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**INSTITUTIONAL ANALYSIS
OF THE CHAPARE REGIONAL
DEVELOPMENT PROJECT (CRDP)**

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INSTITUTIONAL ANALYSIS OF THE CHAPARE REGIONAL DEVELOPMENT PROJECT (CRDP)

1 USAID AND ALTERNATIVE DEVELOPMENT IN THE CHAPARE

1.1 Antecedents of Chapare Development.

The Chapare has been the site of coca leaf cultivation for centuries, although the Yungas of La Paz department replaced it as a center of commercial leaf production for traditional chewing during the colonial period. In the late eighteenth century Intendent Francisco Viedma proposed constructing a road linking Cochabamba with the Chapare and promoting coca cultivation there as a way of infusing new life into the moribund regional economy. Although it was never built because of opposition from other regional interests, exploitation of the tropical lowlands to inject new life into the stagnant upland economy was an idea that anticipated modern development strategies by two hundred years (Larson 1988:253-258).

Modern interest in the Chapare began to rise in the mid-twentieth century. For the preceding seven decades Bolivia's domestic production had been increasingly organized around supplying tin ore to the international market, a historical pattern engendering social and economic change that culminated in the revolution of 1952 and the assumption of power by the Movimiento Nacionalista Revolucionario (MNR). As it became apparent that the MNR's agrarian reform, enacted in 1953, was not going to solve the social and economic problems confronting the rural poor of the highland and valley regions, interest grew in exploiting the nation's tropical lowlands. The success of the revolution had depended on the mobilization of highland peasant producers, but the agrarian reform did not meet the expectations that the mobilization had created. The state hoped that colonization of the tropical lowlands would relieve social pressures in the highlands and valleys, and perhaps provide a stimulus for economic growth there as well.

Logging was the initial impetus for Chapare settlement, and it remained the most important economic activity until the boom in coca leaf production beginning displaced it in the mid-1970s. Settlement of the Chapare dates from the late 1930s, with the construction of a road from Cochabamba to El Palmar in 1937. This reached Villa Tunari in 1940, and Todos Santos in 1942. The Chapare River changed course in 1946, however, isolating Todos Santos, and causing a large part of its population to move to the new settlements of San Miguel and Chipiriri. These two areas became major settlement centers for the Chapare after about 1950 (Flores and Blanes 1984:82). The area began to grow more rapidly in the 1960s. The Plan Nacional de Desarrollo for 1962-1971 assigned an important role to lowland settlement, and the Plan Nacional de Colonización, which appeared in 1963, designated the Chapare as a priority settlement area. In 1965, the Instituto Nacional de Colonización (INC) was established to administer and coordinate settlement activities, including areas for spontaneous and planned settlement; demarcation of individual holdings and formalization of titles; and coordination of international donors,

state agencies and nongovernmental organizations involved in providing settlers with infrastructure and social services.

Construction of the modern highway linking Cochabamba and Villa Tunari also began in 1965. With its completion, in 1972, families from the Andean valleys and highlands of Cochabamba and neighboring departments could establish plots in the tropical valley, and move back and forth between them and landholdings in their home communities. Along this main artery and spreading out on the web of secondary roads and trails being constructed, the population of the Chapare began to grow rapidly, reaching 24,381 people distributed among 54 hamlets by 1967 (Flores and Blanes 1984:82).

Between 1978 and 1980, the Department of Regional Development of the Organization of American States (OAS) worked with the Bolivian Government to formulate an ambitious development strategy for the Chapare that included identifying investment opportunities for immediate implementation. Among the goals of the strategy was to provide a framework for coordinating the activities of some 54 international, national, regional, and private institutions that were promoting development in the Chapare at the time (OAS 1984:182). Subsequent plans for the Chapare, while numerous and varied in emphasis, have not departed from the major elements of the OAS plan, which identified seven areas on which development activities should concentrate: 1) technology transfer; 2) provision of agricultural credit; 3) promotion of agroindustry; 4) zonal market development; 5) secondary road construction; 6) electrification; and 7) installation of potable water systems.

1.2 History of USAID/Bolivia Involvement.

While the United States had sponsored earlier development activities in the Chapare region of Cochabamba, its first efforts to reduce the production of coca leaf by promoting economic development came in 1977, with the Proyecto de Desarrollo y Sustitución (Development and Substitution Project, or PRODES). Funded by the Bureau of International Narcotics Matters of the U.S. Department of State, PRODES was conceived as a research effort to investigate the feasibility of substituting the production of other tropical crops for coca cultivation. Its product was to be a proposal for a project to implement crop substitution, to be funded by the U.S. Agency for International Development (USAID).

The bloody coup of General Luis García Meza in 1980 led to the cessation of almost all activities associated with PRODES. USAID largely suspended support to Bolivia because of widespread violations of human rights under García Meza, a regime with clear links with drug traffickers. Even when the democratically elected civilian government of Hernán Siles Zuazo took office, in late 1982, implementation of development efforts in the Chapare proved difficult. Drug-related activities there had expanded greatly during the period of military control, and the newly installed government was unable to assert its authority in the

zone. Police units left the area, and efforts at repression of cocaine manufacturing were frustrated.

This period marked the area's greatest boom in coca leaf production and coca paste processing. The sheer movement of people into the Chapare was in itself astonishing. A 1981 estimate, for example, calculated 400,000 people and 29,000 vehicles moving into and out of a region that only 14 years before had a population of less than 25,000 (Flores and Blanes 1984:82, 141).¹

In August 1983 Bolivia signed an agreement with USAID to establish a new development effort in the area, the Chapare Regional Development Project (CRDP). Not until after August 1984, however, when the Bolivian government sent troops into the Chapare to regain control, could development efforts begin, even on a small scale. Soon thereafter, USAID and Bolivian government officials reexamined their assumptions regarding crop substitution in the Chapare as an alternative to coca production.

An external evaluation (Pool et al. 1986) in 1986 documented the CRDP's inability to proceed as it had been designed, and set the stage for a reformulation. The evaluators proposed an alternative strategy of attempting to improve economic conditions in the upland valleys from which Chapare migrants came, as permanent settlers and as temporary migrants. This proposal was formalized in a redesign of the CRDP, the field studies for which were carried out in late 1986 and the first half of 1987 (Dickinson and Painter 1987; Dickinson et al. 1988; Painter et al. 1987); the formal project amendment, Amendment 7, was signed in November 1987.

1.3 The Chapare Regional Development Project.

Amendment 7 changed the CRDP into the form that exists today by creating the Associated High Valleys (AHV) component of the project. The amendment recognized that the solution to the problem of widespread involvement by poor Bolivians in the production and transformation of coca leaf in the Chapare was not to be found exclusively in the Chapare. This recognition rested first on two practical problems that faced the CRDP at the time, and subsequently on greater understanding of the dynamics driving people into the Chapare.

The first of the practical problems was that state control over the Chapare was and is tenuous, limited mainly to a small group of development specialists and a repressive police presence, both funded largely by the United States. In 1983, the state was essentially driven

¹ In 1987, a study by the AID-sponsored Development Strategies for Fragile Lands (DESFIL) estimated the Chapare population to be 196,336 people, exclusive of transients (Durana et al. 1987a, 1987b:7).

from the Chapare, and it did not regain a firm foothold there until 1986. Even then, the ebb and flow of the narcotics industry created situations in which, from time to time, U.S. policy makers decided to withdraw development workers. Occasionally these decisions reflected concerns about the security of development workers; at other times they sought to punish the Bolivian government for not being more energetic in its narcotics repression efforts. The result was that it was impossible to maintain the continuous presence in the Chapare necessary for making development activities effective.

The second practical problem related to the implications of the type of development being promoted. With respect to agricultural production, efforts tended to revolve around a rather haphazard search for cultivars that could compete with coca in terms of profitability. The overall production systems of Chapare producers, and the relationships of these systems to the capacity of the Chapare environment to support agricultural production, were not considered for some time. Considering these issues made it apparent that if development efforts were successful in replacing coca with another production regimen, the Chapare would not support the same number of farmers and workers that it does under coca production. This prompted questions about where the people who could not remain in the Chapare would go, and whether they would simply reproduce a coca leaf production system in another area if not provided with an alternative. With respect to infrastructural development, it was clear that drug traffickers were among the major beneficiaries of improved roads and other facilities. The OAS had recognized in the mid-1970s that this would be the case, but recommended proceeding with infrastructural work to support the growth of other types of economic activities, which they thought would replace coca leaf over the medium to long term. By the mid-1980s, however, the scale of coca leaf production for narcotics in the Chapare cast doubt on this assumption.

As USAID and Bolivian planners sought an alternative development strategy, they began to look at migration to the Chapare in relation to Bolivian migratory movements generally. Out of this improved understanding of migration, the general rationale for a project like the AHV component of the CRDP began to emerge. While social science knowledge about migration to the Chapare and elsewhere was far from complete, several points were clear.

First, the coca boom in the Chapare was not the major cause of migration. Rather, migration resulted from a long-standing historical problem facing a large portion of smallholding farmers in the central valleys of Bolivia: they could not support themselves through agricultural production. The well-known peasant artisans of Tarata and the surrounding area, who were important manufacturers of textiles, gunpowder and fireworks, and ceramics from the early eighteenth through the early twentieth centuries, were one response to this problem (Larson 1988). Modern migratory patterns are rooted in the way in which the Bolivian agrarian reform was implemented, particularly in its failure to address the interrelated problems of the low productivity of peasant labor and the continuing parcelization of peasant landholdings. While these problems made life in agriculturally marginal lands more tenuous, ownership of the best agricultural land was becoming

increasingly concentrated. By the mid-1980s land distribution was more inequitable in Bolivia than it had been in 1953, when the agrarian reform was enacted (Urioste 1987).

Second, the Chapare was merely the latest addition to a number of migratory destinations that have attracted poor rural Bolivians. These have included the city of Buenos Aires, Argentine cotton and sugarcane enterprises, the Azapa Valley in northern Chile, the commercial agricultural areas of Santa Cruz department, and several Bolivian cities, particularly La Paz, Cochabamba, and Santa Cruz. These destinations have risen and fallen and risen again in importance as immigration policies and changing market conditions have affected opportunities for migrants. While the physical proximity of the Chapare to central Bolivia and its high level of economic activity have made it the most important migratory destination in recent years, other areas continue to attract significant numbers of people from the same places that send people to the Chapare. Moreover, the migrant population is very responsive to changes in conditions in one area or another, and migratory patterns shift quickly in response to changing opportunities (e.g., Balan and Dandler 1986).

Third, with the growing dependence of poor rural Bolivians on migration as a way of earning off-farm income, migration has become a self-perpetuating dynamic, driven by interrelated processes of economic stagnation and environmental destruction. Arising from the lack of economic opportunity in migrants' home areas, migration has created a condition of chronic labor scarcity in those areas, which, in turn, has affected families' capacity to manage on-farm resources effectively. The resulting decline in agricultural productivity has intensified the pressure to migrate. The downward economic and environmental spirals were exacerbated during the 1980s by a series of disasters, including a drought that began in 1983 and continued through 1989 in some areas, the collapse of the tin mining industry in 1985 as a result of a 50 percent decline in international tin prices, and the impacts--particularly on the poor--of austerity measures imposed on Bolivia because of its foreign debt.

An understanding that the Chapare coca boom is not a prime cause of migration, and that rural people are responsive to changing conditions in both their home areas and their migratory destinations, suggested that participation by the rural poor in the narcotics industry may be reduced by diminishing the pressures on them to leave their home areas and/or by providing alternative migratory destinations. The relationship between economic stagnation and environmental destruction suggested an entry point for development work. A combination of mutually reinforcing activities intended to raise rural incomes could provide incentives for people to remain home (or reduce the amount of time spent in the Chapare), and to spend more time managing soil and water resources. The project would provide support for improved soil and water management in an attempt to restore the physical capacity of the area to sustain the human population, as well as introducing other economic incentives for people to spend more time at home.

The selection of initial home areas for the project reflected a recognition that, while the low-income areas of central Bolivia are relatively equally represented among migrants in the Chapare and elsewhere, the potential of these areas for supporting development that

might pose a real alternative for those who go to the Chapare is by no means equal. Many areas suffer from so many disadvantages with respect income-generating opportunities and extent of resource degradation that no amount of development-related investment could reduce significantly their populations' dependence on migration.

In designing the AHV component of the CRDP, therefore, although potential areas for work were limited to areas from which large numbers of people migrate to the Chapare, the major consideration was whether a given area had enough growth potential to become an alternative destination for people who might otherwise migrate to the Chapare. A previous study by Corporación de Desarrollo de Cochabamba (CORDECO) had suggested that the *distrito sur*, consisting of the provinces of Campero and Mizque, had the potential for the sort of economic growth that would allow it to become a secondary center of population attraction, providing migrants from other areas with an alternative to migrating to the Chapare or the city of Cochabamba.² This assessment was based on the central location of the town of Aiquile on the routes linking cities of Cochabamba, Sucre, and Santa Cruz, and on the potential of improving and expanding irrigated agriculture in the province of Mizque. Kent (1987) and the SARSA/DEFIL team charged with designing the AHV component of the CRDP (Painter et al. 1987) subsequently reviewed the CORDECO study, and concurred with its major conclusions.

It was therefore decided that the AHV component of the CRDP would concentrate its resources in the *distrito sur* in order to try to tap the economic growth potential offered by the area. The work had two technical objectives: 1) providing sufficiently improved opportunities that the portion of the *distrito sur*'s own population that moves to and from the Chapare and provides the narcotics industry with cheap wage labor would decline, and 2) stimulating a process of economic growth that would allow the *distrito sur* to become an alternative source of employment for people migrating to the Chapare from other areas.

It was also hoped that the AHV component of the CRDP would fulfill an important political objective. The combination of an ineffectual and corrupt police force as the major instrument of narcotics repression, and an ineffective (for the reasons described above) development program, both almost entirely funded by the U.S., has made it very difficult for broad sectors of the Bolivian public to become involved in the "war on drugs," despite their recognition of the detrimental effects of the narcotics economy on their country (Rasnake and Painter 1989). By focusing on development problems that cause rural Bolivians to be susceptible to participation in the narcotics industry, USAID became the first major donor

² Many migrants from rural areas go first to the city of Cochabamba, but the city is already swollen with rural migrants and offers few employment opportunities. Thus, for many it becomes a staging area for migration to the Chapare. Selection options were largely confined to the department of Cochabamba because the authority of the state institution charged with executing the CRDP at that time (the Subsecretariat for the Development of the Bolivian Tropics) was defined in terms of work in that department.

to recognize explicitly the social and historical context in which that participation occurs. This would create a "political space" whereby people and institutions could contribute to reducing participation in narcotics without endorsing U.S. policy and actions in the Chapare. It would allow the problem of narcotics in Bolivia to be discussed by Bolivians as a separate issue from U.S. intervention in Bolivian affairs, and contribute to building a national consensus on the need to address narcotics firmly.

2 SUPERVISORY INSTITUTIONS

Any discussion of the institutions involved in the CRDP should begin with a reminder of the disarray that the project was in one year ago. Only then can one appreciate the progress that has been made in turning the CRDP into a development project that can become a model for others throughout Bolivia. Despite the hope surrounding the drafting of Amendment 7 that USAID and the Bolivian government were at last embarking on a development project that would provide poor Bolivians with a meaningful alternative to producing coca leaf and cocaine for the international narcotics market, the project was victimized by a combination of administrative ineptitude, personal ambitions displacing development goals, and venal national and international political interests. As a result, USAID/Bolivia expended much of its project administration efforts responding to concerns raised by the U.S. Embassy that related more to the repressive aspects of the "war on drugs" and to political relations with particular factions in the Bolivian government than with the development issues the CRDP is intended to address. Also, the bulk of the mission's professional staff, which had participated broadly in the redesign of the CRDP, was excluded not only from participating in decisions about project management, but even from knowing what was happening.

"Whimsical" is the most charitable characterization that can be made of the way in which Subsecretaría de Desarrollo Alternativo y Sustitución de Cultivos de Coca (SUBDESAL) operated. Decisions were made changing fundamental directions of the project without consulting those in the Proyecto de Desarrollo Alternativo de Cochabamba (PDAC) and Instituto Boliviano de Tecnología Agropecuaria/Chapare (IBTA/Chapare) responsible for implementing them. These would then be changed in an equally arbitrary manner a few months--sometimes, even a few days--later and the project would bounce off in a totally new direction. Technical personnel who pointed out that these decisions contradicted the design and objectives of the project embodied in Amendment 7, or that they were being instructed to do things that contradicted the terms of reference under which they had been hired were characterized as "disloyal" and even "saboteurs." At the end of 1988, almost the entire technical staff of the PDAC, which was one of the most distinguished in Bolivia, was fired on these grounds. Institutional relationships among the PDAC, Dirección de Reconversión Agrícola (DIRECO), and IBTA/Chapare were made increasingly ambiguous, and a "wild card" was introduced in the form of the United Nations Fund for Drug Abuse Control (UNFDAC) project, which was thrown into the midst of the other institutions with no clarification regarding what any of their respective roles were to be.

Fortunately, by mid-1989, USAID began to regain control of the project management and to attend to issues of personnel, availability and allocation of resources, and specific development impacts the project hoped to achieve. The arrival of a new project officer in July 1989 was a critical event in this process. This coincided with the appointment of a new technical chief (*jefe técnico*) in the PDAC, who articulated a commitment to the original development objectives and model of Amendment 7, and went about rebuilding the shattered PDAC professional staff. With the assumption of power by a new Bolivian government administration, SUBDESAL also articulated a commitment to the integrated development objectives of the CRDP, recognized their achievement as fundamental to curtailing the participation of Bolivia's rural poor in the narcotics industry, and set to work delineating the institutional arrangements whereby these objectives could be achieved.

This report makes a number of critical observations regarding the state of the CRDP and its potential for achieving the development objectives laid out for it nearly three years ago. These should, however, without exception, be evaluated in light of how far the project has come during the past year. The order of magnitude of the problems has shifted: a year ago they had to do with whether the CRDP would survive, while today the problems have to do with specific mechanisms being employed to carry out development activities. This is a fundamental distinction that should not be forgotten by readers of this report. Those who have contributed to turning the CRDP around are to be congratulated, and the critical observations here are offered to assist them in their continuing efforts on behalf of the CRDP.

2.1 Subsecretaría de Desarrollo Alternativo y Sustitución de Cultivos de Coca (SUBDESAL).

SUBDESAL was created in July 1987 under provisions of Decreto Supremo (DS) 21666, which established Consejo Nacional contra el Uso Indebido y Tráfico Ilícito de Drogas (CONALID), an interministerial council charged with coordinating Bolivian government anti-narcotics activities, including policies regarding development, interdiction, repression, prevention, and rehabilitation activities outlined in the Plan Integral de Desarrollo y Sustitución de Cultivos (PIDYS). DS 21666 also created the Subsecretaría de Defensa Social, under the jurisdiction of the Ministry of the Interior. Dependent on the Ministry of Peasant Affairs and Agriculture (Ministerio de Asuntos Campesinos y Agricultura - MACA), SUBDESAL's responsibilities included 1) insuring the intersectoral coordination required to execute policies designed by CONALID; 2) developing and administering bilateral and multilateral cooperation to permit the execution of the PIDYS; 3) technical direction of projects and programs related to agricultural reconversion, economic reactivation, regional development, prevention of drug use, and rehabilitation of drug users; 4) acting as the counterpart of bilateral and multilateral international agencies involved in supporting implementation of the PIDYS; and 5) developing any other activities required to discharge the duties assigned to it. In addition, the Subsecretary of Alternative Development was named as the executive secretary of CONALID, making him the primary source

of information for the ministers composing the council and the primary interpreter of their wishes regarding implementation of drug policy.

Unfortunately, specific lines of authority and responsibility were not defined, leading to certain arbitrary and self-contradictory ways of exercising the considerable power granted to the Subsecretary for Alternative Development. Moreover, the position of executive secretary to CONALID meant that the Subsecretary for Alternative Development was intimately involved in a wide range of foreign and domestic policy issues, the politics of which created acute short-term pressures that were often inimical to achieving the medium- to long-term development objectives embodied in the PIDYS.

These problems began to be rectified in late July 1989 with the promulgation of DS 22270, which defines the PIDYS as the institutional framework within which the Bolivian government would execute regional development programs and projects intended to reduce the production of coca leaf destined for the narcotics industry. This institutional framework departed from the premise that the participation of coca leaf producers is absolutely necessary in all phases of alternative development planning and execution if the actions called for in the PIDYS are to succeed. The participation of specific government agencies and of institutions involved in executing activities under the PIDYS is also stipulated. The institutions charged with being the vehicles of this participation include the Comisión Nacional de Desarrollo Alternativo (CONADAL), Comités Regionales de Desarrollo Alternativo (COREDAL), and the Comités Locales de Desarrollo Alternativo (COLODAL). Specific functions and memberships of each of these institutions are specified in SUBDESAL (1990:3-7).

The authority and responsibility of SUBDESAL was subsequently defined through DS 22373, which was promulgated in November 1989 to give greater specificity to the provisions of Title VI of Bolivia's national narcotics law (*Ley del Régimen de la Coca y Sustancias Controladas* No. 1008). Two important features of this law were the creation of the Consejo Permanente de Coordinación Ejecutiva (COPECE) and Dirección Nacional Ejecutiva. COPECE was made responsible for operational coordination of CONALID, and the Dirección Ejecutiva Nacional was charged with implementing and coordinating the plans, programs, and projects defined by CONALID. These actions relieved the Subsecretary of Alternative Development of his responsibilities as executive secretary of CONALID and placed SUBDESAL firmly under the administration of MACA, removing it from the policy defining and interpreting functions it had assumed.

Under the new arrangement, SUBDESAL is responsible for working through the established administrative structure to plan and program alternative development activities in consultation with the Director Ejecutivo Nacional. This structure includes the institutions established under DS 22270 (CONADAL, COREDAL, COLODAL) as well as the Programas de Desarrollo Alternativo Regionales (PDARs), which define and coordinate the institutional mechanisms and modalities for carrying out specific activities. At present there is only one PDAR, the one known as the PDAC prior to the enactment of the new

administrative arrangement. The Bolivian government expects to secure support from various international donors to finance alternative development activities similar to those being executed and contemplated under the AHV component of the CRDP.

The new organizational plan places alternative development in an institutional setting that will make it much more difficult for it to become the personal domain of an individual. It also provides a framework for the broad-based participation necessary for alternative development to succeed. However, the ways in which important elements of this participation will be realized remain to be defined. A particularly critical issue has to do with participation of the coca leaf producers' unions in the CONADAL/COREDAL/COLODAL structure. Incorporating the unions into the planning and decision-making processes of the alternative development structure is essential for insuring the cooperation and participation of coca leaf growers. At present, however, the *sindicatos* themselves are divided over a number of critical issues; including what should be their position with respect to alternative development. While many are seeking to become involved in alternative development activities, others are becoming more militant in their opposition. Furthermore, the positions being adopted are not reducible to standard expectations regarding the position of one political party or another about policies of the Bolivian government or the United States. The result is that what constitutes appropriate representation of the unions is likely to be contentious internally as well as in talks that may take place on this issue between the unions and the Bolivian government. Agreements made at the level of a federation or *central* may not be respected by individual *sindicatos* at the local level. This may make working with the unions frustrating and engender temptations, particularly for some state agencies, to go it alone. Nevertheless, grower and worker participation is crucial to the success of alternative development, and such temptations should be resisted strongly.

2.2 Programa de Desarrollo Alternativo de Cochabamba (PDAC).

Since the arrival of the new *jefe técnico* of the PDAC, the institution has made a remarkable recovery from the shambles in which it stood at the beginning of 1989, when most of the technical staff was fired amid accusations of disloyalty and sabotage. An extremely competent technical staff has been hired, and morale has been raised to a generally high level. Although, there is room for improvement in some areas, the "fit" between the international advisers and the Bolivian staff is generally good, in both technical expertise and working relationships. The realization of 29 *obras de impacto inmediato* (immediate impact projects) in Campero and Mizque during the final months of 1989 imparted a sense of confidence among the professional staff that it really could define and achieve concrete goals, and greatly improved the tarnished reputation of the PDAC in the countryside. In addition, the new director has been effective in articulating the relationship between the political and technical objectives of the project, inside and outside the PDAC.

The area in which there is the most room for improvement is assessing and ranking individual projects in light of their contributions to general goals. Progress has been made

in that there is increasing discussion projects as a package, and the ways in which discrete activities should reinforce one another receives more attention. Nonetheless, these discussions tend to occur within the agricultural staff, without systematic input from the social and communications departments. Often, when input from other departments is solicited, major decisions about a project or group of projects have been made. Multidisciplinary groups, representing all technical departments of the PDAC, need to consider projects from their conception. There also needs to be an explicit development strategy for Campero and Mizque, which is understood by all, and which serves as a reference point for all discussions. While the technical staff sometimes refers to such a strategy, it is largely an implicit sense of what needs to be done. The elaboration of an explicit development strategy will become more important as project implementation proceeds, for, besides informing internal PDAC decision-making, it will be an important aid in communicating priorities and objectives to institutions charged with carrying out specific activities.

2.2.1 Resource allocation issues. The results of this may be seen in the example of the grape and fruit production projects programmed for 1990, to be carried out in collaboration with IBTA (Table 1). It should be understood that the problem is not with the intention of the PDAC to work with grapes and other fruits. The areas affected by the AHV component of the project have some history of working with fruits, and a successful fruit project would indeed diversify family production and probably raise income. Therefore, it is reasonable to pursue the production of grapes and other fruits. The difficulty concerns the methodology to be employed and the way in which resources are allocated within the project.

Table 1
FRUIT AND GRAPE PRODUCTION PROJECTS
TO BE CONDUCTED WITH IBTA IN 1990

<u>Project No.</u>	<u>Title</u>	<u>Budget</u>
VAA 1.1.6.3	Proyecto de desarrollo de la viticultural (PRODEVI)	\$ 98,950
VAA 1.1.6.5	Frutales Tarata	65,550
VAA 1.1.6.6	Fruticultura Mizque	32,250
VAA 1.1.6.8	Frutales Aiquile	27,250
TOTAL		\$224,000

For example, PRODEVI project (VAA 1.1.6.3), which is the largest of the projects, budgeted at \$98,950, will directly involve a total of 12 families on whose land nurseries will

be established. Technically appropriate varieties will then be sold to farmers in the area.³ While the nurseries will be in farmers' fields, a substantial part of the project's resources will be invested in IBTA's Mayra experiment station at Mizque. The inclusion of farm families in the nursery project does bring the activity closer to intended beneficiaries than would working exclusively in an experiment station. However, the model remains that of attempting to promote agricultural change through production-driven experimentation and innovation, and then trying to sell the results to farmers. Similarly, all the projects discuss validating experiment station technology, and include such items as observation trips to Argentina, Chile, Tarija, and elsewhere. Again, there is nothing inherently "wrong" with any of the projects. Yet, considering the history of grape and fruit production in the areas they seek to serve, and general project priorities, these activities should emphasize building upon, rather than repeating, past experience.

In the first place, the focus on the experiment stations and on validating experiment station technology seems exactly the approach that the PDAC is criticizing IBTA/Chapare for using in the Chapare, because it is too slow and does not yield information on actual farm conditions that favor or impede the adoption of new crops, technologies, and techniques. Second, the projects ignore several crucial aspects of the region's history of grape and fruit production. For example, IBTA has been working with grapes and fruits on its experiment stations for a number of years and has made important advances in learning about fruit production in the region. But, the impacts on farmers have been limited, largely because these efforts have not considered the social and economic conditions in which family production occurs.⁴ In addition, Mizque has already had a bad experience with a grape project, in part because of mismanagement of the cooperative through which the project functioned. At a more fundamental level, however, it was production and transport costs that rendered Mizque uncompetitive with other areas. The change from wine grapes to table grapes represented by the PRODEVI project does not address these issues. Similarly, the Frutales Tarata project talks about technology from the San Benito experiment station, but says nothing about lessons learned from the PDAC-sponsored efforts of ETSA (Escuela Técnica Superior de Agricultura) to work directly with farmers in the area of fruit production.

Solutions to the obstacles confronting fruit production in areas served by the AHV project are not going to be found on experiment stations or in other grape- and fruit-producing areas. They will be found in farmers' fields and in the relations between the production in those fields and the marketplace. It thus would appear more consistent with

³ Proceeds from the sale of material from the nurseries will not go to the families, but be reinvested in the project.

⁴ Since the completion of the initial draft of this report, the PDAC has completed a grape marketing study. It may begin to suggest ways of making grapes a more important source of household income.

the general approach of the project to incorporate the work with grape vines and fruit trees into the on-farm work to be done with cropping systems. This would permit fruit to be promoted and evaluated in the context of the opportunities and constraints that face small-scale producers operating diversified farming systems.

A second resource-allocation issue is that some institutions may be overutilized in terms of their institutional capacity and expertise. As Table 2 indicates, for example, during 1990 the PDAC plans to undertake six discrete activities with Asociación de Servicios Artesanales Rurales (ASAR), a nongovernmental organization (NGO). These activities involve 31 full-time employees and a budget of over half a million dollars. As discussed below, ASAR is a strong organization with a distinguished record of service, and there is no question about its capacity to make an important contribution to the objectives of the AHV project. But, at some point in putting together the Plan Operativo, it should have been noted that ASAR has never had more than 40 people working for the entire organization. Moreover, the largest project assigned to ASAR is for on-farm irrigation in Aiquile (VAA 1.2.1.1). Yet, when interviewed for this institutional analysis, ASAR's *gerente* commented that ASAR has had little experience working with irrigation. Providing ASAR with such experience is probably a good investment, and the size of the effort with ASAR might be justifiable were not ASAR involved in other activities. The fact is, however, that ASAR manages a continuing program and that 1990 is going to be a particularly demanding year because of the start-up of a major project (\$3 million over five years) that it is managing with IBTA and Cooperación Técnica Suiza (COTESU).⁵

⁵ Although this activity has been in the works since 1987, necessary Bolivian government approval did not come until December 1989, and ASAR did not receive the letter formally notifying them of this approval until January. Thus, this particular issue was not something that the drafters of the Plan Operativo were in a position to consider in detail.

Table 2
PROJECTS TO BE UNDERTAKEN BY ASAR WITH THE PDAC IN 1990

Project No.	Title	Employees		Budget
		Full-time	Part-time	
VAA 1.1.2.1	Mejoramiento de ganado	5	1	\$ 89,700
VAA 1.1.4.1	Validación y transferencia de tecnología en conservación de suelos	6	1	95,163
VAA 1.1.6.7	Sistemas de cultivos y transferencia de tecnología	4	-	55,960
VAA 1.2.1.1	Riego parcelario Aiquile	9	1	133,570
VAA 1.3.2	Ganadería inventariación, evaluación, de especies nativas, cercos vivos, etc.	4	1	81,950
VAA 6.1.7.1	Fondo rotativo para financiar pequeños proyectos campesinos	2	-	50,000
TOTAL		31*		\$506,343

* The part-time position refers to a project coordinator whose time will be assigned to different activities. For purposes of the total, this is treated as one full-time position.

Related to the lack of integration of individual projects into an alternative development strategy is continuing confusion regarding the PDAC's role as a coordinating institution as opposed to an implementing agency. In part this may result from the need for the PDAC to assume direct responsibility for implementing certain activities in the Chapare because of the lack of institutions functioning there. Amendment 7 intended for the PDAC to act as a coordinating institution in the AHV for two basic reasons.

First, to have an immediate development impact, it was necessary to work with institutions that already have functioning projects and programs that address the concerns underlying the AHV design. The initial costs in creating an implementation capacity in the PDAC in Campero and Mizque would have been extremely high, absorbing large portions of project resources with few immediately visible results among intended beneficiaries. In addition, as the PDAC was already responsible for a considerable implementation responsibility in the Chapare, it was felt that assigning it primary responsibility for implementation

in the AHV could overtax its technical and administrative capacity. Instead, it was decided to use the financial resources of the project and the considerable technical skill and expertise of the PDAC to support functioning development activities already being carried out by other institutions or by peasant communities directly.

The potential confusion between implementing and coordinating responsibilities is particularly clear in the cases of two projects. These cases, dealing with small and medium-sized irrigation projects and with community-level immediate-impact projects, are summarized in Table 3. Here, the problem has less to do with the projects themselves than with apparently divergent conceptions by the PDAC technical staff about what sorts of activities these projects are intended to carry out. Members of the PDAC technical staff twice explained that the irrigation projects would be carried out by *administración directa*, with the PDAC either adding to its core staff or contracting personnel for specified tasks in order to enter the areas designated in the Plan Operativo as the executing agency. Under this scenario, some of the \$750,000 in VAA 4.1.1 would be used to create an in-house engineering capacity for the PDAC. Funds from VAA 4.3 would then be used to supplement those designated specifically for irrigation in the execution of irrigation projects. This could happen, as the \$500,000 in VAA 4.3 is being held in reserve, with no programming guidelines for its use in the project.

Table 3
PDAC PROJECTS RAISING COORDINATION VS. IMPLEMENTATION ISSUES

Project No.	Title	Modality	Budget
VAA 4.1.1	Obras de pequeña y mediana irrigación	licitación	\$750,000
VAA 4.3	Obras de apoyo comunitario concertado de impacto inmediato	contrato y/o administración	500,000
TOTAL			\$1,250,000

The 1990 Plan Operativo indicates that the PDAC will hire a civil engineer, a geohydrologist, topographers, and drafters to help execute the *obras de impacto inmediato*. The PDAC has already hired two civil engineers and two teams of topographers. Apparently, there are plans to hire additional professionals in these areas to form "direct action" teams based in Aiquile and Mizque to carry out what are primarily small-scale irrigation projects, but which also could include potable water and other rural infrastructure activities.

If these projects are carried out in this way, it will be an effort totally out of proportion to the rest of the PDAC program. It probably would involve a total budget of

over \$1 million, or about 20 percent of the PDAC's 1990 budget, and would involve the administration of more than 30 discrete activities. In addition, thus far the engineers and topographers have been hired as individuals for short-term work, which means that they have no equipment, support, or internal institutional means of coordinating their activities. All this would have to be provided by the PDAC, whose professionals have very little direct experience in the construction industry.

Another version of this story denies that the PDAC is attempting to create an in-house engineering capacity and maintains that the engineers and topographers are only being contracted for specific, short-term assignments. This version acknowledges that no guidelines have been specified for use of the immediate impact funds, but maintains that the funds are being held in reserve to take advantage of opportunities that arise in the course of executing other projects.

Regardless of which version more accurately reflects the use to which the funds are being or will be put, several outstanding issues deserve immediate attention from SUBDESAL and USAID to insure that they are appropriately clarified. First, the infrastructure projects as currently planned have not been linked to general alternative development objectives with respect to such questions as impact on migratory pressure. In addition, plans to build irrigation works are not accompanied by plans to develop the local participation that will be needed to manage and maintain the systems once they are completed.

Second, with respect to VAA 4.1.1, the PDAC will need to be directly involved in the execution of some infrastructure projects. But, there has been no discussion of the appropriate scale for the PDAC's undertaking such direct involvement, given its technical capacity and other responsibilities under the CRDP. The possibilities of bringing additional institutions into the project to work in this area have not been examined. At different times during the past year, for example, the possibility of working with CARE on this type of activity was discussed. CARE has extensive relevant experience conducting potable water projects, and has worked in small and medium-sized irrigation. It would provide much of its own logistical support and handle coordination among different technical teams. Also, CARE's approach is integrated, building local participation for management and maintenance into each project. If there is a specific reason working with CARE has not been pursued it should be disclosed, as should how this sort of effort fits in with PDAC's defined role as a coordinating institution.

Third, with respect to VAA 4.3, the need to maintain such a large amount of money in reserve, without providing guidance to technical staff regarding how it might be programmed, should be examined. The PDAC's desire to have a discretionary fund that can be used to respond to opportunities and emergencies is justified. But, \$500,000 in untied funding seems excessive. It would be wise to go ahead and program uses for at least half this money, with the understanding that, in the event of an unanticipated need or opportunity, it might be used for another purpose.

Fourth, all the questions raised here about large amounts of money being allocated to particular institutions or activities reflect an assumption that doing anything at all in the project areas is a contribution to the goals of alternative development. This was true to a limited extent as the PDAC emerged from its period of prolonged forced inactivity. Almost anything that could have been done would have had a positive impact in terms of building the institution's self-confidence, and demonstrating to people in Campero and Mizque that it was serious about carrying out projects after all. As Amendment 7 points out, however, activities that may be successful in and of themselves do not necessarily contribute to the project's global objectives. For instance, an excessive emphasis on irrigation to the exclusion of other areas of activity could set in motion a pattern of land acquisition and consolidation that would exacerbate migratory pressures rather than reduce them. The definition of specific activities needs to take place within a framework that considers such social issues as processes of class formation, land tenure, and migratory dynamics, on the one hand, and land use capability on the other. While the PDAC has often been sensitive to social issues, the question of land use capability has been addressed only grudgingly. Yet, it is on the basis of the social and land use issues that a methodology for doing alternative development in other areas, under the administration of other PDARs, must be developed. Thus, the importance of learning to allocate resources through an explicit understanding of general goals and how these relate to technical questions is particularly important.⁶

2.2.2 Communications issues. Most of the organizations being considered as implementing institutions for AHV activities are positive about their collaboration (actual or potential) with the PDAC. There is a general consensus that investing in the home areas of migrants is the proper way to address the participation of the rural poor in the narcotics industry. Organizations opposed to the combination of crop substitution and repression that has characterized anti-narcotics efforts in the Chapare are, in some cases, willing to participate in AHV activities. In addition, most institutions acknowledge the need for greater coordination of development projects that tend to be limited in the scope of their impacts. The fact that the PDAC's call for greater coordination is accompanied by the resources to enable organizations to do things that have been difficult or impossible in the past is also welcome.

Despite this generally positive environment for inter-institutional collaboration, there are obstacles. These have to do with the need to define the PDAC's coordinating role in a way that eases collaboration on concrete objectives without creating a situation in which implementing institutions feel that their autonomy has been abridged. In any effort to coordinate actions by independent institutions, autonomy is an issue, whether the effort involves state agencies or private organizations.

⁶ Improvements are being made. Social scientists and irrigation specialists are discussing problems they encounter. While these remain narrow in scope, technical staff members feel that they will open up over time to encompass the more general themes noted above.

In the cases of state agencies working with the PDAC, these are in some cases consuming all of their resources simply to pay salaries, with little or nothing left to carry out the tasks for which they were created in the first place. In principle, the resources offered by the PDAC to enable them to implement projects are welcome. But, there are latent concerns about distortions in lines of real and formal bureaucratic authority resulting from the infusion of funds. Also, agencies which have important tasks to perform have seen their budgets eroded over some years by a combination of fiscal austerity and the diversion of resources to fight the war on drugs. In this context, it is easy to resent that important development projects that a state institution was created to conduct now need to be justified in terms of their contribution to alternative development and subordinated to a master plan that they lacked a role in formulating.

NGO concerns are parallel, but different. The proliferation of NGOs in Cochabamba, and in Bolivia generally, has been in response to limitations of the state at two levels. First, the development efforts of state agencies and conventional international donors have not improved the material conditions of life for most poor people. Thus, NGOs have been a response to the need for an alternative to official approaches to development. Second, the limitations of the state as the chief source of employment for the professionally educated middle class has also become apparent. It has been unable to respond to the needs of this group, in the sense of simply providing employment, as well as in the sense of rewarding efforts to innovate by an increasingly well trained professional class. Thus, there is an inherent tension between the state and NGOs because, by definition, the latter offer an alternative approach to issues such as rural development, as well as an alternative career path to professionals who, until recently, would have been largely dependent on the state for employment. Obviously, these general sensibilities are heightened in the context of current state attempts to exercise greater control over the activities of NGOs.

Because it has both a formal mandate to promote coordinated action by state and private organizations, and because it controls the resources necessary to make coordination a reality, the PDAC bears a special burden to be sensitive to these issues in its relations with other institutions. Over the course of the project, there will undoubtedly be instances of uncooperative behavior by organizations involved in the project. It is important that the PDAC remain mindful of the broad objectives behind its coordinating role, and of the implications that its relatively abundant financial resources have for alienating potential friends as well as for cementing alliances.⁷

⁷ While there have been examples of insensitivity and poor communications, the PDAC has shown itself to be responsive to these issues. It has, for example, conducted an analysis of potential NGO collaborators, and the resulting report makes explicit mention of the kinds of interests that NGOs have that are noted in this report.

2.3 Servicio Nacional de Caminos (SNC).

Through the USAID-sponsored *Caminos Vecinales* project, the SNC has been providing the major infrastructural support to the CRDP by building and improving roads in the Chapare and in the AHV. During the period in which the PDAC was almost totally paralyzed, the SNC provided the only concrete evidence of the CRDP's seriousness about conducting development projects in the AHV. The SNC's activities have included major improvements of the road from La Angostura through Tarata, Punata, Arani, and Mizque, to Aiquile, a distance of approximately 194 kilometers. Besides widening and improving the roadbed, the SNC supervised the cobbling of the section of the road between La Angostura and Tarata, an activity for which the PDAC received support from the Fondo Social de Emergencia.

Beyond "showing the flag" for the CRDP, these projects have apparently helped to promote the kind of regional development envisaged by the AHV project as a way to provide people living there with alternatives to migration, and as a way to promote a pattern of economic advancement that would allow Aiquile and Mizque to attract migrants from other areas who might otherwise go to the Chapare. On completion of the road improvements between La Angostura and Tarata, farmers along the road reported receiving many offers to buy their property, mostly from people in Cochabamba. They also reported a larger volume of truck traffic and more offers to buy their produce at higher prices than had been offered previously. A few went as far as to suggest that they planned to suspend migration to the Chapare to see if the new opportunities would be great enough to earn a living while remaining at home. Unfortunately, SUBDESAL ignored the suggestion by the PDAC social scientist that the impact of the improved road between La Angostura and Tarata be assessed, so evidence of the positive economic effects on the rural economy as a result of the road improvement, while abundant, is anecdotal.

The SNC is attempting to quantify the impacts of road improvements between Mizque and La Angostura in terms of the volume of truck traffic. Data collection is continuing, so the figures presented here are not final, but they do suggest important changes in transport patterns. In the stretch between La Angostura and Arani, for example, the SNC measured an average of about 15 vehicles a day prior to the road improvements. Today, the average appears to be about 80 vehicles per day.⁸ Four or five vehicles a day traveled the road between Arani and Mizque prior to road improvements, while approximately 30 vehicles now travel that section of road daily.

The increase in traffic appears to be largely related to drivers' choosing the improved route for traveling between Sucre and Cochabamba. Beyond this, of course, most vehicles

⁸ This is according to an SNC official interviewed as part of this institutional analysis. USAID/Bolivia has contracted a social scientist to assess the impact of the road, and preliminary results indicate a more modest increase in traffic.

are also choosing to use the new road through the Chapare to travel between Cochabamba and Santa Cruz. This change in regional traffic patterns positions Aiquile and Mizque to benefit from the kind of economic growth that occurred previously in Epizana, that is, restaurants, hotels, and vehicle repair facilities. If this is accompanied by improved urban services such as electricity, the Aiquile-Mizque axis may experience a period of sustained economic growth.

For 1990, the SNC currently plans to have two work crews in the *distrito sur*. They will be involved in improving about 100 kilometers of road between Omereque and Aiquile, and in installing drainage works between Mizque and Arani. This level of activity may be increased because of the recent donation of a large fleet of heavy construction and roadbuilding equipment to CORDECO by the Japanese government. CORDECO does not have a large enough budget to make use of all the equipment it has received, and has entered discussions with the PDAC, the SNC, and USAID regarding the possibility of ceding some equipment to the CRDP for use in the Valles Altos. If these discussions are successful, the SNC anticipates being able to increase the number of road crews working in the Valles Altos from two to four, greatly accelerating the improvements in road connections between the *distrito sur* and the surrounding area. In addition, the SNC will be able to move equipment provided by USAID to the Chapare and increase the level of road maintenance and improvement activity under way there.

Throughout the history of the CRDP, the SNC has worked successfully with the PDAC, and it expects to continue to do so under the new administrative arrangement defined by SUBDESAL. Relations between the institutions have been good. The only concern raised about this relationship by the SNC concerned a potential problem of increased bureaucratization. In contrast to the past, the INC is submitting all paperwork involving project administration to La Paz through the PDAC, in the interest of improved coordination. There is a sense that this is causing undue delays in resolving minor issues. The SNC expressed hope that USAID plans to establish an administrative presence in Cochabamba will make project administration more agile.

2.4 IBTA/Chapare.

IBTA/Chapare is the institution that could potentially see its day-to-day operations most affected by the new administrative structure defined by SUBDESAL. Because of past emphasis on activities in the Chapare by USAID and SUBDESAL, IBTA/Chapare enjoyed wide latitude for independent action, and was treated fairly generously in terms of requests for finances for buildings, equipment, and genetic material. In addition, IBTA/Chapare was not normally required to coordinate closely with the PDAC. There were instances SUBDESAL appeared to discourage communication, playing one institution off the other. This is not to say that the earlier arrangement worked only to the benefit of IBTA/Chapare.

As its staff is quick to point out, IBTA/Chapare's work was also hampered by capricious, internally contradictory decisions and directives emanating from above. Still, the experience of close coordination with the PDAC and the subordination of its agricultural production activities to project goals and objectives defined by the PDAC will be a new one.

Although working out a new relationship between the PDAC and IBTA/Chapare is, and will be for some time, an awkward and occasionally painful experience, IBTA/Chapare is generally positive about the new administrative arrangement. It expresses the hope that close coordination with the PDAC will bring some assistance in several areas. Notable among these are support for marketing the agricultural products IBTA/Chapare is promoting, and help in solving what it terms the "social problems" impeding its working effectively with farmers to gain the acceptance and diffusion of new crops, technologies, and production techniques.

IBTA/Chapare is sensitive about criticisms regarding the limited impact its work has had on Chapare farmers thus far. While they admit that there are things they could have done better, members of the technical staff tend to feel that such criticisms are made with an inadequate understanding of the difficulties they have faced in trying to do their jobs. The point is particularly touchy in the context of statements that IBTA/Chapare has been too research oriented. They point out that only about 5 percent of their budget has been dedicated to research. They also feel that the criticism is unfair, since part of their task has been the introduction of nontraditional crops, including several that were unknown in Bolivia prior to being introduced by IBTA/Chapare. They feel that part of what is written off as research is a necessary part of reproducing an exotic plant and learning about its characteristics in the new environment. To introduce new cultivars to farmers without being intimately acquainted with their characteristics would, they state, be irresponsible, particularly in the Chapare, where the stakes are very high.

One can be sympathetic to IBTA/Chapare's point of view and recognize, with them, that there is room for improvement. While the criticism that it has been too research oriented is not accurate, it is true that IBTA's methods have been very closely tied to the experiment station and to establishing theoretical levels of productivity, rather than to identifying the on-farm constraints faced by farmers. So, they do not have much information on the problems and opportunities posed by attempting to introduce nontraditional species into existing production systems, such as production costs, labor requirements, and marketing possibilities. In cases where they do have such information, they have gathered it under controlled conditions not closely related to the kinds of situations found on most farms.

IBTA/Chapare clearly needs to orient its efforts so that more of its work is carried out under real farm conditions. This will provide answers to many questions about obstacles to adoption of new farming practices and potential economic benefits to producers. It also will put the practices that IBTA wants to promote out where the farmers can see them and encourage individuals to experiment with them on their own. This, in turn, will provide an opening for IBTA/Chapare to reach still more farmers. The current situation of low coca

prices provides IBTA/Chapare with an opportunity to improve its linkages with farmers. Interest in extension services is at an all-time high, and *sindicato* leaders who in the past have been openly hostile have come to seek IBTA's assistance.

Unfortunately, the current high level of interest in IBTA/Chapare's work by farmers is in response to external factors that have caused coca production to be less attractive in recent months, and not to any initiative taken by the institution to address particular problems they are experiencing. In this regard, the fundamental problem facing IBTA/Chapare is whether or not it will be able to move from a "production-driven" orientation to a "market-driven" one. The focus of IBTA/Chapare's effort has been validating the technical feasibility of producing certain crops in the Chapare that, presumably, are potential alternatives to coca leaf, and defining the combinations of physical conditions and input packages under which production can be maximized. It has done little to define where and under what conditions these products might be sold, or under what sorts of organizational and financial arrangements processing and commercialization might be handled.⁹ Beyond the initial stimulus to find alternatives to coca leaf production, little of what IBTA/Chapare's program has been in response to the production and marketing problems faced by farmers in the Chapare.

In effecting a change toward a more market-driven approach, greater emphasis on working on-farm will be a necessary but not a sufficient condition for success. Work in the area of production needs to be defined and ranked according to current market conditions in Bolivia that offer farmers at least the possibility of realizing a reasonable profit doing something other than growing coca leaf. To the extent that market conditions are uniformly negative in this respect, the priority area for work in the Chapare should not be introducing and perfecting new cultivars, but identifying and developing markets. Only then can work in the area of production be directed toward offering a commodity that satisfies a demand.

IBTA/Chapare has expressed a strong preference that the PDAC assume responsibility for activities related to marketing. This reflects its discomfort with the idea of subordinating the production support it has provided in the past to market requirements. The PDAC should be able to offer assistance in this area. But, for crop substitution efforts in the Chapare to have a chance of being successful, marketing and production need to be integrated within a single institution, to achieve as close a fit as possible between the definition of demand for particular commodities and the technical capacity of the Chapare to produce them in a sustainable way. A reorientation of IBTA/Chapare's activities to make them truly market-driven will require fundamental changes the institution's methodology. In the area of production, this will require more work directly with farmers and less based in the experiment station or on demonstration plots where technicians control most

⁹ The principal activity in this respect has been an observation trip to Costa Rica, from where most of the exotic cultivars being tested in the Chapare have been brought, to learn about processing and commercialization arrangements there.

production variables. More importantly, however, it will require a fundamental change in approach, so that efforts to improve production and productivity -- while they remain important -- need to be in response to a specific market opportunity.

3 IMPLEMENTING ENTITIES

Amendment 7 calls for the PDAC to function as a coordinating agency, providing technical and financial support to a series of implementing agencies. These agencies are of three basic types: private nongovernmental organizations (NGOs), state agencies, and institutions affiliated with the Catholic Church. Carafa et al. (1987) identified 126 public and private rural development organizations functioning in Cochabamba.¹⁰ Many of these were involved in innovative projects, with potentially major implications for achieving CRDP goals of reducing participation in the narcotics industry by improving the physical and social conditions of production in migrants' home areas. However, the technical, administrative, and financial weaknesses of the institutions implementing them, frequently limited the impacts of these activities. By providing financial support, technical assistance, and helping the implementing agencies to coordinate complementary activities, the PDAC would promote development that tapped local initiatives and guided them toward an integrated regional impact. In addition, local institutions would be strengthened so that they would be better able to function individually as well as collectively in the interest of regional development because of their participation in the project.

3.1 Nongovernmental Organizations.

The NGOs discussed below represent both potential strengths and weaknesses of the AHV component of the CRDP. Their participation is the strength of the project, in that their local-level ties and experience will greatly ease local acceptance of and participation in the project. Also, their participation significantly expands the breadth of Bolivian cooperation in the search for ways to reduce the numbers of the rural poor engaged in coca leaf production and transformation in the Chapare.

However, because without exception they lack what may properly be called core funding, the NGOs discussed here present a risk as well. In the event that an activity is not administered well and funds are not used correctly, the funding entities (USAID, PL 480, and the PDAC) have no way of recovering their money. While this consideration should not take precedence over the track records of the institutions (all of them impressive) in assessing their possible participation in the project, it does indicate an additional institutional strengthening opportunity for USAID/Bolivia. All the institutions discussed would welcome assistance in securing domestic and/or non-project-specific sources of funding. To the extent

¹⁰ A 1989 PDAC review identified 106 organizations.

that USAID support could provide this, it would make its own investment in them more secure from the point of view of recoverability of funds, and it would strengthen the NGOs' ability to continue working on an expanded level after support from the CRDP has ended.

3.1.1 Asociación de Servicios Artesanales Rurales (ASAR). ASAR, established in 1964, received its *personería jurídica* in 1966 as a nongovernmental organization intended to provide technical and administrative support to peasant organizations seeking to increase their role in defining development problems, and conceiving and executing projects to address them. It is part of a network of institutions of various types, all of which trace their history in some way to the Centro para el Desarrollo Social y Económico (DESEC), which is itself an expression of certain social outreach concerns within the Catholic Church. This network includes a variety of institutions some of them NGOs, like ASAR, while others are federations owned by their members. The different institutions support one another's activities when this is required, with DESEC providing some coordination.

ASAR has carried out programs in support of peasant organizations in several regions of Bolivia, including the northern settlement areas and the mesothermic valleys of Santa Cruz Department; the valley, upland, and Chapare regions of Cochabamba Department; northern Potosí Department; and the Yungas of northern La Paz Department. While it lacks core funding, ASAR has been successful in attracting support from several international sources, including OXFAM America, the Inter-American Development Bank, and COTESU. The size of its staff has varied substantially according to its level of project support, ranging from a maximum of 40 people to a low of 8 during periods of low activity. ASAR has also worked successfully in coordination with other institutions, including NGO's such as CEDEAGRO, international institutions such as COTESU, and state agencies such as IBTA.

ASAR has specialized in providing general technical support for agricultural production systems, and administrative support for peasant organizations in the areas of securing and managing credit and mobilizing savings. In the area of technical support, it has been particularly active in Cochabamba with respect to helping peasants with improved potato seed production. Since 1987, it has been working with COTESU and IBTA to form a mixed enterprise for this purpose, in which the peasant beneficiaries will ultimately become the major shareholders. Approved by the Bolivian government in December 1989, the project is funded by COTESU at a level of \$3 million over five years. ASAR is contributing approximately \$250,000 worth of equipment, land, and buildings to the project.

ASAR has received funds from the Inter-American Development Bank to administer a credit program for supporting the production of improved seed potatoes and craft production as a way to increase rural incomes. Craft activities are now the primary responsibility of AMERINDIA, a federation of peasant craftspeople that also belongs to the DESEC network. ASAR has received considerable favorable attention in Cochabamba for its able management of the credit program. Here it has benefitted from its association with

DESEC, which has a well-defined approach to providing credit to peasant families, characterized by always treating credit, savings mobilization, and technical assistance as inseparable parts of any program. Furthermore, the policy has been to provide credit only to organized groups rather than to individuals, and to provide credit in kind rather than in cash. This experience makes it an excellent candidate to collaborate with the PDAC's agricultural credit program for the AHV (discussed in section 4 below), although it will have to change its normal way of doing business to accommodate the program's need to provide cash payments to individuals. ASAR has indicated that, in principle, it is willing to discuss doing this.

ASAR is the NGO that figures most heavily in the 1990 PDAC work plan, appearing as the executing agency in six different activities with a total budget in excess of \$500,000. Up to 31 full-time people would be required to staff these activities, summarized in Table 2, above. As discussed earlier, ASAR has a solid record of technical accomplishment and administrative accomplishment. But, there is a legitimate question whether such a heavy investment by the PDAC may not be overloading ASAR's capacity, particularly when it involves participation in projects--such as irrigation--that are outside its area of technical experience.

3.1.2 Acción Rural Agrícola de Desarrollo Organizado (ARADO) - Programa de Control Integrado de Plagas (PROCIPLA). ARADO is a highly successful federation of peasant-based organizations. As a federation, it is not an NGO but is owned by its membership. Established in 1963 by DESEC, it is organized into two regional federations, one based in Cochabamba and the other in La Paz. Through ARADO the base organizations carry out activities related to improving crop and livestock production and community infrastructure (irrigation systems, roads, etc.), reforestation, and securing access to "primary necessity" goods. ARADO has managed successful credit programs supported by the Inter-American Development Bank to assist the commercialization of peasant production, and under the USAID-sponsored Crédito Agropecuario de Emergencia (CAE).

While the agreement with the PDAC is formally with ARADO, the services being contracted (VAA 1.1.6.2, Table 4) are those of PROCIPLA. PROCIPLA is an organization without *personería jurídica*, which places itself under the institutional umbrella of ARADO in order to simplify its contract with the PDAC. This arrangement has come about primarily because of a historical link between PROCIPLA and ARADO. Thus, it is PROCIPLA more than ARADO that is the appropriate focus for the present discussion.

Table 4
PROCIPLA PARTICIPATION IN THE CRDP PLANNED FOR 1990

Project No.	Title	Budget
VAA 1.1.6.2	Control integrado de plagas, contaminación ambiental y degradación ecológica	\$160,280

PROCIPLA began in 1985 as a USAID-sponsored project to study issues of pesticide use and misuse in Bolivia, and to begin to develop integrated pest management (IPM) methodologies appropriate for the agricultural conditions faced in different areas of the country (see PROCIPLA 1987). It was initially planned that PROCIPLA would be an IBTA project. This did not work out, however, and ARADO managed the project, although it depended directly on USAID/Bolivia. USAID sponsorship of the project ended in December 1986, but at the recommendation of the USAID mission, the project continued for six additional months with funds from PL 480.

When this funding ended, in mid-1987, the PDAC approached PROCIPLA about providing IPM support to the work in cropping systems it was planning to do in Mizque, under the AHV component of the CRDP. Because it was a project with no institutional existence of its own, however, PROCIPLA had ceased to function. In anticipation of work in Mizque, much of PROCIPLA's office equipment and other property was stored in the offices of the PDAC, where it remained until the end of 1988, when a *convenio* between the PDAC and PROCIPLA was finally approved. PROCIPLA then moved its belongings back into the ARADO building in Cochabamba and into the house acquired for its use in Mizque, and became one of only two activities that the PDAC managed to fund during 1988 and much of 1989. PROCIPLA currently consists of eight people: five agricultural professionals and an administrative/support staff of three.

The reviews of PROCIPLA's work in Mizque have been uniformly positive. Its staff has worked well with farmers and with the technicians of other institutions, particularly CEDEAGRO. It has raised the level of consciousness in the area about the dangers of improper pesticide use, and it has been working diligently to provide farmers with alternatives. In doing its work it approaches pesticides from the point of view of their impact on health and the environment generally as well as from an economic point of view. In the latter context, PROCIPLA seeks alternatives to offer farmers that will increase their net revenue.

The major weakness of PROCIPLA is that it is not an independent institution, but must interact through ARADO with the PDAC or other institutions that can use its IPM expertise. This has not been a problem thus far, as all parties have been cooperative. Still, there is always a possibility that the owners of ARADO, the peasants that make up its base organizations, could decide that PROCIPLA should either work exclusively for them or

remove itself from under ARADO's wing. Given the importance of PROCIPLA's work in supporting the cropping systems activities being executed and contemplated by the PDAC, and given the need for an institution with IPM expertise to be involved in rural development activities in Bolivia generally, it would be a worthwhile investment for USAID/Bolivia and PL 480 to investigate supporting PROCIPLA in making the transition from a project to an independent institution.

3.1.3 Centro de Desarrollo Agropecuario (CEDEAGRO). CEDEAGRO was established in the early 1980s to provide technical support to poor rural populations in such matters as cropping systems, irrigation, and potable water, and to provide them with the organizational support to manage and maintain improvements in these areas on their own. CEDEAGRO has also attempted to help peasant organizations in translating their numerous needs into ideas for specific development projects. Table 5 summarizes the projects in which the PDAC contemplates working with CEDEAGRO during 1990.

CEDEAGRO does not enjoy core funding and relies on proposals to attract primarily international support for its projects. To date, OXFAM America has been its largest supporter, funding a significant portion of CEDEAGRO's construction of small-scale irrigation projects in the province of Mizque. CEDEAGRO has also attracted money from state and private European donors, and expects that these sources will become increasingly important.

Table 5
CEDEAGRO PARTICIPATION IN THE CRDP PLANNED FOR 1990

Project No.	Title	Budget
VAA 1.1.4.2	Tecnología en conservación de suelos (with CENDA)	\$ 35,360
VAA 1.2.1.3	Manejo de riego parcelario - Mizque (with PDAC)	125,600

CEDEAGRO concentrates its limited resources on activities in Mizque so that, over time, its small operations might reinforce one another in an integrated way.¹¹ Since beginning work in Mizque, about eight years ago, it has carried out approximately 42 discrete construction activities, most involving potable water and irrigation systems, schoolrooms, and community buildings. These construction activities have been accompanied by a strong social

¹¹ Early in its history, CEDEAGRO also worked in the Chapare, and introduced lemon grass there in an early crop substitution effort. However, it withdrew from the area along with many other institutions when the state lost control over the region, and it has not returned except for an occasional token presence.

promotion effort at the level of the peasant *sindicatos* and the provincial *central*, and over the course of eight years CEDEAGRO has succeeded in helping what had been a largely moribund institution become an effective voice of rural interests in matters related to economic development in the province. This has not been entirely welcome among Mizque's town-based provincial elite, and CEDEAGRO has earned some detractors in that area.

CEDEAGRO's professional staff is small but diverse. In 1987, when discussions about its possible collaboration with the PDAC began, the professional staff included fourteen people, among them a sociologist, three educators, six agronomists, an economist, a psychologist, and two administrators.

CEDEAGRO points out that some of its construction projects have suffered from technical deficiencies, and notes that sometimes its staff is learning by doing. It has repeatedly showed a willingness to work with the PDAC and any other institution in a coordinated way, and sees the financial and technical resources that may become available through collaboration as a way of improving its own technical capacity. Although it has not yet had a formal relationship with the PDAC, CEDEAGRO has worked with the PROCIPLA project in promoting IPM methods among Mizque farmers, and it has made its house in Mizque available to several groups of visiting dignitaries associated with the project.

The major setback CEDEAGRO has suffered during its history in Mizque has come because of its participation in the CAE program, under which CEDEAGRO received credit through the Federación Nacional de Cooperativas de Ahorro y Crédito de Bolivia (FENACRE) to provide loans to farmers in Mizque. Cuba (1989) describes this in detail. Because of continued bad harvests in Mizque past the official end of the drought emergency, the farmers who received loans from CEDEAGRO under the program were unable to remain faithful to the repayment schedule.¹² CEDEAGRO, which had offered its house in the city of Cochabamba as collateral for the loan, was threatened with foreclosure, and was obliged to place heavy pressure to repay on the poor farmers with whom it had been working. Many of these went to the Chapare to earn money to repay the loan, and others offered to turn their land over to CEDEAGRO, FENACRE, PL 480, and even USAID. Fortunately, USAID intervened and secured an extension of the term of the loan, relieving the immediate crisis. Given its heavy emphasis on social promotion, the major damage to CEDEAGRO was the loss of confidence it suffered among members of the population whose trust it had been trying to earn for several years.

3.1.4 Centro de Educación Rural (CER). Established in 1981 as the Centro Cultural Kipus, CER was originally concerned with the valorization of Andean music and

¹² Although they fell behind schedule, farmers did continue to pay back the loan. Some observers are also of the opinion that CEDEAGRO's inexperience with credit--this was their first effort--contributed to the difficulties, an assessment that CEDEAGRO does not dispute.

cultural traditions, and supporting their continuing vitality among rural communities experiencing rapid social change. From there, it broadened its focus to include more general communications issues such as health, natural resource management, and agriculture and livestock production. While music has receded from center stage because of this expanding focus, it remains a central part of the group's approach for gaining entry to a community and communicating its message. In 1987, the organization changed its name to the Centro de Educación Rural (CER) to reflect the broader focus.

CER is unique among the NGOs discussed here in that, while it has received funding from abroad, it has raised the bulk of its own financing from domestic sources, and it considers itself largely financially self-sufficient. The source of this funding has been the sale of nine long-playing record albums of Andean folk music recorded and released by the group. Based on the success of these albums, CER feels that it can raise money when it needs to for activities it wishes to initiate and carry out. Because the earnings from their record sales are modest, the bulk of CER's professional staff does not normally work full-time; most are professionals with their own careers who donate their time to the organization's activities, or who receive compensation for their work on specific projects. CER presently has a staff of 18 people, including social communications specialists, radio production specialists, artists, a psychologist, a lawyer, agronomists (one *ingeniero agrónomo* and one *técnico*), and a financial auditor. Of these, nine are working full-time on CER's project with the PDAC. Five of the 18 were members of the original groups that founded the Centro Cultural Kipus in 1981. CER does not currently have *personería jurídica*, although it began the legal procedure for obtaining it in April 1989. It expects the granting of this legal standing to come through in about two months.

Most of CER's work on development-related themes prior to its collaboration with the PDAC has been in the Totorá area. Its work in that region has focused on health, agriculture and livestock improvements, and natural resource management. To support this work, it secured help from the Canadian Desarrollo y Paz, and worked with CORDECO/COTESU in producing programs about deforestation in Totorá. The current activity with the PDAC is the first not conceived by CER itself; it is being done under contract, with conceptual direction coming largely from the outside institution.

CER's project with the PDAC (VAA 6.2.6.1, Table 6) involves a broad range of educational and communications activities intended to support the entire scope of activities of the CRDP. These include preparing pamphlets and folders on such topics as livestock management, soil conservation, what is the PIDYS, and what does the PDAC seek to do; and producing videotape programs explaining what the government hopes to accomplish with alternative development, documenting the completion of immediate-impact projects, and discussing opportunities that may be provided to Chapare producers by nontraditional crops. CER has also produced a "sociodrama" with Quechua-speaking actors of peasant origin that discusses migration to the Chapare and issues surrounding it. Presented in the communities of Campero and Mizque, the actors encourage audience participation and discussion, and the sociodrama promises to be an important vehicle for informing people about the goals

and activities of the PDAC, and for gathering local information that will be important for successful project implementation. In addition, CER is collaborating with Radio Esperanza in the production of radio programs, that will treat the themes mentioned above.

Table 6
CURRENT PDAC PROJECT WITH CER

<u>Project No.</u>	<u>Title</u>	<u>Budget</u>
VAA 6.2.6.1	Apoyo en capacitación	\$120,000

Thus far, CER's productions have been of high quality in terms of their technical execution. The pamphlets and folders have been good, with attractive, professional layout and artwork; the video productions have combined sound and images in professional and imaginative ways to communicate their messages. The major problem to date has been with the content of some of the messages, which at times have been socially inappropriate and factually in error. For example, a recent livestock management pamphlet, "Aprendemos a manejar nuestro ganado," starts from the premise that people know nothing about livestock management and shows the negative impacts of current practices. It ignores the fact that peasants in Campero and Mizque have practiced a very elaborate system of livestock management, in large part designed to avoid precisely the kinds of environmental problems we see today. The extensive, apparently unregulated grazing practices observed by project technicians are the result of two decades of gradual impoverishment capped off by six years of drought and a series of economic crises unprecedented in this century. They have nothing to do with ignorance of the peasantry or, in the words of one PDAC technician "olvido cultural."

When these problems have been pointed out, CER's response has been constructive, and it has conscientiously tried to make the necessary corrections, even when this has taken its staff back to the drawing board three and four times. Moreover, it is not clear whether the source of the problem lies in a faulty understanding of the situation by CER or in the direction CER has been receiving from the PDAC. In any case, the production process could be smoothed if the social science unit of PDAC were incorporated into the initial stages of design and script writing instead of being asked to comment on a nearly finished product. CER has recognized this and has been attempting to solicit this type of input at earlier production stages.

3.1.5 Centro de Estudios de la Realidad Económica y Social (CERES). Established in 1978, CERES is one of the oldest social science research institutions in Bolivia, and the most widely known and respected. It maintains an office in Cochabamba, and has conducted research in most areas of the country. It has received funding from the

Facultad Latinoamericana de Ciencias Sociales (FLACSO), the Inter-American Foundation, the Ministry of Planning of the Bolivian government, the Swedish Economic Research Corporation, and the United Nations. The scope of its research has been both rural and urban, and it has been one of the few organizations in Bolivia or elsewhere to take a consistently regional approach as its research focus, linking detailed local analyses with broader national and international tendencies.

CERES has conducted considerable research in Cochabamba, and much of it formed the basis for the design of the AHV component of the CRDP. These studies have included analyses of the regional economy of Cochabamba (Laserna 1983), the La Cancha market of Cochabamba (Calderón and Rivera 1984), and migration to and settlement of the Chapare (Blanes 1983; Flores and Blanes 1984). More recently, CERES has been collaborating with the SARSA project in a series of activities in support of the CRDP. These have included construction of a database of all secondary source material related to social and economic conditions in Campero and Mizque, social and economic conditions in the Chapare, the urban informal economy and its interrelations with coca leaf production in the Chapare, and the impact of the coca boom on the regional economy of Cochabamba. CERES also worked with SARSA in conducting a background study of credit issues in the AHV, focusing on the experiences of ARADO and CEDEAGRO in providing small-farmer credit under the CAE program.

CERES' present work, under a contract directly with the PDAC, involves a baseline socioeconomic study in the Chapare. Funded under the 1989 Plan Operativo, the project will provide the first comprehensive view of the organization of production in the Chapare and its relationship to production in the AHV since CERES' previous work in the Chapare, conducted in 1982. The draft report on the results of this research was presented in February 1990 and a revised version is in preparation.

CERES lacks a source of core funds, but relies on the projects it generates. In addition, CERES researchers (*investigadores*) contribute 20 percent of their earnings to the institution, and this pays for secretarial support, office space, and the like when project funds are insufficient to cover these expenses.

3.1.6 Centro de Investigación de Capacidad de Uso Mayor de la Tierra (CUMAT). CUMAT began in 1983-1984 as a USAID project to assess the land-use capacity of the Chapare. This study confirmed that only a small portion of the region's land was suitable for annual-crop agriculture, and the information it provided was the basis of the physical sciences side of the critique of the CRDP that eventually led to its redesign, in 1987. Subsequently, CUMAT conducted land-use capability studies along what had been designated the La Paz - Cochabamba - Santa Cruz Development Corridor. CUMAT also conducted land-use capability studies in the Alto Beni area as part of an early effort to promote alternative development in Tumupasa, where there was concern about the possibility of a vast expansion of coca production in the direction of the Peruvian border.

At the urging of USAID/Bolivia, which recognized the need to institutionalize the ability to conduct land-use capability assessments in Bolivia, CUMAT sought *personería jurídica* from the Bolivian government; this was granted in August 1986. As an institution, CUMAT's primary source of funding has been PL 480, but its relationship with this body has been rocky. In 1987, for example, the letter of understanding between the two was signed only after the intervention of USAID.

PL 480 has been extremely zealous in monitoring the funds given to CUMAT, although it has never conducted any substantive evaluation of CUMAT's work or given CUMAT an opportunity to be involved in environmental or land-use capability assessments. PL 480 has revealed an irregularity in which CUMAT paid over \$90,000 in unauthorized employee bonuses. CUMAT argues that since PL 480 has never taken a substantive interest in the institution, it does not understand the needs or the difficulties associated with maintaining qualified people and fulfilling professional responsibilities within the framework of funding that PL 480 has provided. CUMAT notes that all financial support from PL 480 has been for specific projects, and has never allowed CUMAT to provide its personnel with training or to conduct other types of institution-building activities.

This situation creates two parallel but separate difficulties for USAID. First, it points out a problem of administrative control in that, in a situation where there has been an apparent misuse of funds and the institution involved lacks a source of core support, there is no way to recover the money. Second, whatever the outcome of the question regarding the use of the funds, USAID has supported the creation of what is arguably the premier institution in South America in the area of environmental and land-use capability studies. CUMAT's expertise has been recognized internationally, and it has received project funding from a number of international sources, including the World Bank, the Inter-American Development Bank, and the Instituto Internacional para Levantamientos Aereospaciales y Ciencias de la Tierra of the Government of the Netherlands. Since its founding, CUMAT has clearly established itself as a Bolivian national resource, and there is an urgent need to enable it to guarantee that its funders can recover moneys if necessary, and to provide CUMAT with some resources for carrying out professional activities without having to hide them within or "piggyback" them on top of specific projects.

During 1990 CUMAT plans to conduct a series of studies that will generate baseline data on current land use and land-use capability, natural resource endowments, and environmental issues in the provinces of Mizque and Campero (Table 7). This activity was one of the first contemplated under the AHV in 1987, because, together with socioeconomic data on the *distrito sur* and on migration to the Chapare, the land-use capability studies would permit prioritizing areas and kinds of activity to be carried out during the implementation phase, as well establish the bases of an alternative development methodology that would simplify replicating the AHV project in other areas. Unfortunately, between the turmoil that afflicted the project during its early phase, and the tendency of technical staff at the PDAC to think in terms of projects rather than an overall strategy, this conception of land-use capability studies was lost.

Table 7
PDAC COLLABORATION WITH CUMAT PLANNED FOR 1990

Project No.	Title	Budget
VAA 1.3.3.1	Estudios para la generación de datos base sobre el uso de la tierra, recursos naturales y medio ambiente, Fase I	349,867 Bs.

3.2 University-Affiliated Institutions.

The PDAC currently is collaborating with two institutions within the Universidad Mayor de San Simón (UMSS) and has plans to collaborate with two more. The two institutions with which it has been working are the Escuela Técnica Superior de Agricultura (ETSA) and the Centro de Formación Integral (CEFOIN). The two institutions with which contracts (*convenios*) are contemplated during 1990 are the Facultad de Ciencias Agrícolas y Pecuarias (FCAP) and the Facultad de Ciencias Técnicas (FCT). Table 8 summarizes the specific activities associated with each UMSS institution.

During this evaluation, it was not possible to become well acquainted with the FCAP and the FCT, and I will not attempt to comment on the particular strengths and weaknesses of these two institutions. However, the experience of the PDAC with ETSA and CEFOIN suggests that, while the university-based are frequently quite capable, certain attendant risks need to be addressed. This discussion will therefore depart from the format of the rest of the present section on implementing agencies to discuss the lessons learned from the projects involving ETSA and CEFOIN for continuing to work with UMSS-based institutions.

Table 8
PDAC Activities with UMSS-Based Institutions Planned for 1990

Project No.	Title	UMSS Institution	Budget
VAA 1.3.4.1	Base de datos sobre suelos	FCAP	\$ 14,200
VAA 1.1.6.1	Transferencia de tecnología agrícola	ETSA	36,900
VAA 1.2.1.2	Riego parcelario Tarata	FCAP	82,500
VAA 2.1	Artesanía	UMSS/?	39,400
VAA 7.2.1	Mejoramiento de salud y nutrición	FCT ^a	64,185
VAA 7.2.2	Diagnóstico y profilaxis de mal de chagas	FCT ^b	63,900
TOTAL			\$301,085

^aDepartamento de Biología - Sección de Nutrición.

^bDepartamento de Biología - Sección Control de Chagas.

The technology transfer program listed above (VAA 1.1.6.1) is a continuation of an activity that began in 1988 and was functioning through 1989. For many months the work with ETSA and that with PROCIPLA, discussed above, were the only two activities that the PDAC was able to conduct with producers in the AHV. The ETSA project was important for several reasons. First, it was hoped that the technology transfer efforts with producers in the area of Tarata would be a good follow-up to the cobbling of the road, assisting farmers to increase and improve their production and to take advantage of the improved marketing activities offered by the road. Tarata was to be something of a test regarding what would be required to improve marketing opportunities in light of the often-cited difficulties that local producers encounter in competing with imported goods in the Cochabamba market. Finally, Tarata responded to the political need of the project to have something to show visiting dignitaries that could be easily observed in a day trip from Cochabamba.

The conception of the project was well-received because it combined a number of elements--small-scale irrigation, annual and perennial cropping systems, and small animals--in an integrated package that in many ways mirrored on a small-scale what the AHV hoped to accomplish. For much of its execution, some management problems were probably overlooked because everyone associated with the project from the side of the PDAC was desperately anxious that it go well. Very little else was happening, and there was reason to

fear that discussion of problems might provide authorities in SUBDESAL or USAID with a reason to close the project down, and come that much closer to ending the AHV.

It was not until the project's evaluation, in January 1990, that several management problems were pointed out. For one thing, while the different components of the project fit together well in the conceptual description, this did not remain the case at implementation. There seemed to be a tendency to jump from one thing to another with little apparent reason. In addition, the students, who were the primary points of contacts with farmers, were inadequately supervised, as the principals in the project had teaching duties that limited their ability to spend time in Tarata. Unsupervised, the students' relations with farmers varied considerably, both in terms of their conscientiousness in attending to their responsibilities and with respect to their technical capacity to respond to farmers' needs.

The PDAC discussed these problems with the principals of the ETSA project, and it appeared that they had agreed upon a solution, when a series of events suggested the vulnerability of projects carried out UMSS-based institutions. Internal conflicts at UMSS resulted in the dismissal of the principals of the ETSA/PDAC project from the university, and UMSS initiated a financial audit of the project, without consulting the PDAC, despite the fact that the PDAC had been closely following the financial administration of the ETSA project. Since the principals' participation in the project had been predicated on their affiliation with UMSS, they became unavailable to the project as well. The PDAC protested this interference with the project, but, because the *convenio* with ETSA was not written with the possibility of such circumstances arising in mind, there was little to support its contention that the university was overstepping its authority. Only by threatening the university with the possibility of canceling plans for future *convenios* was the PDAC able to insist on its own participation in the audit. The results of the audit and any decision regarding the future of work with ETSA are pending.

PDAC's *convenio* with CEFOIN to conduct socioeconomic research in Campero and Mizque also illustrated the need to supervise closely projects implemented by UMSS-based institutions. The difficulties started with agreeing on the final wording of the *convenio* itself, in part because of CEFOIN's confusion regarding its authority to enter such an agreement. Subsequently, when the fieldwork began, senior members of the group were not consistently available to the project because of their involvement in UMSS activities. As a result, the PDAC social scientist and his adviser assumed direct responsibility for coordinating the research effort. The quality of the field research ultimately proved to be high, and expectations are that CEFOIN's report will be a useful contribution to the AHV.

UMSS is a resource that should be tapped by the PDAC. It has many highly experienced and talented faculty members and students who can greatly enrich the work done under the AHV. Also, the use of the projects to provide field experience for students writing theses or completing course requirements is an important development contribution in itself. Yet, exercising control over university projects is an important problem. In the

resource-scarce university environment, the financing that the PDAC projects represent make them potential "plums" to be harvested by authorities with little knowledge of or interest in the goals of the project. Thus, the PDAC must make sure that individuals expected to work on projects at the time a *convenio* is signed will be available at the expected level of effort when the project is implemented. Agreements with UMSS should contain assurances to this effect in the form of 1) adjustments, where appropriate, in teaching loads; 2) guarantees against interference in the agreed-on staffing of a project by administrators; and 3) provisions that principals in a project will be accountable to the PDAC in the event that their level of participation or their professional performance is unsatisfactory.

3.3 Church-Affiliated Institutions.

3.3.1 Secretariado Nacional de Pastoral Social (SENPAS). SENPAS is an organism of the Catholic Church that depends directly on the Conferencia Episcopal de Bolivia. Its primary function is to coordinate the social outreach programs of the church, and its directorate consists of a combination of church bishops and lay people intended to simplify this coordinating role. SENPAS is responsible for coordinating many areas of Catholic social action including health (the Catholic Church sponsors over half the health programs in Bolivia), popular education, training of church social workers, research, scholarships for promising young people with few financial resources, and efforts to defend the interests of Bolivia's large population of rural migrant workers.¹³

Besides these six areas, SENPAS directs a seventh area of activity--support of relocated miners. Here, SENPAS is an executing agency instead of a coordinating one. This circumstance came about when SENPAS defined a need for a program to work with relocalized miners that would serve as an alternative to the Fondo Social de Emergencia approach by helping miners find long-term, self-sustaining employment. When SENPAS raised this need among the NGOs with which it works, it found that they lacked either the interest or the resources to undertake the effort. Thus, SENPAS undertook the work directly. It is because of this experience that SENPAS is proposed as a collaborating institution within the 1990 PDAC work plan (Table 9).

¹³ This last program began with Bolivians working outside of the country, focusing on helping them obtain the necessary legal documents to reduce their being subject to abuses, and on defending their legal and human rights. As Bolivian agriculture and industry have at different times relied heavily on the availability of poor, unorganized migrant labor, the program also came to function within the country.

Table 9
ACTIVITY PLANNED WITH SENPAS IN 1990

Project No.	Title	Budget
VAA 1.3.3.2	Apoyo institucional, manejo e ingeniería de recursos naturales	\$55,000

SENPAS works with relocated miners in a number of settings in several areas of Bolivia. It supports miners' cooperatives along the border with Brazil, in Pando department, and in Potosí and Oruro. It also works with several groups of resettled miners attempting to make a living in agriculture in La Paz, Cochabamba, and Santa Cruz departments. In addition, it has worked with relocated miners to set up cooperative businesses such as automobile repair and the construction of office furniture. In all these activities, SENPAS has stressed the necessary coincidence between the goals that an activity 1) provide acceptable (and potentially growing) levels of income to project beneficiaries, and 2) be based on production practices that give it long-term growth potential (sustainability) along environmental and social dimensions. In support of these goals, SENPAS has successfully managed credit programs and promoted the integration of former mine workers into various niches within the private sector. It seems an administratively experienced and technically sophisticated institution that understands well how to make small, discrete activities fit into a larger strategy.

3.3.2 Radio Esperanza. Radio Esperanza was established in 1978 as a project of the Prelature of Aiquile, and since then it has provided many services to the rural population of the *distrito sur* both in its home areas and in the Chapare. The radio is the major source of information about local matters for the rural population, and its programming includes a large component of material on farming practices, livestock management, building potable water and irrigation systems, and health and sanitation matters. Besides the programs themselves, Radio Esperanza has teams of *promotores* who circulate through the countryside, visiting communities and reinforcing the radio messages. In these programming and education efforts, Radio Esperanza has successfully collaborated with CENDA.

When atmospheric conditions and their locations permit, migrants to the Chapare listen to the station to learn about what is happening at home. The radio has provided an important communications link for families whose members are divided between the two areas. Chapare migrants have shown themselves to be very responsive to information received over Radio Esperanza. There are numerous accounts of people who returned home when they heard that their families needed them, or when events in their community--

such as the completion of an irrigation or potable water project--suggested the possibility that they would find conditions better there. This year, large numbers of people returned from the Chapare ahead of schedule in response to information received over Radio Esperanza that it was raining at normal levels in their communities for the first time in several years.

The potential of Radio Esperanza as a vehicle for communicating with the population of the *distrito sur* about matters concerning the AHV has been recognized at least since 1986, when Dall (1987) visited the station in one of several activities leading up to the redesign of the CRDP. In particular, Dall (1987) signalled the importance of helping Radio Esperanza to obtain improved transmission equipment to reach *distrito sur* and Chapare audiences more effectively. Yet, while the station remained one of the institutions most frequently visited by the technicians and dignitaries who passed continuously through Campero and Mizque, no concrete action was taken to support it for over two years, despite the energetic efforts of many within the PDAC.

Eventually, members of the station's staff and priests responsible for Radio Esperanza within the prelature began to share the view of the CRDP's critics that the AHV was essentially window dressing for what remained a repressive policy toward poor people in the Chapare. They began to resent the expectations that the constant flow of PDAC vehicles created among people who had few alternatives to the project, so that conversations about working together became strained. When the new CRDP project officer and the deputy director of USAID visited the Aiquile in late July 1989, many in Radio Esperanza were reluctant to agree to yet another meeting.

But, a meeting did take place at which the radio station and the PDAC agreed to continue talking to one another. A working relationship was finally established at the end of 1989, when the PDAC provided support for the completion of several small irrigation projects. Radio Esperanza's proposal for support in upgrading its equipment is being acted on, and the station will receive modest help under the 1990 work plan for its educational and organizational work (Table 10).

Table 10
ACTIVITY WITH RADIO ESPERANZA PLANNED FOR 1990

<u>Project No.</u>	<u>Title</u>	<u>Budget</u>
VAA 6.2.7.1	Difusión y organización	\$26,600

4 BOLIVIAN GOVERNMENT AGENCIES.

4.0.1 Servicio Nacional contra Aftosa, Rabia y Brucelosis (SENARB). SENARB was established in 1977 with a credit from the Inter-American Development Bank. It was originally envisaged as having an aggressive outreach program that would develop in

three stages, involving first the departments of Cochabamba and Santa Cruz; subsequently extending to the departments of Beni, Pando, and Chuquisaca; and finally to the departments of La Paz, Oruro and Potosí. The project never got off the ground, however, and the Cochabamba office has done little more than inspect meat at area slaughterhouses. According to one person interviewed, had there been an epidemic, SENARB would have sent people into the countryside to combat it, but the institution has done nothing to deal with issues of disease prevention or the chronically poor condition of livestock belonging to rural smallholders. The funding to be provided by the PDAC is, in effect, giving SENARB the resources to do the job in Campero and Mizque that it was supposed to do at the departmental and national levels anyway (Table 11).

Table 11
ACTIVITY PLANNED FOR 1990 WITH SENARB

Project No.	Title	Budget
VAA 1.1.2.2	Diagnóstico y control de enfermedades animales	\$58,200

4.0.2 Instituto Boliviano de Tecnología Agropecuaria (IBTA). Section 2.2.1 discusses the projects contemplated between the PDAC and IBTA, and the issues raised will not be repeated here. IBTA is the state institution designated for such work, and it would be excellent if the project could support and strengthen this institution in the interest of long-term development. IBTA has employed some of Bolivia's most capable agricultural scientists, and experiment stations such as San Benito and Mayra have conducted interesting and important research, but IBTA has been consistently unwilling or unable to address issues outside the experiment stations. Methodologically, it has not been proficient at conducting on-farm research and using this as a basis for an aggressive extension program. In addition, it has taken a narrow view of agricultural production and has not undertaken serious work evaluating the marketing problems faced by producers attempting to adopt the technologies it proposes.

4.0.3 Corporación de Desarrollo de Cochabamba (CORDECO). The Plan Operativo lists three activities the PDAC plans to undertake in collaboration with CORDECO during 1990 (Table 12). The two largest (VAA 1.3.1.1 and VAA 1.4.1.1) build on CORDECO's considerable experience in forestry and reforestation, a result of its long-term collaboration with COTESU. In the area of flood and erosion control (VAA 1.3.4.2), CORDECO also has technical experience, although it does not enjoy the continuity of sustained effort in the field that the CORDECO/COTESU project has provided in forestry.

Table 12
ACTIVITIES PLANNED WITH CORDECO IN 1990

Project No.	Title	Budget
VAA 1.3.1.1	Plantaciones forestales y manejo silvicultural	\$143,505
VAA 1.3.4.2	Control de erosión y inundaciones	50,000
VAA 1.4.1.1	Producción de material genético	71,700
TOTAL		\$265,205

As the state agency responsible for coordinating and implementing regional development efforts in Cochabamba, CORDECO has a technical staff that is strong in many areas. Because of its official regional development role, it receives substantial support for specific activities from major international donors, and these activities tend to involve excellent Bolivian technical staff. Indeed, CORDECO staff members formulated the major outlines for the regional development plan for Campero and Mizque, on which the AHV is based.

CORDECO also has been handicapped by two major administrative problems. First, turnover among political appointees placed in charge of the agency has been higher than in many other government institutions. This has resulted in frequent paralysis, as new professionals have become oriented to their jobs, and as long-term continuity of effort has fallen victim to short-term political agendas of the party(ies) controlling CORDECO at a given moment. As one might expect, this has serious repercussions--for instance, on employee morale--and it creates high turnover among CORDECO technical staff members who are not political appointees.

The second problem is that CORDECO is frequently funded at levels well below those it anticipated based on announced budget allocations. This means that a large proportion of the budget it does receive goes to pay staff salaries, and that often little remains for them to do the jobs they were hired to do. In the case of project-specific agreements with international donors, this can mean that CORDECO cannot honor a commitment to contribute a certain amount to an activity out of its own budget. Therefore, in any agreement with CORDECO, it is important to seek such guarantees as are possible that the funds that CORDECO commits will be there when the time comes to spend them. It is also prudent to assume that they will not be there, and to design an activity that can be implemented reasonably effectively regardless of CORDECO's financial situation.

5 THE CREDIT PROGRAM

The provision of agricultural credit is a critical component of the CRDP. In the Chapare, timely provision of credit has been the primary demonstration of good faith by the Bolivian government to producers who have voluntarily reduced their level of coca leaf cultivation. Further, agricultural credit is absolutely necessary if producers are to make the investments necessary to establish profitable alternative production regimens. In the high valleys (Valles Altos), farmers need credit to take advantage of the potential offered by irrigation, better roads, improved soil and water management, and greater technical support for sustainable agriculture. It is anticipated that the Chapare (including Yapacaní) will require \$12,500,000 in credit for producers during 1990, while approximately \$3,500,000 will be needed for the Valles Altos component of the project (Programa de Crédito 1990).

5.1 Credit Options for the Chapare.

The major credit issue facing the Chapare component of the CRDP is that there is no institution in place for managing a credit program in the Chapare. This became a serious problem in 1988, when significant numbers of coca leaf producers began to participate in the voluntary eradication program and thus to qualify for the credit and technical assistance promised under the PIDYS. Because of the importance of keeping faith with producers who took the Government of Bolivia (GOB) at its word, PL 480 agreed to serve as a lending institution and to assume responsibility for providing credit to producers certified by DIRECO as having reduced coca leaf production sufficiently to qualify for development assistance.

Since December 1988, 682 loans have been approved, of which 517 have been in the transitional area of the Chapare, and 165 in the illegal coca production area of Yapacaní, where coca not reduced voluntarily by the end of July 1989 could be reduced forcibly under Bolivian narcotics law. Of the \$4,012,297 allocated for the credit program, these loans represented an actual disbursement of \$2,888,355. The loans went to finance improvements on 4,617.5 hectares, of which 4,174.1 hectares are new areas brought under cultivation and 443.4 hectares are lands that were already in agricultural production (Programa de Crédito 1990).

However, PL 480 hopes to define an alternative arrangement before it becomes time to collect on the loans granted under the program. In the first place, because it is not an *Institución Crediticia Intermediaria* (ICI), PL 480's legal authority to administer a credit program is not entirely clear. More importantly, however, the fear that loans to coca leaf producers may be difficult to recover and rates of nonpayment and default high, incites concern that PL 480 has placed itself in a vulnerable financial position, and that it could be decapitalized because of its participation in the CRDP loan program.

Representatives of other institutions participating in the CRDP sometimes imply that such concerns are exaggerated. Nevertheless, all agree that the current arrangement, while it is running smoothly, is a stop-gap measure, and that a more permanent solution to the problem of providing financial services to coca leaf producers in the Chapare is desirable. Indeed, Amendment 7 of the Loan and Grant Agreement No. 511-T-069 and 0543, calls for creation of a credit program that supports efforts to reduce coca production and promotes alternative development, and that creates a stable, self-sufficient financial system to serve the areas affected by the CRDP with respect to providing credit and mobilizing savings. Achieving this objective is important for promoting the integrated economic development that will reduce the susceptibility of farmers to depending on coca leaf production for their livelihoods.

Given the concerns summarized here, four alternatives have been suggested for addressing the credit needs of farmers participating in the CRDP. In summary form, these include:

- 1) changing the program from one that provides loans to one that provides grants, and integrating the management of this grant program into the activities of the CRDP's existing coordinating and implementing agencies in the Chapare (PDAC and IBTA/Chapare);
- 2) persuading the Banco Agrícola de Bolivia (BAB) to assume responsibility of the loan portfolio for the Chapare and providing it the necessary administrative and logistical support to insure its capacity to manage the program well;
- 3) providing the incentives necessary for private banks to undertake the provision of credit to Chapare farmers; and
- 4) creating a new institution, organized like a cooperative or mutual fund, specifically to serve Chapare coca leaf producers.

Each of these alternatives has advantages and disadvantages that are discussed in greater detail below.

5.1.1 Changing from a loan program to a grant program. One proposed solution to the absence of a financial institution willing and able to provide credit to Chapare producers is to modify the credit program so that a financial institution is not required. Under this proposal, producers who satisfy coca leaf production requirements would receive grants that would allow them to diversify agricultural production, improve their homes, and undertake community infrastructure projects.

Several advantages are cited in favor of this approach. First, it would simplify administration of the CRDP by eliminating the need for a financial institution. Instead, the coordinating and executing agencies working in the Chapare (principally the PDAC and

IBTA/Chapare) would provide grants as incentives for participation in development activities. The role of the grants would be essentially the same as the loans, but, as they would be disbursed as grants rather than loans, the services of an ICI would not be required. Also, there would be more latitude in what the grants could be used for than is usually the case with credit. For example, providing a grant would reduce the pressure that the investment be in a productive activity that would generate the revenues necessary to repay a loan. Thus, grants could be used to address critical housing and health needs, creating a base for a more stable Chapare population, which would be more open to medium- and long-term development efforts.

Second, it is argued that a grant program would provide the PDAC and IBTA/Chapare with greater control over alternative development. On the one hand, a grant program might provide additional leverage for becoming more demanding about conditionality requirements and prioritizing areas of activities and types of activities. On the other, grants could be tied more directly to agricultural or other development packages, and the use of the grants, in money or in kind, could be overseen directly by the technical personnel of the PDAC or IBTA/Chapare.

Third, it is also argued that conversion of the credit program to a grant program would yield political advantages. Some people have criticized the use of credit as an incentive for reducing coca leaf production, noting that going into debt to produce a crop for which there are no well-defined markets can hardly be considered a reward for cooperation with coca leaf reduction efforts. Shifting from credits to grants would allow USAID and the GOB to present themselves as more sympathetic and understanding of the concerns of coca producers, while simultaneously exercising tighter control over their participation in and execution of alternative development activities.

However, the major advantage of moving from a credit program to a grant program would be to relieve PL 480 of the risks it feels it is running. It is agreed that long-term development effort of the sort required to reduce the susceptibility of Chapare farmers to coca leaf production will require the services of an agricultural credit institution capable of addressing their particular needs. Replacing the credit program with a grant program would do nothing to address this fundamental need for successful alternative development in the Chapare. In addition, the short-term benefits cited as arising from a grant program are largely speculative. For example, there is no evidence to suggest that producer response to a grant program with tighter conditions for participation and greater guidance from the PDAC and IBTA/Chapare would be significantly different from current responses to the loan program.

5.1.2 Persuading the BAB to assume responsibility for loans in the Chapare.

A second alternative suggested for providing credit to the Chapare is to build in the incentives necessary to make administration of the program attractive to the BAB. Like the private banks, the BAB has been unenthusiastic about granting loans to Chapare producers because it perceives the risks to the lending institution as very high. Such incentives might

include offering differential interest points to the institution, creating a *fondo perdido* with a part of the credit funds for the bank to use to protect itself from losses connected with inability to collect loan repayments, or some plan for sharing risks. There seems to be room for reaching agreement on a mutually acceptable way to reduce the risks incurred by the BAB.

Under this plan, the BAB offices in the areas to be serviced would be grouped into a BAB/Chapare, that would remain within the administrative structure of the national BAB but would be responsible to the PDAC for purposes of administering the CRDP credit program. This structure is suggested as a way of reducing the risk to the CRDP, in light of the BAB's history of management difficulties. The UNDP-sponsored Agroyungas project, which seeks to diversify agricultural production by coca leaf growers in La Paz department, uses this approach with some success.

Critics of this alternative express doubt that the suggested organizational structure would insulate the CRDP credit program from the political and administrative difficulties that have afflicted the BAB. They feel that the level of control that CRDP institutions would have to exercise over the BAB would be so high as to drain their capacity to manage adequately other aspects of the project.

Critics also argue that placing the credit program within the BAB will not satisfy the objective of creating a sustainable financial institution to serve the development needs of Chapare farmers. To the extent that this institutional structure results in an efficiently run credit program, it would not continue beyond the life of the CRDP. On its own, the BAB would be subject to the same pressures that have handicapped its performance in the past, and prospects for a continuing commitment to Chapare producers would not be good.

5.1.3 Providing the necessary incentives to private banks. A third alternative proposed for providing credit to the Chapare is the creation of incentives for private banks to assume loan portfolios for Chapare farmers. The PDAC has discussed this possibility with a number of private banks over the last two years, but all have indicated that the level of risk is too high for them to be interested. It seems likely, however, that some agreement could be negotiated that would make it worth the while of the private banks to participate in the credit program. Such an agreement would presumably include a combination of the sorts of incentives described above with respect to the BAB: permitting a differential interest rate, creating a *fondo perdido*, and sharing risks.

The advantages of working with private banks would be that they would offer greater assurance than could the BAB that the credit program would be well-managed, and they would not require the same high level of day-to-day supervision. The disadvantage is that this alternative, too, is not likely to result in the establishment of sustained financial services to Chapare farmers. Private banks in Bolivia historically have been unwilling to invest their funds in rural development because of their perception that small farmers are a bad risk.

New regulations requiring that private banks maintain a sum equivalent to 40 percent of the value of their outstanding loan portfolio on deposit in the Central Bank have diminished their interest even further. Once the funds provided under the CRDP for development credit in the Chapare were repaid and the risk-reducing incentives were no longer in effect, private banks participating in the project would not seem to have any incentives to use their funds to maintain a credit program for Chapare farmers.

5.1.4 Creating a new financial institution. Creation of a new financial institution specifically for providing development credit to Chapare farmers is the approach favored by the credit adviser to the PDAC. Such an organization would function as a mutual fund or cooperative institution, and would seek both to provide credit and to mobilize savings. It would operate within the institutional framework defined for implementation of the PIDYS at the level of the COREDAL (Comités Regionales de Desarrollo Alternativo), and its board of directors would include representatives of the institutions defined as composing this body (i.e., SUBDESAL; agencies charged with executing projects and programs defined under the PIDYS; and the *centrales, subcentrales, or sindicatos* representing the interests of coca producer) (SUBDESAL 1990:6-7). The PDAC would be responsible for organizing the institution and for supervising its day-to-day affairs during the early stages of the credit program. As the loans made under the project are repaid and the management and administrative skills of the new institution's staff improve, provision would be made for increasing control to be passed to the coca growers' unions, with creation of a wholly farmer-owned financial institution as the ultimate objective.

This approach offers several advantages over the other alternatives discussed. The most important is that it does provide for establishing a self-sustaining financial institution to support rural development in the Chapare. By working within the PIDYS structure and building on the COREDAL, creating a new financial institution would provide a context for meaningfully implementing the commitment to producer involvement in Chapare development efforts; the prospect of owning such an institution would be a powerful incentive for producer participation and cooperation. Moreover, incorporation of the producers' union as part of the management structure will take advantage of the considerable discipline shown by most growers in respecting the policies defined by their *sindicatos*, reducing the danger that in the violent, cynical climate surrounding Chapare development efforts, repayment obligations will not be taken seriously.

However, establishing a new financial institution poses some problems not associated with the other alternatives discussed. Among these is the additional cost in time and money involved in initiating a self-sufficient financial institution. This cost would not necessarily slow down projected credit disbursements for 1990, as PL 480 would continue its current role as manager of the credit program, only gradually transferring management responsibility and staff to the new institution. Rather, the cost would be manifest in financing the start-up expenses of the new institution and in the need for the PDAC to assume a particularly strong supervisory role.

An additional complicating factor is that defining producer participation in the new financial institution will necessarily be a contentious issue. The institutional framework set down by SUBDESAL stipulates that the producers' unions will be represented. But, it does not define a formula for determining the number and composition of producers' representatives, as this needs to be the outcome of negotiations with the unions that have not yet taken place. Experience suggests that negotiations between the government and producers' unions are difficult affairs under the best of circumstances. Presently, the unions are deeply divided among themselves with respect to basic issues of what should be their position regarding alternative development, so they may find it difficult to articulate a clear position from which to negotiate and to insure that any agreement reached at the *central* level is respected by individual *sindicatos*. The possibility of earning control of a financial institution to serve their needs is a benefit that goes well beyond anything offered previously by alternative development efforts, however. This may provide producers with sufficient incentive to resolve their internal differences and define a united position as a basis for participating in alternative development.

5.2 Institutional Framework for Credit in the High Valleys.

The institutional issues posed by plans to provide credit to farmers cooperating with the AHV component of the CRDP are simpler than in the case of the Chapare because institutions able and willing to undertake administration of a credit program are already in place. The major complication is that none of them is sufficiently large to cover the entire area that will be included in AHV activities. As a result, three different institutions are being considered, one for each area of activity. This means that individual agreements will have to be drawn up to reflect the particular circumstance of each institution. The three institutions under consideration are the Cooperativa Integral de Servicios Cochabamba Ltda., the Cooperativa de Ahorro y Crédito San Pedro de Aiquile, and a combination of the NGOs ASAR and CEDEAGRO. Each of these institutions and its probable role in the CRDP is profiled briefly below.

5.2.1 Cooperativa Integral de Servicios Cochabamba, Ltda. More commonly known as the Punata cooperative because of its location in that town, the Cooperativa Integral de Servicios Cochabamba, Ltda. was established in 1977 with 14 associated groups and 185 members. Receiving financial support from USAID/Bolivia and technical assistance in administration and management from Robert Nathan and Associates, the cooperative grew to more than 5,000 members by the end of 1984, of whom over 800 were women. It was one of the few cooperatives that successfully weathered the hyperinflation of the period, although in doing so it had to reorganize, consolidating member groups (Grupos Asociados de Base, or GABs) and reducing the number of peasant leaders from 14 to 8 during 1985-1986. Besides support from USAID/Bolivia, the cooperative has received technical assistance from the Institute for Cooperation in Agriculture (IICA) to set up a cheese-making business, and funds from the Inter-American Development Bank to carry out a dairy cattle improvement and milk production program.

During the 1987 agricultural campaign the Punata cooperative moved more than \$1 million in credit. The default rate among its members has never been higher than 5 percent, and cooperative leaders note that cooperative members who reside in the town of Punata and are not primarily farmers account for a substantial part of that figure. Because of this experience, the cooperative has become more selective in accepting new members, accepting only those for whom agriculture is the primary source of livelihood.

One reason for the Punata cooperative's stability has been that it has limited its rate of growth according to its administrative capacity. Leaders calculate that approximately 20 percent of the population of the Valle Alto are members, and they feel that with this number they are near the limit of their administrative capacity. So, the cooperative was not interested in assuming primary responsibility for managing the CRDP credit program. But, there is a GAB in Villa Mercedes, near Tarata, which is in the area covered by the agricultural technology transfer project sponsored by the PDAC and ETSA/UMSS as part of the AHV component of the CRDP. The Punata cooperative has indicated that it would be willing to accept responsibility for administering the credit for beneficiaries of that project.

5.2.2 Cooperativa de Ahorro y Crédito San Pedro de Aiquile. The Cooperativa de Ahorro y Crédito de San Pedro de Aiquile is an affiliate of FENACRE based in Aiquile. Contact between the Aiquile cooperative and the PDAC is recent, resulting from the search for institutions that could manage the credit program in the Aiquile-Mizque area. Established to serve the interests of Aiquile-based local elites, the cooperative had little interest in funding rural development activities during its early history. In recent years, however, control has passed to schoolteachers of Campero Province, who are more politically progressive and interested in promoting rural development. Currently, approximately 60 percent of the cooperative's credit portfolio is for agricultural development loans made to Campero peasants. Judging from the observations of the credit adviser to the PDAC and references obtained from FENACRE, the Aiquile cooperative is a well-managed, financially sound institution and a good choice as a partner for administering the credit program in the district of Campero.

The major obstacle to working with the Aiquile cooperative is its affiliation with FENACRE. FENACRE presently manages approximately \$20 million in a number of different credit lines sponsored by the Inter-American Development Bank, PL 480, and others. Feeling that FENACRE has reached its administrative capacity, PL 480 has rejected it as a partner in managing credit to be disbursed under the CRDP. This means that to include the Aiquile cooperative in the credit program, the PDAC must by-pass FENACRE and establish a direct link. Preliminary indications are that this is acceptable to all concerned institutions, and plans are being made to proceed in this way during the coming weeks.

5.2.3 ASAR/CEDEAGRO. To service the credit needs of CRDP beneficiaries in Mizque province, the PDAC is contemplating a joint arrangement with the NGOs ASAR and CEDEAGRO. The reason for this approach is that the cooperative based in Mizque is universally judged to be a poor choice as an institution to manage rural development credit. By combining ASAR and CEDEAGRO, the PDAC hopes to take advantage of both ASAR's considerable experience in the successful management of credit programs and CEDEAGRO's longstanding presence in Mizque.

ASAR has had practice in working with the provision of credit to smallholding farmers, and it has developed a comprehensive approach to credit that includes mobilization of savings and technical support as well as agricultural loans. ASAR's experiences have included the administration of a credit program with funds provided by the Inter-American Development Bank, and several instances of working with small-farmer organizations to train them to manage agricultural credits and to help them make the necessary contacts with private local financial institutions. The most outstanding example of this is ARADO, which received technical and administrative support from ASAR until it became a totally independent farmer-owned institution. ARADO has since successfully managed a credit program sponsored by the Inter-American Development Bank to facilitate commercialization of agricultural products. It also provided farmers with credits under the CAE program, with funds from PL 480 and the Banco Hipotecario, functioning as an ICI.

As a continuation of its work in promoting seed-potato production, ASAR has entered a joint venture (Sociedad de Economía Mixta) with UPS SEPA (Unidad de Producción de Semilla, Semilla de Papa), COTESU, and IBTA to form a Unidad de Producción de Semilla. A five-year undertaking with a budget of approximately \$3 million, the project's objective is to create a self-sustaining institution for the production and sale of certified seed potatoes, in which small-farmer beneficiaries will be the majority shareholders. At the outset of the project, 40 percent of the shares are held by COTESU, which provided the bulk of the capital to finance the project; the remaining 60 percent is divided equally between ASAR and IBTA. After five years, COTESU's shares will pass to the small farmers who are members of the enterprise.

Three potential limitations may influence ASAR's effectiveness in administering an agricultural credit program in Mizque. The first is that previously its policy has been to provide credit to producers only in kind. As the CRDP credit program contemplates cash disbursements to farmers, some reorientation of ASAR's standard operating procedures will be necessary. Second, the 1990 Operating Plan of the PDAC contemplates ASAR's participation in six different activities involving a total budget of \$506,343 and approximately 31 full-time employees. As discussed earlier (section 3.1.1), ASAR has never had more than 40 employees working for it at once, so the activities contemplated in the PDAC Plan Operativo represent a major institutional commitment. Second, the Unidad de Producción de Semilla project with IBTA and COTESU, mentioned above, received final approval in December 1989 (Decreto Supremo No. 22379, 4 December 1989), and will require a substantial investment in personnel and other resources by ASAR to get started. Therefore,

care needs to be taken not to overburden ASAR's administrative resources. Third, ASAR has not worked in Mizque and does not have the established relations of trust with farmers that have been important to its success in other areas. It has therefore been suggested that ASAR manage the credit program for Mizque with CEDEAGRO, which has a long-standing institutional presence in the rural areas of Mizque.

CEDEAGRO has been working in a wide array of rural development projects in Mizque for over eight years. In order not to overtax its administrative resources but still have a long-term impact, it has concentrated its resources in the province, and has developed an integrated development plan for Mizque similar in many respects to that contemplated by the PDAC. Although it has carried out over 40 discrete construction projects in Mizque, including school buildings, silos, and irrigation works, CEDEAGRO has had only one experience with agricultural credit, and this has been unpleasant. Under the CAE program, mentioned above with respect to ARADO, CEDEAGRO received PL 480 funds through FENACRE for the provision of agricultural credit to farmers in Mizque (Cuba 1989). A combination of climatic adversity and inexperience in administering a credit program made CEDEAGRO unable to repay the credit on schedule, and the institution was threatened with losing its Cochabamba headquarters. As an additional result of the pressure, CEDEAGRO was obliged to push farmers to repay the credit despite successive years of poor harvests; many rural families are thus coming out of the CAE program significantly poorer than they entered it. In some cases, families that had never worked in the Chapare before migrated there to earn money needed to meet their loan payments. A two-year extension has since been granted for repayment of the loan.

Because of this, CEDEAGRO has expressed some reluctance to become involved in another credit program unless it can receive the administrative support necessary to insure that its previous experience is not repeated. The combined experience of ASAR and CEDEAGRO would make an excellent basis for the credit program in Mizque. CEDEAGRO would benefit greatly from ASAR's experience in business administration and credit management. ASAR needs CEDEAGRO's knowledge of Mizque and its experience in small-scale irrigation to work effectively in the area.

6 CRUCIAL ISSUES

6.1 Assumptions of the CRDP.

From its inception, the Valles Altos component has assumed the feasibility of reducing the rural population's level of participation in the narcotics industry by providing alternative opportunities. This was based on several observations. First, the recognition that the Chapare is not the cause of migration out of central Bolivia, but simply the latest addition to many migratory destinations, and that significant numbers of people continue to prefer other migratory destinations despite the importance of the Chapare, suggested that a various factors influence decisions about where to migrate, and that peasant preferences

for the Chapare cannot be reduced to the desire to earn high wages. Further, migrants are very sensitive to changing conditions, and can shift destinations on short notice. Thus, creating new migratory alternatives or making existing ones seem more attractive seems a way of reducing the flow of people to the Chapare.

Second, the level of resources or opportunities needed to make the difference between whether a family migrates is modest.¹⁴ Families with irrigation, for example, rarely participate in seasonal migration, regardless of how small their landholding. In such areas as the Valle Alto, near Punata, the incorporation of just part of a family's land into an expanded irrigation system was sufficient motivation for many to cease migrating to the Chapare. This sort of experience was repeated by the PDAC early in the history of the AHV project, when improved opportunities for marketing agricultural produce that resulted from widening and cobbling the La Angostura - Tarata road encouraged families to remain at home, rather than go to the Chapare as they had been doing.

Third, it does not appear necessary to generate economic opportunities for farmers that compete dollar-for-dollar with the earnings to be had from participating in the production or transformation of coca leaf. Social science literature has documented many cases in which smallholders' production is oriented toward satisfying a socially and culturally defined set of subsistence requirements. Once that level is assured, farmers are more concerned about mitigating risk than maximizing net revenue. This is the case with the smallholders of Campero and Mizque who form part of the Chapare's *población flotante*, moving back and forth between their homes and the Chapare and providing the labor for a series of activities, including leaf harvesting and transportation, and the initial steps of extracting the cocaine alkaloid.

This population is obliged to migrate somewhere, and the Chapare becomes the destination of choice because of its high wages and its proximity to home. Migration to the Chapare is also perceived as risky, however, for several reasons. Many migrants contract diseases endemic to the area (e.g., yellow fever), and others become ill because of a combination of factors such as poor diet, hard work, and existing medical problems (e.g., chagas disease) that they may have carried to the Chapare with them. In addition, they are aware that they, and not the drug traffickers, bear the brunt of police repression efforts. Indeed they must accept this as a condition of work, for to the extent that they are in direct contact with actual drug traffickers they certainly cannot betray them. Under these conditions, if an alternative development effort provides opportunities that satisfy basic

¹⁴ This does not mean that the problem of migration can be addressed through short-term activities. Rather, because families are responsive to new opportunities, the project can buy time for itself through efforts such as improving and expanding irrigation. However, for impacts achieved in the short term to be maintained, long-term solutions must be found to historical processes of economic stagnation and environmental destruction.

subsistence needs with a lower degree of risk than migration to the Chapare, a significant portion of the rural poor will take advantage of them, even if the level of remuneration is lower than what they could receive in the Chapare.

Thus far, evidence that alternative development efforts "work" is largely anecdotal. As noted in Section 2, authorities have not yet taken advantage of the opportunities to monitor systematically the impacts of completed activities such as the cobbling of the La Angostura - Tarata road. The results of the *obras de impacto inmediato*, carried out by the PDAC at the end of 1989, will not be known until the end of this year's rainy season. Then, families must decide whether the opportunities provided make it worth their while to remain at home and manage their farms during the dry months. But, because farmers invested substantial parts of their Chapare earnings in many of these activities prior to the arrival of the PDAC, and communities undertook them precisely to provide the resources that people need to remain at home during the dry months, the impacts are expected to be significant.

6.2 What We Are Learning about Migration.

Since the AHV component of the CRDP was first conceived there have been continuing efforts to learn more about the dynamics of migration that carry people to the Chapare. In this process, two issues have become clear: 1) the growers and laborers in the Chapare cannot be treated as homogeneous, but have a multiplicity of production goals and economic interests; and 2) conditions in the Chapare change much more in response to external factors than to internal ones.

Since the mid-1970s social scientists and planners have recognized the high degree of social stratification and class formation that characterize the population of the Chapare. Then, the population was stratified according to whether settlers had migrated spontaneously in search of employment in the lumber industry, or whether they had entered under the auspices of state-sponsored settlement. Spontaneous settlers were significantly wealthier than sponsored settlers, holding jobs in the lumber industry and using the wages to hire laborers for help on their farms. The sponsored settlers held no off-farm jobs, and their ability to marshal family labor resources was the limiting factor in their farming operations.

The patterns of inequality that characterized the Chapare in the 1970s are more pronounced and complex today. The farmer population has further stratified into landowners and land renters, and significant numbers of early settlers have earned enough from their farms to be able to reside in Cochabamba, renting their Chapare properties to other farmers. Moreover, as the importance of coca leaf has grown, so has the importance of access to labor, and the distinction between those who can regularly hire the workers they need and those who must make do with family labor has become more pronounced.

Indeed, the insertion of the Chapare farmers into the production and commercialization circuit of an international commodity market has divided the grower and laborer population in complex ways, related to the connections they have to those involved in the transformation of leaves and the sale of a finished or partially finished product. The internal contradictions of the narcotics industry are enormous, and the major forces keeping these from becoming widely apparent are the lack of alternative activities in which leaf producers might become involved, and the substantial unifying effects of the police repression to which the Chapare population is subjected.

A major implication of this for alternative development efforts is that the response of producers to projects and programs in the Chapare and the AHV will not be uniform. Growers and laborers will define their interests according to a series of relationships that we on the outside do not fully understand. But, the potential receptivity to true alternatives--as these are defined by the different classes and interest groups that compose the Chapare population--is great.

6.3 Replicability of the AHV Component in Other Areas.

From the beginning of the redesign of the CRDP to include the AHV component, the *distrito sur* was viewed as something of a laboratory in which a methodology could be defined for regionally integrated development that would reduce the pressures on people to migrate, especially to the Chapare. It was assumed that the project would be replicated in other areas, funded perhaps by USAID, perhaps by another donor.

The original assumptions about the possibility and the desirability of replicating the AHV projects in other areas remain valid, and they have been made explicit in the new institutional framework defined by SUBDESAL. The PDAC has been designated one of what will be several PDARs, and there appear to be possibilities for securing financial support from other international donors for activities similar to those being contemplated and executed in the AHV, in such areas as northern Potosí Department.

Only two major limitations on the potential for replicating the AHV experience are apparent. The first is that, because of the problems described in Section 2, the AHV is only now beginning to function. Thus, there is no experience to replicate, and the anticipated alternative development methodology does not yet exist. This does not mean that activities in other areas cannot go ahead, but they must deal in a much more thoughtful and explicit way with issues that ideally would have emerged as lessons learned from the PDAC experience that could be directly applied elsewhere.

These issues concern the criteria whereby individual activities are judged to fit together in a way that furthers the general objectives of the project: to reduce pressures on people to migrate by 1) stabilizing the deteriorating productive capacity of the physical environment and helping family production satisfy more of people's basic survival needs; 2)

raising rural incomes and reversing processes of environmental destruction; and 3) promoting the economic growth in some areas that will allow them to become new centers of population attraction that stand as alternatives to the Chapare and the city of Cochabamba. This means establishing the social bases of the project. It is not enough to promote economic growth; that growth must be characterized by considerable equity insofar as it pertains to the farm population. For example, if the project emphasizes the development of irrigated agriculture without also addressing the problems faced by dryland farmers and the generation of employment opportunities through promoting agroprocessing and other off-farm activities, it could easily exacerbate existing inequities in resource distribution and increase the migratory flow, rather than diminishing it.

The second limitation concerns the fact that the AHV component of the CRDP was designed with the idea that, besides reducing migratory pressure by improving on-farm conditions, it would promote urban-based growth in Aiquile and Mizque that would provide employment opportunities for people from other areas as well. The *distrito sur* would become a center of population attraction in its own right. This reflected the recognition that, because of a range of issues--related to the natural resource endowment of different areas, levels of environmental destruction, and the unequal distribution of land and other resources--it is not possible to develop all central Bolivia in a way that will eliminate, or even seriously reduce, the pressure on members of the rural population to migrate. Therefore, as described in Section 1, selecting the *distrito sur* as the major area of activity for the AHV was based on its potential to support economic growth beyond that required to improve the subsistence conditions under which the rural population lives. Efforts to replicate the AHV must deal seriously with whether the objectives are to promote similar patterns of economic growth, or whether they are seen as largely palliative, buying time and waiting for the emergence of economic opportunities in other areas.

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ACRONYMS

AHV - Associated High Valleys (component of the CRDP)

ARADO - Acción Rural Agrícola de Desarrollo Organizado

ASAR - Asociación de Servicios Artesanales Rurales

BAB - Banco Agrícola de Bolivia

CAE - Crédito Agropecuario de Emergencia

CEDEAGRO - Centro de Desarrollo Agropecuario

CEFOIN - Centro de Formación Integral

CENDA - Centro de Comunicación y Desarrollo Andino

CER - Centro de Educación Rural

CERES - Centro de Estudios de la Realidad Económica y Social

COLODAL - Comité Local de Desarrollo Alternativo

CONADAL - Comisión Nacional de Desarrollo Alternativo

CONALID - Consejo Nacional contra el Uso Indebido y Tráfico Ilícito de Drogas

COPECE - Consejo Permanente de Coordinación Ejecutiva

CORDECO - Corporación de Desarrollo de Cochabamba

COREDAL - Comité Regional de Desarrollo Alternativo

COTESU - Cooperación Técnica Suiza

CRDP - Chapare Regional Development Project

CUMAT - Centro de Investigación de Capacidad de Uso Mayor de la Tierra

DAI - Development Alternatives, Inc.

DEFIL - Development Strategies for Fragile Lands Project

DESEC - Centro para el Desarrollo Social y Económico

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DIRECO - Dirección de Reconversión Agrícola

DS - Decreto supremo

ETSA - Escuela Técnica Superior de Agricultura

FCAP - Facultad de Ciencias Agrícolas y Pecuarias

FCT - Facultad de Ciencias Técnicas

FENACRE - Federación Nacional de Cooperativas de Ahorro y Crédito de Bolivia

FLACSO - Facultad Latinoamericana de Ciencias Sociales

GOB - Government of Bolivia

IBTA - Instituto Boliviano de Tecnología Agropecuaria

ICI - Institución Crediticia Intermediaria

IICA - Institute for Cooperation in Agriculture

INC - Instituto Nacional de Colonización

IPM - Integrated pest management

MACA - Ministerio de Asuntos Campesinos y Agricultura

MNR - Movimiento Nacionalista Revolucionario

NGO - Nongovernmental Organization

OAS - Organization of American States

PDAC - Proyecto de Desarrollo Alternativo de Cochabamba

PDAR - Programa de Desarrollo Alternativo Regional

PIDYS - Plan Integral de Desarrollo y Sustitución de Cultivos

PL - Public Law (PL 480 is the "Food for Peace" legislation of the U.S.)

PROCIPLA - Programa de Control Integrado de Plagas

PRODES - Proyecto de Desarrollo y Sustitución

PRODEVI - Proyecto de Desarrollo de la Viticultural

SARSA - Settlement and Resource Systems Analysis (Cooperative Agreement)

SENARB - Servicio Nacional contra Aftosa, Rabia y Brucelosis

SENPAS - Secretariado Nacional de Pastoral Social

SNC - Servicio Nacional de Caminos

SUBDESAL - Subsecretaría de Desarrollo Alternativo y Sustitución de Cultivos de Coca

TRD - Tropical Research and Development, Inc.

UMSS - Universidad Mayor de San Simón

UNFDAC - United Nations Fund for Drug Abuse Control

UPS SEPA - Unidad de Producción de Semilla, Semilla de Papa

USAID - United States Agency for International Development