CREDIT AND COST RECOVERY ASSESSMENT

LATIN AMERICA AND THE CARIBBEAN AGRICULTURE AND NATURAL RESOURCES MANAGEMENT TECHNICAL SERVICES PROJECT (LAC TECH II)

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Executive Summary

In its broadest definition, this study looks at the feasibility and ways of moving from heavily subsidized development activities in the Chapare to more market-based, commercially-driven, and sustainable approaches. This implies identification and removal of constraints to normal commercial and market processes and institutions; but through approaches which enhance and facilitate, rather than substitute or distort, market-based incentives.

Findings

Development in the Chapare has moved along a path which required pioneering basic investments in infrastructure, electrification and agro-ecological and market assessment of potential cash crops. Subsequent needs were largely for pre-commercial support for expanding production to commercial volumes and qualities, ensuring sufficient agroindustry capacity to absorb and market alternative crops, and providing productive infrastructure to efficiently handle post-harvest and other market preparation activities. The need now is to move the process forward to a full commercial stage where private market players and commercial institutions support and underwrite the economic growth process.

This progression has moved forward but not at the rate needed, in part due to extraordinary development constraints (non-traditional crops/technologies, markets and farmers). Additionally, the area has experienced development distortions and investment environment set-backs due to extraordinary coca related issues and conditions.

Credit/Financial Services

Among the casualties of coca distortions is the financial services system. Few banks will lend in the Chapare and there are no banks functioning in the region. As alternative crop industries (production, processing, marketing) expand, all players need access to financing and banking services. This is not to say that the program provide credit. Rather, the program can employ non-distorting approaches to lower the risk for lenders, while strengthening the financial credibility and creditworthiness of farm groups by helping them to become more profitable, more deeply capitalized and better managed businesses.

Input Supply

All of the inputs for establishing initial plantations of alternative crops have been provided in-kind as capitalization grants to farmer groups. They, in turn, give these to members as loans through rotating funds. IBTA/Chapare provides most of the planting material at a subsidized price. Expansion of plantations to full commercial levels requires more open, market-based and competitive input supply arrangements.

Research

IBTA/Chapare provides research and pre-extension training for alternative crops. It is 100% program funded. While research is an essential component of a viable cash crop economy in the Chapare, it needs to be made responsive to, and financially supported by the private producers and agroindustries it serves.

Technical Services

Alternative crop technical extension and accounting training to farmer groups is provided through three NGOs contracted for that purpose. Some 150 staff and all other activities are fully program funded, As farmers begin to market cash crops, it is feasible for them to increasingly share, and eventually assume, the costs of those services.

Agroindustry/Marketing

Agroindustries are investing in the Chapare to produce, procure, process and market alternative crops. Most of these are small to medium firms (below $750,000 investments), and have tended to operate below capacity as they test the market and gear up for larger volumes of quality production. Some have received project incentives to buy products from and/or provide services to farmer groups. Many have some difficulty getting adequate financing.

Conclusions

Not only is it feasible to increase cost-sharing, cost-recovery, and mobilization of other resources in most areas now funded by the program, but it is developmentally desirable, indeed essential, in order to achieve a sustainable commercial agricultural economy in the region.

A major challenge is to remove obstacles to full integration of Chapare enterprises and farmer groups into normal commercial processes and relationships. These obstacles include low levels of farm group capitalization and restricted credit to all enterprises in the region. The program can substantially increase farmer capitalization and help stimulate private commercial bank involvement in all areas.

Development assistance is now tied fairly tightly to farmer groups and communities that sign agreements to reduce coca. There remains a sense among farmers that alternative crop and other development assistance is part of the quid pro quo for coca reduction, leading to problems of low farmer commitment to, and capitalization of, assistance. At the same time groups who received introductory levels of alternative crops still need to expand production and consolidate as business entities. It is feasible to increase a sense of ownership through participatory cost-sharing, and especially with groups beginning to market their cash crops. It is critical to note that either these groups are supported until they have more mature production and business management underpinnings, or the framework for sustainable

development may very well collapse and farmers are likely to revert again to coca.

A yet unresolved issue is how to deal with a significant number of coca producing communities in hilly or very low areas which are unsuitable for current alternative crop and roads assistance. A parallel approach is suggested, with opportunities to mobilize community investments.

Recommendations

A brief summary of the major recommendations follows. Additional recommendations and a detailed discussion of the recommendations is presented in the text of the report.

1. The program needs to attend to farmer groups about to enter a commercial consolidation phase, as well as new entrants requiring more basic and pre-commercial support.

2. In all cases, the program should require at least the same level of participation and cost-sharing as that found in the best arrangements achieved to date.

3. Program support in credit/financial services should focus on indirect mechanisms to facilitate lender-borrower connections, rather than provide any direct credit or financing.

4. Regarding the in-kind capitalization grants to farmer group rotating funds, much greater emphasis should be placed on fully educating leaders, staff and membership on fund purpose, management, terms and conditions. These actions, and negotiated acceptance of conditions, should take place before the inputs are delivered.

5. All groups, and particularly new entrants, should be involved in input planning, costing and procurement exercises as early as the in-kind capitalization grants.

6. The Program should support actions to improve competition in planting material supply by providing groups with vouchers for their initial procurement, redeemable by IBTA/Chapare or any other bona fide vendor. Assisting NGOs will certify the integrity of the procurement.

7. USAID/Bolivia, in close coordination with relevant public and private players, should sponsor a detailed analysis of options for creating a market-oriented, client-driven research arrangement serving the cash crop producers and industries in the Chapare. This arrangement should incorporate significant cost-sharing and cost-recovery features.

8. Cost-sharing should be phased in for technical services (extension, management) provided by NGOs with incentives for rapid progress and penalties for lagging contributions.

9. The Program needs to keep flexible options available to support agroindustries, especially those with an investment of less than $750,000, to help them reach out to new entrant farmer groups, and to obtain financing for working capital and plant improvement. Cost-sharing should be

required for any assistance.

10. All community infrastructure projects should seek a minimum 50% local contribution (cash and labor), and productive infrastructure projects for specific commercially consolidating groups should be self- plus loan- financed, possibly with a partial loan guarantee from the program.

Lessons Learned

A consequence of attempting a development program within a highly politicized and conflictive environment is the need for the program to carry an inordinate support burden in all key areas due to the reluctance/absence of normal commercial service and support providers and systems.

The program has successfully engaged over 2,300 farmers who have planted upwards of 11,000 hectares of alternative crops. Agroindustry investments top $9.0 million. As the coca economy deflates, these and many other actors will push the transition to a commercially integrated economy very rapidly.

Short-term coca reduction imperatives allowed credit to be perceived as a coca reduction incentive, resulting in long-term damage to the credit standing of farmers and a greatly restricted availability of credit to all enterprises in the Chapare.

The general purpose of this study is to determine whether, and how best, credit and cost recovery/sharing arrangements can be expanded in the follow-on alternative development component of the counter narcotics activity in the Chapare region. The current Cochabamba Regional Development Program (CORDEP) terminates in July of 1998 and this study, along with other assessments, will contribute to the design of a new initiative.

I. Assessment Methodology

An assessment team of four consultants (Alternative Development Team Leader, Credit/Financial Systems Specialist, Sociologist, and FONDADAL assigned Economist) carried out field visits in the Chapare over a five day period (Dec.5-9 inclusive). Field information was sought regarding the feasibility, opportunities and mechanisms for engaging/increasing private financial involvement (banks, farmer, community, private enterprise) in supporting and expanding key development activities. These major activities included 1) credit/financial services, 2) input supply 3) research, 4) technical services, 5) agroindustry and marketing, and 6) infrastructure. Efforts were made to get views from farmers, farmer groups, NGO staff, agroindustry representatives, IBTA/Chapare and contractor commodity line managers. This information was used with that from additional interviews with USAID/La Paz, the GOB Fund for Alternative Development (FONDADAL),USAID/Cochabamba (CORDEP),the counterpart Programa Para Desarrollo Alternativo Regional(PDAR), DAI (the principal technical assistance contractor), Planning Assistance (umbrella NGO),banks and the Counter narcotics Coordination Group (NAS), to come up with a sufficiently broad perspective, while at the same time obtaining enough detailed information to evaluate and suggest specific options. The institutions and players interviewed are listed in Annex A. Separate analytical reports were done by the Credit Specialist, Sociologist, and Economist, and these fed into the report preparation process. Those reports are attached as Technical Annexes 1., 2., and 3., respectively.

The full scope of work is attached as Annex B. to this report.

The approach adopted for this assessment included a brief exercise to a) establish a broad conceptual framework within which the development experience and future progression in the Chapare can be visualized, b) identify current status of Chapare activities along that development continuum, and c) identify priority needs and appropriate approaches to ensure forward motion toward more sustainable development. Following this, the team began the broad collection of information discussed above.

Given the number and range of different program activities and related players, plus the time allowed for the exercise, the team drew heavily upon direct discussions with informed sources and use of available secondary data, rather than collection of primary data. A significant direct sampling of attitudes and perceptions at farmstead and community levels was not possible under the circumstances. We all felt that additional farmer input would have helped to sharpen our appreciation of farmer perspectives and receptivity regarding proposed options.

To partly off-set this weakness, the team tried to identify and build upon best practices achieved to date. We assumed that these tend to illustrate the extent to which farmers are willing to participate in

various cost-sharing or self-help arrangements, such as community infrastructure. Still, in some cases. the "best practices" achieved could reflect special local circumstances. Thus, recommendations based on them could be either too ambitious for wide-spread acceptance, or under-represent the potential for even greater farmer involvement. The team felt that "best practices," where identifiable, provided a useful reality check and starting point for recommendations.

The assessment also drew upon pertinent prior studies and experiences. For instance, in the case of the need for market-responsive research support and IBTA/Chapare's capabilities, we relied on the J. O'Donnell and L. Szott "Evaluation of IBTA/Chapare Research, Extension and Production Programs" (DAI, 1993), supplemented with a couple of our own interviews. Lastly, the team also drew upon our own experience and best development judgement to arrive at, or confirm, the "art of the possible" regarding the recommendations. We realized throughout this exercise that special coca-related conditions continue to affect development in Chapare and may distort solutions suitable in other contexts.

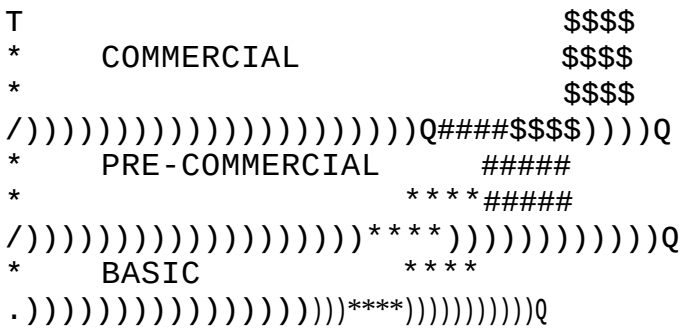
II. Understanding the Development Context

The task of assessing credit and cost recovery/sharing options required that the team look broadly at the context within which past program support and incentives have been provided, and at evolving development conditions and trends within the region. Some understanding of the likely development context and needs over the next 5-10 year period, combined with best practices garnered from field experiences, is necessary in order to define evolving priorities, and types of support and conditions for addressing these.

Essentially, past development conditions required responses that were heavily subsidized and program supported. These have contributed to an impressive level of development preparedness within the region -- more productive infrastructure, better access to markets, electrification, introduction and increasing areas of cash crops, early phases of farmer organization, initial engagement of private market players and private investment. Continued development progress in the Chapare will depend on much stronger linkages with an expanded range of commercial and market institutions and players-- i.e. banks and other financial service providers, input and technical service suppliers, agroindustry and marketing entities.

The diagram below visually depicts the evolving development context and challenge in the Chapare. The descriptions which follow are general and illustrative.

DEVELOPMENT PROGRESSION



BASIC (late 1970's and 1980's)

- Program funded exploration of agro-ecological potential
- Program funded studies of market options
- Program funded introduction and trials of cash crops
- Program funded institutional capacity-building (research and extension)
- Program funded basic productive infrastructure (roads, bridges, electrification)

PRE-COMMERCIAL (1990's)

- Program provided credit/seed capital
- Program direct incentives and support to investors
- Program grants or subsidized provision of inputs to farmers
- Program funded technology adaptation and extension
- Program facilitated market exploration and related infrastructure investments (packing sheds, cold storage, cableways)

COMMERCIAL (late 1990s' and first decade of new millennium)

- Presence of financial services network
- Expanded presence of market-driven investments in production/processing
- Expanded commercial input supply system
- Presence of market responsive technology adaptation and support services
- Presence of more market actors and supporting institutional functions

In broad development terms, this transition is progressing reasonably well. This is quite remarkable, given that the program in the Chapare has had to deal not only with the normal set of challenges inherent in opening up a new area as a development pole, but also with a set of special

development conditions as well as a set of extraordinary coca-related conditions outlined below.

Special Development Conditions

•Non-traditional high value crops and associated technologies

•Non-traditional markets, including export market channels

•Non-traditional farmers, both colonizers from non-tropical areas and a floating coca focused population

Extraordinary Coca-Related Conditions

•Extraordinary income expectations of many farmers involved in the coca economy, and competition of coca production for the time and resources that those farmers need to invest in order to successfully launch production of alternative crops.

•Development assistance tied to and driven by coca eradication criteria, versus purely development criteria, e.g. criteria for providing PL480 Title III credit to Chapare farmers driven more by eradication considerations than analysis of credit needs and capacity of recipients.

•Unrealistic (non-sustainable) expectations of many farmers and some investors that they should receive support at no or very low cost.

•Predominance of political (versus business-oriented) farmer organizational structures, and, in some cases, leadership pressure to concentrate both political and economic power in those organizations.

•A perception of high risks and instability that has delayed the normal level of involvement in the Chapare of banks (currently none operate in the area), private investment and service providers despite the substantial infrastructure and other factors favoring growth in the region.

The combined impact of these special development and special coca conditions has effected the pace with which the area is moving from a heavily program supported pre-commercial phase to a private enterprise-driven commercial phase. Assuming that coca related conditions continue to be resolved, all observers we talked with feel that the pace of this process can be accelerated with continued program support.

Clearly, the next level of challenge in the Chapare lies in speeding up the transition from pre-commercial to a commercial setting, characterized by the predominate role of private commercial institutions, investments and market actors. That is, Chapare farmer groups and agroindustries need to be placed on a normal commercial footing vis-a-vis the financial services network, sources of investment capital and technological innovation, market systems and players, and technical service and input providers. In this regard, the framework of analysis for future program support becomes that of

determining what the remaining impediments are for linking Chapare farmers and organizations with this expanded range of market-based commercial functions and players.

The following sections present our findings, conclusions and recommendations. First, a couple of general issues are addressed which are important for setting the tone and assistance philosophy for encouraging greater farmer and community involvement and for convincing them that results are possible. Second, the six programmatic areas containing specific resource mobilization/cost-sharing opportunities and recommendations are presented in greater detail.

III. General Findings, Conclusions and Recommendations

A. Findings

During the basic and pre-commercial phases of regional development, many program subsidies and incentives were employed to create basic conditions for growth and to underwrite the early commercial experiences of the Chapare's emerging cash crop industries (producers, processors, and marketers). This heavy program involvement reflected the difficulties in opening up a new agricultural frontier--difficulties compounded by extraordinary development and coca production political conditions. Many program-funded interventions did establish conditions for normal market and commercial involvement, i.e. roads, electrification, market infrastructure, introduction and expansion of cash crop production. These have undoubtedly helped draw private agroindustrial investments into the region.

However, special development conditions associated with the coca reduction program, including incentives and subsidies, have created attitudes and expectations inimical to progress toward normal commercial and market-based processes. According to many long-term observers of development activities in the Chapare, particularly in the past, there often was too little genuine farmer and community participation and ownership. Many institutions involved readily admit this, citing the political pressures of coca substitution as the cause. Since 1993, the program has more consistently acted to increase farmer and community involvement, e.g. negotiating and achieving increased community input into infrastructure projects. At the same time, there doesn't appear to be uniformity regarding subsidies across assistance programs in the region. Reportedly, other donors, and some GOB activities (e.g. DIRECO), have had different policies regarding farmer and community contributions. Farmers and communities expect free support. Although there are notable exceptions, many farmers and leaders are reported to view program assistance, including credit, as a grant entitlement rather than a serious commitment and partnership. These attitudes have contributed to the poor credit standing of the area as a whole. Such attitudes were frequently cited as a deterrent to progress toward sustainable commercial development in the Chapare.

A further coca-related complication has occurred. Assistance to farmer groups and communities in the Chapare is now conditioned on the group signing a coca reduction agreement. This could have negative repercussions on both earlier entrants to the program and new entrants.

Earlier entrants had no such conditions, only an interest in alternative crops. It appears that, unless they sign a coca reduction agreement, program support could be withdrawn from them. These early entrants are precisely those now beginning to enter the market. It is clear from comments made by NGOs, DAI, banks, agroindustries and farmer leaders themselves, that almost all of these groups require further technical and business strengthening to become credible and viable market players. Some NGO and other observers feel that the convincing power of sustainable incomes and jobs in alternative crop activities is essential to bring even greater numbers of farmers out of the coca-based economy and to keep them out. Early entrants, if supported, will provide those needed examples.

Some concern was voiced that, because new entrant groups must reduce their coca holdings, they may be more likely to expect more liberal terms for program assistance. This issue was highlighted to us by indications that community participation in infrastructure projects might be dropped from the current 50%-50% split, to requiring new entrant communities to contribute only 30% of costs.

B. Conclusions

It is clear that there is a politically-driven *quid pro quo* between development assistance and coca reduction. They are now bound together in practice by the restriction of program assistance to those groups entering into coca reduction agreements. This assistance environment can create further barriers to getting sincere and meaningful participation and buy-in from farmers since they may feel that are entitled to free works and assistance in return for their commitment to coca eradication. This makes it difficult to design support in ways that promote the transition of farmer groups from dependency toward commercial maturity. For that reason, all development assistance provided to new entrants should begin to reinforce practices that lay the groundwork for eventual engagement in the normal commercial environment.

It is essential for the program to consolidate gains and investments made with earlier entrants. Failure to use program assistance to firmly place earlier entrants into the market and commercial economy can severely impair progress toward self-sustaining growth in the Chapare. If this critical passage from program support to market sustained processes is significantly delayed or left to chance, many farmers may face hard choices between significant family income reduction or a reversion to illicit coca production. These farmer groups, however, are now beginning to market their cash crops and should increasingly be in a position to bear significant proportions of the costs of assistance to them.

C. Recommendations

Recommendation #1. The program needs to attend to both those farmer groups in a commercial consolidation phase, as well as new entrants requiring more basic and pre-commercial support.

In both cases, the focus should be on preparing the groups to ultimately deal directly with, and engage in, normal commercial and market practices and institutions, i.e. obtain financing, procure inputs, pay for technical services, seek contracts and other marketing and service links with agroindustries and marketing enterprises. The level and terms of support provided through the program for new entrants should differ from that provided to earlier entrants. Commercially consolidating groups can be expected to contribute significantly to cost-sharing for any services and support received. New entrants can contribute to a lesser degree since they have yet to begin commercial sales. In every case, suggestions presented later in this report are designed to reinforce commercial practices and responsibilities for farmers. These include:

- emphasis on farmer group business management training;
- early involvement in input planning and procurement practices;
- initial technical assistance agreements with supporting NGOs leading toward contractual relationships, and;
- early introduction of marketing awareness and planning.

Recommendation #2. In all cases, the program should require at least the same level of participation as that found in the best arrangements achieved to date.

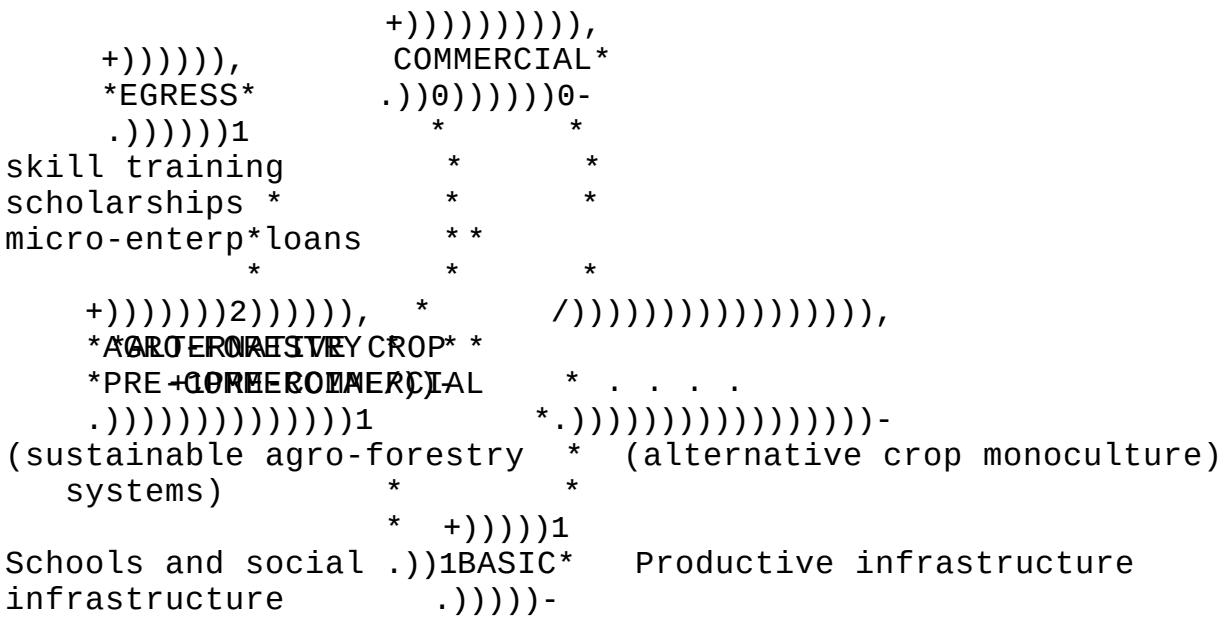
Briefly, these include for community infrastructure a minimum 50-50 split of costs (both cash and labor); for farmer contributions to their inputs/capitalization fund, no less than 10% down in cash and payment of the balance to reflect maintenance of value, e.g. dollarization plus interest rates; establishment from the outset of cost-sharing for technical services, and requirement for written performance agreements between NGOs and groups, laying out results wanted, work plan and respective responsibilities and contributions. There should be a clear link between the technical service and financial and/or business strengthening objectives. Set minimal acceptable and high performance standards, the latter associated with a financial bonus for the service provider and equivalent amount for the group's capitalization fund, and; early preparation for marketing requiring new entrants to develop a marketing strategy, including contacts and familiarization with potential buyers, strategic alliance options to sell initial harvest through groups with established market, market infrastructure planning/costing, and education of membership in market realities and approaches.

These minimal requirements for new entrant and for groups in commercial consolidation are outlined in Table 1. below. Fuller presentations are made later on in the corresponding sections of the report.

Table 1.

New Entrants	Groups in Commercial Consolidation
Infrastructure: 50-50 cost sharing (both cash and labor)	**Infrastructure:** program support with analysis, identification of finance, joint venture partner, partial loan guarantee
Inputs: 10% down payment, balance with maintenance of value provisions; • rotating fund in bank account.	**Inputs**: program assistance in identifying market sources, analysis of options, partial loan guarantee
Technical Services: cost-sharing as goal from outset; • performance agreement linking services to group's financial/ administrative success; •potential bonus and extra contribution to capitalization fund	**Technical Services**: cost-sharing contract required; •phase out of program support to 10% or less by EOP.
Marketing: early preparation of a marketing strategy; •planning and costing of market infrastructure; •education of membership	**Marketing**: facilitation of market connections; •selectively provide partial guarantor role to reduce mistrust factor in some new relationships; •analysis and fine-tuning of market plan; •analysis of market infrastructure and finance; •partial loan guarantee

Yet another unresolved issue arises from the focus of assistance on coca reducing areas. A significant amount of remaining coca reduction will occur in agroecologically fragile zones, where neither the current alternative crop assistance or roads are appropriate. This may call for a slightly more sophisticated program assistance strategy. While not within the scope of work of this assignment, we felt compelled to outline a basic structure of such a strategy. This structure is based on our synthesis of comments and concerns raised by DAI, USAID and other sources we encountered during the course of this work. Rather than look only at the BASIC/PRE-COMMERCIAL/COMMERCIAL paradigm, a parallel and ultimately converging model for less suitable areas might be as follows:



The time-line for adapting and bringing sustainable agro-forestry systems to commercial fruition is likely to be much longer than that experienced with the current alternative crop options. In those more fragile areas, greater emphasis might be placed on providing quality schooling, skill training and further education scholarships that facilitate population egress from the area. In addition, it would help to provide small business/micro-enterprise support for starting income generating activities outside of the coca zone, such as in urban centers in and outside of the Chapare. Aside from up-grading school facilities and teacher/curriculum quality, some farm-to-school trail and walking bridge improvements could be funded. The opportunity for substantial community cost-sharing arises, as the basis for coca eradication compensation is going to shift from individuals to communities. This will generate significant amounts of funding for community works.

The discussion below presents major findings, conclusions and recommendations regarding five specific areas critical to continued area development. These are: 1) Credit/Financial Services; 2) Input Supply; 3) Research; 4) Technical Services; 5) Agroindustry/Marketing Investment; and, 6) Infrastructure. This division is largely for sake of presentation, since the categories are frequently interdependent and interactive, e.g. a discussion of credit/financial services touches on agroindustry investment and vice-versa, since agroindustries may be both credit users and providers.

IV. Specific Findings, Conclusions And Recommendations

A. Credit/Financial Services

1. Findings

Early Experience. From the outset of development activities in the Chapare, credit was not perceived as a critical development constraint. Excess liquidity from coca production was leaving the region for investment elsewhere (J. Ladman, I. Torrico, 1982). However, broader financial services (savings accounts, financial transactions) were still needed. Efforts were made to encourage bank presence, and the Banco de Cochabamba and Big Beni opened branches. (Both banks subsequently failed for reasons not tied to the Chapare.) Similarly, early work was undertaken to improve the financial status and performance of credit unions (La Victoria, Nueva Canaan).

In the late 1980's credit emerged as a tool for encouraging economic development in the areas in Cochabamba from which people were migrating to the Chapare. It also was used as a tool to encourage Chapare farmers to voluntarily reduce coca. PL 480 Title III directly provided $5.0 million to some 5,000 beneficiaries in the valleys and Chapare. Repayments from farmers in the latter area were low for several reasons. According to Agrocapital and other knowledgeable sources, loans were often perceived by farmers as part of a political incentive package to reduce coca (an entitlement). Also, the lending criteria for making loans were driven more by coca reduction concerns than by borrower creditworthiness. In other cases, farmers couldn't repay loans because of weak markets for early production of alternative crops.

The outcome is that banking institutions that we interviewed stated that they see Chapare clients as high risk. This, along with a perception of the Chapare as an unstable and contentious area, where even physical collateral is not secure, has kept banks from entering.

Agrocapital has placed $1.0 million in loans in the Chapare, experiencing a 30% delinquency rate (versus 3.8% nationally). Recuperation efforts continue and Agrocapital expects to recoup most of the debt. It has instituted rigorous lending standards and continues modest lending to highly qualified borrowers--usually those with collateral outside the region. Still Agrocapital representatives told us that future viable credit opportunities exist with selected farmers who have good credit histories.

Agrocapital also attempted a joint venture with a pineapple producer group which was unable to obtain a commercial loan. This experience failed. Agrocapital felt that the farmers didn't support the enterprise, selling their produce to local buyers when prices were high rather than cultivating long-term sales relationships. Nor did members contribute any capital beyond the packing facilities previously donated to them through the program.

Current Situation. No commercial banks operate in the Chapare. The Banco de La Paz plans to open a branch office in the near future. Some farmers and farmer groups (i.e. producer associations and organized producer groups) maintain accounts in banks and credit unions in Cochabamba and Santa Cruz. Others keep cash in hand without earning interest. Agroindustries, businesses and organizations maintain accounts outside the Chapare, which increases their transaction costs.

Direct inquiries were made with several banks to determine what mechanisms, if any, might be used to reduce their perceived risks of lending to Chapare farmers or agroindustries. Two of these (Banco de La Paz, Banco Hipotecario) suggested that the program provide a partial guarantee for such loans. They suggested, for instance, that the program would deposit $1.0 million in an interest bearing account and the bank would lend up to $2.0 million of its own capital for qualifying farmers groups and businesses. In the case of non-payment, the program account would cover up to 50% of any unrecovered balance, once the bank had exhausted all recuperation options. Banco Mercantil, on the other hand, indicated that it would only be willing to operate a credit trust fund for the program, but not risk any of its own resources.

Banco La Paz and Banco Hipotecario further indicated that they would be willing to accept higher levels of exposure in loans to producer associations and agroindustries which had firm sales contracts with bonafide buyers.

Interestingly, both of these banks felt that knowledge of a program-funded guarantee mechanism should not be publicized in the Chapare for fear that farmers might perceive the banks' credit as a political entitlement, or that this might otherwise interfere with their normal lending processes and client relationships.

In talking directly with farmers, some indicated that they have savings in banks or credit unions in Cochabamba and Santa Cruz. Others did not. Some stated that they currently reinvest savings in their farms. It was not possible, however to ascertain the amount of these savings/investments. Broadly speaking, it cannot be assumed from the sparse information we were able to obtain that most farmers have readily available sources of capital sufficient to cover major portions of their needs for production or other investments.

A major source of farm-level financing for establishment of alternative crops is the in-kind technical package channeled through farmer groups' rotating funds. The specific value of production inputs received by each farmer varies by crop and size of start-up area, which is roughly:

Crop	Size of Start-up Area	Value
Banana	1 hectare	$650
Pineapple	1/3 hectare	$600
Palmito	1 hectare	$650
Passion Fruit	1 hectare	$1,800
Black Pepper	½ hectare	$800

The total value of input packages received ($2,117,00), constitutes seed capital for farmer groups' rotating funds. In general, each member initially deposits 10% of the value of inputs received, with the balance payable based on crop sales. In some cases these amounts are dollarized for repayment purposes in an attempt to preserve value. In a few cases modest interest was reportedly charged (5%-10%)on the balances. So far, the initial 10% capitalization appears to be occurring, although accounting and financial management practices remain weak in most groups, making it difficult to generalize.(Planning assistance estimates that 40-50% of the groups maintain their accounting in good or acceptable fashion.) Scheduled repayments are only beginning to come due. The general consensus is that farmers can be convinced to repay their balances, **if** markets are found and prices are favorable. In some cases, groups (e.g. ASPROCUT-pineapple, PROASPA-palmito, ASBA-bananas) have added significantly to their rotating funds through special contributions. Still, it bears to point out that NGO technical staff and several farm group leaders interviewed, indicate that much more member training and orientation needs to occur to heighten their understanding and commitment to make their rotating funds work. In most cases, it appears that the repayment terms and conditions are only brought up for discussion after the inputs have been delivered.

Even assuming full capitalization of farmer group rotating funds, significant additional financing will be needed for operation and further expansion of alternative crop production. DAI estimates that total second-year costs for 7,000 hectares of bananas, 800 hectares of pineapple, 2,000 hectares of palmito, 250 hectares of black pepper, and 250 hectares of passion fruit is in the magnitude of $16.3 million. Loan financing for inputs and paid labor alone would be some $9.6 million.

Agroindustries, such as BANABOL, INDATROP and MILKA, are predisposed to consider in-kind credit to **carefully selected out-growers** willing to adopt improved technologies and management practices. MILKA extends in-kind credit (veterinary products) and deducts the cost from monthly payments for milk received. CORDEP has agreements with some agroindustries (BANABOL, ECO-CHAPARE, KHOCHALITA) to underwrite the cost to the firms of up-grading technical production on existing small farmer plantations and for establishment of new plantations. These schemes seem to hold considerable potential for bringing firms and farmers into a closer marketing and assistance relationship.

Credit remains a constraint for small enterprises wishing to establish plants in the Chapare. Banks are leery and require significant outside collateral. Similarly, established farmer groups wishing to finance

packing centers or cable ways have no source of capital. These are probably bankable investments. DAI reports that five hectares or more of bananas can pay off a $3,500 investment in cable ways in 18 months. Similarly, 100 hectares of bananas can pay off the $7,000 value of a packing shed.

2. Conclusions

Regarding *credit/financial services*, our analysis indicates that farmers will require significant additional liquidity in order to expand their introductory acreage of alternative crops to more commercial scales. This liquidity is likely to come from a mix of sources, i.e. savings, profits from on-going operations, rotating fund capital, and financial institutions.

The assessment found banks to be skeptical and, to some degree, holding exaggerated perceptions of lending risks in the Chapare. Still, until Chapare clients can overcome their negative image and show that they are profitable and business-like, bank lending is likely to expand slowly and cautiously. In some cases, in-kind credit from agroindustries buying farm group crops may factor in.

In the short-to-medium term, program support can best be employed to assist farmer groups to a) consolidate firm and reasonably priced markets and marketing arrangements, and b) deepen and improve their financial and business management capabilities and member capitalization. At the same time, the program can begin to work creatively with formal financial institutions to reduce extraordinary risks of lending to Chapare farmers through partial loan guarantees, perhaps joint venture arrangements. The program can encourage agroindustries to expand in-kind credit and technical support, again through cost-shared and indirect risk sharing approaches as illustrated below.

3. Recommendations

Recommendation #3. Program support in credit/financial services should focus on indirect mechanisms to facilitate lender-borrower connections, rather than provide any direct credit or financing.

Mechanisms for risk-reduction or risk sharing which the program should consider include; guaranteeing some portion of a loan (usually in proportion to the cash equity the borrower is bringing to the deal), through short-term escrow guarantee deposits, provision or assistance in financial management and practices within farmer groups, maximum use/leveraging of rotating funds, facilitate warrant on bonded commerciable stock, facilitate joint venture capital and management infusion, supporting in-kind credit arrangements through agroindustries to contract producer groups.

Recommendation #4. Regarding in-kind capitalization grants to farmer group rotating funds, much greater emphasis should be placed on fully educating leaders, staff and membership on fund purpose, management, terms and conditions. These actions, and negotiated acceptance of conditions, should take place before the inputs are delivered.

An extensive discussion of financial service conditions, needs, constraints and options/recommendations are contained in Technical Annex 1. attached to this report.

B. Input Supply

1. Findings

Past Experience. As discussed in the preceding section, most of the inputs for alternative crop introduction are provided on an in-kind basis to groups as seed capital for rotating funds. These inputs were procured and delivered by program implementing agencies--initially by IBTA/Chapare, and now by NGOs (Agroparcha, IVS, and INDASA). (IBTA/Chapare will be referred to as IBTA/C here on out in the report.)

A farm group leader indicated that many palmito growers expressed strong interest in purchasing motorcultores (small, multi-purpose tractors). When an entrepreneur offered to directly import these from Korea with $1,000 down and balance in reasonable payments, the farmers didn't respond. Still, farmers have continue to ask for program assistance to get these implements. It was our sense that the farmers hoped to get a program subsidy. This appears to represent another case where the hand-out legacy interferes with a market solution.

Current Situation. Planting material for the introduction of alternative crops is produced by IBTA/C, or is imported (e.g. FHIA banana varieties). IBTA/C is creating an autonomous and self-financing planting material production unit aimed largely at the program needs in new coca reduction areas. It proposes to sell planting materials at a cost reflecting the total costs of production.

Increasingly, farmers are collecting planting material from their own plantations in order to expand their acreage. In one case, the palmito association in Valle Ivirza (APTP) is already producing and selling planting material to the program and to individual farmers. Indications are that the private palmito firm INDASA, would also consider selling seed stock to out growers. Local and lower cost sources are bringing prices down from the initial stages where high costs were caused by significant volumes of imported planting material.

The NGOs supporting alternative crop introduction, (IVS, Agroparcha, Indasa), act as the input planning and procurement agents for new entrant farm groups. From NGO and farm leader comments, it appears that past practices together with farmer hesitance in the face of unknown risks, make it difficult not to provide new entrants with initial inputs on a grant basis. As we understand it, farmer groups do participate in defining the acreage and amounts of products, and the NGO then manages the commercial contacts, ordering and delivery processes.

Farmers wishing to expand their plantation beyond the introductory level appear to do so through individual purchases of inputs from commercial agrochemical retail outlets located in Ivirgazama, Chimore and other market centers. These stores require cash payment and occasionally sell equipment to trusted clients on the basis of a down-payment plus credit. When asked, these stores appeared confident that they had the ability to expand the volumes and types of products in response to effective demand. Further inquiries with an agro-import firm in Cochabamba indicate no reluctance to directly import large quantities of products directly for any Chapare farm group able to pay. In a few other cases observed by the team, farmer groups had established their own small input sales depots and were procuring and selling inputs to their members.

2. Conclusions

Commercially run *input suppliers* are needed to support technified production and further acreage expansion. From our inquiries, it appears that the marketplace for agro-chemicals operates reasonably well in Bolivia and can respond to increasing demand in the Chapare. From what we could learn, the constraint isn't in the agro-chemical supply system. Stores and distributors indicate willingness to enter the area as effective demand requires. The constraint tends to be the initial inability of groups to get financing for procuring large volumes of agro products. At a minimum, program assistance could ensure that farmer groups are involved in planning, costing and following the process of procuring inputs for alternative crop production. To build member confidence, emphasis on competitive bidding and transparent decision-making should be included. Even if the first technical packages are provided as in-kind seed capital for rotating funds, farmers need to learn early on the steps, procedures and options in commercial procurement of inputs. Groups need to see the advantages of banding together to buy inputs, or even to work through importers to directly order these. Program assistance can help make connections, and, if necessary. share some of the risk (e.g. partial loan guarantee)to potential financiers, whether banks, suppliers or direct importers.

In terms of planting materials, a more competitive environment will continue to bring prices down. IBTA/Chapare's planting material production unit probably requires competition to either become an efficient supplier or lose business. In fact, the report "IBTA/Chapare Essential Functions and Their Costs" (J. Riordan, D. Tacker, Chemonics, 1996) argues that multiplication of planting materials for commercial sale is not an essential IBTA/C function. They further indicate that, as effective demand increases, so should the number of suppliers. Farm groups (such as APTP above), may want to become market suppliers themselves, and might benefit from technical orientation in both production and business aspects. Private companies can be encouraged to produce and sell planting material and to compete with IBTA/C for supply to new entrant groups. They recommend a voucher system redeemable by IBTA/Chapare or any other private but capable vendor. In sum, the program can help promote and stimulate a competitive commercial market for planting materials.

3. Recommendations

Recommendation #5. All groups, and particularly new entrants, should be involved in input planning, costing and procurement exercises as early as the in-kind capitalization grants.

Subsequently, program support can be applied indirectly to help groups connect with sources of input financing.

Program assistance may subsequently help farmer groups qualify for loans from banks or suppliers for volume procurement through indirect partial guarantee mechanisms at a value up to, but not exceeding the cash contribution or down payment made by the farm group(s) involved. This will encourage farmers to put up more of their own money and therefore increase the importance of their own investment. Also, this limit will ensure that the program does not end up underwriting the banks full risk. Banks can and should bear a large portion of the risk involved in making the loans.

Recommendation #6. The Program should support actions to improve competition in planting material supply by providing groups with vouchers for their initial procurement, redeemable by IBTA/Chapare or any other bona fide vendor. Assisting NGOs will certify the integrity of the procurement.

Our finding indicate that IBTA/C will likely continue to be the major source of planting material in the medium-term. However, the introduction of a voucher payment system would open opportunity for private competition as effective demand expands. The NGOs assisting farm groups can act to certify that the amounts and qualities ordered from a supplier were actually received and the terms met. This assistance can and should be phased out once farmers enter farmers enter their first full year of production for their alternative crop (generally no later than two years after planting, depending on the crop). The vouchers, along with the TA efforts to help farmer groups learn more about input procurement (discussed in section IV. D. below) will establish opportunity for normal market mechanisms and relationships to take over.

C. Research

1. Findings

Research in the Chapare context is largely associated with the production and post-harvest handling of cash crops. IBTA/C played an early role in the introduction and testing of some 30 species of potential income generating crops. Through 1993, IBTA/C's extension activities were the primary vehicle for bringing alternative crop introduction packages to farmer groups.

IBTA/Chapare currently is focused on research for the five major alternative crops (banana, pineapple, palmito, passion fruit, and black pepper). It also has an integrated pest management support group, and a plant material production program for alternative crops. IBTA/C's role in extension has been handed over to NGOs. IBTA/C supports NGO technical staff through training-of-trainer pre-extension activities and some field demonstrations. IBTA/C is the only source of soil testing and plant pathology diagnostics located in the Chapare.

Currently 100% of IBTA/C's budget is program funded through PL 480 Title III reflows. The total budget for the current year is $1,736,716, including direct program support of $536,716 for work on

Sigatoka. The proposal to establish a planting material production unit could put that activity on a self-financing basis.

Options for ensuring that essential research support is available for Chapare's cash crop industries are presented in the J. O'Donnell and L. Szott study (1993) of IBTA/C programs.

The assessment team had little opportunity to directly assess IBTA/C's research program, and cost-sharing/cost-recovery options related to the same. However, all informed sources, plus our own experience, confirm the continuing need for alternative crop research. Threats to the economic viability of crops (e.g. Sigatoka in bananas, Fusarium in pineapple), plus cost and other competitive requirements of cash cop markets are key justifications. IBTA/C leadership and other sources voiced the need for expanding research to include additional agro-ecologically suitable crops with clear market potential. One reason given for this is that long-term viability/competitiveness in export markets, in particular, can change. A second stated reason is that major areas of remaining coca production are also in areas which are not suitable for competitive production of current alternative crops. These areas require agro-forestry systems for which IBTA/C has no significant research in the pipeline.

Furthermore, a dynamic cash crop economy requires close interaction between research and market-focused producers and agroindustries. IBTA/C representatives noted that this was, indeed, more difficult now that extension functions operate independently of IBTA. Researchers had less systematic feedback about field problems. Observations from processor representatives indicated that their communications with IBTA/C are infrequent and irregular.

Lastly, we did not get indications from any sources, including IBTA/C and USAID/B, that there is a widely accepted long-term plan for creating a responsive and sustainably funded research capacity in the Chapare. What seemed clear is that funding for research will probably drop steeply when the program closes down.

2. Conclusions

In addition to potentially broadening the base of financial support for research, closer involvement of private sector clients (farmer organizations, agroindustries) in IBTA/C is needed to ensure that market-linked priories receive research attention. The 1993 "Evaluation of IBTA/Chapare Research, Extension and Productions Programs (J. O'Donnell, L. Szott, DAI), discusses this problem and suggests solutions, including the establishment of a private Chapare Agricultural Development Foundation. Experience in Bolivia with CIAT/Santa Cruz, and elsewhere (e.g. Fondo Hondureño de Investigación Agrícola-FHIA) show that private resources can be mobilized to fund, or at least cost-share client-responsive research activities. In the case of CIAT/Santa Cruz, various agricultural chambers contribute to the core research and project budget. In the case of FHIA, an endowment provides for core costs and fee-for-service allows for full cost-recovery of activities. While a detailed assessment of IBTA/C's cost-sharing prospects couldn't be carried out in the time available, such a study is needed. The results of such an analysis would need to be translated into actions supported through the next phase of the program.

3. Recommendations

Recommendation #7. USAID/Bolivia, in close coordination with relevant public and private players, should sponsor a detailed analysis of options for creating a market-oriented, client-driven research arrangement serving the cash crop industries in the Chapare. This arrangement should incorporate significant cost-sharing and cost-recovery features.

This institutional proposal should present a purposeful agenda leading to explicit decisions and actions to implement the most appropriate and acceptable options over the remaining life of the program.

D. Technical Services

1. Findings

Provision of extension support through NGOS started in 1994. These organizations were essentially contracted to provide a more agile, efficient, and program-focused mechanism to introduce alternative crop technologies and inputs, and to expand cultivated areas. The three NGOs currently providing this support are IVS, Agroparcha and Indasa. (In 1997, the crop extension staff of the coordinating NGO, Planning Assistance, came under direct DA funding and supervision.) The three organizations currently active employ some 90 technical, and 60 support and administrative staff. The accumulative cost of this support from 1994 to November 1997 was approximately $800,000.

NGOs have apparently been effective in motivating and assisting several thousand farmers to adopt alternative crops and technologies. They are now completing assistance commitments to earlier entrants to the program, as well as initiating work with new entrant groups who have signed coca reduction agreements. Personnel who have worked in both IBTA/C and the NGO systems reported that there are fewer bureaucratic rigidities and problems in the latter, and felt that there is a higher sense of work productivity.

In addition to production support, each NGO (including Planning Assistance) provides client groups with training in basic bookkeeping and financial management practices. It appears that this training, plus other enterprise management strengthening, has been both necessary and useful. Leaders we spoke to grasped the importance of solid management for their organizations. Comments made by leaders and NGOs reflected a need to greatly deepen the business orientation and understanding of the members within their organizations. In several instances we observed, e.g. APROCUT, UANABANA, groups have used their own funds to hire bookkeeping and enterprise management support staff.

Planning Assistance initially selected groups to work with which agreed, up-front, to pay for part of the assistance to be provided. Cost-sharing amounted to 10%, 17.5% and 30% in years one, two and three, respectively. This worked for years one and two. Planning Assistance was subsequently asked to move on to other new entrant groups who had signed coca reduction agreements cutting the experiment short. Planning Assistance felt such cost-sharing schemes could work, especially once cash crop sales began.

Only recently has a private organization (SABIN, formed by ex-IVS staff) offered to provide professional accounting and management services to groups in the region on a fee basis. They are also seeking some program start-up assistance. Other management and accounting organizations will most likely begin to offer services to successful farmer groups wanting such help.

Agroindustry and marketing organizations are another private source of technical services to groups. The program has financially supported private TA initiatives through incentive payments based on numbers of units sold/exported. La Khochalita, Winnex, BANABOL and Eco-Banana have all been offered program funded contracts to extend some measure of TA to farmers. In some cases, this seems to have worked reasonably well. It is likely that future support arrangements between agroindustry and select farmer groups will continue. INDATROP, for instance, plans on supplementing its own production of palm heart with that of sufficiently technified out-growers. It plans to enter into pre-harvest contracts with groups and include technical support as well as some inputs. It is important to note that, while all of the agroindustries interviewed expressed varying degrees of interest in working with groups or individual farmers, they all wanted to select only those out-growers who display high technical discipline and serious business commitment and other similar attributes.

2. Conclusions

The current approach of contracting NGOs to introduce alternative crops has been effective. However, as production and sales expand, it is not clear that NGOs will remain the best source of technical services for groups moving into the commercial phase. More market-linked and sensitive sources of assistance would be preferable, such as those offered through agroindustries or joint ventures with processors/buyers.

The program can and needs to help stimulate additional technical support for farmer groups entering into market production. There seems to be no reason that follow-on transitional support can't include substantial cost sharing. Mechanisms allowing greater group involvement in selecting sources of technical support also make sense, since groups may prefer to contract with an individual rather than an entire NGO, or perhaps with individuals from other sources (other NGOs, private firms).

The role currently played by DAI-contracted commodity line managers responds to the need for marketing organization, coordination and relationship-building among groups and agroindustries during commercial consolidation. The program would be well-served to continue support in these areas. At this time, it would make sense to encourage increasing agroindustry and/or commodity group cost-sharing arrangements for commodity line manager services, preferably through performance based contracts. The program might provide base support, but encourage service performance payments and bonus incentives from the other parties.

Other critical areas of farm group assistance are in business accounting, financial management and enterprise development. NGOs have provided basic training to group leaders, office holders, and administrative staff in these functions. This is extremely important if groups are going to manage their enterprises on a credible business-like basis. In fact, internal accounting and management of group

rotating funds is necessary to ensure member confidence and repayment. Proper accounting, funds management and re-lending of reflows is an important way that groups can demonstrate business responsibility to wary financial institutions. Comments from within the NGOs, from outside observers, and our own understanding of NGO staff specializations (mostly agricultural technicians) indicates that more specialized support services are required to consolidate groups as business enterprises. Some form of cost-sharing and open/competitive procurement of this support would be optimal. A phased financial cost-sharing plan needs to be discussed and introduced early on, with clear arrangements for eventual program financial phase out. The timing will reflect how soon the group will reach a commercial level of production.

A quick analysis of the capacity of farmer groups to finance technical services from gross sales receipts indicates that this seems feasible, assuming market availability and reasonable prices for alternative crops. DAI told us that, generally, commercial levels of sales can be expected after year two for bananas, by year two for pineapple , and during year three for palm heart. Taking the palmito case, it is estimated that 1,000 farmers with holdings of two hectares each, could generate gross revenues of $9,150,000 during year-three of production (assuming a sales value of $4,575 per hectare)(DAI figures). Using an average salary cost for technical personnel from one of the NGOs, and assuming 20 staff for the group of 1,000 farmers, annual cost of staff salaries would be $234,000. This works out to about 2.5% of gross sales, or $117 per hectare per year. This would appear to be a reasonable and reachable amount for palmito producer groups. Palmito falls between banana and pineapple in terms of returns/hectare. The situation with passion fruit and black pepper is not yet clear, especially given limited marketing experience to date. Many farmers may end up with holdings of several cash crops.

3. Recommendations

Recommendation #8. Cost-sharing can be phased in for technical services (extension, management) provided by NGO's with incentives for rapid progress and penalties for lagging contributions.

Assumption by groups of full costs of technical services appears to be feasible, once they enter a mature stage of production and marketing. Table 2., below, outlines these options. This table is drawn from the Planning Assistance model. The percentage of program support can be increased (up to 90%) based on the TA's performance if the jointly agreed upon results (based on the improved business performance of the group) is significantly exceeded. The plan therefore contains both a cushion and an incentive to produce results.

TABLE 2.

COST-SHARING FOR TECHNICAL SERVICES

New Entrant Groups Attended by NGOs(Years 1-2)

- Program funding for 80% for years 1-2 based on development and approval of acceptable performance agreement between farmer group and NGO
- TA bonus for fully achieving (10%) or surpassing (20%) the financial and management goals set out in the performance agreement.

All Groups After Initial Two Years (or other market entry threshold measure)

- cost-sharing contract required with groups which is tied to financial results. A suggested schedule follows:

  Year 1: Group 20% Program 80%
  Year 2: Group 50% Program 50%
  Year 3: Group 70% Program 30%
  Year 4: Group 90% Program 10%

- Maximum 20% performance bonus for NGO (10%) and Group's capitalization fund (10%) for any year group exceeds its cost share
- 10% penalty for NGOs not achieving cost-sharing target after year 2.

Assuming that alternative crops become financially successful, normal supply and demand relationships will come into play for technical assistance in the Chapare. The market for such services operates well in the Santa Cruz area and in Cochabamba. CORDEP can begin to take Chapare farm

group leaders to meet with technical and other service providers, and to other farmer groups who currently hire such services allowing them to see how contracts for TA work and how they can be linked to performance. As agroindustries develop confidence and experience with certain groups, some technical assistance will come directly from them. Technical assistance should be considerably more market oriented once farmers begin paying 50% or more of the tab, starting in year two. As program technical assistance phases out, the market will start to phase in to provide these services.

E. Agroindustry/Marketing

1. Findings

Agroindustry has been a major source of non-program investment in the Chapare. It accounts for some $7.3 million, not including some $2.0 million in program supported investments by farmer groups. Five of these enterprises have investment surpassing $500,000; the largest being the MILKA dairy plant valued at $2.0 million (foreign grant funded). In most cases, these can be considered fairly new medium- to small-scale pioneer activities. Most are initiating their own production plots while procuring additional material from farmer groups. Only in a few cases are these firms well-established, well-financed and well-connected with major market outlets. Most are banking on growing volumes of reasonable quality produce coming from program assisted farmer groups, and are enduring market entry ups and downs. They find it difficult to get loans for working capital and supplies and equipment given banks propensity not to accept property in the Chapare as collateral.

DAI has creatively employed several program-funded initiatives to help with capital constraints while simultaneously building working relationships between agroindustries and groups, e.g. payments to Winnex and Khochalita for successful banana exports in exchange for providing farmer groups with technical and marketing support. DAI has also been willing to partially underwrite some market introduction and reconnaissance activities, e.g. Nikkei's palm hearts. Success has been mixed, as could be expected in situations with so many unknowns, externalities and often low levels of initial trust between partners.

2. Conclusions

Agroindustry processing and marketing is a major motor for alternative crop production and economic activity in the Chapare. It is, however, important to realize that even strong firms will experience successes and failures, especially in export marketing. These fluctuations are to be expected over time and there is no way to guarantee that every firm or export sale will be successful. The expansion into local markets, where these exist (bananas, pineapple), is a fall-back position and diversification option. Where channels to local outlets are absent or not yet well developed (palm heart, black pepper, passion fruit), risks of larger losses are part of the business equation.

Agroindustries need a sufficient volume and flow of appropriate quality produce to succeed. For this, Chapare firms are planting on their own lands, hiring technical staff and bringing in inputs and technologies. They are also counting on differing levels of contract production from farmers and are

willing to extend assistance to these producers in order to meet their requirements. At the same time, there are perceived short-comings in those relationships--mutual mistrust, weak farmer marketing discipline, and the availability of producers within the procurement area and sometimes in contiguous blocks. Still, creative cost-shared initiatives, like those employed to date by DAI, appear to help facilitate the building of firm and farmer business relationships.

Some program support for new firms, particularly those with investments under $750,000 is warranted on a one-time basis. This might include cost-sharing in the provision of technical services to new entrant farmers, providing banks with a partial loan guarantee or other support to obtain loans or joint venture financing, specialized technical consultancies and some market reconnaissance; again, all on a cost-sharing basis. These latter two categories of assistance (specialized consultancies, market reconnaissance), might be extended to larger firms, but at a lower level of program contribution. Specialized assistance for solving industry-wide problems (e.g. Sigatoka) is warranted, as is some sharing of costs for promoting Chapare crops within Bolivia and in outside markets.

3. Recommendation

Recommendation #9. The Program needs to keep flexible options available to support agroindustries, especially for those with an investment of less than a $750,000, to help them reach out to new entrant farmer groups, obtain financing for working capital and plant improvement, and to strengthen market links. Cost-sharing should be required for any assistance.

The recommended types and conditions of assistance to agroindustries are outlined in Table 3., below.

TABLE 3.
PROGRAM SUPPORT TO AGROINDUSTRIES

New Agroindustries

- program continues current range of DA introduction assistance
- one-time 50-50 cost-sharing contract to support TA for new entrant groups having a purchase agreement with the firm in terms of hectares/kgs procured, up to $30,000 per firm
- on an exceptional basis, program will assist with joint venture, act as partial loan guarantor, or other steps to facilitate additional capital/credit
- specialized TA for technical production, processing, packaging issues (minimum 25% cost contribution of firm)
- market reconnaissance missions (two maximum per firm; minimum 25% cost contribution from firm)

Established Firms

- specialized TA for technical production, processing, packaging problems (50-50 cost-sharing)
- market reconnaissance (one per firm; 60% of cost from firm)

All Firms

- program provides TA for problems/issues affecting entire industry (such as was done for Sigatoka and palmito harvesting)
- program shares in cost of Chapare crop promotion in Bolivia and externally (50-50 match up to a total of $100,000)

F. Infrastructure

1. Findings

Early Experience. In the Basic phase of the program, all infrastructure was provided at no cost to communities and groups. In fact, roads and packing centers were contracted out and handed over to groups on a turn-key basis. There was no link between infrastructure and specific coca reduction commitments.

Current Experience. Since the early 1990's, the program has increasingly obtained greater cost-sharing from communities and groups. This reached a 50-50 split, or even higher in some cases, in almost all infrastructure works. In general, the community contributions appear to have been largely in local labor and local materials. Nonetheless, one farmer group we interviewed (UAPAC) claimed to have levied a cuota of $36 per month on members to come up with $180,000 counterpart cash for a program-supported electrification project. Community reluctance or inability to provide increasing amounts of cash counterpart would appear to be largely resolved under the new coca reduction agreements. It is our understanding that GOB policy is changing from providing individual payments for coca eradication to providing equivalent payments to the communities. However, we also heard that there is consideration being given to reducing community/group contributions to 30%. Lastly, it appears that the amount of program funding for road maintenance is inadequate and will only cover about one third of the 1400 kilometer system.

2. Conclusions

Since major *infrastructure* is the subject of another study, conclusions are restricted to general observations and a few specific comments on productive infrastructure. Generally, the upward trend in achieving community participation and cost sharing is good. The problem with turn-key and give-away projects is that farmers/communities feel little real ownership and may be unwilling to further capitalize on, or maintain, the projects. An example is road maintenance. Experience elsewhere with self-help roads shows that communities will organize to collect funds (sometimes with tolls) for maintenance purposes. Since communities are to become the collective recipients of coca reduction compensation, assistance in setting up road and other community infrastructure maintenance systems/funds makes sense.

Construction or improvement of productive infrastructure benefitting established farmer groups is more of a finance issue than a grant consideration. In these cases, the program may provide some measure of security guarantee for a portion of loans for productive purposes, but the burden should be on the group and their financial source.

As discussed earlier, all forms of infrastructure in new entrant areas should require the highest level of cost-sharing achieved in similar projects in the region (50-50 minimum in most cases). As stated earlier, the ability of communities to meet a 50-50 split, or even higher, should become even more feasible once they receive coca reduction compensation. Where groups exceed the 50% contribution level, consideration might be given to an additional one-to-one match up to the amount by which they exceeded

50%, for establishing a maintenance or operations fund.

2. Recommendations

Recommendation #10. All community infrastructure projects should seek a minimum 50% community contribution (cash and labor), and productive infrastructure projects for specific commercially consolidating groups should be self- plus loan-financed, possibly with partial loan guarantees from the program.

Where community contributions to infrastructure exceeds 50%, the program could consider providing an additional one-to-one match up to the amount by which they exceeded 50%, to be used for a maintenance or operations fund.

V. Lessons Learned

A major lesson learned is that development take-off to full commercial status can be slowed down and made much more difficult in a highly politicized and conflictive environment, such as the coca-charged Chapare. As a consequence of conflicting signals and, until recently, inconsistent pressure to reduce coca, farmer energies and resources have been less than fully committed to alternative crop production--a situation that seems to be changing, but at a less than optimal pace. Similarly, the participation of the full range of commercial and market institutions and players has lagged in the region. These conditions have left the program to carry an inordinate development support burden in all key areas, from infrastructure and market development to technical service and input provision.

Despite the coca distortions and additional difficulties affecting development in the Chapare, there is a steadily rising number of farmers and farm lands committed to alternative crop production and marketing. To date, some 2,500 farmers have an estimated 11,200 hectares of alternative cash crops. Similarly, agroindustries and farmer groups are continuing to invest and do business in the area. Their accumulative investments total some $9.5 million. It is clear that, as the coca economy progressively deflates, these and other actors will push development, and the transition toward a fully commercial economy, forward at very rapid pace.

Another tough lesson that farmers are beginning to realize, is that the significant abuse of credit and high loan defaults in the zone, has made all of them "credit pariahs" in the eyes of the country's financial system. The struggle to re-establish even normal credit standing will require financial sacrifice and business discipline. Short-term coca reduction imperatives have made donors and government agencies accomplices in this painful state of affairs.

Annex A
Institutions Contacted

USAID/La Paz
USAID/Cochabama, CORDEP
NAS/Cochabamba
DAI/Cochabamba
DAI/Chapare-Commodity Line Managers
PDAR/Cochabamba
IBTA/Chapare, Cochabamba
IBTA/Chapare, La Jota
AGROCAPITAL, Cochabamba and Ivirgazama
PROASPA-Palmito Producer Association
Nikkei-Palmito Processor
ASPROCUT-Pineapple Producer Association
BANABOL-Banana Producer and Exporter
INDATROP-Palmito Producer,Processor,Exporter
UNABANA/ASBA-Banana Producer Association
MILKA-Dairy Plant
VASCAL-Pineapple,Palmito Processor
APACSA-New Entrant Farmer Group
LA KHOCHALITA-Organic Banana Processor, Exporter
AGRO-INPUT VENDORS (2)
AGROPARCHA-NGO
INDASA-NGO
IVS-NGO
PLANNING ASSISTANCE-NGO
BANCO HIPOTECARIO NACIONAL
BANCO DE LA PAZ
BANCO MERCANTIL