most of these funds have poor repayment records, and have become decapitalized. Still, the model for providing production credit to farmers through the associations is in place, and in the absence of other alternative channels for reaching small farmers with financing for production credit, revitalizing these rotating credit funds may be the only alternative for reaching this population on the scale required to meet CONCADE's development objectives and targets.

Associations have two other fundamental needs for financial service needs – to expand or improve existing infrastructure for their own operations and as a group activity affecting their members, and to operate their own business ventures. *Upgrading infrastructure* requires basic investments in land, buildings, facilities and equipment. The absence of water required for packing bananas and other fruits, which was solved only by trucking water to the packing sheds during the past marketing period, has demonstrated the need for wells in many of the associations. Problems with the recent drought has also demonstrated the need to finance irrigation programs. *Operating their business activities* requires working capital to purchase product, pay workers, operate packaging and other processing operations, maintain facilities and equipment, and cover marketing costs.

The associations, therefore, have several specific needs for financial services:

- Access to capital for investments in infrastructure;
- Access to lines of credit for working capital; and
- Access to capital for the rotating credit funds.

Over the long run the associations will need access to other financial services to handle transactions, make transfers and pay bills.

Agribusinesses and Other Intermediaries

Three types of private sector business enterprises have an important role to play in the economic development and viability of the Chapare:

⁸CONCADE, "Terms of Reference for Technical Assistance for Advanced Associations," , p. 1-A.

- Vertically integrated agricultural production enterprises specializing in one or more agricultural products;
- Agribusinesses engaged in the purchasing, processing, handling, packaging and marketing of small farmer production; and
- Businesses engaged in activities that directly serve the agricultural production and marketing sectors.

Vertically integrated agricultural enterprises – such as Chapare Exporta, Banabol and Indatrop – are needed in the Chapare to provide the quantity and quality of product necessary to attract marketers and other buyers. Achieving the scale of operations and quality standards necessary to build a successful export market requires the presence of such large-scale firms. New investment in the region by such firms is desirable, and needs to be promoted and supported by CONCADE.

Agribusinesses engaged in purchasing, processing, handling, packaging, and exporting licit products from the Chapare are key to the success of efforts to encourage small farmers to cease production of coca in favor of licit crops. As it becomes apparent that the producer associations lack the technical skills to run the processing operations successfully and the marketing to build markets for local products, the importance of encouraging successful agribusinesses to assume these roles increases. In many cases, these agribusiness intermediaries serve as channels of financing to small farmers in the form of (a) providing inputs and technical assistance, and (b) advancing disbursements against a contract to purchase the production of the small farmers. The relative scarcity of successful intermediaries is exacerbated by the existence in the Chapare of numerous “white elephants” – modern, high quality production facilities donated by international donor programs that are either not in service, or that are underutilized.

Transportation companies, input suppliers, commercial nurseries and other similar businesses that directly serve the agricultural production and marketing sectors are also needed for the agricultural sector to survive and thrive in the region. The absence of adequate transportation, in particular, is a major constraint to the marketing of small farmer produce, and impedes the entry of new marketing intermediaries.

Agribusinesses attempting to operate in the Chapare have multiple financial service requirements:

- C **Investment capital**, to finance construction and expansion of processing facilities and secure transportation;
- C **Working capital**, to pay wages, purchase materials and supplies, purchase product for processing, and operate processing facilities;
- C **Input financing**, in some cases, to ensure that farmers producing crops on contract have and apply the correct agricultural chemicals and other inputs;
- C **Export financing**, also called “factoring,” to finance receivables until income from exports is realized; and
- C **Transaction services**, such as money transfers, payroll, letters of credit and others.

Sources of financing for these purposes are sorely lacking for businesses operating in the region.

In considering financing for vertically integrated agribusinesses and other intermediaries, CONCADE needs to keep in mind that its key results targets depend primarily on increasing the production and value of products marketed for small independent farmers. Many of the private sector businesses that have been, or that could be supported in the future, while important to the overall economic development of the area often have little impact on small farmer production and marketing. CONCADE needs to stress investments that involve large numbers of small farmers – either as producers for export-oriented marketing firms, or as direct marketers through supported intermediaries – rather than relatively small private businesses that merely hire local workers.

Others

There are other individuals and businesses operating in the Chapare – single women heads of households, hotels, restaurants, mechanics, welding shops and other forms of microenterprises – that, while not directly related to the CONCADE activity’s objectives, form a vital part of the economy of the Chapare. Success in agriculture in the Chapare depends also on the success of these other business ventures, as a robust economy in the region is necessary to support and sustain farming activities. These other individuals and businesses also have a need for financial services – particularly credit, savings, and transactions – to survive and succeed.

Within this amorphous group of individuals and small businesses, CONCADE is particularly concerned with the status of women within the small farmer households who need to establish secondary sources of income to augment household earnings from agriculture and single women heads of household who need to develop non-agricultural primary sources of income. The microfinance experience in Bolivia has demonstrated clearly that this is a strong market segment that uses credit wisely, benefits significantly from credit, and has strong repayment records.

Summary and Conclusions

The market for financial services in the Chapare can be segmented into distinct client groups -- individuals, associations, agribusinesses and others. The different segments have different requirements, and different relevancies to accomplishing the CONCADE activity’s objectives. The project does not need to work with all segments, and it does not have to meet all of the needs of any of the segments. While CONCADE must necessarily place greatest priority on services and market segments that directly support its strategic objectives and intermediate results targets, general broadening of financial services in the region is both good for development and necessary for the benefits of the project to become sustainable.

⁹ESTIMATING THE DEMAND FOR CREDIT

It is not possible to arrive at an accurate measurement of the effective demand for credit in the near, medium, or long term without an extensive and costly census of the area and exhaustive analysis of the economics of the region. Many would argue that credit demand studies should not be undertaken at all.¹⁰

⁹Although this section refers specifically to “credit,” the issue is actually broader. The need is for financing, which may be met through credit or through other mechanisms, such as savings, equity investments, or even bartering.

¹⁰See Ohio State University materials.

On a practical level, it is not necessary to be extremely precise in order to have a useful credit demand analysis. What is necessary is to show that there is sufficient effective demand to absorb funds that are available and may be made available for credit purposes. This can be accomplished through a variety of methods, using existing data, projections and other estimates.

A study conducted for the "Plan de Desarrollo del Trópico de Cochabamba," using macroeconomic models based on legal income in the region, estimated the credit capacity of the Chapare to be \$60.9 million in 1998, rising to nearly \$100.0 million by 2002.¹¹ The credit capacity of the crops sector – CONCADE's primary focus – was estimated at \$35.0 million in 1998, rising to \$51.1 million by 2002.¹² These projections were based on assumptions of (a) a marginal propensity to invest of 19 percent in 1998, rising to 23 percent in 2002, (b) an economic growth rate of 5 percent in the economy of the Chapare, (c) calculated savings of \$6.7 million in the region as a whole, and \$3.9 million among the population engaged in crop production, and (d) an ability to borrow of 9 times the amount of savings.

These estimates show the theoretical limit of borrowing in the region. Outmigration from the region and a slowing of economic activity in the region as coca production declines may reduce these upper limits. Furthermore, the capacity to borrow says little about the actual willingness to borrow, especially at market interest rates.

The CONCADE project is primarily concerned with three sets of potential credit users – small farmers who are producing one or more of the five priority crops, small farmer associations that consist of farmers producing one or more of the five priority crops, and agribusinesses serving the Chapare that deal with one of the five priority crops. Secondary interest is with farmers, associations and agribusinesses engaged in producing other agricultural products, microenterprises, women and other businesses .

Credit Needs of Individual Small Farmers

Small farmer credit needs are directly related to production cycles. The costs of producing a crop can be estimated accurately from hectare statistics and production cost models. In the case of CONCADE and the five principal crops, hectareage is known (or can be estimated fairly accurately), and model production costs are available for "optimum" crop production under various intensity levels. The model uses cost factors associated with "medium" intensity input use, as the minimum amount required to meet the increases in productivity established in the "Results Package."

Production and Cost Factors

| Crop | Hectares in Production | | Production Costs per Hectare | |
|---------|------------------------|-----------------|------------------------------|---------------|
| | | Annual Addition | Existing Land | New Plantings |
| Bananas | 14,000 | 500 | \$1,252 | \$2,045 |

¹¹Eduardo Rodriguez Moreno, pp. 24 to 38. See especially pp. 37-38.

¹²Ibid.

| Crop | Hectares in Production | | Production Costs per Hectare | |
|---------------|------------------------|-----------------|------------------------------|---------------|
| | | Annual Addition | Existing Land | New Plantings |
| Pineapple | 1,700 | 0 | \$1,426 | \$4,894 |
| Palm Heart | 3,000 | 1,500 | \$571 | \$1,733 |
| Passion Fruit | 160 | 0 | \$1,780 | \$3,710 |
| Pepper | 160 | 20 | \$1,343 | \$8,346 |
| Root Crops | 8,000 | 500 | \$451 | \$655 |
| Tea | 60 | 0 | \$80 | \$120 |
| Citrus | 22,360 | 0 | \$452 | \$1,082 |
| Platano | 6,750 | 0 | \$427 | \$762 |
| Basic Grains | 8,029 | 500 | \$824 | \$1,094 |
| Cattle | 28,000 | 0 | \$266 | \$1,412 |

Source of Pricing Information: USAID Memorandum ARD-C-JCP-0044/96, "Envío información Actualizada Costos de Producción Cultivos Priorizados, Gestión 1996, and CONCADE estimates. Costs are based on an intermediate technology for the most popular export variety of each product.

Projecting these costs at current inflation rates produces an overall investment requirement for the five priority crops as follows:

Estimated Annual Investment Requirements for the Priority Crops,
(\$US 000)

| | 2000 | 2001 | 2002 | 2003 |
|---|-----------------|-----------------|-----------------|-----------------|
| Bananas | \$20,878 | \$22,230 | \$23,645 | \$25,124 |
| Pineapple | 2,728 | 2,810 | 2,895 | 2,981 |
| Palm Heart | 4,854 | 5,992 | 7,195 | 8,464 |
| Passion Fruit | 321 | 330 | 340 | 350 |
| Pepper | 430 | 474 | 520 | 569 |
| Root Crops | 4,429 | 4,824 | 5,238 | 5,672 |
| Tea | 5 | 6 | 6 | 6 |
| Citrus | 11,375 | 11,716 | 12,067 | 12,430 |
| Platano | 3,244 | 3,341 | 3,442 | 3,545 |
| Basic Grains | 8,062 | 8,781 | 9,537 | 10,330 |
| Cattle | 8,383 | 8,634 | 8,893 | 9,160 |
| Totals | \$64,709 | \$69,138 | \$73,778 | \$78,631 |
| Adjusted Totals | \$32,354 | \$34,569 | \$36,889 | \$39,315 |
| Note: Production cost factors are adjusted for inflation from the 1996 figures shown in the previous table. | | | | |

There are many factors that determine how investment requirements translate into credit demand. Farmers may finance some of the investments from their own resources and they may decide to farm some of the land less intensively than assumed if prices or markets are not readily available. If we assume that farmers require only 50 percent of the estimated investment requirements – meeting the other 50 percent either through self-financing or non-financing – the projected credit demand for the four years can be seen in the "Adjusted Totals," rising from \$32.4 million in 1999 to \$39.3 million in 2002.

Of course, there are other individuals in the region that might need access to credit, these small farmers may need credit for crops other than the five or eight priority crops, and small farmers may themselves need credit for things other than production, so the total demand for production credit should be considerably higher. Since the project is primarily concerned with small farmers and improving agricultural production in the five priority crops, however, this is the portion of credit demand that CONCADE needs to be concerned with.

Credit Needs of the Associations

CORDEP and CONCADE work with individual farmers through producers' associations. The exact number of associations in the area is unknown, but a recent survey conducted for CONCADE covered 91 institutions. These associations vary widely in quality. CONCADE estimates that 12 of the 91 are sufficiently "advanced" to have the ability to become successful agribusiness enterprises.

Associations need financial resources for three separate purposes: (a) to on-lend to its members in the form of agricultural inputs and services, (b) to operate the association's business, and (c) to expand or improve infrastructure.

On-Lending to Members

On-lending to members was a service installed in the associations by both CORDEP and other donor projects. The associations were given an amount of agricultural inputs for a rotating fund that they could onlend to their members, collecting cash payments at the time of harvest. Without entering into a discussion of the success of these rotating funds, or of the merits of lending in kind rather than in cash, a sample of the associations indicated an average need of about \$75,000 in the rotating fund – about \$900,000 for the 12 "advanced" associations. If the other 79 associations had similar requirements, the total needs for rotating credit funds would amount to \$6,825,000 (\$900,000 for the 12 advanced associations and \$5,925,000 for the other 79).

There is no way to know how many associations actually exist in the Chapare, or how many of the small farmers or hectares discussed above are covered by the 91 associations surveyed. However, it is important to note that rotating credit funds cover costs of production that are incurred by individual farmers, and thus are a subset of the credit needs of individuals discussed earlier.

On-Going Business Requirements

Credit requirements to fund the ongoing businesses of the associations themselves is even more difficult to assess. Many of the associations are barely functioning; the difference between their current activities and a viable business activity is an order of magnitude

One of the primary characteristics of the existing producer associations is a chronic shortage of operating funds. The volume of business, and the revenues generated from the businesses are not sufficient to cover costs and build operating surpluses. Thus, credit is required to meet the ongoing for operating expenses of the associations.

The primary operating expenses of the associations are purchasing of product from producers, paying workers in the processing plants, supplies and materials, maintenance and improvements in facilities and equipment, and transportation. Estimates for these expenses have not been generated.

Infrastructure

Several associations have requested funding for infrastructure improvements, and the prolonged drought in the region highlighted the need for other infrastructure investments that were not contemplated in the original activity design. Three types of infrastructure improvements are needed in the short run:

- C As banana exporting becomes more prevalent among small farmers in the Chapare the associations need to invest in cable networks to transport bananas to the packing centers. This is logically an association investment as cable systems will need to extend through multiple individual small holdings.
- C Banana and pineapple packing require large amounts of fresh water. This water had to be trucked in because of the lack of water at the packing centers. Many of the associations need to install wells to insure an adequate supply of fresh water.
- C The drought in the Chapare highlighted the vulnerability of banana, palm hearts and pineapple production. Small-scale irrigation needs to be installed in a number of the associations to insure an adequate supply of water during the growing season and to better time the growing season of crops such as pineapple.

An illustrative list of investment needs of selected associations included the following:

| Association | Purpose | Amount (US\$) |
|--------------------|--|----------------------|
| ASPROCUT | Infraestructura y maquinaria Cámara fría Material de empaque Sistemas de comunicación | 40,000 |
| AGRO-TE | Infraestructura y maquinaria Equipos de procesamiento Material de embalaje | 50,000 |
| EMCOPAIVI | Improvements in plant and equipment, including pasteurizer and more automatic packaging | 55,000 |
| Ingavi-B (ABIB) | Short-term: 10.5 kilometers of transport cables and 1 packing center | 52,250 |
| | Medium-term: 48 kilometers of transport cable and 6 new packing centers in 6 new areas | 246,000 |

| Association | Purpose | Amount (US\$) |
|--|---------|---------------|
| Sources: CONCADE loan requests and Carballo and Magill interviews. | | |

However, there is no guarantee that making the investment would produce the sustainable business because of the absence of market linkages. Most of the associations have been given processing plants and other infrastructure, and most of this infrastructure is underutilized or inoperative. INGAVI-B was the only association visited that seemed to have a genuine needs for investment because of their functioning market contract with a local exporter. If the exporter would honor its existing contracts with other banana growers, other associations might need additional infrastructure investments to handle and pack bananas.

Although only \$500,000 in actual funding requests have been documented, a conservative estimate is that at least \$4,000,000 is needed to strengthen the productive and business capabilities of the associations to the point where they could function as sustainable business entities.

Summary

It is unfortunate that the survey of associations conducted in the fall of 1999 did not obtain a preliminary estimate of the cash-flows of the various associations. Given the nature of the associations, and the fact that individual farmers often market outside of the associations, it is difficult to derive these estimates. Capitalization of the rotating funds would require an estimated \$7.0 million, but since most of this is for production purposes, it is largely included in the estimates for production financing needs of individual farmers. No attempts have been made to estimate the financing required to support the business operations of the associations, but if they gain strength, the amounts required could be quite large. Business planning should definitely include analysis of financing requirements for at least the stronger associations. Improvements in infrastructure, which benefit both the individual farmers and the associations could easily require up to \$4.0 million in additional financing.

Credit Needs of Agribusinesses

The credit needs of agribusinesses in the Chapare are even more difficult to estimate. The project calls for increasing the number of agribusinesses in the Chapare, which involves support to existing businesses and support to the establishment of new businesses in the Chapare. In fact, businesses seem to be withdrawing from the Chapare, and the net result may actually be a reduction in the number of agribusinesses with locations in the Chapare.

Agribusinesses are those engaged in purchasing, processing and/or exporting agricultural products from the Chapare, those engaged in the manufacture or sale of agricultural inputs to farmers in the Chapare, and transportation companies. The CONCADE project is primarily interested in businesses associated with the five priority crops, though other agribusinesses may be supported.

| Business | Purpose | Amount (US\$) |
|------------|---------------------------|---------------|
| Naturaleza | Funds to purchase product | 22,000 |

| Business | Purpose | Amount (US\$) |
|---|---|----------------------|
| ECOCHAPARE | Funds to purchase product | 15,000 |
| OCS | Funds to purchase product | 10,000 |
| ALESA | Funds to purchase product | 10,000 |
| Paulistania | Machinery | 400,000 |
| Palmiteros | Fertilizers | 50,000 |
| Andean Group | Funds to purchase product. Funds to purchase used refrigerated trucks. | 25,000 200,000 |
| Proyecto Achiote y Curcuma | Unidentified | 200,000 |
| Proyecto Escencial Aceites | Unidentified | 100,000 |
| Sources: CONCADE loan requests and Carballo and Magill interviews | | |

As can be seen, approximately \$1.2 million in credit requests have been received by CONCADE. Other discussions are underway, so the number is much higher. In order to have the level of intermediary activity needed in the Chapare, a conservative \$5.0 to \$10.0 million in new investment is needed.

Credit Needs of Special Target Groups

The project may be interested in the credit needs of other groups, particularly women microentrepreneurs and processors. While women are participating in the economy of the Chapare, both in family-owned agriculture and employment in processing plants, opportunities for women as semi-urban microentrepreneurs abound. Credit programs such as those operated by PRODEM and CRECER have been very effective in reaching and supporting this group of clients.

Unfortunately, the feasibility studies conducted by PRODEM and CRECER do not quantify demand. PRODEM believes that it can place about \$600,000 to \$800,000 in credit over a three-year period, while CRECER has requested \$800,000 for credit purposes, with the assumption that it could place this amount

within a two-year period. Cooperativa San Antonio estimates a market of \$1.5 to \$2.0 million in the region, and CIDRE expects to lend \$600,000 to \$1.0 million over the next three years.

Summary

In summary, considerable additional financial resources are needed to produce and sustain the beneficial impacts targeted for the CONCADE activity. To meet the acreage (hectarage), production, marketing and beneficiary targets set for the alternative development effort in the Chapare, annual production financing of approximately US\$ 70.0 is required. To develop the associations to the point where they can support member production activities and function as viable business entities, another US\$ 4.0 is needed. Agribusiness and marketing investments in the Chapare require an estimated US\$5.0 to US\$ 10.0 million. Estimates of financing needs by others cannot be determined, but several institutions serving these markets have placed initial estimates of credit needs at a total of approximately US\$2.0 million per year.

| Sector | Needs |
|---|-------------------------|
| Small Farmers | \$70.0 million per year |
| Producer Associations | \$4.0 million |
| Processing and Marketing Intermediaries | \$5.0 - \$10.0 million |
| Financial Intermediaries | \$2.0 million |

Thus, there is an immediate need for about \$13.0 to \$18.0 in new investment, plus annual on-going investment in agricultural production of about \$70.0 million.

As can be seen, the amount of investment needed to meet the development goals for the Chapare is very large. However, not all of the investment needs to be financed from external sources. Much of the agricultural production investment, for example, will either be self-financed by the farmers (particularly in the form of labor) or not financed at all as farmers decide not to invest either their own or borrowed funds to implement the technology packages for the various crops. To the extent that it is not financed, the targets set for alternative development in the Chapare will be placed at risk, as the farmers will be unable to produce the quantity and quality of produce needed to attract marketing intermediaries and overseas buyers to the region. Investments in agribusinesses and marketing intermediaries depend on the extent to which farmers are capable of increasing the quantity and quality of agricultural production, and investments in a supporting infrastructure depend on the volume of commerce available in the region. All of these are closely linked, and success in one area depends on success in the others.

SOURCES OF FUNDS FOR FINANCIAL SERVICES

Because of the widespread interest in the Chapare, numerous donor-financed projects are operating in the area. Many of these include credit components. It is important to avoid duplication or overlapping of credit activities through the various programs.

The USAID/CONCADE activity has up to \$4.0 million programmed for grants, incentives and a possible loan fund. It is possible that this amount could be increased by as much as \$6.0 million per year for the next three years from supplemental funding. The FAO has \$5.0 million programmed for credit, but this credit line will be primarily for agro-forestry, so it complements rather than duplicates CONCADE activities. The European Union's development project for the Chapare (PRAEDAC) has a \$4.0 million

fund for credit that will be destined for agricultural production in crops and activities similar to the CONCADE project.

To the extent that other donors provide funds for credit programs in the Chapare, some of the needs for credit will be met by these other programs. However, even when all of the potential funds for credit lines in the Chapare are added together, they represent only a small fraction of the funding required to bring about sustainable development in the region. There is, therefore, ample need for financing in the region – sufficient to justify the use of CONCADE resources in a credit and incentives program.

CHANNELS FOR FINANCIAL SERVICES

Providing financial services to a target population requires the presence of some form of financial intermediary. Until fairly recently, however, no financial intermediaries had offices in the Chapare or provided more than minimal levels of financial services to inhabitants of the Chapare. Those that had previously had a presence in the region closed their offices because of very poor repayment rates and the suspicion of money laundering. All of the commercial banks withdrew from the area; AGROCAPITAL ceased lending, and only maintains offices in the Chapare to try to collect on previous loans.

In the past year two credit unions (*cooperativas de ahorro y crédito*) have opened small branch offices in the Chapare, one NGO has opened three offices working with funds provided through FONDESIF, another NGO operating as a private financial fund (*fondo de financiamiento privado, or FFP*) has recently opened an office to service a micro- and small-enterprise clientele in the major towns and villages, and several other institutions have expressed an interest in, or willingness to, provide financial services to the region. No commercial bank plans to establish an office in the region.

Commercial Banks

Commercial banks have been particularly reluctant to provide financial services to the region in recent years. The lack of licit business activities, poor recovery rates, and suspicion of money laundering in the region caused the banks to close branches and withdraw from the region in the early 1990s. Businesses in the region today complain that not only do the banks not have a presence in the region, they refuse to lend for activities in the region, or do so only with extraordinary guarantees.

USAID sponsored a "banker's day" in the Chapare in an attempt to encourage a number of banks to consider opening branches in the Chapare. This has yet to bear fruit.

In numerous discussions with several of the consultants, Bco. Sta. Cruz has indicated a willingness to consider opening operations in the Chapare in association with the project. It would not establish a branch office in the Chapare, but with appropriate guarantees or a trust mechanism, would be willing to extend loans to solid business ventures that are operating in the Chapare. Bco. Sta. Cruz would not be interested in providing small farmer production credit or credit to associations.

In summary, no commercial bank intends to open branch offices in the Chapare although, with proper incentives, some of the banks would be willing to extend credit to businesses operating in the Chapare. Commercial banks are not interested in providing individual loans to small farmers, financially weak associations, or microenterprises – labor-intensive operations that require a constant local presence – but would serve larger businesses, exporters and agroprocessors.

Non-Bank Financial Intermediaries

Several non-bank financial intermediaries are currently operating in the region, or have plans to do so in the near future. These include two credit unions, and an NGO that is in the process of establishing a private financial fund.

Credit Unions

Credit unions have long been active participants in the Bolivian financial system, and most of the credit unions have been in operation for 30 to 40 years. Operating solely on self-generated capital and savings mobilization, these institutions represent a stable form of financial institution that is self-sustaining and that has grown markedly in recent years.¹³

Two credit unions with their headquarters in Cochabamba have recently opened branches in the Chapare. Hospicio, which was founded in 1962, established a branch office in Invirgazama in April 1999. San Antonio, which was also founded in 1962, established a branch office in Villa Tunari in September 1999.

The San Antonio Savings and Loan Cooperative (CACSA) of Cochabamba is an open-bond credit union that is registered with, and supervised by, the Bolivian Government's Superintendent of Banks. CACSA presently has a loan portfolio of US\$5.8 million, and 40,000 members, although the number of active members is considerably lower. CACSA's loans are denominated in US dollars. They charge a standard 18 percent interest rate per annum on the declining balance for most of their loans. Though they use solidarity guarantees on some of their group loans, the majority of their loans are secured with personal collateral. CACSA is considered to be one of the strongest savings and loans cooperatives in the Department of Cochabamba. In 1998, during depressed economic conditions, they still managed to generate almost a quarter of a million dollars in profit. Approximately 44 percent of their clients are women. The General Manager of CACSA presented a US\$2.5 million, 3-year proposal to DAI for assistance in expanding its portfolio in the region.

HOSPICIO, Ltda. is another savings and loan cooperative which has operations in the Chapare. The institution has worked with the people of the Chapare for approximately three years. They have an agreement with three "syndicates." The way they work is to sign an agreement with the entire syndicate for guarantee purposes. They have also worked with forming small solidarity groups within the syndicates. Their total portfolio in Invirgazama is currently \$95,000. However, due to the coca eradication, the economy of the Chapare is depressed, and business is down and they are suffering a high delinquency rate. Have not had very favorable results this year - are extending the maturity dates of the loans to facilitate payments. As a savings and loan cooperative, 100 percent of the resources belong to the members. They also accept payments for electricity bills. They are currently in the process of becoming regulated by the Superintendent of Banks, but supposedly their equity/asset ratio is not acceptable yet, and there is a question of whether or not they will sustain operations in the Chapare.

The primary strength of the credit unions is their stability. They have existed and operated in Bolivia for nearly 40 years with no external subsidies and little external capital. The primary weakness of the credit unions is that they tend to grow slowly because of their dependence on member savings and deposits, and

¹³The credit union movement suffered a serious decline during the period of hyperinflation, but have recovered in recent years. Particularly encouraging is the fact that they have begun to adopt the "new credit union paradigm," with emphasis on savings instead of shares and a wider variety of financial services.

the limited range of loan products they offer. Credit unions require a broad clientele with a mixed loan portfolio, and are therefore not good candidates for directed agricultural credit programs, where large amounts of funds must be loaned at specific times of years. Also, their smaller asset base limits the amount of exposure to risk they can take. Credit unions could serve a rather limited number of individuals and microenterprises in the Chapare, but would not be able to handle a large volume of loans to small farmers or willing to lend to financially suspect associations. Credit unions do have the ability to offer other financial services, such as deposits, bill paying, and limited transactions.

Private Financial Funds (FFPs)

“Private Financial Funds” are a special category of financial institutions that are subject to supervision and have authority to accept deposits. Two such institutions are, or could be, active in the Chapare.

PRODEM

The Foundation for the Promotion and Development of Microenterprises (PRODEM)¹⁴ has recently established an FFP, and plans to open branches of the FFP in the Chapare.

In 1986 a group of successful Bolivian businessmen, along with several national and international organizations, created PRODEM as a non-profit, non-governmental organization with the objective of supporting and improving the quality of life for the microenterprise and self-employed sector of Bolivia through access to non-subsidized credit. The organization pioneered (in Bolivia) the use of solidarity credit technology that had been developed by ACCION International, another NGO, in other countries. Under this “technology”, formal collateral is replaced by granting loans to a group of microentrepreneurs who guarantee each others loans. PRODEM was extremely successful in implementing this technology.

The demand for credit from the informal sector grew dramatically, and PRODEM decided that it was too limited as an NGO to meet this demand, since it had to rely on donations as its primary source of funds. So, in 1992, some of organization’s founders decided to create Banco Solidario S.A. (BancoSol), one of the first commercial banks dedicated exclusively to offering financial services to microentrepreneurs. This commercial bank, like any other, could access funding sources through capturing savings, inter-bank credits, the issuance of securities, and opening lines of credit from second-tier banks. PRODEM transferred (sold) its portfolio, and primary offices in urban areas to BancoSol.

After the creation of BancoSol, PRODEM changed its strategy and directed its activities to the rural areas of Bolivia. It initiated a “program aimed at delivering efficient, viable, simple and client-driven credit to rural inhabitants and proving that Bolivian farmers could be credit subjects.” In addition to solidarity group loans, it began offering individual loans designed for clients in a position to offer collateral. The organization’s current portfolio is about \$27 million dollars. It services over 50,000 clients, approximately 70 percent of whom are women, through its 56 agencies throughout the country. It extends loans for both agricultural and commercial activities. The interest rates it charges are 18-22 percent annually for dollar loans and 25 percent for boliviano loans. PRODEM is financially self-sustainable.

Through its FFP PRODEM will be able to diversify its funding base and offer additional types of financial services, such as savings accounts, wire transfers, debit card, drafts, and suppliers payments. The NGO, PRODEM, will initially hold just over 50 percent of the PFF and will continue to operate other types of programs, such as training activities.

¹⁴Extracted from Talentino report.

Until recently, PRODEM's senior management felt that the Chapare region was too unstable politically to do business there. However, they now believe that this situation has changed considerably, and they are very interested in establishing operations in the region. In fact, they already conducted their own market study which indicated that the region would be profitable, and they have plans to open an office there by February 2000. Management has had discussions with representatives from the DAI/CONCADE Project about establishing some type of cooperative effort between the two institutions, through which PRODEM could channel credit or investment funds to the producers' associations in the Chapare.

However, PRODEM intends to adopt a cautious approach to lending in the Chapare. It does not foresee lending more than \$600,000 to \$800,000 per year during the first few years of operation, and believes that most of its clients will be village-based micro- and small enterprises. It does not plan to have a large clientele among small farmers, and is not interested in financing or working through the associations.

AGROCAPITAL¹⁵

AGROCAPITAL was founded in 1992 under the auspices of the Bolivian Government and the United States Agency for International Development ("USAID"). The objective of AGROCAPITAL was to administer an agricultural credit program for farmers who were willing to conduct other profitable agricultural activities instead of growing coca plants. This new institution was to function in conjunction with the PL- 480, and CORDEP projects. Unfortunately, the manner in which the credit program was managed was not conducive to ensuring its success. The biggest problem was that AGROCAPITAL did not select its clients. Rather, the client base was dictated by the project. The institution still has about US\$5 million dollars outstanding from this period, the majority of which is considered by management as unrecoverable. As a result of the losses in the Chapare, AGROCAPITAL ceased lending operations in the Chapare.¹⁶ The only office currently open in the Chapare is in Ivirgarzama; which is engaged only in attempting to collect on previous loans. Its transactions and activities are minimal, and it is not making any new loans.

The lessons that AGROCAPITAL learned from its initial experience of offering credit in the Chapare were that:

- C the credit institution must be responsible for selecting its own clients;
- C an institution should not just give agricultural loans; it needs to have a diverse portfolio; and
- C the total family income needs to be considered when determining the basis for repayment on an agricultural production loan.

Taking these lessons into consideration, AGROCAPITAL currently offers two types of credit: microcredit loans of US\$600 -US\$4,000 for which it requires a personal guarantee, and larger loans for which the institution requires a mortgage security as collateral. Their primary market is rural and they offer loans for agricultural and small animal "production" activities, as well as the production of all licit products. Their interest rates range between 16 percent to 24 percent annually. At the national level, 70 percent of AGROCAPITAL's microcredit clients are women.

¹⁵Extracted from Talentino report.

¹⁶AGROCAPITAL does continue lending operations in other areas of the country.

In 1997, AGROCAPITAL began the process of becoming a “Fondo Financiero Privado”, or Private Financial Fund (PFF). As such, it will be regulated by the Bolivian Government’s Superintendent of Banks and will then be able to capture savings from the public, and greatly diversify the financial services it offers. It has no plans to reinstate loan activities in the Chapare.

Non-Governmental Organizations (NGOs)

Non-governmental organizations specializing in microfinance have a solid position in the Bolivian financial system. Following the establishment and success of PRODEM, numerous NGOs have entered the field of providing financial services for urban-based microenterprises. They have been instrumental in channeling funds to the poor and to special groups -- such as women -- within the society. Very few of these organizations engage in rural, especially agricultural, lending. They are not permitted to accept deposits.

One NGO (CIDRE) has recently opened a branch in the Chapare, and another (CRECER) has indicated a willingness to do so.¹⁷

¹⁸Centro de Investigacion y Desarrollo Regional (CIDRE)

El Centro de Investigacion y Desarrollo Regional (CIDRE), the Center for Research and Regional Development, a Bolivian NGO, was founded in 1981 in Cochabamba. It began providing financial services in 1990 with funding from the InterAmerican Development Bank. CIDRE provides loans to microentrepreneurs for agricultural production, animal husbandry projects and other small businesses, as well to municipalities for infrastructure purposes. CIDRE channels funds from FONDESIF, a Bolivian Government entity, which in turn receives funds from many different sources. The institution presently operates in 12 provinces of the department of Cochabamba, including the Chapare, where it recently opened an office.

CIDRE will have a minimum of US\$2 million dollars from FONDESIF to lend in the Chapare, over the next four year period. Procedures for qualifying for the FONDESIF funds have been very time consuming, and have delayed implementation of the program by more than 9 months. One of the implications of receiving funding through FONDESIF is that CIDRE will not be able to accept any other funds that are channeled through FONDESIF, and thus would become ineligible for financing through the CONCADE activity.

CIDRE’s methodology to mitigate the risks in the Chapare are to require that: 1) the individuals applying for a loan be affiliated with a “sindicato” (syndicate) or producer’s association; 2) the president or treasurer of the producer’s association co-sign for the loan, and 3) both the husband and wife sign for the loan. (CIDRE will not lend only to the husband since its experience has demonstrated that men are not as conscientious about repaying loans as women are. Also, in much of Bolivia, especially in the rural areas, the wife is the one who runs the household economy.) CIDRE requires guarantees - either through a mortgage security or some other form of collateral. Loans are made in US dollars. Interest rates range from 12 percent to 16 percent annually. CIDRE attributes its success as a lending institution to the fact that it immediately initiates legal action against debtors if they stop paying. This is a policy that CIDRE management recommends to all institutions offering credit – especially in the Chapare region.

¹⁷See Talentino report for a brief description of other NGOs.

¹⁸Extracted from Talentino report

CIDRE has decided that it wants to restrict its loans in the Chapare to larger loan sizes – loans of greater than \$5,000.

¹⁹**CRECER/Freedom From Hunger**

CRECER/Freedom From Hunger is an NGO that specializes in group lending programs for women, using a “village banking” methodology, in the rural areas of Bolivia. Of the institutions interviewed which employ this type of methodology, it is the only one that is interested in establishing operations in the Chapare. A detailed description of the CRECER/Freedom from Hunger program and proposal can be found in Tracey Talentino’s Final Report.

Buyers and Suppliers

Buyers and suppliers typically account for a large percentage of loans to microenterprises, small businesses and farmers. Suppliers offer inputs and materials on credit, and collect when the harvest or production is sold. Buyers, or middlemen, advance cash and materials and discount the cost of these items from the price of the product collected at harvest time.

Of particular interest to CONCADE is the possibility to channel financial resources through agribusinesses that process and market the production of small farmers. Some of these “suppliers’ credit” arrangements exist in the Chapare at this time. Grupo Andino advances boxes, packing materials and fumigation services to the farmer associations it works with. Banabol handles packing for a few neighboring associations. The extent to which other purchasers offer such credits is unknown.

Expanding these informal arrangements to a more structured “contract farming” or “crop assignment” model might be a major channel for meeting production credit needs. Both of these approaches link agricultural production credit to the marketing of the agricultural output. Under contract farming the buyer (a processing plant or other buyer) extends credit in the form of agricultural inputs and provides technical assistance to farmers with a contract to purchase their production. The buyer borrows from a financial institution to meet the input financing requirements, and the amounts of the credits are deducted from the sales of the product by the farmers. Under a crop assignment model the buyer may specify the inputs and extend technical assistance, but credit is advanced to the farmers by a financial institution – such as a credit union, FFP or commercial bank. The financial intermediary’s loans are guaranteed by a crop assignment to the buyer. At the time of sale the buyer deducts the amount of the loans from the sale price, and pays the financial institution directly.

There are well-known problems with such contract farming models but, if carried out successfully, this can be an effective mechanism for managing production credit and ensuring a market for agricultural produce.

Informal Credit

Informal credit – through family, relatives or moneylenders – is traditionally the most significant form of credit for microenterprises, small farmers, and the poor. This channel cannot be “used” easily by development projects, but exists as a major alternative for small farmers and others when formal sources of credit are not available.

¹⁹Extracted from Talentino report.

MATCHING SUPPLY AND DEMAND

The market for financial services in the Chapare can be segmented into four distinct client groups -- individuals, associations, agribusinesses and others. The major channels through which financial services could be provided are commercial banks, non-bank financial intermediaries, NGOs, and agribusinesses (through contract farming arrangements). The different channels have different strengths and weaknesses, and not all are equally well suited for providing services to all of the target clients.

The table on the following page illustrates the relative feasibility of using the different channels to meet the credit needs of the different client groups. As the table shows:

- C Commercial Banks are well suited to serve agribusinesses, and could serve the credit needs of the associations, but are not well suited to meeting the credit needs of individuals;
- C Private Financial Funds (FFPs) can meet the non-agricultural production credit needs of individuals, are well-suited to meeting the credit needs of women, and could meet some of the credit needs of associations, but are poorly suited to financing production credit and larger investments;
- C Credit Unions can meet the non-agricultural production credit needs of individuals and women, but cannot meet the needs of associations or agribusinesses;
- C NGOs are well suited to meeting microenterprise activities and women's activities, but lack the capital to meet the credit requirements of the associations or agribusinesses; and
- C Agribusinesses have a potentially important role to play in financing the agricultural production credit needs of individuals, but only through mechanisms such as contract farming or crop assignments, and only if the funds are provided by other institutions – such as donors or financial institutions.

To say that a particular channel is well-suited to meeting the credit needs of a particular market segment does not mean that it will do so. Commercial banks have the potential to meet a significant portion of the agricultural production credit needs of individuals in the Chapare, but are highly unlikely to engage in this kind of lending without substantial incentives. Commercial banks are the only institutions capable of supplying credit to the agribusiness sector but have, to date, been extremely reluctant to lend to this sector.

Regulated financial institutions – commercial banks, FFPs and some credit unions – have the ability to provide both savings and credit services in the region. NGOs tend to be more limited, with a focus on a particular set of credit services targeted at a specific client group. NGOs may not take savings. Some of the specific strengths and weaknesses of the various institutional channels for credit are as follows:

Commercial Banks

Strengths

- C Large capitalization

- C Regulated financial institutions
- C full range of banking services

Weaknesses

- C Reluctant to lend in the Chapare
- C Reluctant to lend for agricultural production to small farmers
- C Restrictive collateral requirements

Private Financial Funds (FFPs)

Strengths

- C Very effective in reaching women
- C Strong savings component
- C Variety of savings and loan products
- C Good reputation, management and track record
- C Regulated by banking supervisory agency

Potential Channels for Meeting Different Credit Needs

| Target Group and Objective | Commercial Banks | Private Financial Funds | Credit Unions | NGOs | Agribusinesses |
|--|-------------------------|--------------------------------|----------------------|-------------|-----------------------|
| Individuals, for emergency purposes | | Strong | Strong | | |
| Individuals, for consumption smoothing | | Strong | Strong | | |
| Individuals, for microenterprises | | Strong | Moderate | Strong | |
| Individuals, for agricultural production | Potentially Strong | Limited | Limited | | Potentially Strong |
| Women and women-owned microenterprises | | Strong | Moderate | Strong | |
| Associations, for rotating credit funds | Potentially Strong | Moderate | Moderate | | |
| Associations, for working capital | Potentially Strong | Limited | | | |
| Associations, for investments | Potentially Strong | Limited | | | |
| Agribusinesses, for working capital | Strong | | | | |
| Agribusinesses, for investments | Strong | | | | |
| Agribusinesses, for factoring | Strong | | | | |

Private Financial Funds – FFPs (continued)

Weaknesses

- C Rather limited capitalization and portfolio capability
- C Historically have concentrated in urban areas

Credit unions

Strengths

- C Local presence in the Chapare
- C Member owned
- C Covers savings needs
- C Capable of making small loans with minimal of collateral and bureaucracy
- C Are stable institutions that have survived in Bolivia, without external subsidies, for nearly forty years

Weaknesses

- C Slow capital growth, limited lending capability in early years
- C Often lack ability to respond rapidly to needs of microbusinesses
- C Insufficient capital and liquidity to undertake seasonal agricultural lending on a major scale

NGOs (such as CRECER and PRODEM)

Strengths

- C Very effective in reaching women
- C Provide positive support on a variety of women and household issues
- C Stimulate asset growth among women

Weaknesses

- C Very expensive approach
- C Limited product range
- C Little upward growth

The challenge to CONCADE is to match the channels for institutional credit to the target clients in such a way that best achieves the activity's objectives, and that coincides with the institutional strengths and interests of the various institutions. This is especially difficult, as CONCADE's primary objectives are to increase the productivity, production and value of marketed product of small agricultural producers in the Chapare. None of the financial intermediaries reviewed or discussed are suited to, or interested in, serving this clientele. As a result, rebuilding the rotating credit funds of the various producer associations may be the only viable option for reaching this client group.

MECHANISMS TO STIMULATE INVESTMENT

With severe delinquency problems and suspicion of money laundering, all financial intermediaries ceased work in the Chapare. Only recently have any institutions shown an interest in reentering the zone. Furthermore, as discussed above, none of the financial intermediaries are well suited to serving CONCADE's primary client beneficiaries.

Most financial intermediaries will require some sort of support or incentive to work in the Chapare, and especially to work with CONCADE's primary client group – small farmers and small farmer associations. This support involves reducing risk and/or enhancing profitability. Some of these involve financial operations; others may be more direct.

Financial Mechanisms

Financial mechanisms involve ways to encourage financial institutions to undertake the risks of providing credit to the target beneficiaries. Mechanisms for accomplishing this include trust funds, guarantee funds, and rediscount facilities.

Trust Funds

Another alternative that has been widely used in Latin America is the Trust Fund, or *Fidecomiso*. Under this arrangement project funds are placed in trust in one or more financial institutions. These funds are loaned to individuals, associations, or businesses, with the financial institution receiving a fee for managing the fund.

Major advantages of this approach are that it can move funds quickly; banks are willing to implement it because it carries no risk for them, and they earn income with few expenses or risks.

Major disadvantages are that it fails to leverage funds; bank involvement in providing services to the client group ends with the termination of the trust; and the bank has little incentive to manage the quality of the portfolio.

Guarantee Funds

Guarantee funds are a mechanism for leveraging local resources with a minimum use of US Government funds, and could increase the amount of credit to the Chapare beyond the meager resources of the project itself.

USAID has several credit guarantee mechanisms that could be used by the CONCADE activity, including *Bond Guarantees*, *Loan Portfolio Guarantees*, and *Portable Guarantees*.

Bond Guarantees are used to support the issuance of bonds by financial institutions to assist them in raising local funds to expand their portfolios – primarily in MSE activities. As such, these guarantees greatly expand the pool of credit available in the system. BancoSol and FIE have made use of bond guarantees to increase their portfolios. A bond guarantee does not mitigate against credit risk, and will not overcome bank reluctance to lend in the Chapare, or to finance agricultural production.

Loan Portfolio Guarantees provide a partial guarantee of up to 50 percent of the net loss on the principal amount of loans made by financial institutions to eligible borrowers. The financial intermediary lends its own funds, so the net pool of loanable funds is not increased. However, the guarantee makes it more likely that more of the existing pool of resources will be channeled to the target beneficiaries. The guarantee covers up to 50 percent of the amount of loss that is written off, after the financial institution has taken all reasonable steps to recover the loan. The portfolio guarantee, therefore, can substitute for some of the collateral that would normally be required by the financial institution.

Portable Guarantees are typical used by microfinance institutions to gain access to local commercial sources of funding for on-lending to microenterprises.²⁰ In addition to serving as a security for a loan a commercial bank extends to the institution, the guarantee also provides income enhancement so that the institution is more likely to secure funding at more competitive terms.

Loan guarantees could be used as a creative approach to increasing both commercial bank and non-bank financial institution lending in the Chapare. The main advantage to CONCADE is that its limited funding could be leveraged to have a much greater impact on agricultural production and marketing. Guarantees do not overcome some of the fundamental difficulties involved in lending for agricultural production, but can be especially effective in stimulating bank loans to agribusinesses and in mitigating some of the risk of lending for either private financial funds or credit unions in the region.

Additional information on A.I.D.'s Development Credit Authority is available from A.I.D. Washington.

Rediscount Mechanism

Rediscounting involves reimbursing a financial institution for the amount of loans made to qualified subborrowers for approved activities. A financial institution makes a number of loans that fall within the general parameters of the credit program, and submits those loans to the Central Bank for reimbursement. If the Central Bank certifies that the loans meet the established criteria, it disburses the amount of approved loans to the financial institution. The financial institution pays interest on the funds received. The rediscount mechanism is similar to a trust fund in that the financial institution is essentially working with external resources. It differs from a trust in that the financial institution makes the initial loans out of its own cash and takes the risk on whether or not the loan will qualify for Rediscounting. It also takes the credit risk. Variations on the rediscounting mechanism can pass ownership of the loan to the Central Bank, with the commercial bank acting as a loan servicing entity once the loan is rediscounted.

Other Financial Alternatives

Incentive Fund

The CORDEP project made use of incentives to encourage key agroindustries to operate with project clients. These incentives amounted to cash payments for performance in producing and marketing small farmer products -- such as \$1.00 per box of bananas exported up to a set limit.

This can be an effective mechanism for stimulating new industry entry into a situation that businesses are reluctant to enter. Carried beyond the initial phase, however, introduces pricing distortions and non-economic decisions by businesses. If the business is indeed profitable, the company should not need subsidies to maintain its interest in the business.

Equity Fund

An alternative to credits and incentives to encourage a reluctant business to operate in the Chapare is to invest directly in that business (or a competing business) and install a management that will operate the business.

²⁰Whether or not a portable guarantee could be given to an individual enterprise to shop for credit still needs to be explored.

The ability, willingness and capacity of CONCADE to operate a business successfully must be demonstrated first, and the absence of clear exit strategies might lead to longer term investments than intended.

Contract Farming

Contract farming, either directly (with Agroindustries providing inputs and technical direction to the farmers through the associations) or through crop assignment arrangements with a financial intermediary providing credit for the inputs, is another mechanism for reaching small agricultural producers with needed credit services.

Contract Management of Key Agroindustries

The presence of active processing/exporting companies that are buying products from small producers in the Chapare is absolutely essential for the CONCADE activity to reach its marketing targets. For some of the key crops there is an insufficient number of processors/exporters; for others the existing processors/exporters are not aggressively locating and developing sufficient markets to absorb product that is being produced by farmers participating in the CONCADE activity. In some cases donor agencies have built processing plants that currently stand empty, or are grossly underutilized.

Helping to get idle or underutilized plants operational, or installing a more market-oriented management in key industries could provide a major economic benefit to the region. Contracting management, or contracting more market-oriented management, in cases where export volumes are not expanding rapidly enough, might be a way to stimulate improved markets for the farmers' outputs. For example, La Naturaleza has been approached to manage the Agro-Te processing plant. Other efforts in this area might lead to major increases in export marketing in the region.

Others

If grants are involved, an innovative approach to providing credit funds has been used on USAID projects in Guatemala and El Salvador. The project makes a grant to an institution, but instead of disbursing cash, purchases a CD in a commercial bank. The bank lends to the grant recipient the amount of the CD, with a negotiated interest rate – interest earned on the CD can either offset commercial interest rates or be paid directly to the grant recipient, if the recipient meets production or other targets. The CD serves as a guarantee for the loan, reducing risk. At the end of the project the grant is transferred to the receiving institution.

Non-Financial Incentives

A variety of other non-financial incentives to promote investment and investment finance in the Chapare include:

- price supports;
- tax breaks, including reimbursement of value added taxes on exports;
- tax credits or exchanges for establishing a business in the Chapare;
- Leasing of equipment to key firms; and

- Educating banks on techniques of factoring, leasing, and cash flow lending.

LEGAL AND REGULATORY CONSIDERATIONS

Prudential Regulations of Financial Intermediaries

Microfinance proponents often criticize banks for insisting on collateral when making loans, even to small borrowers or microentrepreneurs. But banks are regulated financial institutions, and one of the main purposes of regulation is to ensure the soundness of the assets of the regulated institution. Collateral is required by the regulatory agency, and the regulatory agency sets the amounts of collateral that must cover different kinds of risk assets. Sometimes, to be very sure, banks require extra collateral to not fall afoul of the regulator.

There are several ways to mitigate the problem of collateral. One is to operate small loan programs through non-regulated financial institutions; as long as the institution is working with donor funds or its own risk assets (as opposed to savings) this option is viable – losses do not jeopardize the savings of depositors. Another way is to substitute other forms of collateral for traditional bank collateral. Group or solidarity pledges are commonly used by microfinance institutions. Credit unions have traditionally relied on co-signers. Loan guarantees can substitute for collateral on larger loans.

Role of FONDESIF and NAFIBO SAM

Decree 25388 of 3/99 stipulates that any monies made available to the Government of Bolivia by international donors through bilateral or multilateral agreements to support microenterprises and microfinance institutions must be channeled through NAFIBO SAM and FONDESIF:

NAFIBO SAM y el FONDESIF son las únicas entidades que proveen los recursos financieros provenientes del Estado Boliviano, o aquellos obtenidos por éste, de entidades financieras internacionales o entidades privadas nacionales y del extranjero, bajo cualquier modalidad o forma de contrato, con destino al otorgamiento de líneas de financiamiento para la concesión de microcrédito y al apoyo institucional integral de entidades financieras que atiendan demandas de microcrédito . . . [Government of Bolivia, Gaceta Oficial de Bolivia, Año XXXIX, No. 2130, La Paz, Bolivia, 5 April 1999, p. 3]

The decree goes on to state that:

Los recursos financieros provenientes del Estado Boliviano, o aquellos obtenidos por éste y canalizados por el Viceministerio de Inversión Pública y Financiamiento Externo, de entidades financieras internacionales o entidades privadas nacionales y del extranjero, bajo cualquier modalidad o forma de contrato, provenientes de la cooperación internacional con destino a [estos] fines . . . serán transferidos para su administración a NAFIBO SAM y al FONDESIF . . . [Ibid., p. 4]

The stated purpose of this decree was to coordinate the use of funds in a rational fashion, not to take over the decision of who receives funds from individual donors. The Government of Bolivia (GOB) wants to "harmonize" the flow of funds to the sector to make sure that donors are not engaging in counterproductive practices (subsidizing credit), or flooding a given institution with money from several sources.

FONDESIF is responsible for any funds channeled through the GOB to non-regulated financial institutions for the purpose of microenterprise or microcredit. It prefers to work through "competitive bids" among a group of "sound" NGOs to select institutions for funding but, if a donor has a strong justification for selecting a particular institution, FONDESIF would be willing to direct funds to that institution.

Several of FONDESIF's operating policies severely restrict funding of development projects. For example, FONDESIF's policies state that no NGO may request funding more than one time (combined grant and loan), and no NGO may borrow more than 50 percent of its paid in capital. Furthermore, FONDESIF prefers to give "grants" to cover the start-up operating costs of new offices or programs, and "loans" for funds that will be used to build a portfolio. The reason for only using loans to build credit purposes was to give all receiving institutions same and equal treatment. Finally, FONDESIF charges a fee for administering the funds, and captures the interest on loans given to institutions for their credit portfolios.

These policies make it very difficult for a donor agency to build a development program through FONDESIF. Financial institutions can typically manage funds amounting to 8 to 10 times paid in capital, and the reason for restricting this ratio is to protect "depositors." NGO's have no depositors, so limiting borrowed funds to no more than one-half times paid in capital severely restricts the potential size of a program and appears to serve no prudential purpose. Using "loans" only to build credit portfolios restricts the long-term growth of a portfolio to the spread earned on interest rates, which limits long-term impact and sustainability as the loans would supposedly have to be repaid to FONDESIF. FONDESIF was uncertain about a proposal to give funds to an institution as a "loan" with a progressive forgiveness of the "loan" as the institution meets performance targets (converting the loan to a grant), and had not thought about alternatives such as directing the interest earned on the loan back to the institution as an offset against costs if it meets its performance targets – both of which CONCADE is considering. FONDESIF wants NGOs participating in such programs to adhere to strict standards of portfolio quality, risks and losses.

NAFIBO SAM's role in channeling development loan funds to regulated financial intermediaries is consistent with past GOB practices, in which all international donor-supplied loans to the GOB were managed by the Central Bank. NAFIBO SAM represents a privatization of this process. Under this arrangement loans are funneled through regulated financial institutions on a commercial basis. NAFIBO SAM retains a commission and a spread on the interest rates.

Although FONDESIF and NAFIBO SAM represent a rational and consistent approach for development finance in most cases, several features make it undesirable for CONCADE's credit and investment incentive programs to work through either of these institutional mechanisms. First, the nature of investment and development in the Chapare is inherently high risk, and requires programs that recognize and are able to accommodate this risk. Applying strict prudential and financial criteria to investments in the Chapare will mean that no investment will take place. The CONCADE program must be able to experiment with high risk investments and non-traditional mechanisms in order to support the development objectives. Neither FONDESIF nor NAFIBO SAM are prepared to offer this flexibility – either in terms of the instruments used or the amount of risk and loss accepted. Second, the FONDESIF and NAFIBO SAM mechanisms do not foster the development of a permanent financial services presence in the Chapare. Because participating institutions would be forced to adopt strict financial disciplines, they would tend, like AGROCAPITAL, to place most of their investment outside of the Chapare. And, as funds were repaid to either FONDESIF or NAFIBO SAM, there would be no guarantee that those funds would continue to be invested in the Chapare.

USAID/Bolivia needs to consider several other aspects of channeling development funds for the Chapare through either of these institutions.

1. Is AID an "international financial entity" as intended in this statement, and is the decree consistent with the bilateral agreement between the U.S. government and the Government of Bolivia?
2. Are the funds of the CONCADE, which deals with agricultural production and marketing in the Chapare destined for "microcredit" as intended in the decree?
3. Passing monies through FONDESIF (and presumably NAFIBO) amounts to imposing a tax on the monies donated by the U.S. government. Is this consistent with the bilateral agreement between the U.S. government and the Government of Bolivia?

These three points need to be addressed by USAID prior to preparing a credit and investment incentives program through the CONCADE project.

Money Laundering

The GOB has established an agency known as the Unidad de Investigaciones Financieras (UIF) within either the Central Bank the Superintendencia de Bancos. This agency is responsible for investigating money laundering through regulated financial institutions. It has established strict definitions and reporting procedures, and continuously monitors banks and other regulated financial institutions. Penalties for failing to catch money laundering operations are quite severe, with the result that most financial intermediaries chose to error on the side of not being exposed to the risk of money laundering. This results in more restrictive banking practices in the Chapare than might otherwise be expected.

Key Policy Issues

Several policy issues need to be addressed during the process of establishing the *Investment Promotion Fund*. Among these are:

- The *Superintendencia de Bancos* does not recognize loan guarantees as legitimate forms of collateral for the purpose of classifying and provisioning for loans. Loan guarantees are specifically covered in the Basle accords, and several countries have successfully addressed similar restrictions through consultation with A.I.D.'s DCA program staff.
- The agrarian reform law (INRA) prohibits the pledging of agricultural land and tools and machinery used to earn a living as collateral. Since land, animals, crops and machinery are often the only form of collateral possessed by a small farmer, some revision to the law to permit these to serve as collateral needs to be made.
- Some of the suggestions in this concept paper may run afoul of Government of Bolivia policies regarding the administration of grants and loans to the government by FONDESIF or NAFIBO SAM. It is important to recognize that these two institutions require credit programs to operate in very traditional manners, while the urgent need for the Chapare is to undertake a series of

innovative, high-risk investment activities. These cannot be carried out successfully if the funds are administered by an agency that is not permitted to take the necessary risks or experiment with innovative financing mechanisms.

- The Government of Bolivia's representatives for the CONCADE activity have recently determined that rotating funds administered by the associations may not charge interest to maintain the value of the rotating funds. USAID/Bolivia should provide no funds for these rotating funds unless this policy is changed to permit the rotating funds to operate on a sound basis, with the prospect of becoming sustainable within the associations.

RISKS AND OTHER ISSUES

Conflicting Donor Policies and Practices

Different donors have different philosophies on grant and credit programs. Some donors subsidize interest rates to the final borrowers, others do not. Some donors prefer to grant capital funds to financial intermediaries, others prefer to loan those funds.

Differing donor policies and practices, especially in a confined area the size of the Chapare, can have adverse consequences as borrowers learn to take advantage of the differences and play one institution off against another. It is especially important to avoid any direct interest rate subsidies.

Financial Market Saturation

Although until recently there have been no financial service providers with offices in the Chapare, that situation is changing rapidly. Two savings and credit cooperatives (San Antonio and Hospicio) have recently opened branches. CIDRE, an NGO is offering microcredit in the region, and PRODEM, an NGO that is considering the establishment of an FFP or bank, plans to open a branch early in 2000.

All of these institutions target the same client population – individuals with a capacity to borrow and repay small production or consumption credits. With a population of only 35,000 families in the Chapare, there is a definite risk that the market is not sufficiently large to support this number of institutions.

Devaluations in Argentina and Brazil

At the moment there are reasonably good markets for Chapare products in Argentina, at least partially due to the overvalued condition of the Argentine peso. If, as is expected, Argentina devalues the peso, Bolivian products might find less of a market there, reducing the credit worthiness of potential borrowers. Further devaluations in Brazil could lower the price of Brazilian goods and make Bolivian products less competitive in Argentine and Uruguayan markets.

Out-migration from the Chapare

Out-migration from the Chapare has accelerated in recent years as families have become disillusioned with the income from non-traditional crops. Out-migration has two impacts: it reduces the potential client base, and it increases the risk of bad debts as families that leave tend not to repay loans.

Availability of Development Programs in Other Areas

If economic opportunities in the Chapare are perceived as limited, recent migrants to the Chapare will be tempted to leave to seek better opportunities elsewhere. USAID/Bolivia is promoting a new development in the *Valles Altos* region of Cochabamba, and this \$20.0 million effort could lure migrants from the Chapare. Families that are contemplating leaving an area are less likely to make capital investments in their present holdings, will have less of a demand for credit, and will be greater credit risks.

Absence of a Credit Mentality

The major threat to "effective" demand is the willingness of the local borrower to repay. Regardless of any other capability constraints, the main fear of potential lenders is the absence of a "credit" culture in the region created by a history of grants and major defaults on past loans that have led to an expectation that this is the norm.

" . . . el Programa PL-480 afecto seriamente la credibilidad del financiamiento en el Trópico Cochabambino al colocar préstamos ligados a los paquetes tecnológicos y el deudor no cancelaba la obligación, ya que no tenía una fuente de venta asegurada, no creando una conciencia crediticia entre los pobladores de la zona y afectando la credibilidad del financiamiento." [Rodriguez Martinez, p. 7.]

There is widespread consensus that a "culture of credit" is developing in the Chapare, and that small farmers are becoming aware of the difference between loans and grants, and of the need to repay loans. Associations interviewed recognized the need to maintain the value of their rotating credit funds, although they were clearly at a loss as to how to deal with farmers whose crop fails or whose income drops for other reasons. If the credit programs lapse into the previous situation of high delinquency rates and loan losses, it will not be possible to meet the investment needs of the small farmers of the Chapare through credit programs.

Subsidizing Interest Rates

There is a general consensus in the development field that interest rates should not be subsidized. Subsidizing interest rates encourages non-economic investments and stimulates production and other activities that are not sustainable in the market. The problem faced by CONCADE is that the investment needed to accomplish the objectives of the project will not take place in the Chapare at prevailing commercial bank interest rates. Some form of subsidy or incentive may be essential to stimulate the needed investment, for individual producers and associations as well as agribusinesses.

There are mechanisms other than interest rate subsidies that can be used to offset high interest rates. The investment incentive mechanism used in the CORDEP project is one way to substitute an achievement-based incentive that does not distort market interest rates. Another mechanism would be to rebate interest to borrowers that fulfill both their production levels and repayment obligations. If one or more trust funds are established, the interest earned on these funds could be rebated to borrowers who make all of their

payments on time – effectively lowering the interest rate, but only if the borrower complies with program objectives.

CONCLUSIONS AND RECOMMENDATIONS

The need for investment is very large. Preliminary estimates show the following needs for financing:

| Sector | Needs |
|---|-------------------------|
| Small Farmers | \$70.0 million per year |
| Producer Associations | \$4.0 million |
| Processing and Marketing Intermediaries | \$5.0 - \$10.0 million |
| Transportation | \$2.0 million |
| Financial Intermediaries | \$2.0 million |

Thus, there is an immediate need for about \$13.0 to \$18.0 in new investment, plus annual on-going investment in agricultural production of about \$70.0 million.

The market for financial services in the Chapare can be segmented into distinct client groups -- individuals, associations, agribusinesses and others. The different segments have different requirements, and different relevancies to accomplishing the CONCADE activity's objectives. The project does not need to work with all segments, and it does not have to meet all of the needs of any of the segments.

CONCADE does, however, have a mandate to further the transition from illicit to licit crop production in the Chapare. This involves ambitious targets for production, marketing, and families assisted. CONCADE must necessarily place greatest priority on services and market segments that directly support these strategic objectives and intermediate results targets. At the same time, general broadening of financial services in the region is important for long-term economic growth and development, and is necessary for the objectives of the project to become sustainable. As a result, CONCADE needs to provide some support to general financial system development in the Chapare

The channel selected to implement the financial services component will have a profound impact on both the nature of client population and the impact on activity objectives. Matching the financial service needs of the various client groups with appropriate channels of intermediation is necessary to achieve CONCADE's objectives.

Supplying credit and other financial services to the Chapare can take place through a variety of financial intermediaries – particularly banks, non-bank financial institutions, and NGOs. Each of these channels has specific strengths and weaknesses. Commercial banks have the resources to meet the credit needs of agribusinesses, and perhaps associations, but are not viable channels for reaching individual small farmers or microenterprises. Non-bank financial institutions and NGOs are particularly well suited to reaching individuals and special target groups (such as women), but generally lack the financial resources to meet long-term or seasonal credit demands of the agricultural sector or to respond to the financial service needs of larger agribusinesses.

The key problem is one of assuring the availability of financial services that are needed to support the immediate objectives of the CONCADE activity – increasing agricultural production and marketing in

selected high priority crops, particularly among small farmers. Commercial banks are poorly suited to serving this sector of the population, and the other organizations that have expressed an interest in providing some services under CONCADE cannot reach the volume or sector-specific targets required to meet CONCADE's goals. Organizations such as CRECER and PRODEM will have little, if any, impact on these objectives. CRECER's portfolio is unlikely to have any loans at all that support CONCADE's core objectives, and PRODEM's portfolio will be heavily oriented toward village microenterprises and consumption. The slow turn-over of agricultural activities is inconsistent with the rapid turnover style of lending that has characterized PRODEM's portfolio to date. Not more than one third of PRODEM's loans would be in the agricultural sector, and these would tend to be for activities not directly related to crop production. The credit unions that have recently established branches in the Chapare tend to grow very slowly, and have a limited clientele. While they can make agricultural loans, they will not have the capitalization to have a significant impact on meeting the overall needs of agricultural production, and cannot afford to have their portfolios too heavily biased toward agricultural.

As part of a more general problem, financial institutions in Bolivia have been reluctant to provide financial services in the Chapare, due in large part to the high risk and poor repayment record of borrowers in the Chapare. Commercial banks have been particularly reluctant to lend and provide other financial services in the Chapare. And only recently have several NGOs and non-bank financial intermediaries opened offices in the Chapare or announced an intention to do so in the near future.

In short, there is no suitable channel for financial services that can respond to the investment needs and special conditions of the Chapare. Commercial banks are needed to handle large credit volumes, but may not be willing or able to take the risk involved in such loans. NGOs can reach very poor people, but are poorly suited to large volumes of transactions, agricultural lending or the large amounts needed to support production credit. FFPs and credit unions can provide savings, transactions and other financial services in addition to credit, but lack the capitalization to meet the volume requirements of either the investments and cash flow needs of the marketing companies or the production credit requirements of the small farmers. Furthermore, FFPs and credit unions are not oriented toward serving the large agricultural population that is the key focus of the CONCADE activity. Any solution that depends on traditional channels of financial intermediation and traditional financing mechanisms, will not significantly improve conditions or help CONCADE meet its objectives.

Final Conclusions and Recommendations

The CONCADE activity has been assigned a substantial array of indicators and performance targets. These targets cannot be met without a significant expansion in the availability of financial services in the Chapare. Furthermore, meeting the targets is meaningless unless the benefits are sustainable. Sustainability can only occur if sufficient financial resources are available for an extended period of time. The CONCADE activity has limited financial resources and a limited time horizon. As a result, it cannot satisfy all of the financing needs for its target beneficiaries and it cannot satisfy any of those needs for more than a very limited period of time.²¹

Lending to institutions and individuals in the Chapare is a high risk operation – one that existing institutions have been reluctant or unable to undertake. Traditional approaches to meeting financing needs will not work in the region due to these high risks, lack of interest by traditional financial intermediaries in servicing the Chapare, the absence of financial intermediaries in the Chapare, and stringent government regulations that make it risky for financial institutions to do business in the

²¹ Although other donor programs are operating in the Chapare, they share the characteristics of limited financial resources and time horizon.

Chapare. A program to stimulate investments in the Chapare must be able to take high risks and be able to absorb a higher rate of loss than normal, and must be dedicated to serving the Chapare. To date, these characteristics are not present in any of the financial intermediaries that have been interviewed. CONCADE must be prepared to accept a higher level of risk than formal sector financial institutions can accept, and it must be willing to accept a higher amount of loss than regulated financial institutions can accept.

CONCADE's primary role in development finance for the Chapare, therefore, should be as a catalyst. Although it needs to focus on meeting its results targets, CONCADE should also be concerned with stimulating sustainable financial services for the region. In this role, it should stimulate the involvement of a wide variety of semi-competing institutions that fulfill the needs of the various market niches, it should underwrite the initial risk of offering financial services in the Chapare, and it should undertake and support a variety of financial operations that are currently unavailable through existing institutions – operations such as equity financing, incentive subcontracts, leasing, contract management of key facilities, financing of receivables, and others. And it should undertake these activities in such a way that its actions stimulate the involvement of other financial intermediaries.

CONCADE should support multiple channels of financial intermediation in the Chapare, while devoting most of its resources to the direct objectives of meeting production and marketing targets. This implies:

- C allocating a relatively small amount of funds to selected NGOs and non-bank financial intermediaries that have *already* established a presence in the Chapare and that are engaged either in financial intermediation (savings as well as credit) or in reaching a specific clientele (such as women); and
- C allocating most of CONCADE's resources and efforts to meeting one or the other of the two priority program requirements – production or marketing – as determined by CONCADE.

To ensure that investment incentive and credit funds reach the Chapare, and that they take the risks necessary to stimulate investment, CONCADE needs to manage the funds directly – at least during an initial start-up period. Past experience and current interviews with potential financial partners has shown that financial intermediaries are unable and unwilling to focus on the Chapare and to accept the levels of risk inherent in lending to the Chapare, that they are not able to reach the primary target audience of small farmers and associations, and that they cannot operate in the Chapare on the scale necessary to achieve the stated objectives.

CONCADE would not lend directly to, or otherwise finance directly, small farmers, associations or other businesses, but would work through existing intermediaries. CONCADE's role would be to manage the funds to ensure that they reach the intended beneficiaries operating in the Chapare, to underwrite the risk inherent in providing financial services to investors in the Chapare, and to stimulate the adoption of innovative loan mechanisms and other financial instruments to better ensure that the types of investment necessary to produce the intended results and long-term sustainable investments take place. The key institutions for channeling the more broad-based financial intermediation funds would include selected FFPs, credit unions and NGOs. The FFPs and credit unions have the ability to generate savings, and represent a more permanent approach to financial development in the region. NGOs have the ability to reach specific client groups.

If CONCADE manages the funds directly, it has access to several mechanisms to stimulate the provision of financial services to the target client groups. These include the investment incentive scheme used under the CORDEP project, establishment of trust funds to meet specific credit objectives and local loan guarantees, equity funding, direct management contracts for key facilities, and use of A.I.D.'s

Development Credit Authority to access various loan guarantee instruments,. Each of these mechanisms addresses a specific subset of the impediments to the provision of effective financial services in the Chapare. Blending strategies to encompass several of these mechanisms may provide the best strategy for achieving the activity's objectives. This range of alternatives would not be available if credit and investment funds were channeled through alternative mechanisms, such as FONDESIF and NAFIBO SAM, or placed in a single trust fund with a commercial bank.

The recommendation, therefore, is to:

expand the CONCADE grant and incentives subcontracts line items, and include a credit component, to stimulate investments in agricultural production, processing and marketing in the Chapare. The funds would be managed directly by CONCADE as an extension of its existing funds management responsibilities, although CONCADE would channel any funds destined for credit through existing financial intermediaries.

ANNEX A

Financing Models for Agricultural Production

This annex presents two projections of financing requirements for small-farmer agricultural production, assuming that all lands and crops are farmed with intermediate technology, and all production costs are financed, either by the farmer himself or through loans. The models show the amount of grants, loans and self-financing that would be required to implement the production packages.

Assumptions for both model include the existing hectares planted in each crop (column 1), the projected annual increase in number of hectares to be produced (column 2), the annual cost in 1996 US dollars to maintain an existing hectare using medium technology (column 3), the cost to in 1996 US dollars to bring a new hectare into production (column 4), the one-time cost of initial plant materials (column 5), and the annual cost of agricultural inputs in 1996 US dollars (column 5). Cost factors are assumed to have increased by 3 percent per year during the period from 1996 to the end of the models.

| Product | Existing Hectares (1) | Annual Increase (2) | Annual Cost (3) | Cost Per New Hect. (4) | Plant Materials (5) | Agric. Inputs (6) |
|---------------|-----------------------------|---------------------------|-----------------------|------------------------------|---------------------------|-------------------------|
| Bananas | 14000 | 500 | 1252 | 2045 | 448 | 422 |
| Pineapple | 1700 | 0 | 1426 | 4894 | 3500 | 448 |
| Palm Heart | 3000 | 1500 | 571 | 1733 | 715 | 271 |
| Passion Fruit | 160 | 0 | 1780 | 3710 | 157 | 1187 |
| Pepper | 160 | 20 | 1343 | 8346 | 900 | 564 |
| Root Crops | 8000 | 500 | 451 | 655 | 0 | 0 |
| Tea | 60 | 0 | 80 | 120 | 0 | 0 |
| Citrus | 22360 | 0 | 452 | 1082 | 309 | 119 |
| Platano | 6750 | 0 | 427 | 762 | 80 | 7 |
| Basic Grains | 8029 | 500 | 824 | 1094 | 510 | 116 |
| Cattle | 28000 | 0 | 266 | 1412 | 50 | 77 |

In both models the initial plant materials are presumed to be granted to the farmers for their first-time shift from coca production to licit crops. Financing for agricultural inputs in the first year are assumed to be loan financed. Subsequent-year financing is financed entirely by the individual farmer, either through his own resources of labor and cash, or through loans. The only difference between the two models is the percentage of future year costs that are assumed to be loan financed. In *Model 1* the farmers are assumed to finance 50 percent of on-going costs through loans, and 50 percent through self-financing (or non-financing). In *Model 2* the farmers are assumed to finance only agricultural input costs through loans, and all of the rest through self-financing (or non-financing). Since the amount of agricultural inputs required differs greatly from crop to crop, the amount of loan financing required also varies from crop to crop. The percentages that are self-financed and loan-financed for each crop can be seen below:

| Crop | Self- Financed | Loan Financed |
|---------------|-------------------|------------------|
| Bananas | 66.29 | 33.71 |
| Pineapple | 68.58 | 31.42 |
| Palm Heart | 52.54 | 47.46 |
| Passion Fruit | 33.31 | 66.69 |
| Pepper | 58.00 | 42.00 |
| Root Crops | 100.00 | 0.00 |
| Tea | 100.00 | 0.00 |
| Citrus | 73.67 | 26.33 |
| Platano | 98.36 | 1.64 |

| | | |
|--------------|-------|-------|
| Basic Grains | 85.92 | 14.08 |
| Cattle | 71.05 | 28.95 |

In both models the total grant funding that would be required is US\$7.4 million over a four-year period. In *Model 1*, with farmers financing 50 percent of the production costs through loans, the individual small farmers in the Chapare would contribute US\$ 146.7 million in their own labor and capital, and would need a rotating loan fund of US\$36.5 million. The total production costs over the 4-year period would be US\$190.6 million.

| Totals | Grants | Self | Loans | Total |
|--------|-----------|-------------|------------|-------------|
| 2000 | 1,766,486 | 33,212,857 | 29,730,622 | 64,709,965 |
| 2001 | 1,819,481 | 35,453,642 | 31,866,941 | 69,140,063 |
| 2002 | 1,874,065 | 37,798,983 | 34,104,681 | 73,777,728 |
| 2003 | 1,930,287 | 40,253,136 | 36,448,004 | 78,631,427 |
| Total* | 7,390,319 | 146,718,617 | 36,448,004 | 190,556,940 |

Note: * - Loans total is maximum rotating fund requirement.

With small farmers accessing loan funds only for agricultural inputs in subsequent years, and providing all of the rest of the production costs from their own resources, the small farmers would have to contribute US\$ 210.1 million over the 4-year period, and would need an permanent rotating loan fund of approximately US\$19.2 million.

| Totals | Grants | Self | Loans | Total |
|--------|-----------|-------------|------------|-------------|
| 2000 | 1,766,486 | 47,683,590 | 15,259,889 | 64,709,965 |
| 2001 | 1,819,481 | 50,806,730 | 16,513,852 | 69,140,063 |
| 2002 | 1,874,065 | 54,074,344 | 17,829,319 | 73,777,728 |
| 2003 | 1,930,287 | 57,492,289 | 19,208,851 | 78,631,427 |
| Total* | 7,390,319 | 210,056,953 | 19,208,851 | 236,656,124 |

Note: * - Loans total is maximum rotating fund requirement.

Although the amount required of the small farmers in self-financed resources appears high, with some 20,000 farmers involved in the program the average cost in self-financing per family is only about \$2,500 per year, or about \$800 per adult member of the household per year (assuming 3 adults per household). This actually amount to about the value of the household labor in agriculture per year.

The year-to-year details of *Model 21* are as follows:

| Year 2000 | Grants | Self | Loans | Total |
|---------------|-----------|------------|------------|------------|
| Bananas | 252,114 | 10,762,678 | 9,863,959 | 20,878,751 |
| Pineapple | 0 | 1,364,229 | 1,364,229 | 2,728,458 |
| Palm Heart | 1,207,108 | 2,682,650 | 963,998 | 4,853,757 |
| Passion Fruit | 0 | 160,272 | 160,272 | 320,545 |
| Pepper | 20,259 | 288,535 | 120,925 | 429,719 |
| Root Crops | 0 | 2,399,022 | 2,030,418 | 4,429,440 |
| Tea | 0 | 2,701 | 2,701 | 5,402 |
| Citrus | 0 | 5,687,601 | 5,687,601 | 11,375,202 |
| Platano | 0 | 1,621,999 | 1,621,999 | 3,243,998 |
| Basic Grains | 287,005 | 4,051,773 | 3,723,125 | 8,061,903 |
| Cattle | 0 | 4,191,395 | 4,191,395 | 8,382,790 |
| Total | 1,766,486 | 33,212,857 | 29,730,622 | 64,709,965 |

Year 2001

| | Grants | Self | Loans | Total |
|---------------|-----------|------------|------------|------------|
| Bananas | 259,677 | 11,448,411 | 10,522,731 | 22,230,819 |
| Pineapple | 0 | 1,405,156 | 1,405,156 | 2,810,312 |
| Palm Heart | 1,243,321 | 3,259,589 | 1,489,377 | 5,992,288 |
| Passion Fruit | 0 | 165,081 | 165,081 | 330,161 |
| Pepper | 20,867 | 312,761 | 140,121 | 473,749 |
| Root Crops | 0 | 2,601,701 | 2,222,039 | 4,823,739 |
| Tea | 0 | 2,782 | 2,782 | 5,565 |
| Citrus | 0 | 5,858,229 | 5,858,229 | 11,716,458 |
| Platano | 0 | 1,670,659 | 1,670,659 | 3,341,318 |
| Basic Grains | 295,615 | 4,412,137 | 4,073,629 | 8,781,381 |
| Cattle | 0 | 4,317,137 | 4,317,137 | 8,634,273 |
| Total | 1,819,481 | 35,453,642 | 31,866,941 | 69,140,063 |

Year 2002

| | Grants | Self | Loans | Total |
|---------------|-----------|------------|------------|------------|
| Bananas | 267,468 | 12,165,602 | 11,212,151 | 23,645,221 |
| Pineapple | 0 | 1,447,311 | 1,447,311 | 2,894,622 |
| Palm Heart | 1,280,621 | 3,868,729 | 2,045,412 | 7,194,762 |
| Passion Fruit | 0 | 170,033 | 170,033 | 340,066 |
| Pepper | 21,493 | 338,179 | 160,361 | 520,034 |
| Root Crops | 0 | 2,814,381 | 2,423,329 | 5,237,710 |
| Tea | 0 | 2,866 | 2,866 | 5,731 |
| Citrus | 0 | 6,033,976 | 6,033,976 | 12,067,952 |
| Platano | 0 | 1,720,779 | 1,720,779 | 3,441,557 |
| Basic Grains | 304,483 | 4,790,476 | 4,441,812 | 9,536,772 |
| Cattle | 0 | 4,446,651 | 4,446,651 | 8,893,302 |
| Total | 1,874,065 | 37,798,983 | 34,104,681 | 73,777,728 |

Year 2003

| | Grants | Self | Loans | Total |
|---------------|-----------|------------|------------|------------|
| Bananas | 275,492 | 12,915,520 | 11,933,466 | 25,124,478 |
| Pineapple | 0 | 1,490,730 | 1,490,730 | 2,981,460 |
| Palm Heart | 1,319,040 | 4,511,485 | 2,633,467 | 8,463,992 |
| Passion Fruit | 0 | 175,134 | 175,134 | 350,268 |
| Pepper | 22,138 | 364,842 | 181,689 | 568,669 |
| Root Crops | 0 | 3,037,481 | 2,634,697 | 5,672,178 |
| Tea | 0 | 2,952 | 2,952 | 5,903 |
| Citrus | 0 | 6,214,995 | 6,214,995 | 12,429,991 |
| Platano | 0 | 1,772,402 | 1,772,402 | 3,544,804 |
| Basic Grains | 313,618 | 5,187,544 | 4,828,421 | 10,329,583 |
| Cattle | 0 | 4,580,050 | 4,580,050 | 9,160,101 |
| Total | 1,930,287 | 40,253,136 | 36,448,004 | 78,631,427 |

The year-to-year details of *Model 2* are as follows:

Year 2000

| | Grants | Self | Loans | Total |
|---------------|-----------|------------|------------|------------|
| Bananas | 252,114 | 13,977,131 | 6,649,506 | 20,878,751 |
| Pineapple | 0 | 1,871,271 | 857,188 | 2,728,458 |
| Palm Heart | 1,207,108 | 2,731,610 | 915,039 | 4,853,757 |
| Passion Fruit | 0 | 106,788 | 213,757 | 320,545 |
| Pepper | 20,259 | 307,894 | 101,566 | 429,719 |
| Root Crops | 0 | 4,429,440 | 0 | 4,429,440 |
| Tea | 0 | 5,402 | 0 | 5,402 |
| Citrus | 0 | 8,380,404 | 2,994,799 | 11,375,202 |
| Platano | 0 | 3,190,817 | 53,180 | 3,243,998 |
| Basic Grains | 287,005 | 6,726,639 | 1,048,258 | 8,061,903 |
| Cattle | 0 | 5,956,193 | 2,426,597 | 8,382,790 |
| Total | 1,766,486 | 47,683,590 | 15,259,889 | 64,709,965 |

Year 2001

| | Grants | Self | Loans | Total |
|-----------|---------|------------|-----------|------------|
| Bananas | 259,677 | 14,877,544 | 7,093,598 | 22,230,819 |
| Pineapple | 0 | 1,927,409 | 882,903 | 2,810,312 |

| | | | | |
|---------------|-----------|------------|------------|------------|
| Palm Heart | 1,243,321 | 3,335,232 | 1,413,735 | 5,992,288 |
| Passion Fruit | 0 | 109,992 | 220,169 | 330,161 |
| Pepper | 20,867 | 335,193 | 117,690 | 473,749 |
| Root Crops | 0 | 4,823,739 | 0 | 4,823,739 |
| Tea | 0 | 5,565 | 0 | 5,565 |
| Citrus | 0 | 8,631,816 | 3,084,643 | 11,716,458 |
| Platano | 0 | 3,286,542 | 54,776 | 3,341,318 |
| Basic Grains | 295,615 | 7,338,822 | 1,146,944 | 8,781,381 |
| Cattle | 0 | 6,134,878 | 2,499,395 | 8,634,273 |
| Total | 1,819,481 | 50,806,730 | 16,513,852 | 69,140,063 |

Year 2002

| | Grants | Self | Loans | Total |
|---------------|-----------|------------|------------|------------|
| Bananas | 267,468 | 15,819,402 | 7,558,351 | 23,645,221 |
| Pineapple | 0 | 1,985,231 | 909,390 | 2,894,622 |
| Palm Heart | 1,280,621 | 3,972,612 | 1,941,529 | 7,194,762 |
| Passion Fruit | 0 | 113,292 | 226,774 | 340,066 |
| Pepper | 21,493 | 363,852 | 134,689 | 520,034 |
| Root Crops | 0 | 5,237,710 | 0 | 5,237,710 |
| Tea | 0 | 5,731 | 0 | 5,731 |
| Citrus | 0 | 8,890,770 | 3,177,182 | 12,067,952 |
| Platano | 0 | 3,385,138 | 56,419 | 3,441,557 |
| Basic Grains | 304,483 | 7,981,681 | 1,250,607 | 9,536,772 |
| Cattle | 0 | 6,318,925 | 2,574,377 | 8,893,302 |
| Total | 1,874,065 | 54,074,344 | 17,829,319 | 73,777,728 |

Year 2003

| | Grants | Self | Loans | Total |
|---------------|-----------|------------|------------|------------|
| Bananas | 275,492 | 16,804,382 | 8,044,605 | 25,124,478 |
| Pineapple | 0 | 2,044,788 | 936,672 | 2,981,460 |
| Palm Heart | 1,319,040 | 4,645,234 | 2,499,719 | 8,463,992 |
| Passion Fruit | 0 | 116,690 | 233,578 | 350,268 |
| Pepper | 22,138 | 393,929 | 152,603 | 568,669 |
| Root Crops | 0 | 5,672,178 | 0 | 5,672,178 |
| Tea | 0 | 5,903 | 0 | 5,903 |
| Citrus | 0 | 9,157,493 | 3,272,498 | 12,429,991 |
| Platano | 0 | 3,486,692 | 58,112 | 3,544,804 |
| Basic Grains | 313,618 | 8,656,507 | 1,359,458 | 10,329,583 |
| Cattle | 0 | 6,508,492 | 2,651,608 | 9,160,101 |
| Total | 1,930,287 | 57,492,289 | 19,208,851 | 78,631,427 |

Totals

| | Grants | Self | Loans | Total |
|--------|-----------|-------------|------------|-------------|
| 2000 | 1,766,486 | 47,683,590 | 15,259,889 | 64,709,965 |
| 2001 | 1,819,481 | 50,806,730 | 16,513,852 | 69,140,063 |
| 2002 | 1,874,065 | 54,074,344 | 17,829,319 | 73,777,728 |
| 2003 | 1,930,287 | 57,492,289 | 19,208,851 | 78,631,427 |
| Total* | 7,390,319 | 210,056,953 | 19,208,851 | 236,656,124 |

Note: * - Loans total is maximum rotating fund requirement.