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**Regional Planning
and Strategy
Analysis for the
Chapare Regional
Development Project**

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EXECUTIVE SUMMARY AND RECOMMENDATIONS

EXECUTIVE SUMMARY

The Chapare Regional Development Project (CRDP) and its implementing agency, the Programa de Desarrollo Alternativo Regional (PDAR), are engaged in a complex development program in two regions of the Department of Cochabamba, the Chapare and the Valles Altos in the Distrito Sur. The objectives of the CRDP include the reduction of coca cultivation in the Chapare, its replacement with alternative agricultural crops and activities in the Chapare, and reduction of the migratory flow of population from the Valles Altos. The goal of reducing migration is to be achieved by improving local economic conditions in Valles Altos through sectoral activities in agriculture, agroindustry, and community infrastructure.

In the Chapare, the implementation of CRDP subprojects is based on the concept of "conditionality." Conditionality requires that coca plant acreage be reduced by specified percentages, either by communities or individual *campesinos*, before subprojects are executed. The conditionality requirement precludes the rational use of development monies, because logical planning and project development are entirely subordinated to coca reduction. In the Valles Altos, where no conditionality requirements are imposed, subproject implementation can be accomplished through the use of sound regional development planning strategies.

In 1985, the forerunner of the PDAR was a small coordinating agency overseeing the execution of subprojects in the Chapare by three implementing agencies with limited sectoral mandates. Since then it has undertaken a broad multisectoral mandate, extended its geographical range of operations, and expanded its range of implementing agencies to over 20. The additional complexity of the PDAR's operations, added almost randomly over the life of the CRDP, has severely stretched the institutional capacity of the PDAR.

Despite its planning and operational difficulties, the PDAR has been successful in the coordination and implementation of several activities such as small-scale irrigation projects in the Valles Altos, road construction in the Valles Altos, and agricultural research and extension in the Chapare.

Many other subproject activities produce only marginal results but require almost the same amount of time and energy to operationalize. Isolated, small-scale infrastructure projects in the Chapare and some of the pilot projects and studies are examples. The multimillion dollar credit component in both the Valles Altos and the Chapare is seriously over-funded. Given the present socioeconomic conditions, there is no way that the intended beneficiaries can use that much credit.

RECOMMENDATIONS

All regional development projects face tough choices as the ambitious multidisciplinary and multisectoral design of project plans confront the realities of limited resources and limited capacity in the field. The challenge is to identify which activities achieve project goals, what can be done, what is done well or even reasonably well, and then to direct project resources and energies in those activities.

Regional Development Focus

Any long-term development plans for the Chapare region must realistically acknowledge the severe constraints of the natural resource base and the clearly documented limitations that colonization of tropical lands implies. Similarly, while the high valleys of Cochabamba have some additional development potential, they too suffer severe constraints on significant increases in productivity.

Short-Term

Initiate no new PDAR and Servicio Nacional de Caminos (SNC) activities in the Chapare and redirect resources to the Valles Altos. Eliminate the small-scale, immediate impact projects and other public infrastructure projects from the Chapare portfolio and suspend road improvement and bridge building activities in the Chapare by the SNC. Because of conditionality requirements, these investments are made in response to coca reduction, and it is extremely difficult for them to relate or contribute to a coherent regional economic development strategy for the Chapare. Continue and even reinforce the Instituto Boliviano de Tecnología Agropecuario (IBTA)/Chapare activities in the Chapare, but focus these activities more narrowly on agricultural extension, farming systems, and agroprocessing links.

Medium- and Long-Term

Continue the short-term strategy outlined above. Depend on interdiction, enforcement, and compensatory payments for coca acreage reduction to control coca cultivation in the Chapare. Diversify the regional focus to one or more peripheral Andean areas (Ayopaya Province), which supply settlers and migratory labor to the Chapare. Use the successful Valles Altos experience as a model for activities in the selected areas. Identify and develop another alternative migratory destination in the Oriente (Santa Cruz) for potential migrants. Focus on sustainable development models accentuating employment generation, renewable resources, nontraditional activities, and export products.

Implementation Strategy

Short-Term

Avoid the addition of any new implementing partners. Concentrate on those organizations that are or have been implementing partners of the PDAR. Dedicate some PDAR resources and technical assistance to strengthening those existing partner organizations administratively and organizationally. Attempt limited experimentation with local grassroots democratic organizations as implementing partners — *concejos provinciales* and peasant organizations. Continue present levels of PDAR direct administration (execution) of small-scale irrigation and potable water projects in the Valles Altos.

Medium- and Long-Term

Seek an appropriate administrative home for the PDAR within the existing structure of the Government of Bolivia (GOB) in an implementing organization. Establish the PDAR as an independent project within this organization operating with its own executive and technical direction and under the close supervision of the funding agency, but with the goal that the home organization would become a key implementing partner for the PDAR. Continue as well the present use of other partner-implementing organizations — NGOs and other governmental agencies. A logical administrative home for the PDAR would be the Corporacion Departamental de Desarrollo de Cochabamba (CORDECO), or, in other departments, the appropriate *Corporacion*. Useful models of successful experience exist.

Sectoral Strategy

Short-Term

Narrow the sectoral focus during the remaining 14 months for the current CRDP. Concentrate on those activities in which the PDAR and its implementing organizations have established a clear record of successful implementation. Agricultural research and extension in the Chapare, road improvement and construction in the Valles Altos, and small-scale irrigation and potable water projects linked to agriculture and natural resource management in the Valles Altos all represent successful efforts that merit additional focus. Reduce the emphasis on large amounts of credit, but experiment with alternative credit approaches and nontraditional intermediate credit institutions (ICIs). Implement some immediate impact, high visibility efforts in market towns and urban areas. These could include cobbling/paving of streets and sidewalks.

Medium- and Long-Term

Continue emphasis on activities that the PDAR has a demonstrated capacity to do well, as noted above, and a scaled-down small farmer credit program.

Market town and secondary city development is a must. The urban functions in rural development approach pioneered by USAID represents an appropriate strategy. Recognize the key role that urban centers play in the development process as rural service centers, centers for off-farm employment, and migratory destinations for rural folk leaving agricultural occupations. Concentrate on the provision of public services and focus credit on activities that will generate private sector job creation in these market centers, including, but not limited to agroprocessing, agroindustry, and artisan activities.

Institutional Strategy

The PDAR and U.S. Agency for International Development personnel and consultants should schedule a strategy development workshop. All key decision makers from the principal policy and implementing institutions (PDAR, the Sub-Secretaria de Desarrollo Alternativo y Sustitucion de los Cultivos de Coca [SUDESAL], USAID, and technical assistance) must be willing to attend and participate. It should be organized and directed by a neutral, trained professional facilitator familiar with USAID projects, development, and Latin America, but with no previous experience or knowledge of the project or project personnel. The initial activity would take the form of a two- to three-day retreat at a location removed from Cochabamba and La Paz. The goal of this event would be the development of a clearly defined project strategy for the PDAR. A review of the project's goals, articulated and unarticulated strategies to date, experiences, and lessons learned would comprise a major element of this activity.

Subsequently, under the direction of the facilitator, participants would work together to articulate a strategic implementation plan for the PDAR, concluding the workshop with a draft strategy document. After a short period of institutional and personal review of the draft document by key project players and institutions, lasting perhaps a week to 10 days, a second, shorter workshop, lasting perhaps one and a half days and again under the direction of the facilitator, should be held. The workshop would identify the problems and difficulties with the initial draft of the strategy document, revise the strategy statement accordingly, and conclude with all key decision makers in the policy and implementing agencies agreeing to the stated strategy.

This activity must be accompanied by institutional changes in the PDAR that will permit the institution to implement a continuous, periodic assessment, review, and reformulation of its institutional implementation strategy. The PDAR should establish a planning office as an integral part of its organizational structure. The current organizational structure simply does not provide any instance for institutional planning and strategy formulation. Staffed with three professionals, this office would depend directly on the PDAR's technical director and would serve as the technical director's advisory and planning body. Technical assistance and training should be provided to this office to assist its personnel in establishing effective procedures for institutional and program planning and strategy development, analysis, and reformulation.

Conditionality (coca reduction as a precondition for development assistance) should be eliminated from the operational level of project implementation. This policy obviates rational planning, program development, and project implementation. If this cannot be accomplished, then serious consideration should be given to suspending all investment activities tied to conditionality.

SECTION ONE

PROJECT BACKGROUND, GOALS, AND OBSTACLES

BACKGROUND AND EVOLUTION

To understand the context of regional planning and strategy analysis in the Programa de Desarrollo Alternativo Regional (PDAR), it is imperative to review some of its institutional history.

The Chapare Regional Development Project (CRDP) was initiated in 1983 by the United States Agency for International Development and the Government of Bolivia (GOB). The project had as its principal goals the reduction of the cultivation of coca in the Chapare region, its replacement with the cultivation of other crops, and the improvement of the productive infrastructure of the region. Several years later, the realization that roads and other public infrastructure actually facilitated narcotics trafficking led to the suspension of these development efforts. Development work then focused on agricultural research and extension.

In 1987, a broader vision of the problem of the development of the Chapare was conceived. This view saw the problem not only as an issue of the regional development of the Chapare, but as part of a much broader set of socioeconomic forces. The improved economic possibilities in the Chapare were encouraging the migration of Bolivians from the area around Cochabamba and the associated high valleys to the Chapare. It was argued that if living conditions could be improved in the associated high valleys, migratory push factors encouraging movement to the Chapare could be reduced and fewer in-migrants would be available to cultivate coca and process it into *pasta basica*. Thus, in late 1987, the CRDP was modified by Amendment No. 7 to include the High Valleys Component, which consisted of a series of subcomponents focusing on agriculture, water management, forestry and natural resources, rural industry and marketing, productive/transport/and community infrastructure, and a pilot investment fund. The two regional components of the CRDP have been operating concurrently with varying degrees of intensity since 1988. Other USAID projects, such as Rural Roads II, have been linked to the CRDP both in the Chapare and in the Associated High Valleys.

Administratively, the supervision and implementation of the CRDP have changed considerably since its inception. The GOB counterpart organization was originally conceived of as simply a coordinating agency. It would maintain a close liaison with USAID, oversee project activities, approve operating agency plans and actions, and channel funds to these agencies. To a large degree this has remained the modis operandi of the CRDP, although some modifications to this were made in 1989.

The original oversight agency, the Sub-Secretaria Para el Desarrollo del Tropico Boliviano (SDTB), was based in Cochabamba and was an administrative dependency of the Ministerio de Planimiento. It had a small technical and administrative staff that numbered 10 to 15. The large part of its supervisory work was with two agencies — Instituto Boliviano de Tecnologia Agricola/Chapare

(IBTA/Chapare) and the Servicio Nacional de Caminos (SNC). When the CRDP's mandate was expanded in 1987-1988 to encompass the Associated High Valleys region, the institution's name was changed to the Programa de Desarrollo Alternativo de Cochabamba (PDAC). Additionally, an intermediary supervisory agency, the Sub-Secretaria de Desarrollo Alternativo y Sustitucion de los Cultivos de Coca (SUBDESAL), was created in La Paz to oversee PDAC and other coca-related development activities in the Yungas region of the Department of La Paz. Finally, all of these activities were transferred from the portfolio of the Ministerio de Planimiento to the Ministerio de Asuntos Campesinos y Agricolas (MACA). Within this last year, the name of the organization was changed again to the Programa de Desarrollo Alternativo Regional (PDAR), reflecting a growing interest in having the CRDP operate beyond the strict geographical confines of the Department of Cochabamba.

As the CRDP's coordinating agency has developed administratively (SDTB to PDAC to PDAR), its operations have become more complex. The number of personnel has increased from 10 to 15 technical and administrative personnel in the mid-1980s to 50 in 1990. This number excludes the additional layer of supervisory personnel in SUBDESAL in La Paz. Additionally the PDAR has increased the number and diversified the types of agencies that implement project activities in the field. It continues with its traditional implementing agencies — IBTA/Chapare, SNC, and Direccion de Reactivacion Agricola (DIRECO), and has added PL 480 projects; United Nations Development Programme/UNFADAC projects No. 411, 412, 415; seven GOB agencies or offices; and four to five nongovernmental agencies. The degree to which specific project activities of some of these implementing agencies, specifically UNDP/UNFADAC, are actually under the PDAR's supervision is not entirely clear. Nevertheless, the PDAR has also begun to implement some projects itself through direct administration. These have been limited to immediate impact projects designed to give the PDAR a higher profile and immediate presence in the project areas. In the Chapare and the Valles Altos these projects are limited to a \$10,000 cap.

Not only does PDAR operate a large office in Cochabamba, but it also operates sleeping and storage facilities for its personnel in both the Chapare region (Villa Tunari) and in the Valles Altos (Aiquile).

The advisory structure associated with PDAR to implement the CRDP has also grown significantly. Beginning in the mid-1980s, USAID-financed advisors numbered five and included two agricultural and extension advisors to IBTA/Chapare, contracted through Experience Inc. (EI), and three individuals on personal service contracts with USAID — a credit advisor, a roads coordinator, and a coordinator for the Chapare region. By 1990, the staff had grown to 13 professionals, including the five listed above, plus a social science advisor (Human Settlement and Natural Resource Systems Analysis or SARSA), six agriculture and natural resource advisors (DAI/TRD), a coordinator for the Valles Altos, an additional engineer, and a soon-to-be-hired senior advisor who will supervise the activities of the new USAID regional office in Cochabamba.

PROJECT GOALS

The goals of the CRDP and the PDAR are to contribute to the reduction of coca cultivation in the Chapare and to promote alternative economic and social development in the region. The concept of "conditionality," the requirement that communities and individual farmers reduce coca cultivation by prescribed percentages to be eligible for infrastructure projects or agricultural credit, is a key technique in contributing to the reduction of coca cultivation. The PDAR also seeks to advance the "alternative development" (non-coca-based development) of the Chapare by promoting a diversified crop economy, improving marketing and rural living conditions, and creating incentives for the development of agroindustrial enterprises. The PDAR is also trying to reduce incentives to migrate to the Chapare by improving the economic conditions and living standards in the Valles Altos region of Cochabamba which supplies large numbers of migrants to the Chapare region.

OBSTACLES

Conditionality and its related development activities contribute in only a very indirect way to the reduction of coca cultivation in the Chapare. Direct payments to coca growers for the reduction of their plantings (\$2,000 per hectare) and enforcement efforts through interdiction and other means are responsible for the vast majority of the reduction of coca cultivation in the Chapare. The conditionality requirement makes rational planning and project development for any kind of alternative development of the Chapare extremely difficult. The politically conflictive and sometimes violent nature of conditions in the Chapare also serve as severe constraints on the PDAR's ability to undertake development work. As a planning and coordinating agency, the PDAR must work with other implementing organizations to execute projects. Its diverse sectoral mandate and regional division of activities (Chapare and Valles Altos) make these kind of coordinating activities difficult. With a comparatively small core staff, the PDAR is stretched thin and many areas do not receive adequate attention, such as planning, credit, and marketing. One person or less is assigned to deal with these major components within the PDAR.

SECTION TWO

CURRENT STRATEGIES AND IMPLEMENTATION

REGIONAL DEVELOPMENT FOCUS

In broad terms the geographic mandate of the PDAR is limited to two regions, the Chapare and the Valles Altos. In both cases, there are specific factors that further limit the geographic distribution of project activities.

Valles Altos

In the Valles Altos, work is concentrated in the Distrito Sur, comprising the Provinces of Campero, Mizque, and Esteban Arce. This focus on the Distrito Sur was justified on two grounds: (1) the need to promote the development of peripheral regions in the Department of Cochabamba, and (2) the belief that an appreciable number of migrants to the Chapare region originated from the southern district. Although there is some debate as to how significant the migratory flow from this region to the Chapare is, the general rationale for focusing development resources in this region is logical and clearly defensible.

Early project documents identified the geographic focus as the agricultural valleys around Aiquile and Mizque, including the two towns. This more-limited focus is justifiable because these areas have the largest concentrations of population and also the greatest potential for increased agricultural production and market center (urban) development.

With the arrival, in early 1989, of the technical assistance team in agriculture and natural resources, composed of personnel from Development Alternatives Inc. (DAI) and Tropical Research and Development, Inc. (TRD), even more narrowly defined geographic areas were identified for project activities. The Associated High Valleys (AHV) technical assistance team selected three small watersheds in which to concentrate project activities — the Uchuchajra (adjacent to Aiquile and the area known as Cercado), the Tipa Jara (the valley lying between Aiquile and Mizque), and the Tucma (a narrow valley close to Mizque). Almost all project activities to date, however, have been directed to the first two watersheds, perhaps because of the easy access provided by the all-weather secondary roads.

The AHV team's rationale for selecting watersheds as the operational units for PDAR's activities in agriculture and natural resources was based on the long-held and widely accepted (but infrequently applied) logic of the river basin as a natural and logical economic planning and development unit. The team identified specific reasons why the river basins were used as operational units. For example, they can serve as basic planning units that integrate natural resource and conservation activities. Also, there is local acceptance of watershed boundaries, which allows the project to focus on the importance of water use for sustainable rural development.

The AHV team's logic is sound and, in the short time project activities have been implemented in the microregions, the strategy appears to be paying solid dividends. Suggestions by some team members and others that the agriculture and natural resource activities be focused around individual irrigation projects as integrated project packages, using the skills and abilities of all advisors and counterpart personnel, is a logical outgrowth of this approach. This approach is recommended here and will be discussed further when sectoral strategies are addressed below. It would be useful to expand the activities in these two watersheds into the major watershed in the agricultural lands adjacent to the town of Mizque. Some plans do appear to be addressing this area, specifically the Incahuasi filtration gallery project.

The other major project activity in the area, road construction, does not really have a specific geographic focus. Efforts have been profitably fixed on the improvement of the secondary road from Arani - Rodeo - Mizque - to Aiquile. Reconditioning the road from Aiquile to Omereque during 1990 is also a positive direction for road investments to take — improving access to productive agricultural lands in and around Omereque and to the town. Future road construction activities for 1991 and beyond will benefit from an informed analysis of the regional marketing system in the Distrito Sur, allowing the identification of where the multiplier effects of road construction will be greatest for *campesinos*, local market towns, and the regional economy at large. A regional marketing system with periodic markets focusing on Aiquile exists in the project area, but little is known about it and more analysis is necessary before further road investments are programmed.

While Aiquile and Mizque are the clearly identified geographic foci for urban infrastructure and the pilot investment fund, none of these activities has yet to develop past the discussion phase or preliminary studies. Given the long time involved in electrification, potable water, and sewer projects, all which require detailed studies, public bidding, and execution by private construction companies, the delays in the start-up of these activities means that it likely no significant urban infrastructure project will be complete until late 1992. Every effort should be made to move these projects ahead posthaste.

Chapare

In the Chapare, the geographic focus of project activities is strongly controlled by the concept of conditionality. This approach restricts the communities in which project funds for infrastructure may be spent to those *centrales* or *sindicatos* that achieve acceptable levels of coca plant reduction under the supervision of DIRECO. In 1988, this approach required 100 percent reduction, but subsequently this has been modified to allow a staged approach. A reduction of 30 percent qualifies a community to have one immediate impact project, another 30 to 40 percent reduction qualifies it for another, and full reduction can result in another small project. Conditionality also extends to the provision of credit. A 10 percent reduction of coca acreage is required to be eligible for credit, and the amount of credit is further conditioned on the total area reduced. At one point, IBTA/Chapare was even expected to control access to training courses and extension work to individual farmers based on certificates of reduction by DIRECO. IBTA/Chapare technicians balked, suggesting that this restriction was unrealistic and did not serve the goals of the project. Subsequently, this requirement was dropped. It is not clear how conditionality relates to infrastructure projects that might be executed in market towns and urban areas.

From a regional planning and strategic development perspective, the conditionality requirement is problematic. It allows little rational planning or rational development strategy to be implemented since potential projects and project sites are dependent on the reduction of coca cultivation by communities. It can easily lead to the construction of questionable projects in inappropriate places. A classic example would be the relatively large investment made in the community of Villa Nueva. This community, located in marginal agricultural lands south of Ivirgarzama, accepted the coca eradication program early, when conditionality requirements were based on 100 percent compliance. Significant amounts of money (perhaps \$250,000) have been invested in construction and equipment of a medical post, and in potable water and access road improvements. The construction of a campesino market in Chimore is another, less-costly example (\$9,000). This structure consists of a cement floor and roof covering an area where *campesinos* can sell their agricultural products. The sad irony of this project is that Chimore can hardly be described as a dynamic marketing center and that it already has a too-large permanent market with 150 stalls, of which perhaps 25 are used. One immediate impact project provided bricks for the construction of part of a *centro de rehabilitacion* (prison) in Chimore. The link between this activity and development is puzzling.

Conditionality also leads to a chaotic geographic distribution of projects with no logical spatial coherence as mutually reinforcing projects or packages. In the Chapare the best agricultural lands lie between the Rio Chapare and the Rio Vientecuatro, and this is a logical area in which to focus development efforts. However, this also coincides with the *zona roja* or the principal and most productive coca growing areas in which resistance to coca reduction is high. Hence, almost no infrastructure development activities occur here. Rather, they become centered on marginal areas like Villa Tunari or Chimore where there is a strong political acceptance of the government's activities.

In the case of the Chapare, is the goal *desarrollo* or *desarrollismo*? Both may be valid goals, one socioeconomic and the other political, but their methods are different and their success or failure must be measured by different means. From a development perspective, the provision of agricultural extension services and agricultural credit may not be so problematic, but some of the same contradictions and dilemmas are evident.

New Regional Initiatives

There is now some discussion of the PDAR extending its regional mandate beyond the confines of the areas of operation, the Chapare and the Valles Altos. These ideas have centered on the possibility of working in areas contiguous to the Department of Cochabamba, areas in northern Potosi and Chuquisaqui Departments that are functionally linked to Cochabamba and that are also supposedly supplying a significant number of migrants to the Chapare region. Survey data from a recent study (Rivera) on migration origins of Chapare residents suggests, however, that Apopaya Province in Cochabamba may supply nearly 17 percent of all Chapare migrants — significantly more than the 3 and 4 percent figures from Potosi and Chuquisaqui respectively. Regardless of the veracity of Rivera's data, the issue of the geographic expansion of the PDAR's mandate requires considerable thought.

The most important issue probably is not where the institution should expand its project activities, but if it should expand them at all. As it is presently constituted, the PDAR is stretched thin. There are significant difficulties finding suitable implementing agencies, problems satisfying multiple bureaucratic

regulations of funding and implementing agencies, and simple logistical problems. Increasing PDAR's geographic coverage, without a serious reexamination and redesign of its operations, is ill advised.

IMPLEMENTATION STRATEGY

The PDAR was conceived and continues principally as a coordinating agency overseeing the implementation of the CRDP. Its main implementation partners have been IBTA/Chapare, SNC, and DIRECO. In the last year, PDAR added a host of additional government and nongovernmental agencies to its list of project implementers. It has also undertaken coordination of development funding from donor agencies beyond the USAID/CRDP umbrella, notably UNDP/UNFADAC, and it is attempting to attract funding and projects from other international donor agencies.

Other than its principal GOB implementing partners, the PDAR has been only somewhat successful in finding other partners for project implementation among other GOB agencies and ministries represented in the Department of Cochabamba. Most of these institutions are weak, have few personnel, and have not had much of a field presence beyond the city limits for many years. Most offer little or no promise as implementing partners. Modest efforts are underway to work with the Corporacion Departamental de Desarrollo de Cochabamba (CORDECO), the Servicio Nacional contra Aftosa, Rabia y Brucelosis (SENARB), IBTA, and GEOBOL. Most of these projects would fall into the category of education or technology transfer, and not infrastructure construction. Regional offices of MACA and the SNDC are dependencies of the national-level MACA in La Paz, as is PDAR. Administratively, these would be logical implementing partners for the PDAR. However, these institutions offer no serious possibilities. The Universidad Mayor de San Simon (UMSS), through its faculties and autonomous bodies, is also an implementing partner for several PDAR projects. These projects generally fall in the categories of education, technology transfer, or pilot projects.

Considerably better results and possibilities for future implementation have been encountered among nongovernmental organizations (NGOs). The PDAR has five projects with the Asociacion de Servicios Artesanales Rurales (ASAR) and one each with the Programa de Control Integral de Plagas (PROCIPLA), Radio Esperanza, Secretariado Nacional de Pastoral Social (SENPAS), and the Centro de Comunicacion y Desarrollo Andino. In 1989, several small irrigation projects were implemented by the Centro de Desarrollo Agricola (CEDEAGRO). Some of these organization undoubtedly have political and religious agendas, but many also seem to have dedicated staff, with an intimate knowledge of local conditions, the confidence of the campesinos, an active presence in the field, and a willingness to be there. These NGOs seem to be excellent implementing partners for the PDAR. There is some debate, however, on how many more NGOs could be recruited to serve as implementing partners. Some data collected by PDAR suggest that there may be over 100 NGOs working in upland Cochabamba. Yet an examination of that data also reveals that the vast majority of these organizations are small (less than five staff members each), and most have narrow operational interests and mandates, making them questionable as suitable implementing partners for the PDAR.

The activation of the credit component of the CRDP by the PDAR has proved especially tricky because of the difficulty of finding ICIs either suitable or interested in participating.

During 1989 and 1990, the PDAR has also taken to direct administration of the small immediate impact projects designed to maintain visibility and political credibility in the project areas. The immediate impact projects in the Chapare region have represented a grab bag of project types, whereas in the Valles Altos they have been more tightly focused on water management and irrigation.

Contracting of private firms to undertake studies for urban infrastructure is underway. This is the anticipated means for implementation of future urban infrastructure projects and large-scale irrigation works.

The PDAR finds itself in a difficult situation with respect to project implementation. The CRDP mandates that the PDAR be a planning and coordinating institution. As the project has grown and its sectoral and regional mandates expanded, the PDAR has had to work with a growing list of implementing agencies in the governmental, private, and nonprofit sectors. PDAR has also, in the interest of action and political expediency, been forced to undertake the implementation of some small projects. These conditions represent a difficult operational agenda for any institution, much less one with an effective institutional history that spans only a few years.

If PDAR's activities and budget were to expand even more, are there additional suitable implementing partners available? Is there significant additional institutional capacity within existing partner institutions of allow an expansion of their efforts? The answers to these two questions are not many and not much, respectively.

One institution that has not yet been considered as an implementing partner is local government (*concejos provinciales*). In Aiquile and Mizque in the Valles Altos and in Villa Tunari and Ivirgarzama in the Chapare, the *concejos provinciales* would be appropriate partners if project activities such as street paving, the construction of sidewalks, curbs and gutters, and other small-scale construction projects existed. Other appropriate projects suitable for implementation by local government could undoubtedly be identified by local officials and PDAR personnel. Such collaboration would help develop local capacity and initiative, something sorely lacking in most small local governments.

Are there any possibilities of working with campesino organizations as implementing agencies? Some have suggested working with *sindicatos* and *sub-centrales* on the implementation of some smaller projects. These democratic, grassroots organizations have a definite presence in the field and will continue to have a presence long after the PDAR is gone. They could also benefit from the experience of implementing a project, and such a strategy would also contribute to building local institutional capacity. Contrary arguments would suggest that their lack of experience with paperwork and accounting practices, their political nature, and the logistical problems of working with them would obviate them as suitable implementing partners. However, it is probably worth experimenting with project implementation with one or two *sub-centrales*.

To what extent should the PDAR continue or expand its direct administration of project activities? This is a thorny issue that evokes strong responses among the various members of the PDAR and USAID technical assistance teams. It is perhaps best to consider the PDAR expansion of direct administration from a regional perspective. In the Chapare, there is little or no justification for PDAR direct administration of projects (immediate impact or others), given the isolated nature of these activities and

the fact that they are not linked to overall development strategy. The situation in the Valles Altos is quite different; solid arguments can be advanced for the direct implementation of specific small-scale irrigation projects and some related agriculture and natural resource activities in this region. The limited number and capacity of proven or potentially suitable partner-implementers in this area are problems. When contrasted with the need and demand for water projects by the local population, the need for direct administration of these projects becomes more imperative. The PDAR and USAID responded to this need in late 1989 and in 1990 with direct implementation of small-scale water projects, but many now argue that these should be suspended in 1991 through the remaining life of the project. It is argued here, however, that the success of these projects, their direct benefits to the target population, their potential as foci for integrated agriculture and natural resource activities, their utility as possible models of development activities in a future/revised CRDP, and their political visibility make them worthy of continuation through the end of the current CRDP, August 1991.

SECTORAL ACTIVITIES

Agriculture and Natural Resources

Valles Altos

In the short time the PDAR and the AHV technical assistance team, fielded by Development Alternatives, Inc. (DAI) and subcontractor Tropical Research and Development, Inc. (TRD), have had to work, many positive and worthwhile activities have been undertaken. These include the establishment of two forestry nurseries; a living fence program for improved livestock control; construction and rehabilitation of numerous small-scale irrigation works; small-scale potable water projects; integrated pest management activities; and short courses and training in livestock, environmental management, and soil and water conservation.

In the design of the Valles Altos agriculture and natural resources component, it was anticipated that the subcomponents of the project — irrigation, soil and water conservation, forestry, ecology, and range and livestock management — would naturally be integrated through the farming systems subcomponent. Because of many factors, including the failure to keep a technical advisor with this specialization on the technical assistance team, the lack of the continuing presence of a strong chief-of-party, and turf battles among the members of the technical assistance team, this integration has not been fully realized.

Water management and irrigation are the foci for technical assistance activities. This strategy has much to recommend it. Irrigation attends to the immediate and urgent needs of many *campesino* communities. *Campesino* communities, *sindicatos*, and *sub-centrales*, are willing to participate in these projects because they see a clear linkage between the problem and the realistic possibility of resolving it. They also see a solution within their grasp. These kind of small and medium-scale irrigation projects can be directed precisely at the project's target population — small-scale agriculturalists who are prime targets for possible migration to the Chapare (personal communication Dr. Carlos Perez). The irrigation projects have been most successful in mobilizing local resources and labor and have been administered

directly by the PDAR as immediate impact projects. Project technicians estimate that perhaps as much as 25 percent of total project costs have been covered by the donation of local materials (sand and gravel) and labor by beneficiary communities. Irrigation serves as a natural *entrada* to peasant communities providing a link to closely related agriculture and natural resource activities. Watershed protection, forestation, controlled grazing practices, and environmental management have obvious links with protecting the quantity and quality of irrigation waters as well as potable water. These activities can and are being linked to short and long-term training exercises. In the case of two subprojects, communities were required to participate in the "linked" subcomponents as a prerequisite to initiation of an irrigation project.

Finally, there is one very strong argument in support of using irrigation as a continuing focus for the various subcomponents — the PDAR has demonstrated it can execute small-scale irrigation projects successfully. As a result, the communities in the Valles Altos have responded with an avalanche of requests for more irrigation and potable water projects.

Chapare

IBTA\Chapare and the Experience Inc. (EI) technical assistance team provided the principal thrust in the Chapare for over five years. The overall record of the IBTA\Chapare component has been positive. Major improvements have been made in the physical infrastructure of the two agricultural experiment stations in the Chapare, La Jota, and Chipiriri, making them suitable sites for housing agricultural technicians, conducting agricultural research, and providing training courses. Furthermore, the number of personnel has increased significantly; at La Jota, for instance, there are 20 technical and extension personnel. Not only has the number of personnel increased, but several informed observers agree that the quality and motivation of the technical and extension personnel has also improved.

The IBTA/Chapare and the EI team followed a logical research and extension program that could be linked reasonably to a coca crop substitution strategy. They selected potential alternative or nontraditional crops that demonstrated three primary characteristics — high value and low weight, potential for agroindustrial transformation, and potential for the international market. Primary among these were pepper, macadamia, ginger, cardamon, and vanilla. Efforts were also undertaken to find improved varieties of citrus (oranges) and pineapples that could be grown in the Chapare. The team has been successful in obtaining the appropriate genetic material, reproducing these crops on the experiment station, and selling or providing in-kind credit to farmers for the distribution of these crops. Furthermore, 20 - 30 supervised demonstration plots (*unidades productivos demostrativos*) have been established by IBTA/Chapare on *campesino* farms throughout the region.

The IBTA\Chapare component has been less successful in widespread practical extension work with farmers. Yet, at this stage of the project, this may be a reasonable situation. Research activities and the development of nursery stock take time. Attention can now be concentrated on extension links. The program has been criticized for focusing too much on single-crop solutions to the alternative crop issue, rather than developing a farming systems approach with several cropping systems available. More effort should be given to identifying suitable cropping system alternatives (agroforestry) for farmers and then linking credit provision to their adoption.

Finally, another difficulty has been finding realistic markets for the new crops. This marketing responsibility falls on the PDAR rather than IBTA\Chapare. Recent production of 5 hectares of ginger by IBTA\Chapare and two private producers resulted in a crop of 60 tons for which there was no market. No preparatory planning or research had been done for the sale of this crop. The resulting problems involved in processing and selling this crop underscore the critical need for some forward planning by the PDAR and IBTA\Chapare concerning the realistic possibilities for marketing of these alternative crops. The PDAR will be seeking a long-term technical assistance advisor in processing and sale of products from Chapare and the Valles Altos, and this will help rectify similar difficulties in the future.

The IBTA\Chapare subcomponent of the PDAR represents one of the best executed and brightest lights in the project's constellation. Additional resources can be profitably invested in the work of IBTA\Chapare, specifically on increased and more intensive efforts at extension to small farmers. IBTA has demonstrated the ability to focus on long-term goals and produce results. This should be supported.

Agricultural Credit

Valles Altos

The PDAR will soon begin the disbursement of \$1.8 million of agricultural credit in the Valles Altos regions of Aiquile/Mizque and Esteban Arce. The goals of the activity are to improve agricultural production systems, increase agricultural employment and income to reduce the migratory flow to the Chapare, and help create viable, self-sufficient agricultural credit systems in the project areas. Four local institutions have been tentatively chosen as ICIs — the Cooperativa Integral de Servicios de Cochabamba, Cooperativa de Ahorro y Credito de San Pedro, ASAR, and Accion Rural Agricola de Desarrollo Organizado (ARADO). These institutions are ready and willing to participate, but the last-minute willingness of the Banco Agricola de Bolivia (BAB) to consider participation has put the participation of the other institutions in question. If the BAB is selected as the ICI, the other institutions will not be included. The possible participation of the BAB can be considered positive — it is the nation's agricultural bank, it needs financing, and it lacks a strong field presence in the project area. Participation in the project would reinforce the BAB. However, the BAB has a poor reputation and a poor record of success. It is known as being ineffective, difficult for small farmers to work with, rigid, and relatively uninterested in providing any kind of follow-on or supervised technical assistance. Further, it has refused to act as an ICI for the PDAR credit program in the Chapare. The BAB is a poor choice to undertake the role of the ICI in the Valles Altos. This is especially true given the willingness and capability of local ICI organizations, which are more attuned to local conditions, small farmers and their organizations, and which are already integrally involved in subproject implementation (ASAR and ARADO).

The details of the agricultural credit component include the distribution of \$1.8 million in credit in 500 loans averaging \$3,500 each. The interest rate is set at 13 percent to be repaid in bolivianos, but pegged to the dollar to maintain the value of the loans. The credit is to support the following activities — annual crops (31 percent), perennial crops (10 percent), equipment and tools (11 percent), productive infrastructure (16 percent), home improvements (20 percent), and livestock (12 percent). The money is to be disbursed during the 1990-1991 agricultural year, a period beginning in mid-1990 and ending in

early 1991 (over 6 to 8 months total). The establishment of a rotating loan fund is planned with the repayment of the loans.

There are several unsettling aspects of this credit plan. The total credit to be disbursed seems large considering the short time available — 6 to 8 months — and the fact that no field activities had even begun by mid-June. The average loan amounts seem high given the limited experience with credit that most *campesinos* have and the low net incomes of most smallholders — probably less than \$1,000 annually. Finally, it is not clear that sufficient attention can be given to providing the technical assistance and training in the use of credit that most recipients would find beneficial.

If the Valles Altos experience is to serve as a model for further activities, the credit program might be profitably revised, by reducing the total amount of loan funds (or redirecting some to agroprocessing or agroindustry activities), reducing the average loan amounts to levels more in line with average *campesino* incomes, and ensuring an improved technical assistance link with those loans made.

Chapare

The credit component of the CRDP in the Chapare has had a checkered history. Major problems surfaced early with the use of this program as a political football. These problems included the unwillingness of any ICIs to serve as the credit arm of the program and the need to draft P.L. 480 to serve as the ICI, a role far beyond its mandate and one it is not comfortable with. Other difficulties were encountered with the high level of coca reduction initially demanded to get credit (in excess of 50 percent). This situation was altered dramatically with a policy turnaround that only required a 10 percent reduction in coca acreage for a farmer to be a credit recipient. Initially, the amount of credit a farmer could request was not linked to the total base amount over which this reduction was made. Hence, even reductions of a minimal number of coca plants resulted in the possibility of loans as large as \$20,000. This problem was eventually resolved with the development of a sliding scale that linked the amount of credit available to the individual farmer to the total amount of coca acreage that was reduced.

Over \$4.8 million in credit has been disbursed to farmers in the Chapare. Loan terms vary between two and 12 years (with grace periods varying between one and seven years) depending on the use of the funds. For instance, crops with short maturation periods, like pepper, have grace periods as short as one year, while credit for long-maturing tree crops like macadamia is about seven years. This credit has been disbursed to support individual crops, livestock, or other activities — in other words, to buy hogs, plant citrus, or repair a home. Relatively small amounts have been used to invest in diversified crop production (*desarrollo alternativo*). By November 1989, over 70 percent of all the acreage planted to crop plants (perennial and annual) using credit funds was planted to traditional Chapare crops such as *platanos* or *bananos* and citrus (a total of 1,672 hectares). In contrast loan funds were used to plant only 13 hectares to macadamia and 8 hectares to pepper. At this pace, a diversified crop economy in the Chapare is a long way off.

Other major problems confront the Chapare credit program. Considerable funds are still supposed to be disbursed before the end of the CRDP in August 1991 — perhaps as much as \$10 million between the Valles Altos and the Chapare. However, preliminary studies in the Chapare have suggested that the repayment capacity of many of those who have received loans was initially calculated based on

farmer income from coca cultivation. With the dramatic drop in coca prices, their ability to repay these loans is doubtful. Additionally, some local campesino organizations (*centrales y sindicatos*) apparently are advising credit beneficiaries not to repay their loans. Their rationale — "let the gringos pay."

Given these circumstances, the PDAR should assess whether the premises upon which the agricultural credit program was originally designed are valid. Credit and its use in the Chapare present especially difficult questions. Can a continuation of the agricultural credit program as it is currently conceived and administered be justified? Under the current political constraints is it honest to call this a credit program, or is it simply a system of transfer payments to local farmers? Is there any likelihood that the disbursement of funds will contribute in a major way to a diversified crop economy in the Chapare? In the Valles Altos, the difficulties are less severe and there is a greater likelihood that the credit component can be more satisfactorily handled.

Rural Industry and Marketing

Valles Altos

There is little to report about this component of the project in the Valles Altos since little has been done with the exception of one small subproject. In November 1989, the PDAR asked the USAID centrally funded project, Agricultural Marketing Improvement Strategies, to prepare a diagnostic marketing study at the national and international levels. The final report is available but no projects have been produced to date.

Chapare

The panorama in the Chapare is more positive. A total of nearly \$1 million is budgeted for agroindustrial activities, most of which are studies or pilot projects such as extraction of the essence of cedron, a fruit processing plant, extraction of Japanese mint, banana flour production, and dehydration of kudzu. Most of these subproject studies and pilot projects are being undertaken through cooperative agreements with entities of the Universidad Mayor de San Simon (UMSS). A small amount of funding (\$50,000), as in the Valles Altos, is budgeted for commercialization and marketing studies to be done by the PDAR.

A major project designed to create productive infrastructure in the Chapare is the milk processing plant now being constructed in Ivirgarzama by UNDP\UNFADAC Project No. 415. There has been considerable skepticism about this project and the validity of its technical bases. Yet, it is under construction and slated to begin operation within the next six months. The virtual certainty of the completion of this project suggests that the PDAR should find ways to contribute to its long-term success. Directing credit to farmers who will be suppliers of the plant would be one worthwhile consideration. Another useful effort the PDAR could take immediately would be marketing studies for milk and cheese production. Dependable markets must be found immediately if the plant is to be successful. UNDP\UNFADAC plans to turn the plant over to a farmer-run cooperative within a year of its completion. Efforts at training farmers in cooperative thinking and in the operation of a cooperative

business need to begin shortly, and the PDAR could play a strong supportive role, financing training and technical assistance in cooperative formation. The potential benefits of this project are significant and the PDAR should play a supportive role.

Roads and Community Infrastructure

Valles Altos

Road construction and small-scale irrigation and potable water projects have been a major focus of project activity in the Valles Altos. Road construction, implemented through SNC-Caminos Vecinales, has made significant immediate and long-term contributions to the development potential of the Valles Altos. During 1989 and 1990, investment focused on improving the Arani-Rodeo-Mizque-Aiquile road. These efforts resulted in significantly reduced travel times between the Distrito Sur and Cochabamba (perhaps as much as two to three hours) and increased accessibility within the region, between Aiquile and Mizque. These improvements have been of such a magnitude that local bus companies reportedly have rerouted some of the Cochabamba-Sucre traffic via Mizque instead of the older route that runs via Epizano.

Road construction efforts in 1990 are centered on the Aiquile - Omereque road, and this activity also offers good prospects for positive results. Improvements in this road segment will create better marketing alternatives for crops grown in the small, but productive, agricultural valley around Omereque, as well as improve access to and from Omereque.

Future road improvements and construction in the Distrito Sur should be guided by a solid understanding of the agricultural potential of peripheral areas and the regional marketing structure. Answers to questions concerning the location and size of the key secondary marketing centers, the system of flows of agricultural products and consumer goods, and the agricultural development potential of different areas will contribute to a rational use of resources and guarantee the greatest multiplier effect in the future.

Improved urban infrastructure for the key market towns of the Distrito Sur is contemplated in the principal policy and planning documents guiding the work of the PDAR. Suitable potable water systems for Aiquile and Mizque and improved electrical systems for both towns figure prominently in these documents. In the case of electrification, by mid-1990, these activities had advanced to the stage of preliminary studies. Nearly \$800,000 is budgeted in 1990 for the improvement of the potable water systems of both Aiquile and Mizque, with the remaining funds needed to complete the projects to be disbursed in 1991. Although CORDECO studies for these projects exist, the process of submitting them to public bidding appears to be just getting underway. It seems unlikely at the present pace that any funds for construction can be disbursed in 1990. Similarly, \$500,000 is budgeted for expenditure in 1990 for an improved sanitary sewer system in Aiquile, again based on a CORDECO study. It too will be constructed by a private contractor, and the bidding process seems no further advanced than does that for the potable water systems.

The delay in initiating these activities and the significant time lag involved once the studies have been completed, the contracting process finished, and construction begins are disheartening. This is because under the best of circumstances it will take three years before any concrete results will be felt by the towns' residents.

The planning for the improved electrical systems for Aiquile and Mizque present some questionable approaches. Amendment No. 7 outlined specific directions for these activities, or at least avenues that should be considered initially in any electrification scheme. Specifically, it called for a hydrological study of the Rio Tucma and studies examining the prospects for the installation of mini-hydroelectric plants along rivers in the Distrito Sur. The mountainous nature of the region, the need to conserve natural resources, and the desirability of keeping recurrent costs for public services at a minimum all argue for the examination of the possibilities harnessing the hydroelectric potential of the area. Yet, no hydrologic study of the Rio Tucma has been made nor have other options for mini-hydroelectric sites been examined. No studies are planned. Planning for the provision of electricity in the region centers on Aiquile and comprises a two-pronged approach. The first phase is to dedicate \$200,000 to \$300,000 before August 1991 toward the refurbishing of the two municipally owned turbines, which provide Aiquile with very limited electrical service. The second phase, to be implemented in the medium term, and still at the discussion stage, is to invest perhaps as much as \$1.2 to \$1.5 million in a gas-powered turbine system using nearby natural gas deposits owned by YPFB as the power supply. It is suggested that this system would generate sufficient electricity for both Aiquile and Mizque and allow for the projected growth of these towns for many years.

These may be the only two reasonable avenues to the provision of electrical service in the Distrito Sur. But no studies or evidence have been compiled to substantiate the validity of these immediate and medium-term solutions. Taking a different approach, a loosely formed cooperative venture, directed by an individual in Mizque using private funding, is now attempting to construct a hydroelectric installation on the Rio Tucma. The principal participant reports that \$200,000 is already invested in the construction and that the project has the potential to generate 300 to 400 kw. It is suggested that the project will be operational by mid-1991. This may be all a pipe-dream; there may be no significant hydroelectric potential on the Rio Tucma and the project may never be finished. But, the project may work out as planned.

The PDAR's actions in this area should be guided by informed and clearly documented studies examining the hydroelectric potential of the Rio Tucma and the region at large. Before hundreds of thousands of dollars, indeed millions, are invested in schemes that depend on nonrenewable natural resources, the hydroelectric option should be shown to be clearly unsuitable or impractical.

Chapare

The roads and community infrastructure in the Chapare have been the object of a diverse range of activities in 1989. A major endeavor was the construction of additional infrastructure at the agricultural experiment station at La Jota. Improvements in about five secondary roads, ranging in length from 5 to 9 kilometers, represented another infrastructure component. The other major element in the Chapare was 22 small-scale immediate impact projects. Included among these were school room additions, communal centers for peasant organizations, health posts, mothers clubs, equipment for health posts, and the

conclusion of a small potable water system. Most of these projects have been concentrated in the area around Chimore and in the area south of Ivirgarzama near Villa Nueva. Projects have been constructed in these areas because of the willingness of the inhabitants to meet coca reduction quotas as preconditions for project construction.

A similar investment thrust characterizes the 1990 year. Approximately \$500,000 is budgeted for more small-scale immediate impact projects. Additional secondary road improvements, under the direction of the SNC-Caminos Vecinales also continue. A large farmer's market complex, a *mercado campesino*, costing \$250,000 is proposed for construction in Cochabamba. The idea is that this facility will allow peasant farmers from the Chapare to market their crops directly in the city, avoiding intermediaries and hence receiving better prices for their products. The record of success of other such efforts to construct special peasant markets in Bolivia and elsewhere in Latin America is not impressive and this project should be carefully evaluated before it is implemented.

Although not under the direct control of the PDAR, significant contributions to the improved infrastructure in the Chapare are being made by the UNDP/UNFADAC programs No. 411 and No. 412, which are constructing potable water systems, roads, and other public infrastructure. Last year, for instance, these activities included the improvement and expansion of the potable water system for Villa Tunari. These programs are not directly constrained by conditionality requirements and hence are able to program investment activities in a somewhat more coherent manner than conditionality requirements permit the PDAR to do.

SECTION THREE

ECONOMIC DEVELOPMENT AND RURAL REGIONS

The basic strategy of the CRDP and PDAR has been agriculturally based. That is, it has centered on providing improved productive infrastructure in rural regions (such as secondary and community access roads and small-scale irrigation), agricultural experimentation and extension, community infrastructure for rural communities (school buildings and health posts), agricultural credit, and some support for agricultural processing and agroindustries — mostly in the form of studies and pilot projects. There are plans to undertake some infrastructure investments in public infrastructure in the small towns and villages in the Valles Altos and the Chapare, but these have not gotten past the stage of preliminary studies. A notable exception here would be the installation of potable water in Villa Tunari by UNFADAC and its intention to do the same in Ivirgarzama. Given this backdrop and the need to examine the PDAR's regional development strategy, it is useful to reflect on the social and economic development of rural regions in a broader context.

The case of the United States provides a useful comparison. Around 1920, 50 percent of the country's population lived in rural areas and engaged in agricultural occupations. In the 20 years that followed, in part as a result of the depression and dust bowl conditions in parts of the country, the government focused considerable resources on rural areas. Agricultural extension services to farmers increased significantly; the soil and water conservation service initiated major conservation programs including terracing, contour plowing, planting shelter belts, waterway protection, and pond construction; and federally subsidized agricultural support and disaster programs were institutionalized. Agricultural production increased to even more impressive levels. Rural electrification reached increasing numbers of farmsteads. And people left the countryside in droves. Sixty years later, in 1980, only 3 percent of the population of the United States was rural and engaged in agricultural occupations.

As economies evolve from rural/agricultural to urban/industrial, the countryside expels people to the small towns, cities, and metropolitan centers. This pattern is evident in capitalist, socialist, or communist political systems and in developed, developing, or underdeveloped economies. This process of rural to urban migration may even be accelerated as efforts are made to develop the rural, agricultural sector. Various factors may contribute to this. They include the reduction in the number of smallholders as productivity increases, allowing greater capital formation, and then land consolidation occurs leaving large farming units. A reduction in the need for significant amounts of manual labor results as more and more farming operations are mechanized. This eliminates the need for a landless peasant workforce and reduces the opportunities for supplemental employment by smallholders. The remaining rural/agricultural population experiences rising material and social expectations with improved transportation, communication, education, and health services.

In the Bolivian context, social scientists have clearly documented the significant and even historic dependence of the rural population on migration and remittances, and on temporary off-farm employment for economic survival. Work in the tin or silver mines, migration to northern Argentina, Buenos Aires,

and Chile, and migration to the major urban centers within the country are all examples. While there is no hard evidence available to prove the relative rates of migration, it seems likely that there is far greater migration from the depressed peripheral regions of the Department of Cochabamba to the cities of Cochabamba, Santa Cruz, and La Paz, than there is to the Chapare.

A useful observation is reported by the director of the IBTA/Chapare agricultural experiment station at La Jota. He reported the case of a Chapare campesino on whose land the experiment station established a demonstration plot (*unidad productivo demostrativo*). The combined efforts of the farmer and the agricultural extension personnel were extremely effective and the plot became productive and eventually profitable for the campesino. The campesino accumulated savings and investment capital, and used it to buy a taxi! Today he spends most of his time shuttling along the paved highway near Chimore and devotes little time to his farm. The experiment station director quipped: Apparently his real goal wasn't to become a farmer!

None of this is to say that agricultural and rural development are not important, and indeed, even urgent. What it is designed to suggest, however, is that the solutions to the problems of development or alternative development in Bolivia are as likely to be found in small towns, cities, and urban centers as they are in the agricultural areas of the meso-thermic valleys, tropical valleys, or tropical lowlands. The development strategy followed by USAID and the PDAR in seeking solutions must consider and address that reality.

3. Eliminate PDAR and SNC activities in the Chapare and redirect them to the Valles Altos. Specifically this would include the elimination of the small-scale immediate impact projects and other public infrastructure projects from the Chapare portfolio, and the suspension of road improvement and bridge building activities in the Chapare by the SNC. Because of the conditionality requirements, these investments are made in response to coca reduction and it is extremely difficult for them to relate or contribute to a coherent regional economic development strategy for the Chapare. The funds probably could be used more effectively in the Valles Altos. Continue IBTA\Chapare activities in the Chapare, but focus them more narrowly on agricultural extension.

Medium- to Long-Term

A follow-on CRDP (1991-1995) offers the PDAR and its principal funding partner, USAID, significant additional options in its regional development focus.

1. Continue the present policy and focus on the Chapare and the Valles Altos as the primary regions for development activities.
2. Continue the present regional focus on the Chapare and the Valles Altos, but modify the policy of conditionality in the Chapare to allow for a more rational allocation of development funds. Conditionality could be tied to other types of bilateral aid like ESF funds. This would allow infrastructure investments to be planned and implemented in those areas in which they would produce the greatest multiplier effects and long-term benefits for the alternative development of the Chapare.
3. Suspend all development aid in the Chapare on the rationale that any development that occurs in that region directly or indirectly benefits the drug economy. The Chapare, a typical tropical lowland region, has already exceeded the human carrying capacity; it is already over-populated and over-exploited. No rational development policies can be developed for the region until interdiction and enforcement activities severely reduce the regional dependence on coca money, the population has been reduced, and the local economy reaches a "low-coca" equilibrium. Redirect resources to improve living conditions and the economic development potential in those areas that have traditionally provided the settlers and migratory laborers to the Chapare.
4. Diversify the regional focus beyond the Chapare and the Valles Altos. Utilize the Valles Altos experience as a model of what can be done to promote economic development in depressed peripheral regions that supply the settlers and migratory labor to the Chapare. Focus subsequent regional efforts in one or two areas that can be documented as clear, significant, origin centers of Chapare migrants. Ayopaya Province in the Department of Cochabamba is suggested as a region warranting priority consideration. Areas outside the Department of Cochabamba should only be considered as secondary options due to logistical and potential political difficulties.
5. Identify other possible growth regions where agriculture, forestry, or agroindustrial potential exists. Develop these areas as alternative migratory destinations for poor smallholders and landless peasants from the current source regions of Chapare migrants. Concentrate on sustainable development models with activities utilizing renewable natural resources, creating maximum employment generation (labor intensive), and focusing on export and nontraditional products.

SECTION FOUR

STRATEGIC ALTERNATIVES

The following discussion examines the three major topics discussed in the section on Project Appraisal — Regional Development Focus, Implementation Strategy, and Sectoral Strategies. It attempts to identify the various strategic options the PDAR could pursue. The discussion of each subheading is further subdivided into an analysis of the short-term and Medium- to long-term options. Short-term options correspond to an approximately 14-month time period until August 1991, the end of the current CRDP. Medium- and long-term options represent a four- to five-year time period and correspond to the possible anticipated initiation of a second CRDP project (of a similar budgetary magnitude), running from August 1991 until perhaps 1995.

The alternatives suggested here are by no means an exhaustive list of all possible alternatives or permutations of those alternatives. Neither are they suggested as stand-alone options. In some instances, combinations of different alternatives might be the most appropriate approach. The alternatives suggested here should be considered as a point of departure and a basis for continuing discussion and debate among PDAR and USAID personnel, as efforts are made to agree upon and clearly define suitable short-, medium-, and long-term strategies for the continued operation of the PDAR and the CRDP.

REGIONAL DEVELOPMENT FOCUS

Short-Term

In the short term, the strategic alternatives for the PDAR's regional development foci are limited.

1. Continue present policy and implementation activities. This consists, in broad terms, of dividing PDAR efforts and finances (excluding the IBTA/Chapare and SNC budgets and activities) so that the Valles Altos area would receive two-thirds of the effort and funding, and the Chapare area one-third of the effort and funding. This division of effort would represent a continuation of current IBTA/Chapare and SNC financing levels and activities.
2. Continue the general division of resources between the two regions at present levels, but reconfigure the focus of the public infrastructure investments in the Chapare. Eliminate the immediate impact projects and minor secondary road improvements, and direct the funds toward larger urban-based projects that would be identified and implemented without conditionality requirements and would contribute to the development of one or two urban, market centers in the Chapare. In the short term, such activities might have to be limited to street cobbling or paving and sidewalk and gutter construction.

IMPLEMENTATION STRATEGY

Short-Term

1. Continue the current de facto practice of adding new implementing partners as the need arises. Continue direct administration (*administracion directa*) of small-scale irrigation projects and potable water projects only through the end of the current budget year, and then suspend them entirely for the 1991 year.
2. Add implementing partners representative of democratic grassroots organizations, such as local governments (*concejos provinciales*) and peasant organizations (*sindicatos, sub-centrales, and centrales*).
3. Add no new implementing organizations. Work only with those organizations that are now or have been implementing partners for PDAR. Only add new projects (1991) that can be executed by this group of organizations. Dedicate some PDAR resources and technical assistance to strengthening these organizations administratively and organizationally, thus improving their ability to implement PDAR projects and to survive after PDAR support is concluded.
4. Continue to administer directly the small-scale irrigation and potable water projects (immediate impact projects) in the Valles Altos through the end of the current CRDP project. Concentrate even greater budgetary and personnel resources on this effort. The demonstrated success, high visibility, significant local demand and need, and utility in serving as a focus or *entrada* for other related agriculture and natural resource activities argue forcefully for the continuation and expansion of this effort.

Medium- and Long-Term

1. Continue the current institutional-implementation arrangement, with the PDAR serving only as a training and coordinating agency, using partner-implementing organizations to execute projects. Continue the organization's institutional position as a decentralized dependency of MACA. Suspend all direct administration activities carried out under the prior CRDP project.
2. Continue to operate as outlined in alternative 1 above, except develop or establish (by administrative decree) one or more additional implementing partners, which would allow the PDAR to continue some of its successful, directly administered project activities. As a dependency of the MACA, a search for logical implementing partners of the PDAR should center on other direct or decentralized dependencies of MACA. SNDC would be a reasonable choice and its linkage to the PDAR could serve to rejuvenate and strengthen an organization with considerable field and community experience.
3. Seek an appropriate administrative home for the PDAR within the existing structure of the GOB in an implementing organization. Establish the PDAR as an independent project within this organization, operating under the close supervision of the funding agency, but with the idea that the home organization would become a strong implementing partner of the PDAR. Continue the present use of other partner-implementing organizations (NGOs and other government agencies). CORDECO would be a logical

administrative home for the PDAR and, if the PDAR expands to other departments, the appropriate corporations could serve as the institutional homes there as well. A useful model of such an approach using CORDECO exists in the long-term partnership between CORDECO and Cooperacion Tecnico Suizu (COTESU) in reforestation. USAID has used a similar approach with department development corporations in other Latin American contexts. This approach would facilitate the direct administration of some projects, execution of studies, project supervision, and contribute to long-term institution building within the GOB.

SECTORAL STRATEGY

Short-Term

1. Continue the present policy and practice of the execution of a wide range of sectoral activities in the two project areas. Consider the initiation of new project activities for the 1991 budget year.
2. Narrow the sectoral focus during the remaining 14 months of the current CRDP. Concentrate on those activities in which the PDAR and its implementing organizations have established a clear record of successful implementation. Agricultural research and extension in the Chapare and small-scale irrigation and potable water projects linked to agriculture and natural resource management in the Valles Altos all represent excellent areas for the intensified concentration of sectoral activities. The Valles Altos project should immediately obtain the assistance of a farming systems specialist for three to five months to integrate production and resource management objectives.
3. Augment the urban/marketing center component of the project. Insure that some efforts are directed to improving living and economic conditions in towns. Short-term efforts should be centered on the completion of studies for public infrastructure and private investment options (supported by credit), which could be initiated in a subsequent CRDP. Immediate activities, generating some local employment and political visibility, could include cobbling or paving of streets and sidewalks and the construction of curbs and street drainage.
4. Reduce emphasis on credit. Experiment with alternative credit approaches and implementing partners. Develop practical and realistic credit limits and methods of repayment for peasant farmers. Diversify use of credit lines to include credit for agroprocessing and linked agroindustry.

Medium- and Long-Term

1. Continue present PDAR policy and practice as noted in alternative 1 above, but extend diverse focus throughout life of CRDP follow-on project.
2. Concentrate sectoral focus on areas of demonstrated success as noted in alternative 2 above. Use previous successful PDAR activities, especially in the Valles Altos experience, agricultural research and extension in the Chapare, and road construction efforts as models for these future efforts.

3. Implement an additional major component focusing on urban/market center development (urban functions in rural development). Recognize the key role that urban centers play in the development process as centers for off-farm employment and migratory destinations as rural folk leave the land. Concentrate on the provision of good public services operated by local organizations (*concejos provinciales* and *cooperativas*) when appropriate and possible. Focus significant credit on private sector job creation in urban centers.
4. Reduce the amount of agricultural credit to be disbursed in a future CRDP. Concentrate more energy and resources on technical assistance to small farmers in the effective use of credit, the development and strengthening of local credit providers, experimentation with innovative means of extending credit and repayment programs, and diversifying credit provision to include agroprocessing and agroindustrial enterprises in the private sector.

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INTERVIEWS

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LIST OF ACRONYMS

AHV	-- Associated High Valleys
ARADO	-- Accion Rural Agricola de Desarrollo Organizado
ASAR	-- Asociacion de Servicios Artesanales y Rurales
BAB	-- Banco Agricola de Bolivia
CEDEAGRO	-- Centro de Desarrollo Agricola
CERES	-- Centro de Estudios de la Realidad Economico y Social
CORDECO	-- Corporacion de Desarrollo de Cochabamba
COTESU	-- Cooperacion Tecnico Suizu
CRDP	-- Chapare Regional Development Project
DAI	-- Development Alternatives Inc.
DIRECO	-- Direccion de Reactivacion Agricola
EI	-- Experience Inc.
GOB	-- Government of Bolivia
IBTA	-- Instituto Boliviano de Tecnologia Agricola
IBTA/Chapare	-- Instituto Boliviano de Tecnologia Agricola\Chapare
ICI	-- Intermediate Credit Institution
MACA	-- Ministerio de Agricultura y Asuntos Campesinos
NGO	-- Nongovernmental Organization
PDAC	-- Programa de Desarrollo Alternativo de Cochabamba
PDAR	-- Programa de Desarrollo Alternativo Regional
PROCIPA	-- Programa de Control Integral de Plagas
SARSA	-- Human Settlement and Natural Resource Systems Analysis
SDTB	-- Secretaria para el Desarrollo del Tropico Boliviano
SENARB	-- Servicio Nacional contra Aftosa, Rabia, y Bruceelosis
SENPAS	-- Secretariado Nacional de Pastoral Social
SNC	-- Servicio Nacional de Caminos
SNDC	-- Servicio Nacional del Desarrollo de la Comunidad
SUBDESAL	-- Sub-Secretaria de Desarrollo Alternativo y Sustitucion de los Cultivos de Coca
TRD	-- Tropical Research and Development, Inc.
UNDP/UNFADAC	-- United Nations Development Programme
UMSS	-- Universidad Mayor de San Simon
USAID	-- United States Agency for International Development
YPFB	-- Yacimientos Petroliferos Fiscales Bolivianos