

PD-ABQ-753

UNITED STATES AGENCY FOR INTERNATIONAL DEVELOPMENT

98886



**BOLIVIA**

**RESULTS PACKAGE**

**Counter-Narcotics Consolidation of Alternative Development Efforts**

**(CONCADE)**

**1998-2002**

**Activity Number 511-0643**

A



# MEMORANDUM

Counter-Narcotics  
Special Objective Team

## ACTION MEMORANDUM FOR THE MISSION DIRECTOR

**DATE:** August 27, 1998

**TO:** Frank Almaguer, Director

**FROM:** *Ray Baum*  
Ray Baum, CN SOT Chairman

**SUBJECT:** Approval of CN SOT Results Package (RP) Illegal Coca Eliminated from the Chapare by 2002

---

**I. ACTION REQUESTED.** You are requested to approve the following Results Package (RP) which will (1) organize and document planned activities for a Results Package entitled Counter-Narcotics Consolidation of Alternative Development Efforts (CONCADE), (2) permit a \$1 643 million obligation for FY98 and (3) enable achievement of planned activities from FY98-02 at an estimated \$80 million. Such approval will allow the Mission to continue uninterrupted support for the establishment of sustainable alternative development a key intermediate result toward the elimination of illegal coca from the Chapare.

**II BACKGROUND.** Suppression of the coca/cocaine production and trafficking is a major US foreign policy interest. Constraints to elimination of illicit coca are overwhelming market demand, wide availability of production inputs, weak law enforcement and weak public support. For the past decade, the USG has financed counter-narcotics initiatives in interdiction, eradication and alternative development. The Government of Bolivia's (GOB) coca eradication policy began with the passage of "Ley 1008" in 1987 and has recently been strengthened with the launching of "Plan Dignidad" in December 1997. Unfortunately, eradication efforts have been offset by the planting of new coca, and consequently there has not been a net reduction in Chapare coca cultivation during the past ten years. This lack of real progress in coca reduction resulted in the USG and the GOB modifying the coca reduction strategy to focus on coca elimination and the treatment of coca as an illegal product.

Results of alternative development efforts under the Cochabamba Regional Development Project (CORDEP and its predecessors) to date have led to an increase in licit crop production in the

Chapare from an estimated 40,600 hectares in 1986 to over 96,000 hectares in 1997. Virtually everyone in the Chapare has directly benefited from USAID's investment to date in alternative development through the construction of roads, bridges, electrical connections, water systems, and in general the strengthening of the licit economy. Access to markets is no longer a constraint, as a result of the infrastructure and market development assistance provided by USAID. Approximately 3,000 kilometers of roads have been improved or maintained to all weather standards, and 97 bridges have been built. Even with dramatically increased output of licit products, farm-gate prices have continued to stay high because of the improved roads, the opening of new domestic and export markets, and improved product quality. Furthermore, the success of alternative development has dramatically changed public opinion, and Bolivians are much more accepting of the fact that Chapare farmers do have viable licit options to coca production. The fact that 95 percent of the Chapare's coca is eventually converted into cocaine is being increasingly recognized by Bolivians. This has increased awareness of the fact that coca growers are engaged in an illegal endeavor.

As a follow-on to the CORDEP Program, the CN SOT conducted a number of technical assessments which assisted USAID in better planning and focussing its future alternative development efforts and linkages to the overall USG/GOB counter narcotics effort. In June 1998, technical assistance was acquired to assist the CN SOT in preparing and finalizing a results package (CONCADE) for the period FY98-02. Annex A contains the results package which has been fully reviewed and approved by the CN SOT.

**III. DESCRIPTION.** The design of the CONCADE RP is a result of a collaborative effort between Mission and GOB staff within the Office of the Vice Ministry for Alternative Development. Strategies, implementation arrangements and procedures were verbally conceptualized and agreed to with the joint USAID-GOB design committee prior to the actual drafting. The Result Package was developed under the assumption that licit crops can not completely substitute for the income generated from coca leaf and coca paste sales, and therefore a combined mix of eradication, enforcement, and alternative development is necessary to achieve the goal of a coca free Chapare. Equally important is the recognition that alternative development efforts within the Chapare cannot continue to be justified exclusively on the grounds of promoting broad based economic growth unless it is clear that these investments directly contribute to a significant decline in coca production. Therefore, the designers of the RP included into the design that farmers must agree to eradicate all their coca in order to qualify for continued participation in alternative development activities. Conditioning activity assistance to customers that sign "zero coca" agreements will contribute to the net reduction of illegal coca.

The CONCADE Result Package consolidates experiences and results achieved to date to more effectively respond to the needs of Chapare producer associations and private sector investors. The primary modifications from previous activities are

- development assistance will be closely linked to coca elimination, and

G

- the reduction of subsidies and the development of exit strategies are included in the RP in order to assure a certain degree of sustainability

All necessary planning documentation, analyses (institutional, financial, economic, and technical), a summary of the Environment Assessment and required checklists as described in ADS 202 5 4 are included as part of the RP Annexes are described below

- 1 CONCADE Results Package (Annex A),
- 2 CN Results Framework (Annex B),
- 3 Affirmation Statement of Adherence to Current Policies (Annex C), and
- 4 Certification Pursuant to Section 611(E) of the Foreign Assistance Act of 1961, as Amended, requiring USAID/Bolivia Mission's Director signature (Annex D)

The following sections describe the seven categories of information for an RP as required by ADS Section E202 5 4a, or references where this information can be found in more detail. An additional category, "Period of Achievement," while not required by the ADS, is herein included to specify the time frame for achievement of the program objectives

1 The set of activities designed to achieve the RP results. Planned activities in the areas of policy strengthening, agriculture development, market research, extension services and technology transfer, infrastructure development, credit and subsidies, and public awareness are described in detail in the RP, including intended results, proposed partners, and implementation procedures/arrangements. In order to carry out appropriate alternative development efforts, a direct contract will be awarded by USAID to a U S firm or institution under fully competitive procedures to provide and manage all technical assistance required for the Activity. The Contractor will provide U S, third-country and Bolivian personnel for both long and short-term technical assistance and specific administrative requirements for the implementation of CONCADE. The Contractor will work under a performance-based contract and will be responsible for ensuring that all appropriate implementation actions are carried out by CONCADE implementing entities in order to achieve CN expected results.

In coordination with the GOB's Regional Alternative Development Program (PDAR), the Contractor will continue to collect data on Chapare economic development and initiate efforts to track information concerning coca including number of zero coca agreements, number of families included in the agreements, number of hectares slated for eradication, the time frame for eradication, and the number of hectares actually eradicated. To assure the timely and efficient flow of information between PDAR and the GOB Coca Eradication Entity (DIRECO), a PDAR staff member will be seconded to DIRECO. The CN Results Framework contains a set of Primary Intermediate Results as well as a set of Secondary Intermediate Results. IR 3 "Existing Coca Eradicated", and IR 4 "Sustainable Alternative Development Established", relate directly to the proposed interventions described in the RP. The expected results to be achieved in order to comply with the Special Objective will be tracked by a series of indicators specifically adopted for the Activity, including, but not limited to annual gross and net coca eradication,

*d*

hectares of licit crops planted in the Chapare, net income through licit crop production, number of sustainable business operating in the Chapare, the value of licit products leaving the Chapare, and an increased capacity among local municipalities and communities to maintain their own road network as outlined in Section IV B of the RP

**2 Analysis required to approve activities** The CN Results Package provides sufficient information and analysis to approve this program. Prior to the design, the following studies were conducted to assist in the design effort: integrated pest management, credit and cost recovery, an environmental assessment and a municipality assessment. The findings of these studies have been incorporated into the RP. As part of the design process, institutional, economic and financial analyses were conducted and are included in the RP.

**3 Explanation of how activities will achieve the intended results** The Results Package Section IV, Consolidation of Alternative Development Efforts, describes how Sub-Intermediate Results will contribute to the attainment of CN Intermediate Results and the Special Objective. Section IV E, Alternative Development Consolidation Program, further outlines how planned activities will achieve sub-intermediate, intermediate and special objective level results.

**4. Personnel with the knowledge and capacity to deliver results** The CN SOT, the new contractor, and the GOB will jointly work at the policy and implementation levels to develop the full knowledge and capacity needed for achieving all levels of results. To support the work carried out by the GOB implementing entities, NGO/private firms with experience in tropical agricultural development will be selected on the basis of the personnel qualifications (levels of related experience/education/knowledge, and orientation towards the goals of the program including the eradication of coca). Further, an institutional analysis was conducted which reflected that the GOB required assistance to strengthen its capacity to deliver results.

**5 Responsibilities and authorities for results achievement** The Delegation of Authority under ADS 103 5 14b1 provides the Mission Director with the authority to implement strategic, special and supportive objectives, including authority to negotiate and execute bilateral grants and to approve documents related thereto. As cited in the DOA Mission Order 100-1, the ADS 103 also states that the Mission Director may redelegate this authority on an ad hoc basis. It is thus expected that the actual implementation of these activities will be carried out at the SO and IR levels, with further Mission Director approvals only as necessary. Section IV A, Activity Management, Coordination and Decision Making describes the roles and responsibilities of each implementing entity and the role of the CN SOT.

**6 USAID and partner's funding for results achievement** CONCADE consists of \$60 million in planned life of activity provided by the Bureau of International Narcotics Control and Law Enforcement of the US Department of State (INL). The Government of Bolivia (GOB) will provide \$20 million for counterpart resources. Continued financial and other support for this RP for other than the current year is contingent upon satisfactory performance in net coca reduction, alternative development progress, the availability of funds, and subsequent transfer of such funds to USAID by INL. In the event that the USG contribution is decreased, the GOB contribution

E

may be reduced accordingly. However, the GOB's contribution will provide an amount equal to one third of the amount of the Grant provided by the USG

**7 Performance monitoring for results achievement** The Results Package Section V, Performance Monitoring Plan, describes the results-driven monitoring procedures and responsibilities. The Contractor will set up the system and actually manage the data base while gradually training PDAR staff in its operation, management and use. Once PDAR staff is deemed to be sufficiently trained and capable of managing the data base, the contractor will turn monitoring responsibilities over to PDAR.

**8. Period for results achievement** Designs and analysis for all planned new activities are described in the RP and will begin following the selection of the Contractor scheduled for May or June 1999. The strategy period for the RP is FY 1998 to FY 2002.

**IV. OBLIGATION PLANS.** With your approval, an obligation of \$1,643,000 will be made prior to the end of FY-98 with the Government of Bolivia for the Counter-Narcotics Objective through a Counter-Narcotics Sectorial Special Objective Agreement (CN SOAG). This initial FY-98 obligation will be used to initiate activity implementation with the contractor. Subject to the availability of funds and compliance with net coca eradication targets, SOAG amendments will be executed to obligate \$15,000,000 in FY-99, \$18,000,000 in FY-2000, \$18,000,000 in FY-2001, and \$7,357,000 in FY-2002.

**V. AUTHORITY** ADS Section 103.5.14b(1) delegates to you the authority to implement strategic, special and support activities, or to successfully redelegate that authority to lower levels. Clearances listed below are consistent with those required by Mission Order 100-1, on delegations of authority. This RP approval is undertaken as part of the implementation of USAID/Bolivia's Counter-Narcotics Special Objective.

**VI. RECOMMENDATION** In requesting your approval of this Results Package, ADS 202.5.7 requires that agreements meet applicable statutory, regulatory and USG policy requirements prior to obligation of funds. Additionally, the Reengineering Transition Guidance Cable No. 2 (STATE 221490, 9/18/95) requires that prior to obligation, analyses (technical, institutional, financial and environmental), as applicable, must be completed, that implementation and disbursement methods must be adequately identified and that adequate planning must have been completed with respect to the intended results to satisfy FAA Section 611(a). These analyses and items are addressed in this Results Package. In approving this Results Package, you are thus acknowledging that the above-mentioned components of ADS 202.5.7 and the Reengineering Transition Guidance Cable No. 2 will be adequately addressed prior to obligation of these funds. In the revised DOA Mission Order No. 100-1 dated March 31, 1998, USAID/Bolivia has established the results package approval stage as a check point to insure that these planning elements are adequately addressed prior to obligation. Accordingly, you are

requested to approve the Counter-Narcotics Results Package developed for providing basic guidelines for the management and implementation of the Counter-Narcotics Consolidation of Alternative Development Efforts (CONCADE) Activity No 511-0643, by signing in Annex D and in the space below

APPROVED [Signature]  
DISAPPROVED \_\_\_\_\_  
DATE 8/27/98

[Signature]  
Drafted by CN RBAum/CDerrick

Clearances

SOS HDiezdeMedina	<u>DRAFT</u>	date	<u>08/26/98</u>
RLA WHoppe	<u>WJH</u>	date	<u>8/27/98</u>
RCO JDunlap	<u>[Signature]</u>	date	<u>8-27-98</u>
FMO JFunkey	<u>[Signature]</u>	date	<u>8/27/98</u>
A/DD PEhmer	<u>[Signature]</u>	date	<u>8/27/98</u>

h:\cn\design\memo

Annex A

**Results Package Document**

**Counter-Narcotics Consolidation of  
Alternative Development Efforts  
(CONCADE)**

RESULTS PACKAGE DOCUMENT  
COUNTER-NARCOTICS CONSOLIDATION  
OF ALTERNATIVE DEVELOPMENT EFFORTS  
(CONCADE)

## TABLE OF CONTENTS

	Page
I Problem Statement	1
A Overwhelming Market Demand	1
B Wide Availability of Production Inputs Including Labor	2
C Weakness of Law Enforcement Institutions	3
D Weak Public Support	3
II Background	5
A The Chapare	5
B Previous USAID Involvement in the Region	7
C Government of Bolivia Strategies and Commitment	9
1 Law 1008	9
2 Plan Dignidad	10
a Introduction	10
b Alternative Development Strategies	11
III Other Donor Contributions, Commitment, and Capacity	13
A Consultative Group Position	13
B Substantial Resource Commitments	15
1 UN Drug Control Program (UNDCP)	15
2 European Union Contributions	15
IV USAID Consolidation of Alternative Development Efforts	17
A Activity Management, Coordination, and Decision Making	17
B The Results Framework	22
C Results Oriented Tasks to be Performed by the Contractor	23
D Conditionality	33
E Alternative Development Consolidation Program	35
1 The Agricultural Continuum	35
2 Crop and/or Agricultural Activity Identification and Selection	39
a Expansion of Existing Crops	39
b New Crops or Agricultural Activities for the Future	39
c Bumpers Amendment Considerations	40
d Forestry and Agro-Forestry	40
3 The Role of Credit	42
a Production Credit	42
b Investment Promotion Credit	42
4 Alternative Development Policy Unit	43
5 The Use of Subsidies and Incentives	43

5

6	The Role of Agricultural Organizations	45
	a. Farmer Organizations	45
	b. The Agricultural Chamber for the Tropics	45
7	Infrastructure Development	46
8	Coordinated Public Awareness Program (USIS)	47
	a. Introduction	47
	b. Objectives	47
	c. Strategy (Audiences and Coordination)	48
	d. Results	49
	e. Components	50
V	Performance Monitoring Plan	52
	A. The Present Situation	52
	B. CONCADE Requirements	52
VI	Environmental Considerations	55
	A. Summary of Alternatives	55
	B. Recommendation of Preferred Alternatives	55
VII	Acquisition and Assistance Plan	59
	A. Institutional Arrangements	59
	B. Acquisition and Assistance Scheduling	59
VIII	Financial Plan	60
	A. Financial Considerations	60
	1. Existing Inventories	60
	2. Financial Oversight, Reviews, and Audits	60
	3. Major Budgetary Assumptions/Explanations	61
	B. Activity Budget	62
Annexes		
1	Economic/Financial Analysis	
2	Institutional Analysis	
3	Assistance Checklist for the CN Special Collectives	

## ACRONYMS

A I D	U S Agency for International Development
AIC	Activity Implementation Committee
AMU	Activity Management Unit
CCVV	Tertiary Roads Department
CFR	Code of Federal Regulations
CN/SOT	Counter-Narcotics Strategic Objective Team
CONALTID	National Council Against Illegal Drugs Traffic
CONCADE	Counter-Narcotics Consolidation Alternative Development Efforts
COP	Chief of Party
CPG	Counter-Narcotics Policy Group
CRDP	Chapare Regional Development Project
CY	Current Year
DA	Development Assistance
DEA	Drug Enforcement Agency
DIRECO	Dirección Nacional de Reconversión Agrícola
EMISBA	Empresa Municipal Integral de Servicios Básicos
ESF	Economic Support Fund
EU	European Union
FAA	Foreign Assistance Act
FAO	Food Aid Organization
FHIA	Fundación Hondureña para la Investigación Agrícola
FONADAL	National Fund for Alternative Development
GOB	Bolivian Government
IBTA	Bolivian Institute of Agricultural Technology
INL	International Narcotics and Law Enforcement
IPM	Integrated Pest Management
IRR	Internal Rates of Return
LAC	Latin American and the Caribbean
LAN	Local Area Network
MIST	Military Information Support Team
MOU	Management Operation Unit
NAS	Narcotics Affairs Section
NGO	Non-governmental Organization
NPV	Net Present Value
PACD	Project Assistance Completion Date
PDAR	Regional Project for Alternative Development
PMP	Performance Monitoring Plan
PVO	Private voluntary Organization
R-4	Results Review and Resource Request
RFP	Request for Proposals
SNC	National Road Service
UNAGRODI	Unidad Agropecuaria de DIRECO
UNDCP	United Nations International Drug Control Programme
US	United States
USAID	U S Agency for International Development
USG	U S Government
ZCA	Zero Coca Agreement

## I PROBLEM STATEMENT

Suppression of coca and cocaine production and trafficking continues to be the major foreign policy interest of the United States Government in Bolivia. The coca problem would be significantly worse today had USG and GOB counter-narcotics efforts not taken place in the past. Over the last eleven years (1988-1998), an average of 8.8 metric tons of cocaine have been seized annually (an average of approximately 4 percent of estimated potential production), 10,900 individuals have been arrested on cocaine related charges, over 7,000 base and hydrochloride labs and 14,000 maceration pits have been destroyed, several major trafficking organizations have been dismantled, and more than 50,192 hectares of coca have been eradicated, representing the equivalent of well over 200 metric tons in annual cocaine production.

Bolivia's illegal coca economy as a percent of the legal economy has dropped steadily, going from 8.5 percent in the late 1980's to about 2.4 percent in 1996, although this has been more a result of lower coca leaf production, lower prices for coca leaf, and improvements in other sectors relative to the coca economy. Today USAID-financed technical assistance and infrastructure, combined with higher farm gate prices for licit products, have begun to transform the Chapare's economy. Licit crop production in the Chapare increased from an estimated 40,600 hectares in 1986 to 96,300 in 1997. Net private investment in licit activities in the Chapare has also increased, including at least 16 firms with over \$8.6 million in their own investments at stake. Despite these accomplishments there has not been a significant reduction in coca production as many farmers are combining the cultivation of coca with licit crops due, in part, to the failure of DIRECO and other agencies to follow-up on the coca eradicated, as well as USAID and the GOB not conditioning alternative development assistance to coca eradication in the past. Indeed, it is estimated that about 18 percent more coca is grown in the Chapare today than in 1987.

The constraints to achieving the Counter-Narcotics Special Objective are formidable. They are summarized here in four main groups: overwhelming market demand, wide availability of production inputs, weak law enforcement institutions, and weak public support.

### A Overwhelming Market Demand

Since Bolivia represents approximately 23 percent of worldwide coca production, it can be said that between \$12 billion and \$19 billion of annual worldwide cocaine demand is supplied by

Bolivia<sup>1</sup> By contrast, spending on all cocaine supply control efforts in Bolivia has averaged about \$50 million annually over the last ten years. Translated into a coca/hectare equivalent, these figures mean that the cocaine coming from one hectare of mature Chapare coca in full production is worth approximately \$820,000 in the US consumer retail market. Of this amount, 77 percent remains in the pockets of US retailers, 22 percent goes to wholesale exporters who move the drug to the US, and about 1 percent, or \$8,200, stays in Bolivia.

In contrast to traffickers who keep most of the proceeds, coca farmers receive approximately \$2,100 per hectare for a year's production of coca leaf, or \$4,430 if they convert the leaves to cocaine base. This can be compared to the GOB's one time cash compensation payment of up to \$2,500 for eradicating that same hectare. (This controversial program began to be phased out in May 1998 and will be totally converted to community compensation payments by October 1998.) This wide divergence in value between coca producers and cocaine consumers gives narco-traffickers significant maneuvering room to adjust the prices (and other incentives) paid to farmers for coca products. Traffickers use this to ensure a stable supply of coca-cocaine products.

#### B Wide Availability of Production Inputs Including Labor

Production of coca and cocaine requires suitable land, labor, planting materials, and precursor chemicals. It is roughly estimated that less than one percent of Bolivia's land potentially suitable for growing coca is currently used for that purpose. In terms of labor availability, Bolivia's current population of 80 million is the poorest in the hemisphere after Haiti, which means that many unemployed and underemployed Bolivians in the highlands and elsewhere have little or no opportunity cost to entering coca production in the Chapare.

The coca plant is one of the easiest and cheapest commercial crops to grow requiring relatively few inputs, including labor. It thrives in a wide range of climate and soil conditions where other crops fail. Controlling the flow of precursor chemicals (kerosene, gasoline, sulfuric and hydrochloric acids, ether, etc.), most of which originate in neighboring countries, has been very difficult to achieve, so that many coca farmers in the Chapare are now producing their own cocaine base. This situation of abundantly available production inputs presents a difficult

---

1 Bolivia's annual production of cocaine base is estimated at 185 MT. Some 50% is exported to be refined into HCL in other countries and 50% is refined in-country. World supply of cocaine base is estimated at 840 MT, making Bolivia's portion 23% of the total.

2 One hectare of mature Chapare coca yields an average of 7.44 Kg of cocaine HCL. The US national average retail price of 1 Kg of HCL is around \$110,000.

law enforcement challenge, as it gives producers many options in adjusting to interdiction and enforcement

#### C Weakness of Law Enforcement Institutions

Several different GOB entities are involved in combatting narco-trafficking. Unfortunately, as in most Third World countries, these entities face little domestic public demand for performance or accountability and are hampered by persistent shortages of trained and educated manpower. Wages will always be relatively low despite USG financed subsidies and bonuses. The judicial system as a whole is based on an antiquated "inquisitorial" adjudication process which is not up to the challenges posed by well financed narco-trafficking interests. While important legal and code reforms are under way with USAID's assistance, significant institution-building is still needed before the judicial system as a whole will assume its proper role as a major force against narco-trafficking. Until this occurs, police enforcement will have a limited effect.

#### D Weak Public Support

Cocaine consumption in Bolivia is only recently becoming a concern. While drug awareness programs have raised the Bolivian public's consciousness of this threat, it is not easy for many Bolivians to appreciate the problems caused by cocaine consumption in far-away countries. This, combined with a tradition of well organized rural unions created to protect campesinos' economic and political rights, has caused many coca unions and their federations to openly oppose and even sabotage the GOB's eradication efforts.

To date, over 90 percent of coca eradication has been voluntary and compensated, despite current laws which effectively make most if not all Chapare coca grown today illegal and subject to forced eradication. Fortunately, it seems that significant changes in public attitudes are taking place. Thanks to a persistent USG interagency campaign over the past year, public opinion as reflected by newspaper editorials and articles has, according to a recent USIS study, shifted to a much more anti-cocaine stance, making strong government action increasingly feasible.

It is also important to note that over the past decade, coca production and processing has evolved in many respects. For example

---

3 A recent study by CELIN (Centro Latino-Americano de Investigacion) showed a dramatic increase in reported lifetime prevalence of cocaine use from 1.2% of respondents in 1992 to 2.4% in 1996. The latter figure approaches US levels and is most likely due to the increase in Bolivian cocaine HCL production. In the past, coca paste and base were shipped to Colombia and other countries for processing into consumable HCL, and little HCL was consumed in Bolivia.

- \* Net coca cultivation in the Chapare has expanded from an estimated 28,000 hectares in 1987, when the eradication program started, to an estimated 33,000 hectares in 1997
- \* While coca production has been pushed further from roads, new production areas have opened in more remote locations such as the Isiboro Sécure and Carrasco National Parks, where alternative development is prohibited
- \* Bolivian coca growers have vertically integrated their production, and many of the growers process coca leaf into cocaine base, thereby generating more income for themselves. Rather than being exported to Colombia, coca base is increasingly converted into cocaine hydrochloride in Bolivia
- \* The importation of precursor chemicals and export of cocaine and intermediate products continues despite successful intermittent control operations. The arrest and prosecution of a considerable number of violators of narco-trafficking laws apparently have not deterred drug trafficking

## II BACKGROUND

### A The Chapare

The principal focus of the Counter-Narcotics Consolidation of Alternative Development Efforts Activity (CONCADE) will be the Tropical Region of the Department of Cochabamba and includes the Provinces of Chapare, Tiraque, and Carrasco. This area, commonly known as the "Chapare", is located just to the north of the eastern most range of the Andes Mountains. It is bounded on the south by the face and foothills of that range following, for the most part, the limits of the Carrasco National Park. Its western boundary is the Isiboro National Park while its northern boundary is largely undefined, following the boundary between the Departments of Cochabamba and Beni. The Ichilo River, which marks the limits with the Department of Santa Cruz, forms the eastern boundary.

The Chapare lies at an approximate altitude ranging from 300 to 2,500 feet above sea level and is characterized by a humid, sub-tropical climate with rainfall ranging from 2,500 to 5,000 millimeters per year as one moves from east to west along the main Santa Cruz to Cochabamba highway. Temperatures are normally quite warm but storms from the south can bring cold conditions resulting in periodic reduced rates of plant growth. There is no real danger of frost, however.

The area sits astride the main east-west highway connecting Bolivia's major cities and the regional and terminal markets in neighboring countries. The area is crossed by a medium sized pipeline which will soon transport petroleum products from recently developed fields in the eastern part of the region to the refinery and national distribution network in Cochabamba. There is a local network for the distribution of electricity to most of the villages and towns in the region. A system of farm-to-market roads, transitable though out most of the year, serves the area as well. Many of the towns and villages have potable water and sewerage systems, most have primary schools and there are secondary schools in the larger towns. There are medical clinics in most of the larger towns and villages and two regional hospitals, one in Villa Tunari and the other in Ivirgarsama.

Area soils range from good to poor in their ability to support tropical agriculture, with the poorer soils being dominant. These soils are formed from the sediment of the many rivers and streams that originate in the steep northern face of the Andes. Their quality is influenced by the parent material in the mountains combined with relatively high rainfall and poor drainage. The western portion of the area is formed from additional calcareous material and is relatively more fertile. Towards the east, the nature of the parent material results in highly acidic soils due to concentrations of aluminum and other

metals which can reach levels that are toxic to some crops. In general, the pH of most soils is low averaging between 4 and 5. Success in overcoming excess acidity with the application of dolomitic limestone from local deposits has been demonstrated, however, most of the soils in this portion of the area are of low fertility.

Many of the foothill areas are too steep and fragile for sustainable farming while those to the north are affected by increasingly poorer drainage and water logging. The best soils are found on the river terraces in the western half of the region but even these are subject to periodic flooding. This flooding, poor drainage, and water logging can limit the usefulness of these soils for some crops.

As the rivers and streams emerge from their mountainous canyons and enter the plains, their velocity drops rapidly. Their capacity to transport silt, sand, and stones is reduced even more drastically resulting in braided, highly unstable channels and frequent flooding of neighboring areas. Flooding in these deposition areas frequently presents hazards to human activities and related infrastructure.

Indigenous peoples that have inhabited the area since time immemorial have been driven to the margins of the region by several waves of settlement. The earliest of these was associated with the trade in salt and charque (dried beef) between the salt pans and mining centers around Potosí and the cattle grazing areas of the Beni. The village of Todos Santos, then at the head of river navigation, was the key entrepôt for this trade. Coca leaf for the alleviation of hunger and fatigue among miners was also an important traditional product of the locality known as the Yungas of Vandíola. The opening of the first road to the region in the era of the Chaco war (1932) brought about some additional incursions by highland peoples. The construction of an asphalt highway in the sixties brought about a second major wave of settlement by highlanders. The surge in demand for cocaine in the US and Europe in the late seventies prompted a third settlement surge that became a flood with the closing of most of the State-owned mines in the mid- to late eighties.

The majority of current Chapare inhabitants are ex-miners from the highlands who have little experience in tropical agriculture, market knowledge, and the fragile nature of the environment in which they live. The population in the Chapare has grown dramatically in the last 25 years, reaching its peak of approximately 200,000 people in 1987. It is currently estimated that around 35,000 families reside in the Chapare, with an average family size of 5-6 members, of which 10,000 families are dedicated exclusively to coca.

## B Previous USAID Involvement in the Region

USAID's first real effort in transforming the region was the construction of a "modern" highway from the city of Cochabamba to the center of the region at Chimore in the early sixties. The purpose of that effort was to provide reliable access to the region and make it suitable for settlement by colonists from the still relatively densely populated highlands. The GOB, with some assistance from USAID, constructed some additional key access roads and supported the introduction of such crops as rubber, citrus, cacao, palm hearts, spices, and colorants. Technical assistance in this phase was provided by the University of Florida under contract with the Office of International Narcotics Matters. These efforts were frustrated by the lack of adequate farm-to-market roads, accessible markets, and instability brought on by a series of military coups and general political unrest. This phase of US assistance came to an end with the takeover of the government by Luis Garcia Mesa in 1980.

Since the early 1980's the Government of Bolivia has undertaken a series of projects intended to phase out the production of coca in the Chapare region. As part of this effort, the GOB has initiated programs to reactivate the licit economy, generate jobs and employment opportunities for persons actually or potentially engaging in coca cultivation or in illegal processing, and provide incentives for private sector investment that will allow the expansion of income and employment opportunities.

The USAID Chapare Regional Development Project (CRDP) was approved in 1983 and began field operations in 1985. The goals of this project were to modify and improve the existing small farm system by first harmonizing actual land use with land use capability. This was followed by increasing agricultural production through the use of improved varieties, new cultivation techniques, and in the judicious use of pesticides. These improvements were accomplished through adaptive research, training and extension. Direct land use improvement activities were complemented by improved infrastructure, better marketing techniques, farmer organizations, and agro-processing.

After the authorization of the CRDP, a number of changes were made in the scope of work, funding, commitments, and duration of project activities. Amendment No. 2 in November 1987, expanded the target area to include field activities in the high valleys southeast of Cochabamba, and established coca eradication conditions for farmer credit. The revised goal for the CRDP was "to reduce coca production in Bolivia", while the revised purpose was "to develop alternative sources of income for people who are engaged or could be potentially engaged in the production, processing and marketing of coca in Bolivia".

In 1989, USAID Bolivia considered a proposed amendment (Amendment No 4, August 1989) which would have expanded the project to include more natural resource conservation activities in the Chapare, provided additional financial resources for field activities, further extended the life-of-project to September 30, 1994, and made significant changes in project implementation and management procedures. The components of the CRDP included a) agriculture and forestry production, b) rural industry and marketing, c) productive, transport and community infrastructure, d) institution building, and e) credit. Although the amendment was never implemented, in 1991, the approval of the Cochabamba Regional Development Project (CORDEP, Project No 511-0617), permitted a continuation and expansion of activities initiated in 1983 under the CRDP.

The original goal of CORDEP was to increase investment, productivity and employment in licit activities to help Bolivia transform its economy from one that was based on the production of coca to an economy that does not have to rely on such production. The purpose of CORDEP was to develop alternative sources of income and employment for people within the project area, i.e. the Chapare and the High Valleys of Cochabamba. The CORDEP project, which is still ongoing (until May 1999), has four components which encompass a variety of activities that have built on the experiences and accomplishments of the earlier CRDP. These components are a) marketing, b) capital resources, c) sustainable small farm production, and d) project management. Though the original project goals have remained constant, the project left the High Valleys in 1994 to concentrate its resources in the Chapare. Additionally, CORDEP had originally been involved with several efforts in both the parks and their surrounding buffer zones, such as environmental education, park infrastructure, tree nurseries, reforestation, creating management plans and delimiting the national parks' boundaries.

As a result of the CRDP and CORDEP activities virtually everyone in the Chapare has directly benefitted from alternative development in terms of roads, bridges, electricity, water systems, as well as terms of a general strengthening of the licit agricultural economy. Approximately 9,000 families have received project-funded planting materials and/or technical assistance. Additionally, over 8,500 families have been connected to the national electrical grid. Additionally, the many farmers who have purchased or obtained improved planting materials and learned improved farming practices from their neighbors can be considered to be indirect beneficiaries. By December of 1997, the combined efforts of the CORDEP and CRDP projects had financed the completion of 754 km of improved roads, 62 km of cobble stone roads, maintained 2,465 km of roads, and constructed 92 bridges.

Furthermore, under CRDP and CORDEP, a variety of agro-forestry practices have been promoted. These include the use of live

fence posts, the planting of legume cover crops, reforestation in uncultivated areas, tropical fruit tree plantations, improvement of short and long term fallow practices and improvement of forage crops. It is recognized that agro-forestry farming systems and research, as well as sustainable "pure" forestry extraction are critical to the Chapare's future, beginning in 1996 this development aspect began to be handled at the donor level principally by the Food and Agricultural Organization of the United Nations (FAO) through financing from the UN Drug Control Program (UNDCP)

Also, access to markets is no longer the constraint that it once was as a result of the infrastructure and market development assistance provided under CRDP, CORDEP, and other alternative development programs. Even with the dramatically increased output of licit products, farm-gate prices have continued to stay high because of improved roads, the opening of new domestic and export markets, and improved product quality.

A further significant result of the success of alternative development is that it has helped to change public opinion concerning counter-narcotic activities in the country. Bolivian public opinion today is much more accepting of the fact that Chapare farmers have viable licit options to coca production. The success of alternative development and the message that 95 percent of the coca produced in the Chapare is eventually converted into cocaine, are core themes which have helped to convince Bolivians that the "poor campesinos" are not only engaged in an illegal endeavor, but are now better off than 90 percent of the campesinos in the country, even if their coca crops disappear.

## C Government of Bolivia Strategies and Commitment

### 1 Law 1008

The first sincere attempt by the GOB at addressing the coca-cocaine trade was the enactment of Law 1008 in 1988. Among several important steps, the law established three production zones distinguishing between traditional coca production for legal domestic consumption and illegal production zones whose coca was destined to the illicit coca-cocaine international market. A third category encompassing transitional production zones was also specified where the production of coca leaf would be legal for 10 years when it would then become illegal (April 1998).

The Traditional Zone comprising 12,000 hectares, is dispersed among several provinces of the Departments of La Paz and Cochabamba where the coca bushes tend to be planted on terraced hillsides and produce a "sweeter" leaf much preferred for direct, traditional consumption. Coca produced in these traditional

areas (up to 12,000 hectares), was allowed to remain legal for traditional and legitimate uses for the life of the law and presumably into the future

The Transitional coca production zones were defined as those areas resulting from spontaneous or planned colonization and where coca had been planted as a result of increasing demand from the international cocaine trade. The term "excess" is used to apply to coca produced in these zones, and while considered legal for a ten-year period until April 1998, (A coca bush is thought to have an average productive life of 10-12 years ) this "excess" coca has been subject to a voluntary and compensated eradication program loosely tied to crop substitution activities under the name of Alternative Development. Strictly speaking, the coca being produced in these zones is now illegal and can be subject to forced eradication without compensation. However, due to socio-political reasons, the GOB has opted for some forced eradication, a decreasing compensation formula, proposed relocation/recolonization efforts, and increased Alternative Development activities.

The Illegal Production Zones are defined in the law as the rest of the country which does not fall into either of the first two categories. Since all the coca produced in these areas is illegal, it has tended to be produced in the more remote and inaccessible areas, especially in the national parks. Over the past 10 years a portion of this coca has been forcefully eradicated, but no compensation or Alternative Development activities have been provided. It is currently estimated that this illegal coca, plus the "excess" coca being grown in the traditional zones adds up to approximately 33,000 hectares.

## 2 "Plan Dignidad"

### a Introduction

The "Plan Dignidad", or "With Dignity Plan" was released in December 1997, and contains the basis for a four part strategy for Bolivia's withdrawal from the coca-cocaine trade by the year 2002. The four parts to the strategy include Alternative Development, Prevention and Rehabilitation, Eradication of Illegal Coca Bushes, and the Interdiction of Cocaine Products. The Mission's R4 Counter-Narcotics Section is directed principally at Alternative Development activities in the Chapare, and which coordinates with the Narcotics Affairs Section (NAS) on eradication issues, leaves interdiction, prevention, and rehabilitation activities to the GOB and other donors.

The Plan is extremely ambitious and will require resources far beyond those which can be provided locally. Nevertheless, it is seen by the Mission and other national and international observers as a critical first step, as well as the first sincere

commitment on the part of the GOB to do what it can to achieve a drug-free society within the time allotted

As part of the demonstration of this sincerity, the GOB has re-established an inter-ministerial coordinating body (the National Council Against the Illegal Drugs Traffic, CONALTID), which reports to the Vice-President and includes the ministries of Foreign Affairs, Government (Interior), Treasury, National Defense, Agriculture, and Health. Its technical/implementation agencies include the Vice-ministries of Alternative Development (Ministry of Agriculture), and Social Defense and the National Police (both under the Ministry of Government). The ultimate success of this body has yet to be determined, however, representatives from the UNDCP recently noted that since January it has been meeting as much as two to three times per week.

The financial requirements for the "Plan Dignidad" are enormous attempting to approximate the enormity of Bolivia's illicit drug problem. In total, the Plan estimates that US\$ 952.0 million will be required from all sources, approximately US\$ 190.0 million per year over five years. This is broken down into US\$ 700 for Alternative Development (73 percent), US\$ 129.0 for Interdiction (14 percent), US\$ 108.0 million for Eradication (11 percent), and US\$ 15 million for Prevention and Rehabilitation (2 percent). The Plan further proposes that the GOB be responsible for at least 15 percent of the total, with 85 percent or US\$ 809.0 million being provided by the international community over the five-year period, or US\$ 162.0 million per year. This seemingly unequal division of financial responsibility is based on issues of "Shared Responsibility" (supply versus demand), the extreme poverty of Bolivia (The second poorest country in the hemisphere after Haiti), and the fact that the success of the Plan will benefit the worldwide community of nations and not only Bolivia.

#### b Alternative Development Strategies

The Plan proposes to build on successful Alternative Development activities of the past, much of which supported by USAID, including the introduction of new crops, the consolidation of an extensive road network connected to interdepartmental trunk roads, improvements in education and health facilities, sanitation infrastructure, agro-industrial promotion, and the provision of electrical power.

A refocusing of the GOB's Alternative Development activities as specified in the Plan would include a greater emphasis on marketing linkages for the alternative crops which would be promoted including a special focus on agro-processing and other value-added mechanisms to further improve the position of alternative crops versus the cultivation of coca, the provision of tax incentives for entrepreneurs who are willing to invest in

the coca producing transition zones, improved agricultural research which is aimed at the marketing of final products, facilitating and improving the mechanisms by which agricultural inputs are made available to farmers, and, the development of special industrial Development Zones complete with necessary services for industrial facilities offering employment, higher incomes, and, most importantly, an alternative to the relatively high incomes offered by the production and processing of coca

The Plan goes on to elaborate additional initiatives including development activities in the "Expulsion Zones" (Normally highland areas which provide the migrants to the coca-producing lowlands ) in an attempt to stem the flow of migrants seeking a better life in coca producing areas, and, the relocation/colonization of at least 5,000 families already living in coca producing areas to other areas of the country where, presumably, the possibilities for Alternative Development are greater. Since other donors have pledged support for these activities, it is the Mission's preference not to work with them so as to concentrate its efforts on the goals of coca eradication and the improvement of incomes and employment opportunities in the Chapare

### III OTHER DONOR CONTRIBUTIONS, COMMITMENT, AND CAPACITY

#### A Consultative Group Position

The XI International Cooperation Consultative Group meeting was recently held in Paris (April 1998). The Group welcomed the GOB's "Plan Dignidad" while calling it ambitious and asking for a prioritization of activities. It especially recognized the political commitment and will that the Plan represents. Following is a summary of the recommendations which the group made to the GOB, as well as to the international community in general.

#### Recommendations to the GOB-

- \* further strengthen its drug control coordination and cooperation efforts at international and regional levels,
- \* update the drug control framework (Law 1008), particularly taking into account the need to clarify the definition of licit and illicit coca in the country, increasing the effectiveness of measures against money laundering, improving control of precursors and controlled chemicals, as well as strengthening the national judicial system and assuring that human rights are not violated,
- \* strengthen its ability in tracking, identifying and punishing persons involved in the laundering of revenues from illicit drug transactions,
- \* strengthen national institutions such as the Vice-Ministry for Alternative Development and the National Fund for Alternative Development (FONADAL), the prefectures and municipalities of the Chapare to assure a clear framework and coordination with regard to alternative development, eradication and drug control, as well as curtail corruption within the public sector,
- \* reinforce control and monitoring of coca eradication and articulate this process to the implementation of alternative development projects,
- \* incorporate alternative development activities into the mainstream national development process, including coordination at all levels--it is also important to tie the activities in the coca cultivation areas to coca eradication objectives,
- \* elaborate a detailed plan of action including a clear prioritization of specific activities and measurable achievement indicators,

- \* emphasize human resources development through education, training, and improved facilities in fields with employment opportunities,
- \* conserve the natural resources and implement environmentally sustainable activities, and develop areas such as eco-tourism, forestry, and agro-forestry,
- \* improve living conditions and provide income generating activities in the "expulsion zones",
- \* promote the participation by the private sector in the Cochabamba Tropics, including special tax incentives,
- \* establish a climate of mutual confidence among the three main parties involved in the debate about coca and alternative development including the government, the target groups, and the donor community,
- \* maintain a clear, unambiguous message to producers that there is no future for illicit crops, backing this with concrete drug law enforcement actions including vigorous measures to stop new plantings of coca bushes, and,
- \* disseminate coherent information and develop public awareness campaigns in the country on the negative effects of coca production, drug trafficking and abuse

#### Recommendations to the International Community-

- \* review the possibilities to support the Bolivian Anti-Narcotics Strategy 1998-2002, as well as co-ordinate all alternative development activities with the Vice-Ministry for Alternative Development, FONADAL, and other departmental and local authorities,
- \* continue and reinforce efforts in demand reduction and control measures,
- \* consider "debt for alternative development swaps", and,
- \* the international multilateral financial institutions must recognize the importance of drug control and should be willing to assist the Bolivian Government in its efforts to combat narco-trafficking

It should be noted that the vast majority of the recommendations made by the Consultative Group coincide with the Mission's R4 document and its strategy for accomplishing its Strategic Objective pertaining to Counter-Narcotics activities

## B Substantial Resource Commitments

### 1 UN Drug Control Program (UNDCP)

The UNDCP is the second largest donor for counter-narcotics activities after USAID. Its current program valued at approximately US\$ 4 0 million includes institutional development support at the ministerial CONALTID level, as well as to FONADAL and the National Directorate for Agricultural Reconversion (DIRECO), principally in the form of information systems in the case of the latter. Support is also given to the Vice-Ministry for Social Defence in the area of precursor interdiction, the confiscation of assets, and money laundering. It is also providing support to standardize counter-narcotics information and data with surrounding countries.

Additionally, the UNDCP is in the design stage of a second set of activities including three in the area of Alternative Development: agro-forestry and forestry in the Chapare-- especially on the more fragile lands (US\$ 8 0 million), job skills training by the International Labor Organization (ILO) for coca producers or workers wanting to become skilled and semi-skill workers (US\$ 5 0 million, which will reach 4,000 families), and, a coffee development program in the Yungas (US\$ 1 0). They will also be providing US\$ 2 5 million through UNICEF to create "Healthy Schools" where drug awareness will be taught, as well as US\$ 1 0 million for "Social Communications", which will be a publicity campaign to "demystify coca" and convince the public that coca is harmful to their society (CORDEP has collaborated with the UNDCP in this area previously).

### 2 European Union Contributions

The European Union (EU) concluded negotiations for a future program to assist the GOB in the implementation of its counter-narcotic activities in April 1997. However, a lack of government counterpart funds, and perhaps a lack of EU experience in counter-narcotic activities, have resulted in prolonged delays and implementation had not begun as of June 1998.

In the event that these obstacles are overcome, the EU plans to channel its funding through FONADAL. The program is currently calculated at approximately US\$ 30 4 million over a six-year period with US\$ 24 0 million coming from the EU and US\$ 6 4 million coming from the GOB. (The budget for the EU is calculated in Euros whose conversion to the US dollar fluctuates resulting in approximate US dollar values.)

The components of the EU's program are designed to compliment the Mission's present and future activities and were prepared with a significant degree of collaboration. These planned activities include

- \* A cadastral survey of approximately one million hectares of land in the greater Chapare region which could eventually lead to a land titling program to be implemented by the National Agrarian Reform Institute (INRA) (EU contribution of US\$ 5 0 million, GOB contribution of US\$ 2 3 million )
- \* A credit program directed at farmers and farmer associations willing to substitute alternative crops for coca, plus credit for entrepreneurs willing to invest in agro-processing or related infrastructure This component would be implemented through a bank, or bank-like institution, (possibly one or more NGOs with financial experience), and would function as a loan guarantee program whereby up to 70 percent of a loan would be guaranteed by the program (EU contribution of US\$ 5 0 million, no contribution from the GOB )
- \* Support for infrastructure development which would improve the quality of life through economic growth This activity would work through the main municipalities in the Chapare to construct roads, water and sanitation systems, community electrification networks, and possibly improve the local airport (EU contribution US\$ 6 3 million, GOB contribution US\$ 1 9 million )
- \* Conservation/Environmental Protection activities which would be implemented through local NGOs to assist farmers to improve the management of existing forestry resources on their farms and to improve environmentally sustainable agricultural practices (EU contribution US\$ 5 million, GOB contribution US\$ 4 million)

Furthermore, the EU plans to provide an additional US\$ 7 0 million in operating expenses, equipment, and technical assistance to support the four activities mentioned above

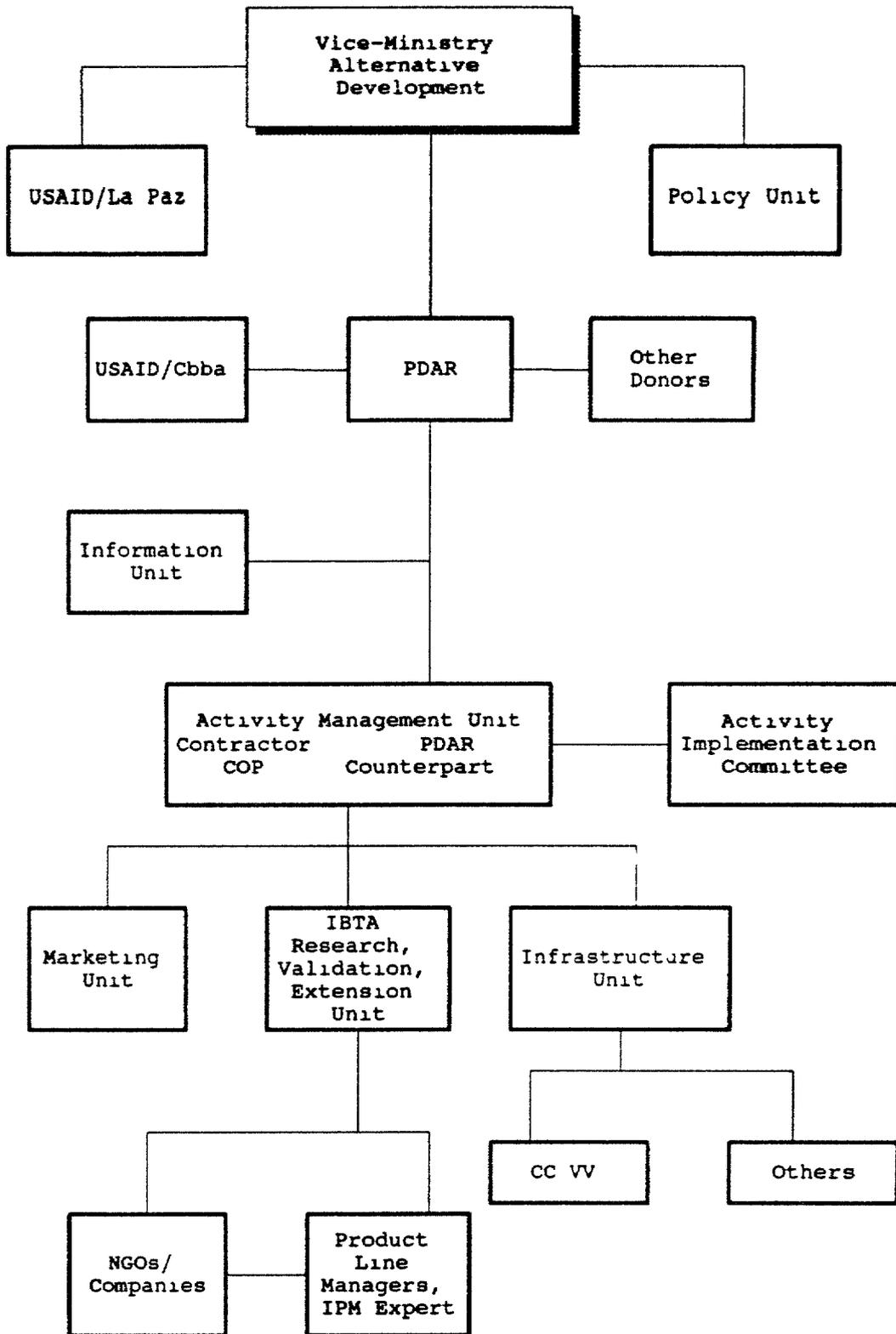
#### IV USAID'S CONSOLIDATION OF ALTERNATIVE DEVELOPMENT EFFORTS

##### A Activity Management, Co-ordination, and Decision Making

The Activity will benefit from joint implementation, coordination, and decision making. In La Paz, this will take place between the office of the Vice-Ministry for Alternative Development and the USAID/La Paz CN SOT Chairperson. The newly created Policy Unit assisted by the Contractor and jointly sponsored by CONCADE and the Vice-Ministry, shall report directly to the Vice-Minister. In Cochabamba, it will take place at two levels: between the USAID/Cochabamba Representative and the Director of PDAR for programmatic, planning, and Results Package issues, and, between the PDAR Counterpart and the Contractor's Chief-of-Party (COP) for day-to-day implementation issues. In this last instance, however, where the Contractor's COP and the PDAR Representative will make decisions jointly, since this is a performance-based contract, it will be the direct responsibility of the Contractor to see that they are carried out by the implementing entities. Additionally, the USAID/Cochabamba Representative will serve as liaison between the CN/SOT and the Activity Management Unit (AMU) to provide implementation guidance in conformance with USAID procedures, policies, and results-oriented priorities.

The following illustrative organizational chart demonstrates these relationships, as well as those of the implementing agencies, and is provided for clarity since offerers are free to suggest alternative relationships.

CHART 1.  
CONCADE



The Contractor's COP and the PDAR Counterpart will form the Activity Management Unit (AMU) which is a decision making entity. This unit shall be supported by four sub-units: the Information Unit, the Marketing Unit, the IBTA Research, Validation, and Extension Unit, and, the Infrastructure Unit, all of which are implementation entities. The Activity Implementation Committee (AIC) is composed of the two members of the AMU, representatives from the four sub-units including Caminos Vecinales, and the USAID/Cochabamba Representative who will serve as the AIC Chairperson. From time to time representatives from the NGOs/private companies, as well as the IBTA Product Line Managers might also attend AIC meetings on an as needed basis. The AIC is an advisory body to the AMU and will meet at a minimum on a biweekly basis.

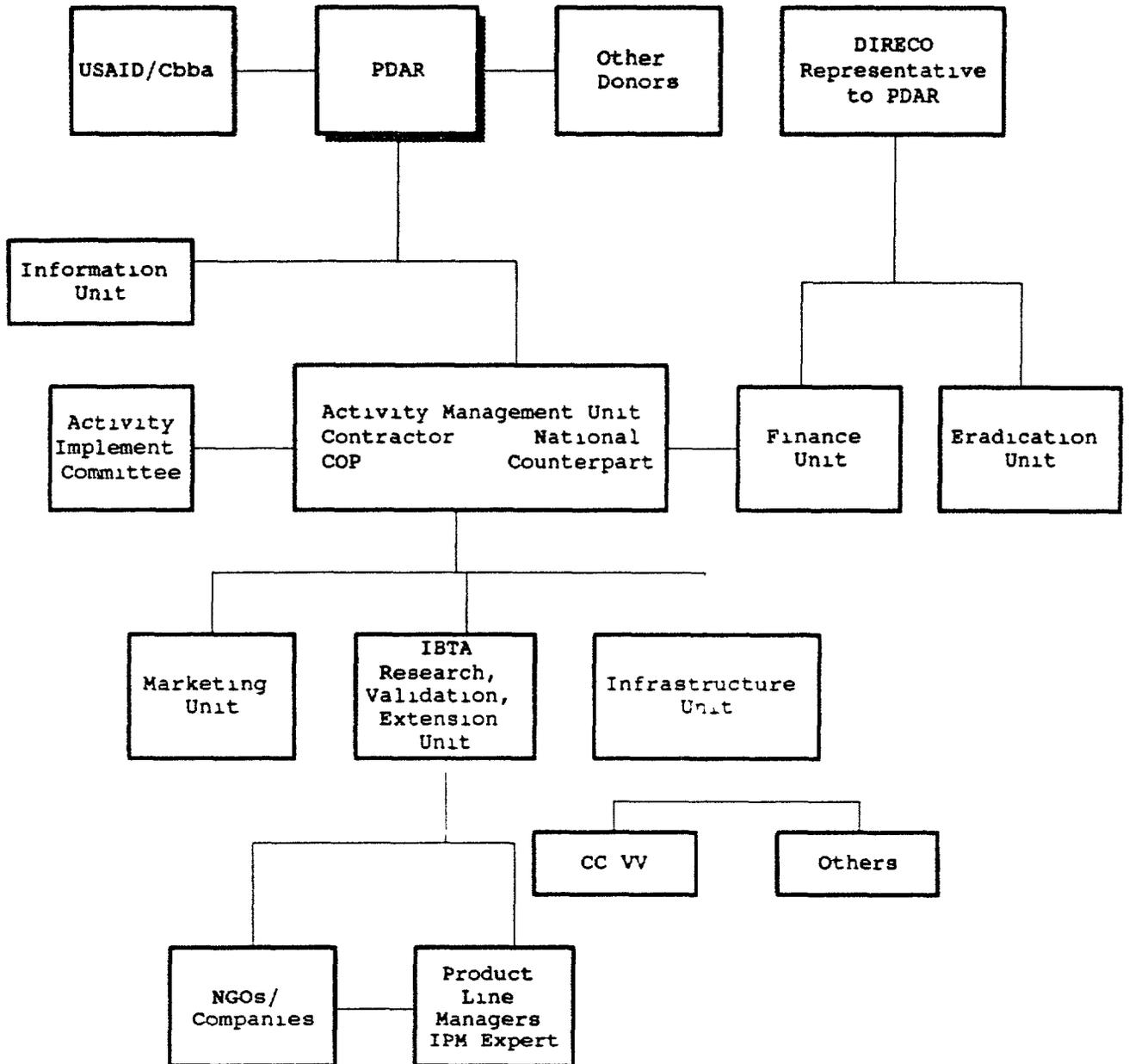
The Information Unit shall receive information/data from PDAR, DIRECO, Caminos Vecinales, and the three sub-units under the AMU and provide data and reports to PDAR, the AMU, and others. As is stated in Section IV, this unit will initially be established and operated by the Contractor, but will eventually be transferred to PDAR.

The Marketing Unit shall be responsible for market research, identification, and specification, as well as the forward contracting for CONCADE-promoted crops, and the oversight of the Investment Promotion Fund. The Contractor shall be directly responsible for the accomplishment of its tasks. The IBTA Unit shall be responsible for applied research, pre-extension training of the employees of the NGOs/private firms, as well as validation of the extension activities performed by them. The Product Line Managers and an Integrated Pest Management (IPM) expert shall be selected and hired by this unit in coordination with the AIC, and shall be assigned as operational experts to the IBTA Unit. On the other hand, the NGOs/private firms shall be hired by the Contractor with guidance from the AIC and IBTA. The Contractor shall coordinate and oversee the activities of this unit. The Infrastructure Unit shall coordinate with and supervise the activities of Caminos Vecinales and any other organization involved in infrastructure. Its activities shall also be the responsibility of the Contractor.

In cases where Zero Coca Agreements result in "Community Compensation" which will be used for activities similar to those of CONCADE, the AIC shall include a representative from DIRECO (Possibly from UNAGRODI, DIRECOS's "quick-response" community development unit, if that unit continues to exist. If not, then the representative would come from DIRECO itself and be at as high a level as possible.) This expanded AIC would plan, program, and coordinate the specific activities for those communities/farmer organizations which will receive community compensation payments for alternative development activities. In

this case the suggested organizational chart would be the following

**CHART 2  
CONCADE and  
DIRECO**



Additionally, because of the need for coordination between DIRECO and PDAR in terms of information/data exchange and compliance in the case of the Zero Coca Agreements, PDAR will fund a position for a PDAR representative to be housed in DIRECO as a coordinator between both organizations. This person would be the day-to-day liaison between the two organizations and have as his/her main responsibility the timely transfer of information between them.

## B The Results Framework

The current Results Framework as stated in the Mission's R4 document for the Counter-Narcotics Objective contains a Special Objective followed by a set of Primary Intermediate Results, as well as a set of Secondary Intermediate Results. IR3, Existing Coca Eradicated, and IR4, Sustainable Alternative Development Established, relate directly to the CONCADE Activity and are described briefly below. However, two of the Primary Intermediate Results, New Coca Plantings Prevented (IR1), and Increased Risks and Reduced Incentives for Coca Production and Marketing (IR2), while critical to the achievement of the SO, will not be directly supported by CONCADE but will fall under the responsibility of NAS, DEA, or other JSJ agencies. Likewise, four of the Secondary Intermediate Results, Effective CN Law Enforcement Established (IR1.1), Bolivian Public Rejects the Cocaine Economy (IR2.1), Police Properly Enforce CN Laws (IR1.1.1), and, GOB Agencies Effectively Investigate and Process CN Cases (IR1.1.2), also fall under the responsibility of other USG agencies.

IR3, "Existing Coca Eradicated" is an area where recent GOB performance has shown significant improvements. In 1997, Bolivia achieved a 7 percent net coca reduction, the first net reduction in several years. The civilian coca eradication agency DIRECO is responsible for negotiating voluntary eradication and verifying forced eradication. Additionally, DIRECO has the responsibility of continued monitoring to assure that no coca is replanted by the farmers on the land where it has been eradicated. DIRECO is financed and equipped by NAS. The achievement of this result will be supported by the annual counter-narcotics certification process. Certification conditionality is expected to place increasing emphasis on net coca eradication targets. Since 1990, USAID has administered ESF, and now INL-funded, balance-of-payments support programs which require progress towards coca eradication and, at times, other counter-narcotics related activities as a condition for disbursement. The receipt of balance of payments resources has enabled the GOB to offset the costs of eradication programs and enforcement. During the next five years, use of performance-based disbursements for balance-of-payments support, subject to the availability of funds, will be continued. Specific conditions will be determined annually through multi-agency consultations and negotiations with the GOB. The FY 1998 balance of payments will be conditioned to specific

targets relating to the destruction of coca seed beds. The actual amount of funding and the terms and conditions for disbursement of the funds will be detailed in a separate balance of payments Agreement. IR3 includes one sub-intermediate result, IR3 1 "Farmers Accept Eradication Conditionality". The basic concept of IR3 1 is to require that farmers agree to eradicate all their coca in order to qualify for continued participation in alternative development programs - Zero Coca Agreements -- as opposed to the partial eradication of the past. This shift in strategy is consistent with the policy of treating coca as an illegal product.

IR4, "Sustainable Alternative Development Established", will be the primary responsibility of USAID, its GOB partners such as the Vice-Ministry for Alternative Development, FONADAL and PDAR, various private sector organizations, and other donors such as the UNDCP and the EU. Previous efforts begun under CORDEP will continue to strengthen the agricultural base of the Chapare and its related infrastructure to provide farm families with alternative sources of sustainable farm income which can provide acceptable living standards without the need to grow coca. This intermediate result will be supported by three sub-IRs: IR4 1, "Sustainable Farm-level Production Capacity Established", IR4 2, "Sustainable Market Linkages Established", and, IR4 3, "Sustainable Market Demand Established".

The expected results to be achieved in order to comply with the strategic objective will be tracked by a series of indicators specifically adopted for the activity, including, but not limited to: annual gross coca eradication totaling 30,000 hectares by 2002, hectares of licit crops planted in the Chapare increasing to 119,000 by 2002, net income generated through licit crop cultivation on Chapare farms increasing by 3-4 percent annually, number of sustainable businesses operating in the Chapare utilizing licit products or supplying licit agro-industries increasing to 80 by the end of the activity, the number of businesses exporting Chapare agricultural products increasing to 15 by the end of the activity, the marketable value of licit produce increasing by 20-20 percent annually, and an increased capacity among local municipalities and communities to maintain their own road networks by the end of the activity by 85 percent.

C Results Oriented Tasks to be Accomplished/Performed by the Contractor, included in Performance Monitoring Plan (PMP)

**Task No 1- Sustainable farm level production capacity for licit crops established**

**Sub-Task No 1 1: Eradication conditionality increasingly accepted by farm families**

Indicator Farm families participating in coca-free areas/agreements and receiving alternative development assistance

Unit of Measure No of farm families, cumulative

Source CONCADE PMP data base containing PDAR/DIRECO information

Frequency Quarterly

Targets

End of CY 1999	10,000
End of CY 2000	22,000
End of CY 2001	27,000
End of CY 2002	30,000

Relationship to Mission's Results Intermediate Result 3 1

**Sub-Task No 1 2 Increased hectares of licit crops planted in the Chapare**

Indicator Increased hectares of licit crops planted in the Chapare

Unit of Measure Increase in hectares planted in licit crops (annual increase and cumulative)

Source CONCADE PMP data base containing NGO/private firms information cross-referenced with annual sample or satellite survey

Frequency Yearly

Targets

End of CY 1999	7,000 has,	cum	101,650 has
End of CY 2000	7,700 has,	cum	109,350 has
End of CY 2001	5,350 has,	cum	114,700 has
End of CY 2002	4,350 has,	cum	119,000 has

Relationship to Mission's Results Intermediate Result 4 1

**Task No 2 Sustainable market linkages established**

**Sub-Task No 2 1 Net income from CONCADE-assisted crops increasing by 3-4 percent annually**

Indicator Average annual income per capita

Unit of Measure U S dollars

Source CONCADE PMP data base

Frequency Yearly

Description Performance for each crop should be monitored to assure the economic viability of each crop over the 1999-2002 period Contractor will be required to submit detail information on crop by crop basis

Targets

End of CY 1999	\$1,780
End of CY 2000	\$1,850
End of CY 2001	\$1,900
End of CY 2002	\$1,960

Relationship to

<b>Mission's Results</b>	<b>Intermediate Result 4</b>
<b>Sub-Task No 2.2</b>	<b>Domestic agro-businesses purchasing Chapare produce and/or supplying agro-inputs on a regular basis</b>
Indicator	Domestic agro-businesses purchasing Chapare produce and/or supplying agro-inputs on a regular basis
Unit of Measure	No of businesses (cumulative)
Source	CONCADE PMP data base
Frequency	Quarterly
Description	A sustainable business has a minimum of \$25,000/year in gross income with its own capital at risk and operating consistently for at least one year
Targets	End of CY 1999 55 businesses End of CY 2000 65 businesses End of CY 2001 75 businesses End of CY 2002 80 businesses
Relationship to Mission Results	Intermediate Result 4 2 1
<b>Sub-Task No 2 3</b>	<b>Agro-businesses exporting Chapare produce on a regular basis</b>
Indicator	Agro-businesses exporting Chapare fresh and processed products on a regular basis
Unit of Measure	Number of agro-business (cumulative)
Source	CONCADE PMP data base
Frequency	Quarterly
Description	A sustainable business has a minimum of \$25,000 year in exports, with its own capital at risk, and operating consistently for at least one year
Targets	End of CY 1999 12 businesses End of CY 2000 13 businesses End of CY 2001 14 businesses End of CY 2002 15 businesses
Relationship to Mission Results	Intermediate Result 4 2 2
<b>Sub-Task No 2 4</b>	<b>Marketable value of CONCADE-promoted crops increasing by 20-30 percent annually</b>
Indicator	Value of licit produce
Unit of Measure	Thousands of U S dollars
Source	CONCADE PMP data base
Frequency	Quarterly

Description Marketable volume excludes wastage, farm level consumption, and any other consumption within the Chapare

Targets  
 End of CY 1999 \$52,000  
 End of CY 2000 \$64,000  
 End of CY 2001 \$74,000  
 End of CY 2002 \$91,000

Relationship to Mission Results Intermediate Result 4 3 1

**Sub-Task No 2 5 Exports of Chapare licit produce increasing annually**

Indicator Annual value of Chapare fresh and processed produce exported

Unit of Measure Thousands of dollars (non-cumulative)

Source CONCADE PMP database

Frequency Quarterly

Description Value of all Chapare crops at the border, not just those supported by CONCADE

Targets  
 End of CY 1999 3,000  
 End of CY 2000 5,000  
 End of CY 2001 6,000  
 End of CY 2002 7,000

Relationship to Mission Results Intermediate Result 4 3 2

**Task No 3 Alternative Development Organizations Strengthened**

**Sub-Task No 3 1 Increased capacity for sustainability in farmer organizations**

Indicator Number of legally registered farmer organization being funded with fees for services paid by their members

Source Farmer organizations providing information to NGO private firms

Frequency Quarterly

Description Business oriented farmer organizations include syndicates, associations, cooperatives, etc

Targets  
 End of CY 1999 12  
 End of CY 2000 24  
 End of CY 2001 36  
 End of CY 2002 50

**Sub-Task No 3 2 Farmer organizations graduated from Activity assistance**

Indicator Farmer organizations graduated

Unit of Measure Percentage of farmer organizations graduated

Source Farmer organizations providing information to NGO/private firms  
 Frequency Quarterly  
 Description Farmer organizations include syndicates, associations, cooperatives, etc which have graduated from continuous assistance  
 Targets  
 End of CY 1999 0 percent  
 End of CY 2000 10-15 percent  
 End of CY 2001 16-25 percent  
 End of CY 2002 26-50 percent

**Sub-Task No 3 3 Number of farmer organizations paying for their own technical assistance**

Indicator Increased number of farmer organizations capable of paying for their own technical assistance  
 Unit of Measure Number of farmer organizations  
 Source Information provided by farmer organizations validated by NGO/private firms  
 Frequency Quarterly  
 Targets  
 End of CY 1999 0  
 End of CY 2000 10  
 End of CY 2001 25  
 End of CY 2002 40

**Sub-Task No 3 4 Increased capacity for technology transfer in GOB organization**

Indicator Individual research activities completed in any given calendar year positively validated and adopted by farmers  
 Unit of Measure Percent of individual research activities being adopted by farmers  
 Source Farmer organizations providing information to NGO private firms  
 Frequency Yearly  
 Description At least 25% of farmers receiving CONCADE assistance should adopt the results of each individual research activity to be counted as an adopted technology  
 Targets  
 End of CY 1999 25%  
 End of CY 2000 35%  
 End of CY 2001 50%  
 End of CY 2002 75%

**Sub-Task No 3 5 Increased capacity for technology transfer in non-government/private organizations**

Indicator Increased average annual yield  
 Unit of Measure Metric tons or kilograms per hectare  
 Source CONCADE PMP data base

Frequency	Yearly
Description	This indicator implies improved applied research capability being appropriately validated and transferred to NGO/private firm for extension services, Contractor will be required to provide detailed information on a crop by crop basis New crop increases will need to be established by the Contractor with USAID/GOB approvals
Targets	<p>Bananas</p> <p>End of CY 1999 70 mt /has</p> <p>End of CY 2000 90</p> <p>End of CY 2001 110</p> <p>End of CY 2002 135</p> <p>Pineapples</p> <p>End of CY 1999 11 5 mt /has</p> <p>End of CY 2000 12 0</p> <p>End of CY 2001 13 0</p> <p>End of CY 2002 13 5</p> <p>Passion Fruit</p> <p>End of CY 1999 10 0 mt /has</p> <p>End of CY 2000 10 0</p> <p>End of CY 2001 10 0</p> <p>End of CY 2002 10 0</p> <p>Palm Heart</p> <p>End of CY 1999 675 kg /has</p> <p>End of CY 2000 750</p> <p>End of CY 2001 815</p> <p>End of CY 2002 900</p> <p>Black Pepper</p> <p>End of CY 1999 3 mt has</p> <p>End of CY 2000 3</p> <p>End of CY 2001 3</p> <p>End of CY 2002 3</p>

**Sub-Task No 3 6 Local capacity for sustainable maintenance of road infrastructure enhanced**

Indicator	Costs of road maintenance covered by non-CONCADE resources
Unit of Measure	Percentage of costs covered by non-activity resources
Source	CONCADE PMP data base
Frequency	Quarterly
Description	Financial contributions are expected to come from municipalities, farmer organizations, community compensation, and/or road users It is estimated that this process shall take the first year of the activity After this time specific percentages of the total costs of road maintenance shall be established
Targets	End of CY 1999 municipal 10% community 5%

End of CY 2000 municipal 15% community 10%  
 End of CY 2001 municipal 35% community 20%  
 End of CY 2002 municipal 55% community 30%

**Sub-Task No 3 7 Local capacity for sustainable improvement of road infrastructure enhanced**

Indicator Costs of road improvement covered by non-CONCADE resources  
 Unit of Measure Percentage of costs covered by non-activity resources  
 Source CONCADE PMP data base  
 Frequency Quarterly  
 Description Financial contributions are expected to come from farmer organizations, community compensation, and/or road users It is estimated that this process shall take the first year of the activity After this time specific percentages of the total costs of road improvement shall be established  
 Targets  
 End of CY 1999 community, others 5%  
 End of CY 2000 community, others 10%  
 End of CY 2001 community, others 20%  
 End of CY 2002 community, others 30%

**Task No 4 Private Sector Investment in agriculturally-based industries stimulated**

**Sub-Task No 4 1 Investment credit needs identified**

Indicator Credit applications including feasibility studies received from prospective investors and favorably reviewed by USAID GOB  
 Unit of Measure No of credit applications  
 Source CONCADE PMP data base  
 Frequency Yearly  
 Description As part of this task current credit options shall be analyzed and procedures for managing credit shall be identified  
 Targets  
 End of CY 1999 5 applications  
 End of CY 2000 10 applications

**Sub-Task No 4 2 Investment credit fund established and operational.**

Indicator Firms established in the Chapare receiving loans from investment fund  
 Unit of Measure No of firms  
 Source CONCADE PMP data base  
 Frequency Yearly

Description	Firm selection and loan approval shall be based on Policy Unit/FONADAL/USAID/AMU established criteria								
Targets	<table border="0"> <tr> <td>End of CY 1999</td> <td>0 business</td> </tr> <tr> <td>End of CY 2000</td> <td>3 businesses</td> </tr> <tr> <td>End of CY 2001</td> <td>5 businesses</td> </tr> <tr> <td>End of CY 2002</td> <td>5 businesses</td> </tr> </table>	End of CY 1999	0 business	End of CY 2000	3 businesses	End of CY 2001	5 businesses	End of CY 2002	5 businesses
End of CY 1999	0 business								
End of CY 2000	3 businesses								
End of CY 2001	5 businesses								
End of CY 2002	5 businesses								
<b>Task No 5</b>	<b>Employment Generated</b>								
<b>Sub-Task 5 1</b>	<b>Licit agricultural-based employment</b>								
Indicator	Jobs created								
Unit of Measure	No of full-time jobs created								
Source	CONCADE PMP data base, assumed as a result in increased hectares by crop from Sub-task 1 2								
Frequency	Yearly								
Description	Indicator includes non-cumulative figures provided in the targets								
Targets	<table border="0"> <tr> <td>End of CY 1999</td> <td>2,000</td> </tr> <tr> <td>End of CY 2000</td> <td>4,000</td> </tr> <tr> <td>End of CY 2001</td> <td>5,000</td> </tr> <tr> <td>End of CY 2002</td> <td>6,000</td> </tr> </table>	End of CY 1999	2,000	End of CY 2000	4,000	End of CY 2001	5,000	End of CY 2002	6,000
End of CY 1999	2,000								
End of CY 2000	4,000								
End of CY 2001	5,000								
End of CY 2002	6,000								
<b>Sub-Task No 5 2</b>	<b>Licit non-agricultural-based jobs created</b>								
Indicator	Jobs created								
Unit of Measure	No of full-time jobs created								
Source	CONCADE PMP data base								
Frequency	Quarterly								
Targets	<table border="0"> <tr> <td>End of CY 1999</td> <td>300</td> </tr> <tr> <td>End of CY 2000</td> <td>350</td> </tr> <tr> <td>End of CY 2001</td> <td>400</td> </tr> <tr> <td>End of CY 2002</td> <td>450</td> </tr> </table>	End of CY 1999	300	End of CY 2000	350	End of CY 2001	400	End of CY 2002	450
End of CY 1999	300								
End of CY 2000	350								
End of CY 2001	400								
End of CY 2002	450								
<b>Task No 6</b>	<b>Alternative Development subsidies reduced</b>								
<b>Sub-Task No 6 1</b>	<b>Subsidies on planting material reduced</b>								
Indicator	Level of subsidy								
Unit of Measure	Percentage of subsidy provided by CONCADE								
Source	CONCADE PMP data base cross-referenced with information provided by NGO/private firms								
Frequency	Quarterly								
Description	Agro-chemicals will receive no subsidies from the beginning								
Targets	<table border="0"> <tr> <td>End of CY 1999</td> <td>100%</td> </tr> <tr> <td>End of CY 2000</td> <td>80%</td> </tr> <tr> <td>End of CY 2001</td> <td>60%</td> </tr> <tr> <td>End of CY 2002</td> <td>40%</td> </tr> </table>	End of CY 1999	100%	End of CY 2000	80%	End of CY 2001	60%	End of CY 2002	40%
End of CY 1999	100%								
End of CY 2000	80%								
End of CY 2001	60%								
End of CY 2002	40%								

**Sub-Task No 6 2. Subsidies on productive infrastructure reduced**

Indicator Level of subsidy  
Unit of Measure Percentage of subsidy provided by CONCADE  
Source CONCADE PMP data base cross-referenced with information provided by NGO/private firms  
Frequency Quarterly  
Description Items include packing facilities, cable-ways, cooling and collection centers, etc  
Targets  
End of CY 1999 85%  
End of CY 2000 55%  
End of CY 2001 25%  
End of CY 2002 0%

**Task No 7 Agricultural-supply distribution centers located in the Chapare**

Indicator Increase in agricultural-supply businesses and/or distribution centers in the Chapare  
Unit of Measure No of businesses and/or distribution centers  
Source Evaluation conducted by Performance Monitoring Team of CN/SOT  
Frequency Quarterly  
Description A distribution center/business is defined as one that provides technical assistance in the use of agro-chemicals and it is an official sales representative of an agricultural-supply manufacturing company in Bolivia having at least two outlets in the Chapare  
Targets  
End of CY 1999 1 business  
End of CY 2000 2 businesses  
End of CY 2001 3 businesses  
End of CY 2002 4 businesses

**Task No 8 Result-oriented management information system in place supporting policy and implementation actions made by AMU, GOB and USAID**

**Sub-Task No 8 1 Performance Monitoring Plan (PMP) completed and operational**

Indicator Performance Plan operational to monitor progress towards results  
Unit of Measure Level of use among USAID/GOB agencies and other donors  
Source Evaluation conducted by Performance Monitoring Team of CN/SOT  
Frequency Quarterly

Targets                   End of 1st Qtr   Performance Monitoring Plan developed and approved by USAID/GOB  
 End of 3rd Qtr   Performance Monitoring Plan established  
 End of 4th Qtr   Performance Monitoring Plan fully operational to track progress towards results

**Sub-Task No   8 2           Integration and dissemination of a PMP completed for performance monitoring**

Indicator                Performance data fully integrated and operational between implementing entities using improved data bases  
 Unit of Measure        Degree of integration and dissemination of systems and data bases  
 Source                 Evaluation conducted by Performance Monitoring Team of CN/SOT  
 Frequency              Quarterly  
 Description            This task shall entail the elimination of all redundant existing systems and data bases, and ensuring the PMP is being used by Policy Unit, and, obtaining quarterly progress reports and annual operating plans computerized and consolidated using the PMP  
 Targets                End of the 2nd Qtr   Integration of PDAR/DIRECO systems,  
 End of the 3rd Qtr   Integration of marketing/infrastructure systems,  
 End of the 4th Qtr   Integration of IBTA-NGO/private firms system,  
 End of the 5th Qtr   Full integration

**Sub-Task No   8 3           Integration of a PMP completed for financial and administrative decision making**

Indicator                Financial and administrative PMP fully integrated and operational between implementing entities using existing financial and administrative systems  
 Unit of Measure        Degree of integration of systems and data bases  
 Source                 Evaluation conducted by Performance Monitoring and Financial Teams of CN/SOT  
 Frequency              Quarterly  
 Description            This task shall entail the elimination of all redundant existing systems and data bases, and ensuring the PMP is being used for financial control/management, pipeline analysis and for obtaining quarterly progress reports and annual operating plans computerized and consolidated using the PMP

Targets                    Financial/administrative systems integrated  
 End of 3rd Qtr    Consolidated quarterly reports to be provided to GOB/USAID containing information on results and financial status  
 End of the 4th Qtr    IBTA-NGO/private firms PMP integrated  
 End of the 4th Qtr    PDAR-IBTA-SNC PMP integrated  
 End of the 5th Qtr    operating plans consolidated using the computerized PMP system

**Task No 8.4                    PDAR managing the integrated PMP**

Indicator                    PDAR fully capable of managing PMP developed by Contractor  
 Unit of Measure            PDAR capability  
 Source                      Evaluation conducted by Performance Monitoring Team of CN/SOT  
 Frequency                  Quarterly  
 Targets                    End of 1st Qtr    PDAR hires capable staff  
                               End of 5th Qtr    PDAR PMP staff fully trained  
                               End of 7th Qtr    PDAR staff fully capable of managing the consolidated PMP

**D Conditionality**

Conditioning alternative development to coca eradication is a relatively new concept. It reflects the much closer coordination that will take place between NAS-supported eradication and USAID's alternative development consolidation and counter-narcotics program. Indeed, it is an essential part of the Mission's Results Package as embodied in Intermediate Result 3.1 "Farmers Accept Eradication Conditionality."

The basic concept is to require that farmers agree to eradicate all of their coca in order to qualify for continued participation in alternative development programs ("Zero Coca Agreements", as opposed to the partial eradication of the past). The NAS, and its GOB partner DIRECO, will set conditions in collaboration with USAID, and DIRECO will verify that the agreed upon eradication is on schedule or has taken place. This approach would not have been practical in the past when USAID's alternative development programs had not reached the visibility and credibility obtained to date. The shift is consistent with the policy of treating coca as an illegal product. Since conditions will vary greatly from location to location, it is not possible to describe in advance the specific conditions or alternative development needs for a particular community. Although alternative development

assistance will be conditioned to coca eradication, the primary responsibility of USAID will be to provide Chapare farm families economically sustainable sources of farm income which can provide adequate living standards without the need to grow coca

Neither the Chapare nor other actual or potential Bolivian coca zones are homogeneous areas. They differ locally according to natural resource endowments, the skills and ability of farmers, accessibility, the prevalence of coca, the strength of institutions, leadership, and other important location-specific attributes. Some areas may be so lacking in these attributes or so isolated as to make them unsuited to USAID alternative development activities.

PDAR and DIRECO will have to delimit and define geographic areas within the Chapare. Using participatory mechanisms, such as consultation with farmer associations or groups, special development assistance, with input from the AIC, can be tailored to the characteristics of each area and offered selectively in return for the eventual elimination of coca.

If a particular community is not willing to simultaneously reduce coca for Alternative Development assistance, the PDAR in conjunction with the AIC will cancel or postpone assistance targeted for such a community and initiate negotiations with a more receptive community. The development activities for any given community would be tailored to the area's development needs. The options could include, for example, so many kilometers of road improvement, so many hectares of specific alternative crops supported (bananas, palm heart, etc.), technical assistance in production or marketing, marketing infrastructure (cable systems, storage and packing facilities, etc.), or other initiatives as agreed by the parties under the Zero Coca Agreements. An end-point or "exit strategy" in the form of explicit results indicators will be developed at or shortly after the beginning of CONCADE assistance to each community group in the same manner as was mentioned above, ie, PDAR in conjunction with the AIC.

To define and work in these areas, the following illustrative steps might occur:

- \* Consulting with NAS and DIRECO, PDAR and the AIC will identify a series of areas where a high probability exists of reaching coca eradication agreements (or where growers have already eradicated),
- \* PDAR and the AIC, together with farmer groups from the area will participate and define development actions/results tailored to each specific area,

- \* PDAR staff will meet with NAS and DIRECO to determine how much coca remains to be eradicated (or has been eradicated) within a particular community to clearly determine the feasibility of providing CONCADE assistance,
- \* An eradication agreement will be negotiated between the community or agricultural association for coca eradication (zero coca),
- \* Conditionality agreements criteria will be established and contain a time frame, a phasing schedule, and an inventory of coca to be eradicated, and,
- \* An "exit strategy" will be developed as part of the conditionality agreements, ie , when negotiated levels of alternative development activities are completed, the area or farmer association graduates and assistance terminates

#### E Alternative Development Consolidation Program

##### 1 The Agricultural Continuum

The consolidation of Alternative Development activities will link the various activities of the agricultural cycle to a continuum of events which will be supported by CONCADE. Of critical importance is that the continuum will be market driven with different elements of the market forming both the beginning and the end points of that continuum. The day to day responsibility for the implementation of these activities will reside with the Activity Management Unit (AMU) composed of the Chief-of-Party for the Contractor and the national counterpart provided by PDAR, although the Contractor will be held accountable for the success of the components and the achievement of activity results. The steps in the continuum are as follows

CHART 3 The Agricultural Continuum

Market Research,  
Identification,  
and Specification  
(Including agro-processing  
where appropriate )

Applied Research,  
Validation of New Crops  
New Problems

Social  
Infrastructure  
(Road Maintenance)

Extension/  
Technology Transfer

Farm Level  
Production

Post-Harvest  
Technology Transfer

Productive  
Infrastructure  
(Packing Sheds,  
Cable Ways, Etc )

Produce Marketing  
(Including Transportation)  
Feedback to  
Market Research

The process shall begin with Market Research, Identification, and Specification. This would include local, regional, and export markets depending on the crop and its relative competitive advantage, profitability, and ease of transport. Of equal importance is the availability of agro-processing capabilities, or, more likely, the ability of the Marketing Unit under the Contractor to attract investors to establish such capabilities. The potential for the processing of agricultural commodities would allow for somewhat lower quality standards, and avoid problems of perishability and transportation to distant markets. It would also create jobs and increase the value-added of locally produced crops. This component would be implemented by the Marketing Unit established by the Contractor and would be staffed with people, most likely expatriates, with demonstrated practical experience as entrepreneurs in this field.

Applied Research would be the next logical step in the continuum. This would include the testing of new crops, including validation of the research of others, as well as on specific problems which are identified over the life of the Activity. The testing would be conducted at the La Jota Experimental Station, as well as on selected farmer plots. Demonstration plots on the land of farmer clients would also be carried out. Criteria for deciding whether the testing will be conducted at the station and/or farmers' plots will need to be developed by IBTA. This component shall be implemented by the Chapare unit of the Bolivian Institute for Agricultural Technology (IBTA/Chapare). In order to fulfill this role, however, the Contractor shall supervise the activities of IBTA, as well as assisting the organization in altering its role from being a traditional research station setting its own agenda based on the interests of its researchers to that of a more proactive organization responding to the needs of farmers, especially in terms of the marketability of their crops.

The Extension Technology Transfer component would be carried out by an unspecified number of selected NGOs and/or private consulting firms with experience in tropical agricultural development. These organizations shall be selected by the AMU on the basis of appropriate or required educational levels of the people proposed, their levels of experience, their willingness to work and live in the Chapare, and of equal importance, their knowledge and orientation towards the general goals of the program including the eradication of coca. These organizations shall be assigned to specific geographical areas within the Chapare and shall carry out extension activities with farmer organizations dealing with issues of agricultural production and organizational development/strengthening. They shall receive periodic "pre-extension" training on the results of IBTA/Chapare applied research and would be under the technical supervision of the IBTA staff in coordination with an agricultural expert working for the Contractor and assigned to IBTA/Chapare. Overall supervision and oversight of their activities, as well as those

of the NGOs/private companies, would be provided by the Contractor. Periodic validation of these activities would be provided by PDAR.

Farm level production would obviously be carried out by the farmers themselves although with the assistance and supervision from the NGO/private firms' extension agents. In some cases this assistance shall be on an individual basis, while in most cases it shall be through the farmer organization to which each farmer belongs. As above, technical supervision of the NGOs/private firms shall be carried out by IBTA, while overall supervision would be carried out by the Contractor.

Post-Harvest technology transfer shall be carried out in a similar fashion to that mentioned above, as shall technical and overall supervision.

Productive infrastructure, under the supervision of the Contractor, shall be provided to farmer groups based on what is agreed to in the "Zero Coca Agreements" signed by each group or community. The criteria and conditions for providing productive infrastructure shall be based on the concept of conditionality described above in Section IV D. The type of infrastructure to be provided would therefore represent the "felt needs" of the group or community, although the specific designs (packing sheds, cable ways, drainage systems, etc.) shall be decided upon jointly between the organization/community, NGO/private firm representatives, and the Infrastructure Unit of the AMU based on the recommendations of the AIC. Additionally, it is also contemplated that the Zero Coca Agreements would specify a labor contribution from the organization/group, and possibly the provision of cash payments, and some local construction materials as well.

Social infrastructure would also be provided in a similar fashion, i.e., based on the Zero Coca Agreements negotiated with the farmer organization/community. Types of social infrastructure shall include such items as road improvement/maintenance, electrical networks connected to the national grid, and others. Since the majority of this type of infrastructure would be the result of an expansion of existing infrastructure, it shall be a requirement that local municipalities will be involved, especially in terms of contributing local counterpart funding and providing, or facilitating, future maintenance. In the case of road improvement, the National Roads Service (SNC) shall be the implementing agency funded through CONCADE. In some cases this work will be carried out through Caminos Vecinales (CCVV) directly, while in others it will be sub-contracted to private firms under the supervision of the Contractor. Otherwise, the design and construction of the social infrastructure shall be the same as that for productive infrastructure.

The Produce Marketing function of the Contractor shall be twinned with the Market Research, Identification, and Specification function discussed at the beginning of the process. Ideally, marketing contracts would be established in advance, although this might only be likely for those crops being exported. Adequate transportation services should also be programmed in advance if possible and produce would likely be picked up at collection, packing facilities on a prearranged basis. Farmer organization members, in the company of an NGO/private firm representative (And from time to time the representative from the Marketing Unit of the Contractor), would accompany the produce to market in order to monitor the price and total payment received, as well as observe the quality of the produce upon arrival, and any other factors which might be improved upon in order to assure the highest price and total income possible. This information would be fed back to the beginning of the continuum. This function shall be the primary responsibility of the Marketing Unit of the Contractor, although information concerning results would also be channelled back to IBTA and the NGO/private firms.

## 2 Crop and/or Agricultural Activity Identification and Selection

### a Expansion of Existing Crops

At the beginning of CORDEP between 40 and 60 crops were identified as being potentially appropriate for the agronomic conditions of the Chapare. These crops were then matched to their market potential and other factors and the number was reduced to the five which are currently being promoted at this time: bananas (two varieties, Cavendish and FHIA), palm hearts (two varieties, smooth stem and spiny stem), pineapple (two varieties, Pucallpa and Cayena Lisa), passion fruit, and black pepper. All five of these crops have not reached the point of market saturation, with the possible exception of passion fruit, and all face the potential of market expansion.

### b New Crops or Agricultural Activities for the Future

In the future Activity some new crops may be added, although their choice and number will be left to the AMU, in collaboration with the AIC, based on market considerations. New crops shall be sought for basically three reasons:

- \* Marketing channels have changed and/or opened up both within Bolivia and in surrounding countries,
- \* All of the agronomic "nitch" areas of the Chapare have not been fully researched or exploited, and,

- \* The technology for Cavendish bananas, pineapple, and palm hearts has been well researched and proven viable on farmer's plots, as well as understood by a substantial number of farmers. Marketing channels while not perfect, have also been established in local (processing plants), domestic, and export markets. (Due to the recent outbreak of black sigatoka which has greatly reduced banana cultivation and increased production costs for the Cavendish variety, the importation of relatively new sigatoka resistant FHIA varieties are being introduced out will require testing in the marketplace )

#### c Bumpers Amendment Considerations

In terms of the Bumpers Amendment which is directed at protecting US agricultural exports from competition from USAID-assisted countries, four observations can be offered,

- \* The three prohibited crops, sugar, palm oil, and citrus will not be dealt with in the Activity,
- \* Of the five currently assisted crops, as well as the suggested crops for the future (papaya, rubber, ginger, etc ), only minimal levels will be sent to the export markets in Chile and Argentina, and will not at all approach the one percent threshold level of US exports in terms of "significant injury" or "significant impact",
- \* The quality of even these minimal exports will not approach that of US exports for many years and will therefore not represent competition in any real sense, and,
- \* Lastly, Section 599H of the FY 1990 Foreign Assistance Appropriations Act specifically waives the Bumpers Amendment in the countries of Bolivia, Peru, and Jamaica where AID funds are used to " promote crops which can economically be grown in the coca producing regions of these countries " Also, Section 14 of the International Narcotics Control Act of 1989 (P L 101-231) renders inapplicable those sections of the FY 1990 Foreign Assistance Appropriations Act that restricts activities to promote the production of an agricultural commodity for export which would compete with a similar commodities grown or produced in the US, " provided this assistance is part of crop substitution activities in the narcotics control effort "

#### d Forestry and Agro-Forestry

As was stated above in the Background Section, as well as in the Environmental Assessment pertaining to this Activity, the soils of the Chapare range from good to poor with the majority of soils being in the poor range. Additionally, much of the land mass is

considered fragile due either to its steep slope, water logging, low pH levels, or the extremely thin nature of the soil itself. Lastly, in the case of land which is currently planted to coca, or which has recently had its coca eradicated, the soils are especially deficient in plant nutrients due to the coca plant's efficiency in absorbing soil nutrients, and to the fact that all of the plant's leaves are harvested leaving nothing to replace the soil's organic matter and the nutrients it contains.

These factors will leave CONCADE implementors with two choices as to what to do with these lands depending on the severity of the soil's degradation. On the poorest soils, especially those which have been heavily degraded, are on steep slopes, or which are particularly eroded, forestry, defined as the planting of non-commercial varieties of trees, shrubs, or grasses is the only viable answer.

On lands which are less degraded, less sloped, and still have some agricultural potential, the use of agro-forestry practices offer an interesting alternative. This technology usually begins with a cover crop such as rice. Once the rice is harvested, bananas, or a similar semi-permanent crop is planted at a density less than what would normally be recommended. As the banana plants begin to grow, commercially valuable timber varieties are planted either amongst the banana plants or along the borders of the banana groves.

As the years progress, usually up to ten years, the banana plants are gradually thinned to the point where the tree canopy begins to close. At this point the bananas are totally removed and a gradual thinning of the trees takes place. Even these trees which have been thinned have a commercial value in the form of roof rafters, fence poles, and other similar uses. By twenty years many of the trees species will have reached the point where they can be harvested and sent to sawmills for processing into sawn lumber.

The FAO, with funding from the UNDCP has already begun programs in forestry and agro-forestry in the Chapare which have met with some initial success. As was discussed above in Section III B 1, the UNDCP plans to have US\$ 8 0 million available for these activities which will cover approximately 800 hectares and 400 farmer plots. The Mission, through CONCADE proposes to further assist these programs through a "buy-in" with the UNDCP. This not only makes good sense in terms of the Activity's design, but it complies with a strong recommendation made in the Mission's Environmental Assessment concerning the Chapare. The amount of the buy-in would be up to \$1 0 million per year over the five year life of the Activity depending on the availability of funds. Since this would entail a separate contract with the UNDCP, the Contractor for the Activity shall only be charged with monitoring and reporting on the progress of the FAO, and in making a yearly

recommendation to the Mission as to future funding, but would not be responsible for its achievements

### 3 The Role of Credit

#### a Production Credit

Past experience has shown that credit for production purposes has not been successful among farmers in the Chapare. In some cases cash credit has been diverted to uses other than those for which it was intended, while in others the payback rates have been quite low. It is also thought that many of the farmers which have signed coca eradication agreements consider the provision of credit to be part of their entitlement for coca eradication and therefore feel no obligation to pay it back. (AGROCAPITAL, a local NGO, originally setup under CORDEP to provide production credit in the Chapare experienced a 34 percent default rate causing the agency to lend elsewhere in the country where it has experienced an average default rate of only 3 percent.) It should be pointed out, however, that until now many necessary agricultural inputs have been provided for free or at highly subsidized prices. Once these subsidies are lifted, the demand for credit, either formal or informal, could rise substantially. On the other hand, farmers might simply forgo the use of agricultural inputs, especially fertilizer.

As a result of the above, production credit is not being proposed as a component of the Results Package. Nevertheless, the need for credit shall be monitored from time to time through the NGOs/private companies and a production credit component could possibly be provided in the future. In no case, however, would this involve cash credit, but would rather involve vouchers which could be redeemed from input supply houses in the Chapare, Cochabamba, or Santa Cruz.

#### b Investment Promotion Credit

A more feasible need for credit, and a greater chance for repayment, would be in the area of investment promotion credit, particularly as an incentive for potential investors who would be willing to establish facilities in the Chapare, agriculturally-based or otherwise, for a whole range of activities from canning factories, to juicing and pulping facilities, to textile assembly plants. For the purpose of providing incentives, a credit guarantee fund shall be established in one or more interested banks which would on-lend to interested entrepreneurs. Selection and lending criteria for these loans will be established at the AMU level during the early stages of Activity implementation. This program shall be linked with the GOB's recently proposed tax exempt legislation for entrepreneurs willing to locate in the Chapare.

Precedent exists through FONADAL for this type of arrangement. In this case FONADAL placed US\$ 400,000 in a local bank for on-lending for investment purposes in the Yungas. These loans are granted at 12 percent with 4 percent going to the bank for its administrative expenses and 8 percent being channeled back into the fund for maintenance of value purposes and future lending. The use of AGROCAPITAL for this purpose shall also be explored during Activity implementation.

#### 4 Alternative Development Policy Unit

The promotion of Alternative Development and its consistency with eradication and interdiction efforts is a difficult and complicated task involving many different activities including policy issues both at the Vice-Ministerial level and at the legislative level. Assistance in this area shall be provided through the Contractor to the Vice-Ministry for Alternative Development in the form of a Policy Unit composed of an expatriate or senior FSN professional advisor hired through the Contractor, with the concurrence of the Vice-Ministry, plus one locally hired expert to be provided by the Vice-Ministry. The personnel of the unit shall report directly to the Vice-Minister for Alternative Development.

This unit would consider such issues as investment incentives, export incentives, taxation on agricultural supplies and equipment, land titling and adjudication, and possibly the coordination and review of pre-feasibility investment studies for private sector investment. The unit shall coordinate with export and/or investment promotional companies wherever possible and rely on the Activity's information system for key data when necessary. Additionally, this unit shall be expected to carry out continuous technical analyses on topics such as markets, crops, available export supply, eradication compliance with "Zero Coca Agreements", and other topics regarding Activity policy implications.

#### 5 The Use of Subsidies and Incentives

Throughout the implementation of both CRDP and CORDEP, the vast majority of goods and services provided to farmers have been partially or fully subsidized including planting material and all other agricultural inputs, on-farm infrastructure such as cable ways and packing plants, as well as less tangible items such as agricultural research and technical assistance. Several well placed sources agree that the majority of farmers view these subsidies as an entitlement resulting from coca eradication activities, while others who, might or might not, have eradicated their coca simply view the subsidies as a donor welfare program.

CONCADE will endeavor to reduce, or even eliminate, these subsidies over time on a case by case basis. For fertilizers and

other agro-chemicals no subsidies will be provided from the beginning. Subsidies on such items as planting materials, productive infrastructure, and road maintenance will be reduced and possibly eliminated over the life of CONCADE, while agricultural research, extension, and technology transfer, however, will remain subsidized.

It must be admitted that the successes which CORDEP has registered to date in terms of volumes of produce and alternative farmer income can be directly related to the levels of subsidies which have been provided. In the absence of these subsidies, strong interdiction and eradication campaigns will be required for farmers to choose alternative development except in cases where the economic development efforts have been consolidated to the point where technologies are proven, markets are assured, and increases in farmer income are clearly evident.

Additionally, USAID-funded subsidies in the area of planting materials and agro-chemicals in the past have actually constrained the development of private sector businesses in those areas within the Chapare. The reduction and eventual elimination of these subsidies is therefore seen as a potential stimulus for local businesses of this type.

In the new Activity, as farmer groups are assisted, be it through an NGO or a private consulting firm, an assistance agreement, either as part of the Zero Coca Agreement, or as an amendment to it, shall be signed with each group specifying the type of assistance to be provided (including frequency, quality, volumes, etc), what portion of the assistance will be paid for by the group (including the method of payment, when, and how), as well as a scheduling, or "exit strategy" which will determine a gradual reduction of subsidies balanced against a gradual assumption of most costs of the assistance being provided to the group.

It should be pointed out, however, that this methodology is thought to be possible in the case of tangible goods such as agro-chemicals, planting material, on-farm infrastructure, and transportation services, but will most likely not be possible for less tangible services such as research, technical assistance, and extension services. Since these types of services are less likely to be tied to actual results, at least in the eyes of farmers, it is highly probable that they will not be willing to assume these costs. Additionally, there is little precedence in the world, either developed or developing, for farmers actually paying for these, less tangible, types of services directly. Nevertheless, the Contractor shall seek to develop an "exit strategy" for these less tangible services as well in an attempt to attain a degree of sustainability once the Activity ends.

## 6 The Role of Agricultural Organizations

### a Farmer Organizations

Farmer organizations represent a key element in the agricultural continuum described above. Providing technical assistance to individual farmers, except in special cases (eg demonstration plots), would be uneconomic and beyond the scope of this Activity. Therefore the NGO/private companies will necessarily deal directly with farmer organizations of various types. Furthermore, since CONCADE assistance will be conditioned on the signing of Zero Coca Agreements by communities and/or farmer organizations, it is only natural that these same communities and/or farmer organizations would be the recipients of CONCADE support.

It has been noted that Bolivian workers are perhaps some of the most organized in the world, and its agricultural sector is no exception. (Whether this type of organization results in increased power, or not, can be debated.) At least six general categories of farmers/agricultural workers exist in the Chapare including by region from the smallest to the largest, unions, centrals, and federations, by crop, local producer groups and associations, and often by producer cooperatives as well. Whichever the type or level of organization which chooses to sign the Zero Coca Agreements, it is the members of that organization who will become the target customers of the Activity.

Assistance provided by the NGOs/private firms to these organizations will be of two general types as set forth in the Zero Coca Agreements: agricultural support including, inputs, infrastructure, technical assistance, and training, and, organizational strengthening including, management and administrative training and technical assistance, accounting procedures, and general legal support. In order to carry out this type of assistance, the NGOs/private companies shall have two types of technicians/field agents: agriculturists and organizational development/business managers. These two types of technicians will often work as a team in dealing with each organization, while in some cases they will work individually depending on the actual needs of the organization. In some cases the technicians will work with the entire membership of an organization (eg in general training sessions), while in other cases they will work with selected members of the organizations whose job will be to pass on the information to the rest of the membership.

### b The Agricultural Chamber for the Tropics

The Agricultural Chamber for the Tropics has recently been formed to promote licit Chapare agricultural production and the promotion of Chapare products. The Chamber includes producer

organizations, agro-processors, purchasers and wholesalers of agricultural commodities, input suppliers, and others. Activity support to this organization will only be provided in terms of institutional strengthening assistance and training but not in the form of infrastructure such as offices, vehicles, computers, or operational costs. It is thought that although this organization can play a vital role in the development of agriculture in the Chapare and in representing and defending the needs of its members, it needs to muster sufficient resources within its membership to cover these types of costs.

## 7 Infrastructure Development

Past Mission social infrastructure activities in the Chapare have been principally limited to road upgrades/improvements. This, along with minor contributions from other donors has resulted in the Chapare having the highest density of roads per square kilometer in the country. For this reason, CONCADE will be concerned primarily with promoting the maintenance of the already 3,000 kilometers of existing tertiary roads (caminos vecinales) in the Chapare. Nevertheless, and where appropriate, communities might opt for cable way systems instead of road improvement or maintenance.

While these roads have no doubt facilitated the movement of agricultural inputs and produce in and out of the Chapare, they are often seen by the local inhabitants, as well as local government officials, as "CORDEP roads" and therefore outside of their responsibility in terms of maintenance. This view has been further exacerbated by the willingness of CORDEP implementing entities to maintain roads when necessary to the exclusion of the local municipalities and local inhabitants. Furthermore, once these roads were improved, they were never formally turned over to the municipalities.

As a result of the Local Participation Law (Ley de Participación Popular, passed in 1995), the responsibility for the maintenance of tertiary roads was given to the municipalities. Nevertheless, adequate funding levels to accomplish this responsibility have never been provided. Issues of sustainability aside, this has resulted in a deadlock between CORDEP, which only has the capacity to maintain approximately one third of the road network per year, and the municipalities which have neither the funding nor the interest in maintaining the vast majority of the road network.

The Contractor shall attempt to change this relationship of semi-dependency, as well as a total lack of sustainability, in various ways including 1) direct planning and decision making with the municipalities to prioritize which roads would be maintained and when, 2) a formal turning over of roads to the municipalities once they have been improved or maintained, 3, relying more on

Producers' Associations, which have a vested interest in having adequate roads, to provide labor, materials, and cash payments for the improvement/maintenance of "their" roads, and 4) providing support (technical assistance, training, and equipment) to the recently created municipality association in the Chapare (EMISBA, which includes the three largest municipalities ), which is attempting to pool its resources to be better able to address the problem of road improvement/maintenance in their respective areas of influence

In order to change the current methodology of totally subsidizing road improvement and maintenance, the Contractor shall work with the municipalities and producer associations to inform them in the strongest terms possible that all future road work will become the responsibility of both groups (See Section IV C.) If these percentages are not met, the road(s) simply would not be improved or maintained. For those expenses which would have to be covered by cash payments, these would be prorated among the three participants as well and should be made available before any work would begin

At this time it is not known which of the two probable mechanisms would be the most efficient, and least corruptible, to actually perform the work of improving and maintaining the road network. EMISBA could be strengthened to the point where it could have its own pool of road machinery, and skilled operators and engineers to do the work themselves. On the other hand, it might be more efficient for the municipalities or AMISBA to have its own engineer/supervisors but to contract out to the private sector the actual construction work required. Both models shall be tested during the first year of the Activity with the most appropriate one being chosen for use in subsequent years

## 8 Coordinated Public Awareness Program (USIS)

### a Introduction

The United States Information Service (USIS) in Bolivia designs, plans, and implements the US Embassy's Public Affairs Strategy regarding counter-narcotics efforts. USIS is the US government's public affairs agency, authorized to disseminate public messages in coordination with the other agencies of the US Embassy

### b Objectives

The Embassy's primary goal is to halt the production of coca and coca derivatives that fuel international narcotics traffic. Embassy objectives which address this goal include significant annual net reductions and eventual elimination of illicit coca cultivation, more effective interdiction, heightened public awareness, and viable alternative development

The principal communication objective is increased public awareness of and support for counter-narcotics issues and policies, and a broader understanding of relationships between law enforcement and democratic responsibility

The following points summarize the communication goals and objectives of USIS and the other cooperating agencies in matters concerning the eradication of coca, alternative development, interdiction and prevention

Our various communication efforts aim to

- \* increase understanding of participation in and support for the goals of eradication, interdiction, prevention, and alternative development (in urban and coca growing regions ,
- \* help to correct the mistaken perceptions that exist concerning this effort (for example, that alternative development does not offer viable economic profits, that there is no private investment in the Chapare, or that private investment damages the farmers, that there are no families of farmers who have benefitted from alternative development, that there are no markets for alternative development crops, that the eradication programs harm human rights, and that the US government is violating national sovereignty), and
- \* inform the Bolivian public about US efforts to reduce its own domestic demand for illicit drugs and to cooperate with other international counter-narcotics programs

#### c Strategy

The following strategy is pivotal to explaining to target audiences the principal goals of the Embassy's counter-narcotics strategy that a vigorous law enforcement and interdiction program, coupled with voluntary and involuntary eradication efforts, will force coca growers to seek other, licit alternatives that are economically viable. USAID-sponsored alternative development programs and Bolivia's general development efforts have provided real opportunities for thousands of Bolivians. In order to communicate this message, USIS will use various communication media, including USIS-produced newspapers such as the quarterly "El Nuevo Chapare," TV spots and occasional programs such as "La Otra Cara," the weekly "Gran Angular," and other media as appropriate

## The elements of the Strategy are

### \* Three Audiences

The USIS strategy has three main target audiences: urban public opinion leaders, urban publics who often have ambivalent views on peasants' "rights" to grow coca, and on the coca growing population of the Chapare in general.

### \* Coordination

The implementation of the Public Affairs Strategy needs two levels of very close and full coordination to facilitate administrative decisions (such as budget approval from each agency for every specific project, agreement on the need to produce messages that support the policy, etc.) and to produce the projects, select the dissemination media and support the political decisions.

1. High level coordination among and between the various US government agencies will be established. The Counter-Narcotics Policy Group (CPG) will have primary responsibility for policy decisions, carried out through its weekly meetings. The CPG will define policies and messages, and will approve budgets for the implementation of the public affairs strategy.

2. A working level coordination will be established, with the essential function of articulating the decisions of the CPG in the identification of projects, media selection, definition and implementation of each of the communication projects. This level of operational coordination should be formed by representatives of USAID, NAS, MIST, DEA and USIS, as well as GOB representatives, specifically DIRECO, PDAR, FCNADAL and the Vice-ministry of Alternative Development.

The joint work among the agencies involved in both levels should achieve a very cooperative coordination of efforts, and maximize the beneficial results of the strategy.

### d Results: A Change in Attitudes

The work carried out during recent years has generated a dramatic change in opinions expressed by influential leaders who regularly publish their commentaries in the media of La Paz, Cochabamba, and Santa Cruz. Since 1994, USIS has been monitoring public opinion in the press. The following significant changes have been observed:

- \* In the last four months of 1994, positive opinions regarding alternative development were 39 percent of the total, yet by the first four months of 1998, positive opinions had

increased to 66 percent, neutral opinions were 33 percent, and negative opinions had declined to only 1 percent

- \* On the topic of eradication, during the last four months of 1994 positive opinions were 52 percent, but by the first four months of 1998 positive opinions had increased to 82 percent

Overall this change of attitude in public opinion on the issue of illicit drugs is significant, and we believe that a new view of the policies of the war on drugs has been created

As an example of this change, survey results indicate that at present a majority of the public thinks that it is necessary to eradicate illicit coca, that alternative development now offers better and more tangible results in comparison to past years, that illicit drug consumption is on the rise in Bolivia, that money laundering is taking place representing a corrupting force in society, and that there is a better understanding of the policies of the US government with less sympathy for opposition positions or coca-producing groups

#### e The Components

In recent years, the above strategy has been implemented as a result of multilateral negotiations among USIS and other USG and GOB agencies NAS, DEA, USAID, PDAP, and others. Through the utilization of both levels of coordination described above, the goal is to employ the coordination mechanisms and define the tasks of each one, with the purpose of reaching the optimal design methodologies, the approval of concepts and budgets, and the production of components

The components of the strategy for urban and rural audiences have been identified and selected for proper effectiveness in the generation of increasing support and participation in the counter-narcotics objectives of the US government and the GOB. The more specific objectives of the strategy, through the use of the various media components are increased support for and participation in the eradication programs, increased support for and participation in the alternative development programs, promotion of public investment in the Chapare, understanding of the programs against the trafficking of precursor chemicals, money laundering, and drug trafficking, increased support for the strengthening of organizations of farmers who are pro-alternative development, and increased support of the community for law enforcement and the rejection of illicit drug consumption

Based on the successful experiences of recent years, USIS has created eleven media components, six for urban and five for rural audiences. Each one of these components combines the human, financial, technical, and logistical resources of the US

government agencies and its counterparts in the GOB, i.e. USAID, the Narcotics Affairs Section (NAS), the Military Information Support Team (MIST), the Drug Enforcement Agency (DEA), the Rural Alternative Development Program (PDAR), the National Fund for Alternative Development (FONADAL), the Office of Agricultural Conversion (DIRECO), the Vice-Ministry of Alternative Development, the Rural Mobil Patrol Unit (UMOPAR) and the Counter-Narcotics Special Task Force (FELCN)

## V PERFORMANCE MONITORING PLAN (PMP)

### A The Present Situation

The present CORDEP system uses Microsoft Access software and collects data on approximately 35 intermediate indicators, roughly half of which are directed at measuring performance, while the others can be called informational. The sources of data are principally two, including the monthly reports of the Contractor which detail monthly activities, and those of the three NGOs which provide field data through the sub-contractor charged with supervising them. While IBTA Chapare and Caminos Vecinales also provide information to the system, it is often not provided on a timely basis and is sometimes incomplete. DIRECO, the GOB agency charged with eradication, does not provide any information to the CORDEP system, and in fact, the system contains almost no information concerning coca.

PDAR currently "validates" the information provided by the NGOs by visiting and surveying a sample of farmers. However, this validation only measures inputs (seedlings delivered, visits by extension agents, etc.), rather than measuring outputs (increases in production or income, hectares under cultivation, etc.), which is a serious failing of the validation process.

As an informal control, the current contractor also conducts an annual survey of 4-5 percent of the farmers in its data base. A different group is surveyed each year which allows for an expansion in the survey's geographical coverage, but which does not allow for a measuring of change over time within each yearly group. This informal control mechanism will be maintained under CONCADE.

### B CONCADE Requirements

Many aspects of the current CORDEP Performance Monitoring System are valid and functioning well, while others are not. The PMP for CONCADE, to be designed and implemented by the Contractor in co-ordination with the PDAR, will build on the strengths of its predecessor while adding several areas of data collection deemed to be currently missing. Coordination between and among the Contractor, which will carry the main responsibility for the management of the system, and the various GOB agencies which provide information to the system, as well as receiving information from the system, will be improved and made more efficient.

Additionally, CONCADE will require several alterations to the CORDEP Information System. First, and most important, it will have to track information concerning coca including number of Zero Coca Agreements signed, number of families included in the agreements, number of hectares slated for eradication, the time

frame for eradication, and the number of hectares actually eradicated. This information should be provided by DIRECO, but to date, DIRECO does not track information concerning the Zero Coca Agreements. Rather, these agreements are tracked by PDAR, although not adequately. Nevertheless, the agreements contain no information other than the name of the farmer organization and a statement of their willingness to eradicate. In the future, all of the indicators mentioned above must be included in the agreements, and they must become part of the DIRECO data base and be reported to the Contractor on a timely monthly basis. As part of its validation responsibilities PDAR will have to monitor farmer organization/community compliance with their respective agreements. Additionally, to assure the timely and efficient flow of information between PDAR and DIRECO, a PDAR staff member shall be seconded to DIRECO as was explained above in Section IV A.

The PMP will be improved upon and made fully operational by the Contractor and will be integrated into the Results Framework described above in Section IV B. This Section also details the units of measure to be used, the source of the information, the frequency or schedule of data collection, and the responsible office for providing the data.

The Plan will receive and provide information from various sources including the Vice-Ministry, PDAR, the AMU, the Policy Unit, the Marketing Unit, the IBTA Unit (including the NGOs, private firms and the Product Line Managers), and the Infrastructure Unit (including Caminos Vecinales). In order to accomplish this, each unit will have to establish and maintain its own data base containing information appropriate to its activities and progress towards achieving its CONCADE-established results and related targets. Additionally, at each individual level unit the data collected will serve as the basis for the elaboration of annual operational plans to guide the implementation process through each coming year. These will be consolidated in the early years of CONCADE by the Contractor, and in later years by PDAR.

PDAR will be a key organization in both providing information to the data base as well as receiving information from it, and, in fact, will house the data base from the beginning of CONCADE. As the Activity begins, staff of the Contractor will actually manage the data base while gradually training PDAR in its operation, management, and use. Once the PDAR staff is deemed by the CN/SOT to be sufficiently trained and capable of managing the data base, it will be officially turned over to them. From then on, and until the end of CONCADE, PDAR's management of the data base will be evaluated/validated on a twice yearly basis by an external firm with competence in this area. Once the data base is turned over to PDAR, however, the Contractor shall continue to manage

and operate its own data base in order to assure the efficient accomplishment of its responsibilities under the Activity

The data base will also benefit from validation in at least two ways. First, the Annual Survey mentioned above as part of the CORDEP information system will be continued by the Contractor to allow for a spot checking of information. If any major divergences are encountered, a more, in depth, evaluation by the CN/SOT or an external firm. Secondly, the use of an external firm will be used to validate the information being provided on a twice yearly basis. This will include the Contractor in the initial stages of Activity implementation, and PDAR in the later stages as was mentioned above.

Lastly, the financial management systems of the various GOB agencies working with CONCADE, plus the Contractor, must be integrated to provide consistency of financial and result information in both format and content. This set of data will necessarily become part of the CONCADE data base and will be used to more efficiently manage Activity responsibilities be they by the Contractor, PDAR, or a combination of both.

Other additional areas of information which are currently not being collected may include

- \* Credit, both formal and informal, investment and production, terms and repayment rates. This will particularly apply to the Investment Promotion Fund where hard data will originate. Nevertheless, information on farmers' needs for production credit, especially as subsidies are taken off, should be tracked.
- \* Input usage, are farmers using the recommended inputs?
- \* Land Ownership, are farmers willing to invest in their land? Do they have title which a bank or other financial intermediary will accept?

## VI ENVIRONMENTAL CONSIDERATIONS

The following summary has been extracted from the June 15, 1998, Environmental Assessment, "Elimination of Illicit Coca from the Chapare", prepared by the Regional Environmental Officer, Quito, Ecuador

### A Summary of Alternatives

#### (1) Alternative A No Action

USAID would cease to provide any support to the GOB for the eradication of coca and implementation of alternative development activities in the Chapare. Other bilateral donors, the United Nations, and Bolivia itself would be likely to continue to support alternative development but are less likely to provide financial support for eradication. The total level of funding for both alternative development and eradication would be unlikely to attain that contemplated under the Special Objective. Bolivia's efforts to eradicate coca would probably be reduced.

#### (2) Alternative B Coca Eradication Without Alternative Development

Although the US government would continue to support coca eradication, it would not continue to finance alternative development. Other bilateral donors and the United Nations might continue to support alternative development, but the total level of funding would fall. A lower rate of coca eradication would be likely, since the incentives for eradication, such as road improvements, technical and marketing assistance, and credit provided through the alternative development program, would be reduced.

#### (3) Alternative C Coca Eradication With Alternative Development

Alternative C would combine coca eradication with alternative development. USAID will finance the implementation of the strategy that is described above in this document. This strategy provides the most detailed description of the actions proposed to achieve the SO that was available to the EA Team.

### B Recommendation of Preferred Alternative

The Environmental Assessment recommends the proposed alternative, **Alternative C, Coca Eradication with Alternative Development**. The eradication of coca from the Chapare would reduce the severe negative, long-term, irreversible environmental impacts of coca cultivation and processing. If successful, alternative development would provide former coca farmers with reasonable alternatives to coca production. They would thus be less likely to continue to cause negative environmental impacts through the

practice of low-productivity, shifting agriculture, including coca cultivation and associated deforestation. Fewer former coca farmers would migrate to cities, causing associated problems of sanitation and contamination.

Under Alternative A, **No Action**, by contrast, lack of financial resources would severely weaken Bolivian efforts to eliminate the cultivation and processing of illicit coca and provide alternative sources of income to coca. Consequently, the high financial rewards and low risks of coca cultivation would continue to make it an attractive alternative to the difficult living conditions in other parts of Bolivia. Coca cultivation would thus continue to stimulate deforestation and contamination in the lowlands of Bolivia.

Alternative B, **Coca Eradication without Alternative Development**, would eradicate coca cultivation and processing in the Chapare, thereby eliminating their negative environmental impacts. Former coca farmers, however, would not be provided with alternatives to coca. Social and economic instability would be likely to result. Many former coca farmers would be likely to migrate to more remote areas, less under the control of the government, where they would clear forest, practice shifting agriculture and possibly return to coca production. The negative environmental impacts associated with deforestation, coca cultivation, and processing of coca leaves would thus be likely to continue. Some former coca farmers would be likely to migrate to urban areas, causing negative environmental impacts such as poor sanitation and contamination.

Table 1 compares the projected environmental impacts of the three alternatives in relation to the significant environmental issues that were identified during the environmental assessment.

Table 1 Environmental Impact Alternatives

Significant Issue	Predicted Environmental Impact		
	Alternative A No Action	Alternative B Coca Eradication without Alternative Development	Alternative C Eradication with Alternative Development
Road improvement & maintenance	<b>Negative</b> Direct/indirect, widespread negative impacts from road construction	<b>Negative</b> Direct/indirect widespread negative impacts from road construction	<b>Positive</b> Better designed & maintained rural road network
Recuperation of former coca fields	<b>Negative</b> Direct/indirect long-term negative impacts from deforestation and erosion due to continued cultivation and processing of coca	<b>Positive</b> Elimination of widespread negative impacts of coca cultivation	<b>Positive</b> Elimination of direct/indirect long-term negative impacts from deforestation and erosion due to coca cultivation and processing re- vegetation reduces short- term negative impacts of eradication
Disposal of chemicals used in coca processing	<b>Negative</b> Direct/indirect negative impacts from coca processing chemicals	<b>Positive</b> Reduction of negative impacts of processing chemicals	<b>Positive</b> Reduction of negative impacts of processing chemicals
Pesticide use	<b>Negative</b> Direct/indirect negative impact on biodiversity and human health from contamination due to untrained excessive and unregulated pesticide use	<b>Negative</b> Direct/indirect negative impact on biodiversity and human health from contamination due to untrained excessive and unregulated pesticide use	<b>Positive</b> Reduction in direct/indirect negative impacts on biodiversity and human health through the implementation of integrated pest management practices and regulation of sale of pesticides

	<b>Alternative A No Action</b>	<b>Alternative B Coca Eradication without Alternative Development</b>	<b>Alternative C Eradication with Alternative Development</b>
<b>Road improvement &amp; maintenance</b>	<b>Negative</b> Direct/indirect widespread negative impacts from road construction	<b>Negative</b> Direct/indirect widespread negative impacts from road construction	<b>Positive</b> Better designed & maintained rural road network
<b>Type of agriculture</b>	<b>Negative</b> Direct/indirect negative impacts on biodiversity, soils, and ecosystem functioning due to continued extensive agricultural practices	<b>Negative</b> Direct/indirect negative impacts on biodiversity soils and ecosystem functioning due to continued extensive agricultural practices	<b>Positive</b> Reduction in negative impacts of deforestation and agriculture due to intensification of agriculture on suitable soils
<b>Implementation &amp; monitoring of mitigation measures</b>	<b>Negative</b> Lack of mitigation/monit oring	<b>Negative</b> Lack of mitigation/monit oring	<b>Positive</b> Implementation and monitoring of mitigation measures

## VII ACQUISITION AND ASSISTANCE PLANNING

### A Institutional Arrangements

The Activity will be managed and implemented primarily through an institutional contractor which will be ultimately responsible for the achievement of the overall Results Package and tasks outlined in Section IV A above. The Contractor will also enter into sub-agreements with a yet to be determined number of NGOs/private firms which will act as the link between IBTA/Chapare and the clients/farmer organizations.

Additionally, a separate "buy-in" will be negotiated outside of the prime contract with the UNDCP for the services of the FAO in the area of agro-forestry or forestry. Lastly, a separate sub-contract with the US Information Service will be negotiated for the Coordinated Public Awareness Program.

### B Acquisition and Assistance Scheduling

Acquisition and Assistance Actions	Target Date
CBD notice published	09/04/98
RFP issued by USAID/Bolivia	09/15/98
Offerer's conference held	10/18/98
Proposals due in 60 days	11/15/98
Contractor selected	02/28/99
Contract preparation completed	03/31/99
Contractor mobilization in-country	04/30/99
Personnel selected by Contractor	05/31/99
Implementation initiated by Contractor	05/31/99
NGO/private firms selection process initiated	05/20/99
Units of Contractor fully staffed	06/30/99
MCOs work arrangements completed with implementing entities	07/31/99
Work initiated by NGO/private firms with IBTA	07/15/99
Policy Unit staffed and operational	08/30/99
Management/procurement administration systems established	08/30/99

#### Notes

<sup>1</sup> Contractor offices established and operational in Cochabamba and the Chapare

<sup>2</sup> This includes all units to carry out marketing infrastructure, technology transfer and information system functions

<sup>3</sup> Implementing entities include IBTA Chapare, SNC CC F, PDAR and DIRECO

## VIII FINANCIAL PLAN

### A Financial Considerations

Due to the somewhat unique nature of CONCADE several financial considerations will be required of the Contractor which are not normally present in an Activity of this kind They include

#### 1 Existing Inventories

CONCADE is a follow-on Activity to the CORDEP Project As such, many of the items which would normally be procured by the Contractor at the initiation of an Activity such as vehicles, office equipment and furniture, etc will not be necessary during the first fiscal year of the Activity, with the exception of some essential computer equipment Rather, these types of items will be transferred from the CORDEP contractor to CONCADE contractor as part of the transition process Furthermore, during FY 99, the contractor shall perform a procurement inventory of existing items transferred from CORDEP or other projects including those which were under the control of the CORDEP contractor, PDAR, IBTA/Chapare, and SNC, Caminos Vecinales A judgement will then be made between the contractor and the CN/SOT as to which of the items are still serviceable, which need to be sold at auction, which can be donated, and which need to be replaced Once these decisions are made, the contractor shall proceed to procure the items which need to be replaced

#### 2 Financial Oversight, Reviews, and Audits

Since much of the Activity's work will be implemented through GOB agencies, special financial oversight procedures will be necessary on the part of the Contractor These include

- \* Advance requests for USG appropriated and Title III resources for GOB entities, PDAR, IBTA/Chapare, and SNC/Caminos Vecinales, shall be reviewed and approved by the Contractor prior to submission to USAID/La Paz in the case of USG advances, and to the Title III Executive Secretariat in the case of Title III advances
- \* Vouchers prepared by the GOB implementing entities to liquidate USG and Title III advances shall be reviewed and approved by the contractor prior to submittal to USAID/La Paz in the case of USG advances, and to the Title III Executive Secretariat in the case of Title III advances
- \* The Contractor shall provide a copy of the Summary Sheet for all advance and liquidation requests to the PDAR Financial Unit

- \* The Contractor shall be responsible for arranging for annual audits of both appropriated funds, as well as Title III or other GOB funds, by any one of several firms approved by USAID/La Paz. Audits shall be subject to USAID guidelines for non-US organizations and the Mission's FMO shall participate in the elaboration or approval of the scopes of work for these audits. Audit reports shall be provided to USAID/La Paz and to the Controller General's Office of the GOB.
- \* In addition to the annual audits, the Contractor shall also perform periodic financial, administrative, and technical reviews of PDAR, IBTA/Chapare, and SNC/Caminos Vecinales.
- \* The PDAR internal auditor shall be required to follow-up on any issues identified in the external or internal audits, or the reviews conducted by the Contractor.

### 3 Major Budgetary Assumptions/Explanations

#### a USAID Contributions

- \* Summary table shows FY projected obligations for FY-98 through FY-2002. However initial CONCADE commitments will not be made until FY-99.
- \* Projections take into consideration that International Narcotics and Law Enforcement (INL) funding for USAID obligations will not be available before the third quarter of each FY.
- \* Projections assume that the GOB undertakes aggressive and sustained eradication and interdiction campaigns which will strengthen the need for alternative development actions, and that the GOB complies with annual net eradication targets as agreed to between the GOB and the USG.
- \* Projections assume that complementary contributions will be made by other donors for counter-narcotics alternative development efforts closely tied to eradication conditionality.
- \* FY-2002 INL funding will need to be provided to USAID during the second quarter of that year in order for USAID to fully expend funds before the end of the Activity which should coincide with the end of FY-2002.
- \* From FY-99 to FY-2001, USAID will need to obligate an average of \$14 million in order to allow CONCADE implementing entities to complete commitments with sufficient lead time to engage subcontractors in the implementation of alternative development activities. USAID

needs about 3 to 4 months to commit funds to implementing entities and another 3 to 4 months to commit funds to specific activities. Therefore, initial expenditures do not start before 6 to 8 months after funds are obligated by USAID. This means that it may take more than 15 months to fully expend funds received in any given fiscal year.

#### b. GOB Contributions

- \* It is expected that the GOB will be able to provide a counterpart contribution of at least one third of CONCADE's total budget costs which approximately amount to \$20 million. Title III counterpart resources and other GOB sources will be provided to partially finance activities to be implemented by IBTA/Chapare, SNC/CC VV and PDAR.
- \* Projections assume that CONCADE will not cover personnel costs of GOB implementing entities through the life of the activity. However, USAID funds will be provided in FY-2001 and FY-2002 to partially cover non-personnel funding needs of IBTA/Chapare, SNC/CC VV and PDAR.
- \* Projections also assume that PDAR, as the GOB coordinating entity of all alternative development efforts in the Department of Cochabamba, will increasingly receive funding support for their operations from other donors.
- \* Chapare municipalities are expected to increasingly contribute to the maintenance of road infrastructure in the Chapare which will correspondingly diminish USAID contributions as the Activity comes to an end.
- \* As explained in previous sections of this document, funding projections assume that subsidies for planting materials and critical productive infrastructure will decrease as farmers and farmer associations gradually assume a greater portion of their costs.

#### B. Activity Budget

Table I includes total projected obligations (in US\$ millions), subject to the availability of funds, for the life of the CONCADE. Table II shows USAID annual obligations (in US\$ millions) for CONCADE from FY-1998 to FY-2002.

**CONCADE Activity Budget**  
**Total Projected Obligations for Fiscal Years 1998 - 2002**  
(in millions of U S dollars)

Activities	USAID <sup>1</sup>	GOB	TOTAL
USAID/Bolivia Support <sup>2</sup>	2 6	0 0	2 6
Implementation Assistance <sup>3</sup>	11 0	0 0	11 0
Subprojects <sup>4</sup>	46 4	20 0	66 4
<b>Total</b>	<b>60 0</b>	<b>20 00</b>	<b>80 0</b>

1 Total USAID estimated obligations subject to availability of funds

2 Includes funds to cover support, audits, evaluations and assessment costs carried out by USAID/Bolivia

3 Includes funds for technical assistance for technology transfer infrastructure, marketing, investment promotion, performance monitoring and results tracking

4 Includes funds for government non government and international entities for research, validation, training, procurement of commodities and services marketing, investment promotion and infrastructure activities

**Table II**  
**CONCADE Budget**  
**Projected USAID Annual Obligations**  
**(in millions of U S dollars)**

Activity Elements	FY 98	FY-99	FY-2000	FY-2001	FY-2002	TOTAL
USAID/B Support	0 0	0 9	0 7	0 8	0 2	2 6
Implementation Assistance	0 6	2 6	2 6	2 8	2 4	11 0
Subprojects	1 0	11 5	14 7	14 4	4 8	46 4
Total USAID	1 6	15 0	18 0	18 0	7 4	60 0

**ANNEXES**

# I Economic/Financial Analysis

## TABLE OF CONTENTS

Page

INTRODUCTION	
I	COMPARATIVE RATES OF RETURN
II	BY HOW MUCH SHOULD THE COCA PRICE FALL?
III	MAJOR OBJECTIVES OF THE ALTERNATIVE PROGRAM
IV	PROJECTED ECONOMIC IMPACT
V	INVESTMENT REQUIREMENT
VI	AGRO-FORESTRY
VII	ANALYSIS AND IMPLICATIONS
	A INVESTMENT/OUTPUT RATIO
	B INVESTMENT REQUIREMENT IN RELATION TO AVAILABLE RESOURCES
	C REALISM OF OBJECTIVES IN THE R-4 DOCUMENT
VIII	COMPARISON OF THE COST OF THE JOINT ALTERNATIVE DEVELOPMENT/INTERDICTION PROGRAM WITH THE VALUE OF THE COCA IT IS DESIGNED TO PREVENT
IX	THE ROLE OF ALTERNATIVE DEVELOPMENT

## INTRODUCTION

This analysis will cover the following points Phase 1 will present the internal rates of return (IRR) and Net Present Value estimates of coca leaf and base in comparison with those of the most promising five major alternative crops -- bananas, pineapple, passion fruit, palm hearts and black pepper While other crops or activities might be added in the future, these have been the ones on which alternative development has focused so far, and for which data are available This analysis will be followed by a discussion of the significance of these rates of return for the purpose of explaining the difficulties encountered in promoting the shift out of coca

Phase 2 will present data on the impact of these alternative crops on output, net income generated, number of families benefitted, employment generated and exports These data will be presented for each of the five major crops, with footnotes indicating the source of all data or the methodology used to arrive at the estimates Most of the data were obtained from the CORDEP product line managers stationed in Cochabamba

Phase 3 will present data on the investment requirement The product line managers were asked to estimate the investment that was required to achieve the goals of AID's alternative development program as stated in the Mission's R-4 document, without considering the constraint imposed by AID's budgetary limitation The investment requirement will be broken down into direct assistance in crop production (e.g. financing the fixed and operating expenses in the first year) and other assistance, including technical assistance, infrastructure, assistance in marketing and investment promotion, research and extension, and aid to institutions

Phase 4 will analyze the implications of these data Specifically, the total investment requirement will be compared with the expected total net income generated by these five crops to determine and evaluate the investment/output ratio obtained Next, the total investment requirement will be compared with the projection of total resources (from all donors) to identify the resource gap, as well as to determine the feasibility of attaining the goals set in the R-4 document The investment requirement will also be compared with the value of the coca base that the program is expected to prevent A final section will discuss the role and justification of the alternative development program now that major reliance is being placed on interdiction and eradication to eliminate all coca production by the year 2002

## I COMPARATIVE RATES OF RETURN

A comparison of the internal rate of return (IRR) and Net Present Value (NPV) of coca and coca base with that of the five major alternative crops is presented in Tables 1 and 2. Table 1 computes the IRR and NPV over the life time of the plant, while Table 2 considers only a five-year period after planting on the assumption that many farmers will not make their decisions on the basis of a longer period. Note, however, that application of a five-year time horizon produces very different results in both IRR and NPV in the case of plants requiring a substantial first year investment followed by a significant annual stream of returns extending over a ten-year period, as in the case of FHIA bananas and palm hearts. Our analysis will focus on the life time of the plant (Table 1), which assumes that the farmer's time preference does not exceed the 12 to 22 percent discount rates used in the NPV calculations.

The first thing to note is the high profitability of both coca leaf and base. At the average coca leaf price which prevailed during the twelve-month period ending in May, 1998 (\$79.4 per 100 pound "carga"), the IRR for coca leaf over the life span of the plant (12 years) is 211.5 percent, and for coca base 233.5 percent (Table 1). Even if one considers only the first five years after planting, the IRR still is a very high 209 percent for leaf and 231.4 percent for base (Table 2).

The second point of interest is that the high IRRs for coca leaf and base, when compared with those of the five major alternative crops, are not unique. They are, in fact, equalled or even surpassed by the rates of return of passion fruit (658 percent), black pepper (238 percent), and by one variety of pineapple (Puacallpa), 219 percent. This raises the question as to why the combination of technical and direct assistance to alternative development, control activities by the GOB with USG support, and compensation payments to coca farmers for coca eradication, have failed so far to induce a substantial shift out of coca to the major alternative crops.

The answer to this question is, first, that some important caveats need to be attached to the high IRRs shown for the alternative crops, and second, that the IRR and NPV data, even if accepted as correct, are not the only consideration that determines the farmer's decision to shift to alternative crops.

With regard to the caveats, there is the question as to how readily the conditions that produced these favorable IRRs can be extended to all farmers that shift out of coca. We were advised that our data did not originate in experiment stations, but were obtained in the field. Still, the alternative crops were grown by farmers who had access to relatively favorable soil, seeds, inputs, technical assistance, access to market, and to an

expanding market Do all these conditions prevail for all -- or most -- farmers now in coca?

It cannot be assumed that these favorable conditions will be available to all farmers, and even when they are, there is evidence that many farmers -- perhaps most -- will choose not to adopt the whole input package, fertilizer in particular Hence, the IRRs and NPVs obtained by the general Chapare population are likely to be lower than those presented in Tables 1 and 2

A third caveat is the question of the persistence of the high IRRs in the case of crops currently sold only in the national market, as is currently the case with passion fruit and black pepper Will not the price decline, perhaps quite sharply, as output increases and the domestic market approaches saturation? Farmers are likely to be well aware of this risk

In addition to these caveats, coca farmers weigh several factors apart from the relative profitability of coca/coca base vs alternative crops first, coca is here With coca, there is no need for new and possibly unknown seeds, new inputs, and a new technology, second, the coca plant is hardy and easy to take care of, requires little labor except at harvest time, and after conversion to base, is relatively non-perishable, third, coca has a high value per unit of weight, and is, therefore, easy to transport on trails unsuitable for other crops, finally, and most importantly, the product has an assured export market at a stable and profitable price No reliance needs to be placed on the national market and the risk of saturation These factors, which are not shared by the alternative crops, provide coca with a powerful combination of advantages that strongly discourage a shift Thus, in the absence of forced eradication, or a very credible threat that it will occur, the risks of cultivating coca are acceptable In the words of M S Hanrahan "economically rational producers are likely to voluntarily eradicate coca only when faced with a real probability of forced eradication or a palpable risk and uncertainty are introduced into the revenue side of the market They will seek to evade controls and plant new areas to coca " In view of the plentiful availability of land, labor and capital in the Chapare, the author concludes that parallel development is likely to continue, unless, it may be presumed, that forced eradication and interdiction are stepped up considerably above the level that prevailed at the time the Hanrahan report was drafted (July, 1995)

The data presented in Tables 1 and 2 also suggest why, for many coca producers, the compensation payment of \$2,500 per hectare

---

Michael S Hanrahan & Daniel Sanchez, "ALTERNATIVE DEVELOPMENT, Agricultural Income and Returns to the Main Factors of Production", July 10, 1995, P 24

eradicated proved insufficient to take farmers out of coca (without planting it elsewhere) This amount must be compared with the net present value (NPV) for coca leaf of about \$16,200 at an annual discount rate of 12 percent, and \$10,940 at 22% (Table 1) Even if one considers only a five-year time horizon (Table 2), the NPV is substantially above the compensation payment This conclusion was also reached by the Hanrahan report In addition, there is the awkward fact that many coca growers accepted the compensation payment as the price for eradication, then planted elsewhere

This analysis confirms the Mission's conclusion that alternative development can only induce, but will not by itself suffice, to significantly reduce, and still less to eliminate, reliance on coca in the Chapare Major dependence must be placed on interdiction and eradication to reduce the profitability of coca to a level substantially below that of alternative crops by increasing risks and production costs to both growers and processors

---

/ Ibid , P 24

**Table 1**

Comparative Internal Rates of Return  
and Net Present Value per Hectare of Coca  
with the Five Major Alternative Crops  
Over the Lifetime of the Plants

Crop	IRR	Net Present Value in US Dollars	
		@ 12% / p a	@ 22% / p a
Coca Leaf	211 5%	\$16,223	\$10 940
Coca Base	233 5%	\$18,489	\$12 502
Bananas - Cavenales 1473 pl/Ha, intermediate inputs	168 0%	\$8,735	\$5,862
- FHIA 01 2292 pl/Ha intermediate inputs (1)	22 7%	\$1,483	\$70
Pineapple (3 years only) - Pucallpa 24000 pl/Ha intermediate inputs	218 6%	\$5,857	\$4,975
- Cayana Lisa 35000 pl/Ha, intermediate inputs	170 2%	\$6,874	\$5 763
Palm Hearts - 5000 pl/Ha low inputs	74 3%	\$15,068	\$8,560
Passion Fruit (3 years only)	658 5% (2)	\$820	\$741
Black Pepper	238 3%	\$44,464	\$30 239

**Source** Calculations based on projections of cost and revenue data provided by DAI technicians, as of June, 1993

(1) Projections for FHIA bananas are very conservative as there is as yet no experience with regard to acceptance and price, and the market is limited to what can be sold domestically.

(2) For passion fruit the IRR is so high in relation to net present value because there already is a significant output in year one, resulting in a very low negative cash flow in that year, despite the investment made in that year.

**Table 2**

Comparative Internal Rates of Return  
and Net Present Value per Hectare of Coca  
with the Five Major Alternative Crops  
During the First Five Years after Planting

Crop	IRR	Net Present Value in US Dollars	
		@ 12% p a	@ 22% / p a
Coca Leaf	209.0%	\$ 8,900	\$6,936
Coca Base	231.4%	\$10,159	\$7,953
Bananas			
-Cavendish 1473 pl/Ha intermediate inputs	165.11%	\$ 4,602	\$3,563
-FHIA 01, 1292 pl/Ha, intermediate inputs	1.4%	(\$ 711)	(\$1,171)
Pineapple (3 years only)			
-Pucallpa, 24000 pl/Ha, intermediate inputs	218.6%	\$ 5 857	\$ 4,975
-Cayena Lisa, 35000 pl/Ha intermediate inputs	170.2%	\$6 874	\$ 5,763
Palm hearts			
-5000 pl/Ha, low inputs	48.8%	\$2 964	\$ 1 731
Passion Fruit (2 years only)			
-	658.5%	\$920	\$741
Black Pepper			
-	235.8%	\$23 436	\$18 286

**Source** Calculations based on projections of cost and revenue data provided by DAI technicians, as of June, 1998

1 As noted by the DAI product line manager for bananas, it makes no sense to take only a five-year outlook in case of this crop which yields a good return over a ten-year life-span. The relevant IRR is, therefore, the one calculated in Table 1

## II BY HOW MUCH SHOULD THE COCA PRICE FALL?

To what extent must coca leaf prices be caused to fall to depress the coca profit margin below that of alternative crops? We doubt that a reliable answer to this question can be given for the following reasons (1) Almost all coca currently grown in the Chapare is processed into base, so that it is the price of base, rather than coca leaf, which is the determining factor, (2) a major imponderable is the farmer's perception of the degree of risk involved in growing coca, which depends on the vigor with which eradication and interdiction are pursued, (3) the farmer's perception of the risk he is assuming in shifting to different crops, particularly with regard to market outlets, (4) in view of the very low price of coca leaf in relation to the street price of cocaine sold abroad, traffickers can readily raise the price of leaf to any level required to induce supply

We have nonetheless estimated the IRR for unprocessed coca leaf at various hypothetical coca prices, starting at \$75 per 100 pound carga, and declining to as little as \$25. Production costs were assumed to remain constant at the current level

Price \$/carga	IRR
75	211 5%
67	173 3%
50	119 3%
40	86 0%
35	68 6%
30	50 0%
25	26 1%

Our estimate is that the price of unprocessed coca leaf would have to fall into a range of \$25 to \$35 per 100 lb carga for coca to become competitive with the five major alternative crops, given the importance of the various non-economic factors favoring coca leaf and base described above. This estimate is roughly in line with the \$20 to \$36 range (for unprocessed leaf) arrived at in Hanrahan's linear programming model for the year 2,000

---

/ M S Hanrahan, Op cit , Table 5, P 27

### III MAJOR OBJECTIVES OF THE ALTERNATIVE DEVELOPMENT PROGRAM

Given the key USG goal to eliminate all illegal coca production by the year 2002, the objective of the alternative development program is to assist coca growing farmers to obtain alternative sources of income by that target year. This assistance is to be limited to farmers who sign a Coca Eradication Agreement with DIRECO and agree to participate in the coca-free zone. The objective of the program is not to assure farmers who shift out of coca an equivalent source of income, but to provide them with an income in line with that earned by average farm families in Bolivia.

According to the Mission's R-4 document, the number of farm families participating in the coca-free zone is to increase from 2,554 in 1997 to 30,000 in 2002, an increase of some 27,500 families. Assuming an average of 4 to 5 members per family, this would mean covering some 110,000 to 137,500 people.

Additionally, the net per capita income from the five major licit crops in the Chapare is to increase from \$1600 in 1997 to \$2,350 in 2002, or by \$750 or 47 percent. The combination of these two objectives would mean a total increase in income from these five alternative crops of \$82.3 to \$102.9 million over this period. The Economic and Financial Analysis sections of this report will enable us to venture a preliminary assessment as to whether these ambitious objectives can be met with the resources likely to become available over the 1998-2002 period.

---

/ Depending on whether one assumes an average Chapare family of four or five members. The calculation in the latter case is as follows:

Additional families benefitted during period	27,446
Number of persons benefitted	27,446 X 5 = 137,230
Increase in income per capita targeted	\$750
Total increase in income this would entail	137,230 X \$750 = \$102,922,000

#### IV PROJECTED ECONOMIC IMPACT OF THE PROGRAM

The projected impact of the proposed consolidation of alternative development efforts (CONCADE), with breakdown for each of the five major alternative crops, is presented in Table 3, while total results are summarized below. Table 3 shows value of total output, total net income generated, number of families benefitted, total employment generated and exports in both 1998 (used as base year) and 2002. The data is mostly from a team of consulting agronomists (the CORDEP Product Line Managers) located in Cochabamba who visit the Chapare at regular intervals. The source or derivation of all figures is explained in the footnotes to Table 3. A summary of the results expected by 2002 appears below.

##### Summary of Totals Projected for 1998 and 2002

	1998	2002
1 Total Area Planted to Alternative Crops (hectares)	3,585	19,673
2 Total Net Income Generated ('000\$)	4,856	29,748
3 Number of Families Benefitted	6,550	22,594
4 Employment Generated (person/years)	1,222	7,430
5 Total Exports ('000\$)	2,084	43,979

Source Data from Table 3

The targets to be attained, set by the CORDEP Product Line Managers, appear ambitious. The total area planted to alternative crops is to expand by 449 percent, total net income generated by 513 percent, the total number of families benefitted by 245 percent, total employment generated by 508 percent, while total exports are projected to expand by 21 times (the latter mostly owing to palm hearts, the full production of which is exported in processed form). It is likely that performance will fall somewhat short of these expectations.

These ambitious targets are consistent with the objective of benefiting a total of some 30,000 families by 2002. The increase in per capita income, however, would fall short of the very ambitious \$750 objective set in the R-4 document. Assuming an average size family of 4.5 members, the number of persons benefitted would be 101,673 persons (22,594 families X 4.5), with an increase in per capita income of some \$293<sup>8</sup>. The realism of these objectives will be discussed further following review of the investment requirement and funding availability.

---

/ Net income generated during period of \$29,748,000 (line 2 of table) divided by 101,673 persons = \$293

**Table 3**

Projections of Hectares Planted, Output and Net Income To Farmers for the Five Major Alternative Crops Receiving Direct Assistance from USAID

Licit Crop	Bananas		Pineapple		Passion Fruit		Palm Hearts		Black Pepper	
	1998	2002	1998	2002	1998	2002	1998	2002	1998	2002
1 Hectares Planted and Carried Over	1,650 <sup>1</sup>	7,220	730	1,200	150 <sup>3</sup>	400 <sup>3</sup>	700 <sup>4</sup>	9,600 <sup>4</sup>	153 <sup>3</sup>	1,253
2 Output in Tons	55,320 <sup>1</sup>	961,000	7,876	16,199 <sup>2</sup>	1,500 <sup>3</sup>	4,000 <sup>3</sup>	420 <sup>4</sup>	8,640 <sup>4</sup>	459	3,759
3 Value of Output in thousands of US dollars	3,236	22,161	1,496	3,078	330 <sup>3</sup>	880	810	15,552	1,377	11,277
4 Net Income per Hectare <sup>1</sup> in US Dollars	Cavendish <sup>1</sup>		Pucallpa <sup>2</sup>		468 <sup>3</sup>	468 <sup>3</sup>	1,067 <sup>10</sup>	1,067 <sup>1</sup>	6,539 <sup>11</sup>	6,539 <sup>1</sup>
	1,462	1,462	2,407	2,648						
	FHIA <sup>11</sup>		Cayena Lisa							
	380	380	2,863	2,863						
5 Total Net Income Generated in thousands only US Dollars	1,852 <sup>11</sup>	8,695 <sup>11</sup>	1,187	2,425	70 <sup>3</sup>	187 <sup>3</sup>	747	10,248	1,000	8,193
6 Number of Families Benefited	1,818	8,254	241 <sup>1</sup>	3,131 <sup>1</sup>	150 <sup>3</sup>	400 <sup>3</sup>	3,900 <sup>11</sup>	8,300 <sup>11</sup>	306	2,506
7 Employment Generated per Ha (Persons/day) <sup>11</sup>	131	131	151	151	173	173	92	92	255	255
8 Total Employment Generated (Total Persons/Years) <sup>1</sup>	553	2,746	237	444	87	231	215	2,944	130	1,065
9 Exports in thousands US Dollars	264 <sup>1</sup>	1,632 <sup>1</sup>	70	770 <sup>11</sup>	0 <sup>3</sup>	0 <sup>3</sup>	1,750 <sup>17</sup>	36,000 <sup>1</sup>	0 <sup>3</sup>	5,577

**Footnotes to Table 3**

Bananas There are two varieties, Cavendish and FHIA The data provided by DAI area as follows

1998 2002

Cavendish (established in blocks or compact areas)	Hectares	Output MT	Hectares	Output
New Plantings	1,267	55,320	5,500	899,742
FHIA	383	-	1,720	61,255
Total	1,650	55,320	7,220	960,997

2) Pineapples There are two varieties, Pucallpa and Cayena Lisa Hectares planted and production in 1998 and 2002, and output in these years, are as follows

1998 2002

	Has Planted	Has in Production	Output M T	Has Planted	Has in Production	Output
Pucallpa	455	354	5,289	601	478	7,812
Cayena Lisa	275	117	2,587	599	405	8,385
Total	730	471	7,876	1,200	883	16,199

Total Value of Output (in thousands of \$) \$1,496 \$3,378

Source Pineapple Line Manager, "Superficie en hectáreas, Producción y Valor de Pinya y sus Proyecciones al Año 2002"

3) Data provided by Production Manager for passion fruit and black pepper

4) "Metas de Producción de la Línea Palmito, CORDEP II "

5) For bananas source Banana Line Manager, "Estimaciones Anuales de Producción e Ingresos en Plantaciones Cavendish", and "Estimaciones de Plantaciones Nuevas Valor de la Producción y Familias Atendidas, Programa FHIA"

6) Value of output of palm hearts was estimated as follows In 1998 3 000 000 tallos @ \$ 27 each = \$ 810 000 In 2002 57 600,000 tallos @ \$ 27 each = \$ 15,552,000

7) Net Income per Hectare is derived from the Product Line Managers' crop production tables which provide detailed estimates of costs revenues and net return per hectare per year over the life of the plants Only the average of the first five years after planting is considered in all cases other than bananas for which we considered eight years)

In the case of bananas net income per hectare and total net income are derived as follows

For Cavendish

Average net income per hectare over the first eight years \$ 1 462 per hectare

Total net income

In 1998 \$1 462 x 1 267 Has=\$1 852 000

In 2002 \$1 462/Ha x 5 500 Has = \$ 8,041 000

17

For FHIA

Average net income per hectare over the first eight years \$ 380/Ha

Total net income

In 1998 No output hence 0

In 2002 \$380/Ha x 1,720 Has = \$ 653 600

Grand Total net income for both varieties

In 1998 \$1,852,000

In 2002 \$8,694,600

Source Banana Line Manager, "Flujo de Costos e Ingresos para Una Hectárea", y "Estimaciones Anuales de Producción e Ingresos en Plantaciones Cavendish" y "Programa FHIA"

9) For pineapples, net income per hectare and total net income are derived as follows

For Pucallpa

Average net income over the three-year life of the plant \$2,407

Total net income

In 1998 \$2,407 Ha x 354 Has = \$852,078

In 2002 allowance must be made for the projected 10% increase in average yield

\$2,407 Ha + 10% = \$2,648

\$2,648/Ha x 478 Has = \$1,265,744

For Carrera Lisa

Average net income over the three year life of the plant \$2 863

Total net income

In 1998 \$2 863/Ha x 117 Has = \$334,971

In 2002 \$2,863/Ha x 405 Has = \$1,159,515

Total Net Income Generated by both varieties

In 1998 \$1,187,049

In 2002 \$2,425,259

10) For palm hearts and black pepper, the estimate is the average annual income per hectare for the first five years following cultivation

11) Total net income of both banana varieties combined See footnote (8) for detailed calculation

12) Includes only families which signed a Zero Coca Agreement (ZCA) Source Gerencia de Línea Piña, "Inversiones Efectuadas y sus Proyecciones para 1997-2002 "

13) Includes only families which signed a coca eradication agreement Source "Metas de Producción de Línea Palmito, CORDEP II "

14) Employment generated per hectare is estimated in person/days per annum The estimates were based on the detailed crop production tables which show the person/days requirements for each task

15) The employment generation figures per hectare expressed in person/days on line 7 were multiplied by the number of hectares under cultivation in 1998 and 2002 (line 1) these were then converted to person/years on the assumption of an average of 300 person/days per year In the case of bananas, this process was done separately for each of the two varieties

16) Source Production Line Manager for bananas

17) According to Production Line Manager for palm hearts all palm heart production in 2002 will be exported The export value of palm hearts on line 9 refers to the total export value of the processed product (in cans while the "value of output" on line 3 refers only to the gross value of the unprocessed farm product (i.e. "tallos") This explains the much higher value of exports on line 9

18) Assumes that one-fourth of pineapple output is exported

78

## V INVESTMENT REQUIREMENT

The projected investment requirement for the five-year period 1998-2002 is presented in Tables 4 through 7. It is divided into two parts: direct investment which consists of crop assistance to farmers to defray the costs of planting a new crop during the first year of cultivation, and includes seeds, other inputs, equipment, labor, etc., and indirect investment which includes technical assistance, infrastructure, assistance to marketing and investment promotion, aid for research and extension services, and needed subsidies to key institutions during the period. While estimates for direct investment are shown for each of the five major crops, the projected requirement for indirect investment does not provide a crop by crop breakdown, as it is not practical to allocate items such as technical assistance and aid to institutions to particular crops. On the other hand, we provided an estimate of the breakdown of the indirect investment requirement into its major components, such as TA, sales & investment promotion, infrastructure, etc., presented in Tables 5 and 6, to the extent available data permitted.

The direct investment requirement for the five crops is presented in Table 4, sections A through E. It is based on data provided by CORDEP's product line managers, though the methodology applied is ours. We assumed that financing was needed for the first year of cultivation of an alternative crop, since no revenue generally could be expected that year, while the farmer would lose his income from coca. On the other hand, no allowance was made for any direct crop assistance in the following years since the sale of the first year's crop should provide the resources for planting in the following year. The direct investment requirement was based on the estimated average total cost of cultivation per hectare, which was then multiplied by the total number of hectares to be planted during the 1998-2002 period.

It should be borne in mind that all technicians consulted were asked to provide their best estimates of the resource requirement to meet the goals set in the R-4 document, without regard to the availability of funds that might become available. This is particularly important in the case of large budget items such as the infrastructure and technical assistance budgets presented in Tables 5 and 6, which together come to about \$47 million. Our purpose was to separate the requirement from that which can be accomplished with resources likely to become available, in order to determine whether there is a gap between requirements and resources, and if so, what its approximate size is likely to be.

In the case of the requirement for technical assistance, training and services to the NGOs, provided by Planning Assistance, IBTA and the product line managers (in Table 6), we found that the estimates given to us were likely to err on the high side, a judgement with which the Team Director concurred. On the other

hand, we found that the allowance the technicians made for marketing and investment promotion fell far short of the amount the Mission considered necessary for the further development of the major crops, given the importance of significantly expanding their export markets. We decided, therefore, to provide a column of "adjusted figures" alongside the estimates provided by our sources (column 2 of Tables 6 and 7). These data obviously require careful review.

The total investment requirement for the five major crops during the period 1999-2002 comes to \$71.5 million with our adjustments, and to \$89.4 million if all estimates by the Consultant's product line managers and other technicians are accepted (Table 7). All estimates should be revised periodically as better data become available. It also should be borne in mind that these investment requirement estimates apply to the five major crops only, and exclude any new activities that AID and other donors might decide to undertake, as well as the FAO proposed agro-forestry project that will be discussed in the following section.

**Table 4**

**Direct Investment Requirements for the  
Five Major Crops 1998-2002**

Note For direct crop assistance (which excludes technical assistance, aid to institutions, marketing, investment promotion and infrastructure, items that are listed separately in tables 5 and 6), we assumed that financial assistance is required only for the first year of operation, or until the first crop is marketed. The proceeds from that sale should be available to cover the production cost of subsequent years.

**A Bananas Cavendish and FHIA<sup>o</sup>**

**Investment per Hectare  
in Year 1**

Cavendish                      FHIA

Equipment	3,235	280
Inputs	4,980	11,850
Materials	2,936	361
Packing Material	1,331	0
Labor	4,647	3,725
Total in Bs	17,129	16,216
Total in US dollars (1\$=Bs 5.5)	3,114	2,948

Number of Hectares Planted over 1998-2002	566	536
--	-----	-----

**Total Direct Crop Investment over 1998-2002**

Cavendish	\$3,114/Ha	5,500 Has=	\$17,127,000
FHIA	\$2,948/Ha	1,720 Has=	\$5,070,560
<b>Total Direct Investment</b>			<b>\$22,197,560</b>
<b>Estimated Cost of Technical Assistance, 1998-2002</b>			<b>\$541,000</b>

---

<sup>o</sup> Source: Banana Production Line Manager

B Pineapples Cayena Lisa and Pucallpa

	Investment per Hectare in Year 1 in US dollars <sup>1</sup>	
	Cayena Lisa	Pucallpa
Fixed Investment		
Planting Material	1,909	873
Equipment and Other Material	293	222
Labor	502	447
Operating Costs		
Inputs (Materials & Agrochemicals)	266	120
Labor	398	442
Total Costs per hectare in Year 1	3,369	2,105
Total number of hectares planted in 2002		
Cayena	599	
Pucallpa	601	
Total Direct investment over 1998-2002		
For Cayena Lisa	\$3,368 x 599 Has (2) =	\$2,017,432
For Pucallpa	\$2,104 x 601 Has (2) =	\$1,264,504
Total Direct Investment		\$3,281,936
Estimated Cost for Technical Assistance, 1998-2002		\$568,640

At the exchange rate of \$1=Bs 5.5

Source: Pineapple Line Manager, Flujo de Costos e Ingresos para una Hectarea Cayena Lisa y Pucallpa

C Passion Fruit

Investment per  
Hectare in Year  
1 in US dollars

Fixed Costs	
Inputs	678
Labor	552
Operating Costs	
Inputs	338
Labor	756
Total Costs per hectare in Year 1	2,324

Years	1998	1999	2000	2001	2002
Hectares Planted	100	150	170	190	210
Investment Required \$2,324/Ha Line 1	232,400	348,600	395,080	441,560	481,400
Total Direct Investment over 1998-2002					1,900,650

D Palm Hearts

Investment Budget for 1998-2002  
(In US dollars)

Seeds and Labor	\$5,165,000
Other Inputs	<u>\$1,358,000</u>
Total	\$6,523,000 <sup>4</sup>

Institutional and Technical Assistance Support for Palm Hearts (1)

Technical Assistance (includes external assistance)*	4,607
Training	800
Agricultural Research	520
Assistance for Marketing	630
Investment Promotion	670
Monitoring and Evaluation	610
Total	\$8,837 <sup>3</sup>

Source: Passion Fruit Production Line Manager

Source: Product Line Manager for Palm Hearts, "Presupuesto Estimado de Inversiones Palmito" 29 de junio de 1998

These high figures assure that 93 hectares will be planted to palm hearts during 1998-2002 a goal that is considered unlikely to be attainable. We have, therefore, lowered these projections significantly in our own estimates in Tables 6 and 7.

E Black Pepper

Investment per Hectare  
in Year 1 in US  
dollars

Fixed Costs

Labor	630
Planting Material and Other Inputs	1,570

Operating Costs

Labor	510
Inputs	122

Total Costs per hectare in Year 1	2,832
-----------------------------------	-------

Projected number of hectares in 2002 1,253

Total Direct Investment requirement \$2,832 x 1,253 Has=\$3,548,496

Estimates for other investment requirements as follows

Market Promotion, \$20,000 a year for five years	\$100,000
Technical Assistance, \$644 per hectare for 1,253 Has	\$806,932

\* These items are included, in part in Table 6 which estimates the investment requirements

94

**Table 5**

**Investment Requirements for Infrastructure**

Investment  
(In millions of US dollars)

	Average Annual	For 1999-2002
1 Roads and Bridges		
Road Maintenance (of a 1200 Km network @ \$1,125 per km)	\$ 1,35 million	-
Improvement and Essential Expansion of the Road Network, 30 km p a @\$32,500/km	\$ 0 975 million	-
Medium Bridges (250 metres), \$2,500/meter	\$ 0 625 million	-
Box Culverts (5 structures/year), \$20,000/structure	\$ 0 100 million	-
Stone Paving, \$22,500/Km x 50 Km	\$ 1 125 million	-
Road Maintenance Equipment	\$ 0 450 million	-
<b>Total Average Annual</b>	<b>\$ 4 625</b>	<b>\$18 5</b>
2 Cable Systems (from field to road) 200 Km/Year, \$4,200/km	\$ 0 84	\$ 3 4
3 Packing and Collection Centers 100 structures over 4 years	-	\$ 0 50
4 To Provide Clean Water for Washing Crops		
Deep well project	-	\$ 1 00
Surface water requirement	-	\$ 0 55
<b>Grand Total, 1998-2002</b>		<b>\$ 24 00</b>

<sup>1</sup> Excluding Intensive Drainage Work  
Source Manager for Roads and Other Infrastructure

85

Table 6

Investment Requirement for Technical Assistance, Marketing and  
Investment Promotion, Research and Extension, and  
Aid to Key Institutions over 1999-2002  
(in thousands of Dollars)

Technical Assistance (TA)	Technicians Estimates	Adjusted Figures <sup>2</sup>
All Pre-Harvest Pproduction TA handled by 3 NGOs (including resources for taining their technicians) <sup>1</sup>	14,000 <sup>1</sup>	8,000
Post-Harvest Technical Assistance:	6,974	4,667
	Technicians' Estimates	Adjusted Figures
Pineapple	\$568 <sup>3</sup>	568
Bananas	541 <sup>8</sup>	541
Passion Fruit	451 <sup>5</sup>	451
Palm Heart	4,607 <sup>4</sup>	2,300 <sup>9</sup>
Black Pepper	807 <sup>5</sup>	807
Marketing and Investment Promotion (including pre-feasibility studies, marketing surveys, TA on plant lay-out, outside contracts, etc) 250,000/year(6)	1,000	7,000 <sup>10</sup>
Research, Training and Services to NGOs	6,000 <sup>7</sup>	3,000
<b>Total</b>	<b>27,974</b>	<b>22,667</b>

Note The above estimates were obtained from different sources and may involve significant duplication

- 1 Source Director of Planning Assistance
- 2 Adjusted by Chemonics Team where technicians' estimates appeared excessive or suggested duplication of function
- 3 "Inversiones Efectuadas y sus Proyecciones en US \$ para la Linea Pina, Periodo 1997 - 2002"
- 4 Palm Hearts Product Line Manager
- 5 Product Line Manager for Black Pepper and Passion Fruit
- 6 Investment and Agro-Industry Unit
- 7 Source Chief Technical Division, IBTA/Chapare
- 8 Banana Product Line Manager, "Estimación de Costo de Asistencia Técnica, 1998 - 2002"
- 9 Assumes that less than half as many hectares as projected will be planted to palm hearts over 1999-2002 (4,000 Has in lieu of 9,800 Has See footnote 2 of Table 4, page 4)
- 10 The technicians' allowance for marketing and investment promotion is partial and believed to be wholly inadequate The Mission plans a major effort in the marketing area, as the development of exports is considered essential to the growth of alternative crops in the Chapare

**Table 7**  
**Summary of Total**  
**Investment Requirements Over 1999-2002**  
**(in thousands of Dollars)**

	Technicians' Estimates	Adjusted Figures
<b>Direct Investments in Crops<sup>1</sup></b>		
Banana	22,198	12,648 <sup>4</sup>
Pineapples	3,282	3,282
Passion Fruit	1,906	1,906
Palm Hearts	6,523	3,500 <sup>5</sup>
Black Pepper	3,548	3,548
<b>Total Direct Investment in Crops</b>	<u>37,457</u>	<u>24,884</u>
Infrastructure <sup>2</sup>	24,000	24,000
Technical Assistance, Investment Promotion, Marketing, Research and Extension, Assistance to Institutions	27,974	22,667 <sup>3</sup>
<b>Grand Total</b>	<b>89,431</b>	<b>71,551</b>

2

- 
- 1 From Table 4, Sections A through E
  - 2 From Table 5
  - 3 From Table 6, figures adjusted by Chemonics Team
  - 4 This lower figure for bananas assumes that financing will be provided for first year fixed costs only  
The financing of operating or variable costs will be borne by the farmer
  - 5 See footnote 9 of Table 6

81

## VI AGRO-FORESTRY

The Food and Agriculture Organization (FAO) of the United Nations is currently implementing a forestry conservation project in the Chapare, with financing from the UNDCP and counterpart from FONADAL. The project is designed both to provide for a system of sustainable exploitation of forest resources and to avoid the waste inherent in the traditional system, which involves clearance of wooded areas through slash and burn, followed by a cycle of cultivation of annual crops, perennial crops, leaving land fallow, and a renewed cycle of slash and burn, until the forest is exhausted.

The FAO proposal to the Mission is for USAID to participate in the financing of an agro-forestry project involving the cultivation of a combination of crops, including bananas, rice, forest cover and trees. The cover is expected to save labor and inputs required to maintain the productivity of the soil, and will assist in its fertilization. On the basis of results obtained on parcels near Gilberto Villarroel, FAO claims that the project yields an IRR of 49 percent, a net present value of \$2,200 (at an annual discount rate of 18 percent) on the basis of an initial investment of \$794, which is recovered in the third year. The return will take the form of an annual income of about \$1460 per hectare from bananas alone between the first and sixth year, and will yield additional income from the sale of soft and hard woods in the 10th and 20th year.

The Mission is currently considering a "buy-in" into this program amounting to about \$1 million a year, while the FAO-UNDCP counterpart may be as high as \$8 million over the 98-02 period. While the project is being seriously considered, it is not yet sufficiently advanced to permit estimation of its likely impact on output, net income, number of families benefitted, and employment generated. It was not, therefore, included in our quantitative analysis.

## VII ANALYSIS OF IMPLICATIONS

In this section, we will compare the total net income generated by the five crops with the total investment requirement (summarized in Table 7) to determine the investment/output ratio that the program entails. We will also compare the total investment requirement arrived at in the course of this analysis with the projection of total resources (from all sources) expected to become available to finance it in order to arrive at the resource gap (if any), as well as to determine the feasibility of achieving the goals set in the R-4 document.

### A Investment/Output Ratio

Table 8 summarizes estimates for the total net income generated by the five major crops in 1998, along with projections for 2002. The resulting increase is \$24.9 million over this four-year period. This compares with a total investment program of about \$71.5 million (using our adjusted investment budget) and to \$89.4 million (the sum of the unadjusted product managers' projections), resulting an investment/output ratio of 2.9-3.6. While investment/output ratios vary significantly from one activity to another (see footnote 6) a ratio of 3.0 is often used as an average. While a ratio as low as 1.0 to 1.5 sometimes occurs in small-farm agriculture when most of the investment is in inputs and operating capital and both land and infrastructure are available, such a low ratio would be suspect in the case of the Chapare, in view of the large investments in infrastructure, technical assistance, research, training, etc. that are required to promote the profitable development of alternative crops. Note that the combined investment requirement in these areas amounts to about \$47 million (according to our adjusted estimates in Table 7), equal to 2/3 of the total investment program. This fact caused the investment-output ratio to rise to around 3.0. It also should be borne in mind that our estimate of direct investment in crops is based on the assumption that former coca farmers will obtain full financial assistance only in the year of cultivation of one of the five crops, but none in subsequent years, unless they decide to expand the area under cultivation. Our assumption is that they would use the proceeds of the first harvest to defray the operating costs of cultivating the same area in subsequent years. They are thus expected to use their

---

\*/ The investment/output ratio (generally called the incremental capital/output ratio) is almost always a multiple of one, since the total amount of the investment in productive facilities is related to the output of a single year, while the capital created generally has a life span of several years. The ratio varies considerably depending on the activity, all the way from 1.5 for small farm agriculture to 5 or more for physical and social sector investments, such as infrastructure, housing, health, and education.

own resources, i e reinvest part of their earnings, to cover their operating costs on each hectare newly planted to alternative crops, in all years after year 1 Our estimate of the investment requirement is thus limited to the financing required of public donors, and excludes any reinvestment that farmers are expected to make of their earnings to cover the costs of maintaining their output on each hectare converted to alternative crops Note that this observation applies only to direct crop investment With regard to infrastructure and technical assistance, investment promotion, marketing, etc it is assumed that donor assistance will cover the full cost over the four-year projection period

**Table 8**

Summary  
Projected Net Income  
Generated in 2002 by the Five Major Crops  
(in thousands of Dollars)

	1 Total Net Income in 1998 <sup>1</sup>	2 Total Net Income Generated by 2002 <sup>1</sup>	3 Increase in Income 1998-2002 (2 - 1)
Bananas	1,852	8,695	6,843
Pineapple	1,187	2,425	1,238
Passion Fruit	70	187	117
Palm Hearts	747	10,248	9,501
Black Pepper	1,000	8,193	7,193
Total	4,856	29,748	24,892

<sup>1</sup> As estimated for each crop on line 5 of table 3

## B Investment Requirement in Relation to Available Resources

The total investment requirement, developed in Tables 4 - 6 and summarized in Table 7, is placed alongside the funding that the Mission expects to become available during the four-year period 1999-2002 (Table 9). On the funding availability side, the Mission expects about \$55.0 million to become available for alternative development over the period to finance the requirements of the five major crops (including both the direct and indirect investment requirements, as presented in Table 7), but excluding the \$5.0 million "buy-in" into the FAO/UNDCP agro-forestry program. The Mission also expects the European Union (EU) to provide a \$6.3 million complementary program to finance roads, water and sanitation in the Chapare, but this program is not expected to finance the USAID investment program, and was therefore omitted from Table 9. With regard to the GOB contribution, there is a GOB-USAID agreement, incorporated in the PL-480 Executive Implementation Letter of June 15, 1998, in which the GOB commits itself to contribute \$6.2 million to the Alternative Development Program over 1999-2002. It is also expected that the municipalities will contribute to the financing of the infrastructure in their regions, (although there is not, as yet, a formal agreement to this effect), and it is in fact planned that USAID-financed road improvement and other infrastructure projects will be conditioned on provision of such counterpart. Municipalities are expected to contribute a gradually increasing share to the financing of the road maintenance and improvement project, starting with 10 percent in 1999, and rising to 20 percent in 2000, 40 percent in 2001 and 50 percent in 2002. An average of 30 percent of the \$18.5 million four-year road budget (\$5.55 million) was entered for municipalities in Table 9.

No estimates for Germany and Spain were entered in Table 9, as no commitments or estimates could be obtained from their representatives. The UN will be financing a number of activities in the Chapare, but these are mostly in the social sector (training, schools, clinics), and in the area of institutional development, which are not likely to contribute directly to the financing of our investment program for the five crops. On the other hand, as noted in Section VI, the UNDCP will help finance, jointly with the FAO, the Agro-Forestry program, listed on lines 5 and 6 of Table 9.

Without the Agro-Forestry program, the total financial availability for the five crops (inclusive of the contribution of the GOB and the municipalities) is projected at \$66.8 million, versus a total investment requirement of \$71.5 to \$89.4 million (line 4 of Table 9). Inclusion of the FAO/UNDCP Agro-Forestry program would raise both the investment requirement and funding availability by \$13.0 million (lines 5 and 6 of Table 9),

assuming that USAID can obtain the \$5 0 million programmed for that purpose (which would be additional to the \$55 million for the five crops), and that the FAO/UNDCP would contribute the \$8 0 million included in their proposal. According to these projections, the gap between the projected investment requirement and funding availability is \$4 7 to \$22 6 million, depending on whether one uses the sum of the estimates of the Consultant's product line managers, or our lower adjusted estimates, for the investment requirement. The lower end of this range would be within the margin of error.

All projections presented in this report should be treated as preliminary. It should also be emphasized that even a meticulous four-year projection of both requirements and funding availabilities should be reviewed at periodical intervals -- at least annually -- if they are to remain relevant for policy making purposes.

Table 9

Projected Investment Requirement and  
Funding Availability, 1999 - 2002  
(in thousands of Dollars)

	Investment Requirement <sup>1</sup>	Source	Projected Funding Availab
1 Direct Investment in Crops	24,884	USAID <sup>2</sup>	5,000
	to 37,457	GOB5	6,258
2 Infrastructure	24,000	Municipalities	5,550
3 TA, Investment Promotion, Marketing, Research and Extension, Aid to Institutions	22,667		
	to \$27,974	UN <sup>4</sup>	-
4 Total Investment for the Five Crops (lines 1 + 2 +3)	\$71,551 to \$89,431	Total Available Resources	\$66,768
5 FAO - UNDCP Financed Agro Forestry Project	13,000	USAID	5,000
		FAO - UNDCP	8,000
6 Total, with Agro Forestry Project	84,551 to 102,431		79,768

1 From Table 7

2 According to latest information available to Mission

3 Municipalities are projected to contribute an average of 30% of the cost of road maintenance and improvement over the 1999 - 2002 period (\$18.5 million x 30 = \$5.55 million)

4 The UN will be financing a number of social sector and institutional development activities during the projection period, but nothing that meets the specific investment requirement of the five major crops

5 Source: USAID - PL480 Executive Implementation Letter, dated June 15, 1998

94

#### C Realism of the Objectives Set in the R-4 Document

The answer to this question depends on three factors (1) whether USAID will actually obtain the \$55 million projected to become available over the four-year period 1999-2002, (2) the realism of the projections by the Consultant's product line managers of the number of families expected to benefit from alternative development, and the increase in income from the program that they are expected to earn, and (3) whether the projected gap between total investment requirements and availabilities can be closed

These are all open questions at this time. Our calculation in Section IV suggests that, if all these conditions were met, the objective of providing alternative sources of income for some 30,000 former coca growing families by 2002, though quite ambitious, might be attainable. However, we believe that the additional objective of raising the per capita income for all 30,000 families projected to benefit from alternative development by some \$750 is unlikely to be attained. We would suggest an increase of \$200 to \$300 as a more realistic target for 2002. It also must be emphasized that this goal refers to the hoped-for increase in per capita income from alternative development, and not to an increase in per capita income as such, since the income from coca would be lost.

VIII COMPARISON OF THE COST OF THE JOINT ALTERNATIVE  
DEVELOPMENT/INTERDICTION PROGRAM WITH THE VALUE OF THE COCA IT IS  
DESIGNED TO PREVENT

The data to help answer this question are presented in Tables 10 and 11. Table 10 estimates the combined cost of both the four-year alternative development program and the U S financed interdiction-eradication program, including NAS support for the GOB military. To project the total cost of the interdiction-eradication program, we took the actual total \$22 million expenditure in FY 1997 as base, and assumed that costs to the USG would increase by 2.5 percent a year, equal to the annual rate of inflation in the U S. Thus, the program would cost the USG some \$96 million over the 1999-2002 period (line 5 of Table 10). This amount, when added to the \$71.5 million projected cost of the alternative development program (our adjusted estimate), would come to a grand total of some \$167.3 million over this four-year period (line 7 of Table 10).

The estimated annual value of the coca/cocaine that the Chapare has the capacity to produce is estimated in Table 11. Since all coca leaf is processed into base, and a substantial proportion of that base is also processed into HCL in Bolivia, the value of unprocessed coca leaf (on line 1) is obviously irrelevant. The value of coca base is equally irrelevant from the viewpoint of the U S interest, since all base is processed into HCL before being exported to the U S. Thus, the relevant values are those of HCL, of which the annual wholesale value is some \$214 million in Bolivia (line 3 of Table 11), and attains the astronomical figure of \$16.8 billion when valued at U S street prices (line 4). Even if one uses only the wholesale cocaine price in Bolivia, it is clear that a single year's output substantially exceeds the combined four-year cost of the alternative development and interdiction/eradication programs.

The above constitutes a powerful justification for the combined alternative development/interdiction program on two assumptions: (1) that the program will succeed in eliminating all, or at least most, cocaine production in Bolivia in the target year, and (2) that the elimination of Bolivia's production will not be replaced by increased production elsewhere.

**Table 10**

Total Estimated Cost of Interdiction and  
Expenditures for Alternative Development Over 1999 - 2002  
(in thousands of Dollars)

	Calendar Year					
	1997	1998	1999	2000	2001	2002
1 Law Enforcement	12,436					
2 Control and Eradication	2,374					
3 NAS Support for Military	7,156					
4 Total	21,966	22,515	23,078	23,635	24,246	24,852/
5 Total Cost of Interdiction over 4 year period, sum of 1999 - 2002				95,831		
6 Projected Investment For the Five Major Crops				71,500 <sup>1</sup>		
7. Grand Total				<u>167,331</u>		

Source For FY 1997 data NAS/DEA Table on "Ayuda de EE UU a Bolivia Años Fiscales 1993 - 1997" October 17, 1997 Extrapolation over 1998 - 2002 is ours

<sup>1</sup> Projected to increase during 1997 - 2002 at an average annual rate of 2.5% which is the US rate of inflation in recent years

<sup>2</sup> Our adjusted estimate of investment requirements

Source For FY 1997 data NAS/DEA, Table on Ayuda de EE UU a Bolivia, Años Fiscales 1993 - 1997 October 17, 1997 Extrapolation over 1998 - 2002 is ours

Table 11

Estimated Value of the Chapare's Annual  
Coca Production  
(in thousands of Dollars)

1 Coca Leaf Production Potential of the Chapare (unprocessed)	$56,200 \text{ MT}^1 \times 1,477/\text{MT}^2 = 83,027$
2 Potential Value of Base (assuming all leaf is converted into base)	$153,133 \text{ Kg}^3 \times 700/\text{Kg} = 107,193$
3 Potential Value of Cocaine HCL in Bolivia (if all base is converted into HCL):	$53,000 \text{ Kg}^4 \times 1400/\text{Kg}^5 = 214,200$
4. Retail Value of HCL in the US	$153,000 \text{ Kg} \times 110,000 = 16,830,000$ (= 16 8 billion p a )

---

<sup>1</sup>DEA, 1997 Andean Coca Estimates, Table on Bolivia Potential Coca Leaf Production by Region

<sup>2</sup>Equivalent of a price of \$67 per 100 pound carga, as used in the last Mission projection  $\$67/100 \times 2,205 \text{ lbs/Ton} = 1,477/\text{Ton}$

<sup>3</sup>367 Kg of dried coca leaf are needed to produce one kilo of base Hence  $56,200,000 \text{ Kg} \text{ divided by } 367 = 153,133 \text{ Kg}$

<sup>4</sup>DEA, 1997 Andean Coca Estimates, Table on Bolivia Potential Cocaine Production, According to AID Mission data.

98

## IX THE ROLE OF ALTERNATIVE DEVELOPMENT

USAID's alternative development program has a history that goes back more than fifteen years. Along with compensation payments to coca eradicators, the threat of forced eradication of all coca at the end of a ten-year period in the "transitional zone", and with the help of the USG financed interdiction program, it was hoped that coca production could be eliminated, or at least substantially reduced, by the end of this ten-year period.

The alternative development program has had substantial success in developing alternative crops in the Chapare (particularly bananas and pineapples, but also the other three major crops assisted by the program), and has also resulted in the gross eradication of over 46,000 hectares over the ten-year period 1988-97. The proportion of total income derived by Chapare farmers from coca declined significantly owing to the growth of these alternative sources of income. Unfortunately, new plantings of coca in the Chapare had the effect of leaving the total area planted to coca virtually unchanged over this period. Hence, alternative development was more aptly described as "parallel development".

The Mission, and USAID/Washington, are now convinced that the alternative development program cannot be the center piece in its fight against coca cultivation. The major emphasis has rightly shifted to eradication and interdiction, a shift that has the full support of the Banzer Administration, which has committed itself to full eradication of all illegal coca cultivation by 2002. Alternative development is now relegated to a supporting role.

This change in policy raises the following questions: What is, precisely, the role that the alternative development program is expected to play? Is the U.S. still justified in spending at least \$60 million on it over the next four years, given the fact that the elimination of coca continues to be our primary goal, and that the program is not expected to play more than a subordinate role?

The answer to this question is definitely affirmative, for the following reasons:

- (1) Humanitarian considerations. There are some 30,000 to 35,000 families in the Chapare wholly or partly dependent on coca for their livelihood. Most coca farmers are not well off. Moreover, the planting of a new crop generally entails substantial costs, especially in the first year, while there is a waiting period of one or more years before the first

---

<sup>1/</sup> Counting from enactment of Law 1008 in 1988

crop can be harvested This time gap must be bridged There is also the fact that alternative crops are much more demanding of infrastructure, inputs and technical assistance than coca

- (2) Political considerations Bolivia is a democracy The government cannot be insensitive to the hardships imposed by its policies upon large numbers of people, especially in view of the power of the country's unions and the close cooperation that prevails between the rural and urban unions The policy of forced eradication has been a particularly conflictive and sensitive issue, rendered all the more acute by U S insistence on eradication The government needs all the economic support the U S can provide The withdrawal of the U S from financing alternative development would isolate the GOB further and could force it to relent on its resolve The U S also needs the program to mitigate the unpopularity of its stance on eradication And above all, the U S has an overriding interest in preventing the narco interests from subverting the government
- (3) While alternative development has failed to reduce the surface planted to coca, it does sweeten the pill for those who must swallow it It should be viewed as offering at least partial compensation to farmers forced out of coca It is far better to move from coca to an alternative crop than to be left with nothing The program offers a positive incentive to shift out of coca, which, when accompanied by a credible threat of forced eradication, can be expected to accomplish its purpose
- (4) While economic development certainly is not the focus of the alternative development program, it has nonetheless occurred on a significant scale The economy of the Chapare is now considerably more diversified, is endowed with a much better infrastructure, has made a good start in developing its export potential, and has provided its farmers with higher wages and a higher living standard than farmers in most other areas of the country

We believe that these arguments constitute a powerful case for continued U S financing of alternative development Most importantly, the full cooperation of the GOB in implementing the interdiction-eradication program is essential, and cannot be expected to occur without U S economic support It should also be noted that no termination date can be placed on the interdiction-eradication program Even when most or all coca has been eradicated, the same vigilance and control must continue, or coca cultivation will reappear This is bound to occur as long as the drug is in demand at highly profitable prices

## II. Institutional Analyses

### Background

On July 5, 1991, USAID/Bolivia and the Government of Bolivia (GOB) signed Project Grant Agreement No 511-0617, titled the Cochabamba Regional Development Project (CORDEP), providing \$80,000,000 in grant funds. USAID successfully negotiated with the GOB to provide \$40,000,000 counterpart funding to be channeled through the PL-480 Executive Secretariat and the Direccion de Financiamiento Externo y Monetizacion (DIFEM). The original CORDEP PACD was September 30, 1997, but has since been extended twice until May 31, 1999.

The goal of the CORDEP Project is "increasing investment, productivity and employment in licit activities as Bolivia transforms its coca based economy". The purpose of the Project is "to develop sustainable alternative sources of income and employment for the people within the Department of Cochabamba and its area of influence". The area of focus is the Chapare region.

The Project has four components

\* Production and Marketing

To provide technical assistance to farmers for the production and marketing of alternative crops

\* Capital Resources

To provide private sector firms with incentives to build fruit and vegetable processing facilities

\* Small Farm Sustainable Agricultural Production

To increase the agricultural production of farmers through research and extension services provided to them

\* Project Administration

To provide adequate support for USAID/Bolivia personnel contracted for project management and oversight of CORDEP

### Project Implementing Entities

The Project has three implementing entities:

#### Regional Alternative Development Program (PDAR)

The PDAR central office is located in Cochabamba. It was created by the GOB to function as the coordinating body for CORDEP.

alternative development activities. Additionally, its roles include a) validation of information and data on work at the field level; b) monitor implementation activities at the field level, c) monitor and assess the environmental impact of sub-projects, and d) report on program results. PDAR is the point of contact for farmers requesting CORDEP assistance for alternative development activities. The key staff of PDAR is composed of an Executive Director responsible for overall management who reports to the Vice-Minister for Alternative Development, an Administrative/Financial Officer, and a Technical Officer. Nine other professional staff, and ten administrative/support staff are also based in Cochabamba. Cochabamba-based professional staff and the Executive Director travel to the field on a regular basis. There are seven technicians and general support staff permanently based in PDAR's field office in Villa Tunari.

PDAR from its inception in 1983 (The entity has changed its name several times in the past 15 years), has attempted to develop an institutional capacity to become the coordinating body for the entire alternative development program in the Chapare on behalf of the GOB. As alternative development became more complex in the late 1980s, and program needs shifted with the entrance of additional donors, PDAR has attempted to develop new capabilities to better respond to program implementation needs. For example, PDAR is developing a unit which will collect data, and monitor and report on project progress. To do so the entity is developing its own data base and information system. However, there are some weaknesses that must be addressed as will be noted below in the observations to this analysis.

#### **Bolivian Institute of Agricultural Technology (IBTA/Chapare)**

The main office of IBTA/Chapare is also located in Cochabamba. Although IBTA/Chapare has considerable autonomy, it is a branch of the Ministry of Agriculture. IBTA/Chapare's principal function is to conduct applied agricultural research in areas directly related to alternative crops being promoted in the Chapare. Additionally, it provides training to extension workers and produces seedlings for alternative crops included under CORDEP.

The key staff of IBTA/Chapare is composed of an Executive Director, an Administrative/Financial Officer and a General Accountant. Ten other administrative and support staff are also based in Cochabamba. There are fifty technicians and fifteen support personnel based in two field research stations in the Chapare.

The IBTA/Chapare Production Unit is one of the principal providers of seedlings for the project, and the organization is making a special effort to improve the efficiency of this unit.

Even if the plant production unit could achieve self-sustainability, however, this strategy may have to be reviewed and re-organized, since the plant production unit may actually restrain the entrance of the private sector into this area. Over the years, IBTA/Chapare has become detached from its headquarters, leaving it without legal status. This is an issue which must be addressed in the near future.

#### **National Road Service-Tertiary Roads Department (SNC/CCVV)**

SNC-CCVV is a de-centralized institution under the Ministry of Transportation and Communications with its main office located in Cochabamba. Its function is to provide for road improvement directed to areas which demonstrate agricultural development potential. While it has technical and administrative autonomy it is under the organizational structure of the SNC/La Paz District.

CCVV key staff is composed of a Project Officer, two engineers, and an Administrator. Eighteen other professional and support staff are also based in the Cochabamba office. There are 160 field staff working in Chapare.

CCVV develops an Annual Operating Plan, which is submitted to the CORDEP Project Implementation Committee for review. Once the Committee reviews their plan, it is submitted to the Vice-Ministry for Alternative Development for final approval. CCVV includes the specific roads to be improved and maintained in their Annual Operating Plan, including those that it plans to contract out to the private sector. The implementation of the plan depends on the availability of funding.

#### **Funding for the Operations of the Implementing Entities**

The PL-480 Executive Secretariat, Title III provides local currency for 100 percent of the funding for PDAR, IBTA/Chapare, and SNC-CCVV operations. As Title III counterpart funding diminishes there is a high level of uncertainty regarding the future operations of all three entities.

#### **Follow-on Project**

The CN/SOT has identified PDAR, IBTA/Chapare, and SNC-CCVV as the three implementing entities to continue activities under CONCADE in order to achieve the CN Intermediate Result 4 "Sustainable Alternative Development Established". The three implementing

entities are suited to continue implementation because of their

\* past experience and administration of USAID resources,

- \* technical expertise with alternative development issues, and
- \* strategic location relative to the Chapare

### **Objectives of the Analyses**

In order to undertake this institutional analysis, a team of financial analysts from USAID/Bolivia Financial Management Office (FMO) visited the three implementing entities as part of the CONCADE design effort. The purpose of the visit was to conduct a preliminary evaluation to

- \* Determine if PDAR, IBTA/Chapare, and CCVV are complying with policies and procedures as established in their Commodity and Services Acquisition Manuals, Financial and Administrative Manuals, Inventory and Fixed Asset Manuals, Budgeting and Budget Implementation Systems, and for the Heavy and Light Equipment Maintenance System (In the case of SNC/CCVV), in compliance with GOB laws,
- \* Examine practices for fixed asset registration and tracking,
- \* Conduct a preliminary evaluation of the internal control mechanisms in place, and,
- \* Follow-up on the observations and recommendations on internal controls as reported in the external auditing reports for the year ending December 31, 1997

### **Scope of the Review**

The review included

- \* A preliminary review of the policies and procedures currently in place.
- \* A preliminary review of the accounting systems and internal control mechanisms utilized by the implementing entities
- \* Follow-up on observations and recommendations for internal control as stated by the external auditors

### **Methodology**

The following methodology was used

- \* Introductory meetings with the heads of the three entities, plus systems and financial/administrative management personnel

- \* A review of manuals for: Commodity and Services Acquisitions, Administrative and Accounting Systems, Inventories, Fixed Assets, Budgeting and Budget Implementation System, and the Heavy and Light Equipment Maintenance System for SNC/Caminos Vecinales
- \* A sample selection of commodity and service acquisitions was undertaken to see if policies and procedures established in the manuals were being followed.
- \* A sample of items which are included in the inventories was examined
- \* A review of the procedures followed for fixed asset registration and right-offs was made at the three entities
- \* A sample of personnel files was reviewed and the respective documentation analyzed (contracts, CVs, personnel records and certificates)

#### **General Conclusion**

In general, the three implementing entities possess sufficient capacity to adequately account for the receipt and use of USG appropriated funds. However, several material weaknesses were observed which need to be corrected prior to the implementation of CONCADE. Nevertheless, this preliminary conclusion needs to be confirmed or modified when the pre-award survey is conducted. The more relevant administrative deficiencies that were detected in the review and the recommendations for corrective steps are provided below.

#### **Observations and Recommendations**

In order to strengthen the administrative capacity of each of the three implementing entities, and because of the importance of some of the observations, the implementation of most of the following recommendations must be carried-out prior to any disbursements under CONCADE, and should be considered Conditions Precedent. The following is a summary of the observations and recommendations by category.

#### **Integrated Information System**

##### *Observation*

In 1993, PDAR, IBTA/Chapare, and CCVV developed an Integrated Information System (IIS), based on Price-Waterhouse prepared manuals, in order to have an integrated

105

information system to use as a management tool. The system utilizes Informix software under a UNIX operating system which was inherited from DONOVAN, and completed by the Mitchel Group in 1992. This program is well designed, however, due to the complexity of the software utilized, it was not completely implemented, but rather was complemented by the different entities through the creation of small sub-programs utilizing individual spreadsheets. This has negated all possibilities for the information to be integrated.

Since PL-480 Executive Secretariat provides operational funding, the three implementing entities only prepare accounting reports in local currency. When the entities are requested to submit accounting reports in US Dollars, electronic spread sheets are used instead of using the bi-monetary accounting systems that were originally designed and which allow for this type of report preparation. Apparently, the users are not acquainted with the accounting module for bi-monetary report preparation.

#### *Recommendation*

The design of the current system is still valid and should continue to be used so as not to lose six years of valuable data and experience. Nevertheless, since six years have passed since it was designed, it needs to be upgraded to make it more user friendly, transportable, and LAN/Windows compatible. The three systems must also be integrated to provide for the mutual exchange of information among existing data bases. This should be done immediately by the three entities and be considered as a condition precedent to the disbursement of any funds under CONCADE.

Additionally, the new contractor should be required to make a reassessment of the existing information system of the three entities in order to make it totally compatible with its own, as well as making it compatible with the new results-oriented data requirements of USAID.

#### **Personnel Functions Manual, Human Resource Management Systems, and Personnel Evaluation Manual**

#### *Observation*

None of the three implementing entities have personnel manuals or human resources management systems. PDAR and SNC-CCVV do not have a personnel evaluation manual. The Price-Waterhouse manuals developed for the three entities, and mentioned above, do not include personnel manuals.

While the three implementing entities were charged with the responsibility to adapt/adjust the Price-Waterhouse developed manuals to their specific needs, they did not take this opportunity to develop their own procedures for personnel management. This failing, at one time, could have been considered acceptable for the three entities since they have relied on USAID assistance in this area until recently. This, however, has led to substantial USAID involvement in personnel hiring which is no longer desirable, nor is it in line with current USAID policies.

In one of the implementing entities, Caminos Vecinales, salaries are being funded from two different sources, the GOB and Title III. Each funding source has a different pay scale and different salaries for the same type of work.

#### *Recommendation*

PDAR in coordination with the other implementing entities, should develop a standard system for personnel management, including hiring policies, compensation, and benefits.

In order to have clear guidelines related to specific functions and to have uniform performance within the implementing entities, as well as for personnel evaluations, each entity should develop personnel systems and procedures pertaining to hiring practices, salaries, salary increments, and personnel benefits. Personnel policies and salary scales will need to be reviewed and approved by USAID prior to the disbursement of funds to GOB entities under CONCADE. This should also be included as a condition precedent under the new Strategic Objective Agreement.

#### **Financial-Administrative Oversight**

##### *Observation*

None of the three institutions possess appropriate administrative-financial support to carry out operations oversight.

##### *Recommendation*

The three implementing entities manage a significant amount of funds. It is therefore recommended that the existing mechanisms and systems are strengthened within PDAR to ensure appropriate financial-administrative oversight functions of all three entities. A description of administrative-financial activities should be included in the Annual Operating Plans of each entity. PDAR's Financial-Administrative Manager shall be required to follow-up

on any issues identified in the external audits or in the reviews conducted by the Contractor.

## **Legal Status**

### *Observation*

The legal status of two of the three implementing entities is not clearly defined. For example, IBTA/Chapare which was created as a branch of the national level IBTA, is currently an independent entity with no relation to the national level and is not recognized as a legal entity. The legal status of PDAR is also questionable. SNC/CCVV derives its legal status from the SNC national level.

### *Recommendation*

In order to avoid future problems regarding the titling of fixed assets, inventories, etc., and prior to any disbursements to the three implementing entities, the GOB must clarify the legal status of PDAR and IBTA/Chapare and clearly define the lines of communication, authority, and responsibility for all three entities. This should also be considered a condition precedent under the new Strategic Objective Agreement.

## **Updating of Manuals**

### *Observation*

The manuals developed in 1993 by Price-Waterhouse have never been updated. Additionally, several procedural changes have been made which were not incorporated into the manuals. For example, IBTA/Chapare no longer utilizes Bin Cards for inventory control as was established in the respective manual, rather it utilizes a computerized system whose use was not incorporated into the appropriate manual.

### *Recommendation*

It is recommended that all implementing entities update their manuals, and that policies and procedures be standardized. Where procedures identified in the operational manuals are no longer valid, they need to be documented in an operational memo.

While the three implementing entities are following guidelines as established in the manuals developed by Price-Waterhouse for the acquisition of commodities and services, they should also develop a list of their providers and up-

date the list on a periodic and systematic basis. The periodic up-dating will allow the entities to determine if their providers are still in business or no longer exist. Additionally, this process will allow them to locate other providers who are entering the market, and who may be more competitive or offer better services. A data base should be developed for provider tracking.

## **Follow-up on Internal Control Audit Recommendations**

### *Observation*

External audits were conducted for the three implementing entities for the year ending December 31, 1997. Included were some observations and recommendations on internal control. As of July 18, 1998, when this analysis was conducted, IBTA/Chapare and CCVV had several outstanding observations. They are.

#### IBTA/Chapare

- Undocumented differences in purchasing prices
- Missing signatures on some sampled items
- Delivery vouchers lacking defined procedures

#### SNC-CCVV

- Files for payments of work orders lacking payment receipts
- Incomplete heavy equipment and vehicle documentation
- Delivery vouchers for vehicles only partially following procedures
- Documentation for equipment and vehicles not filed in an orderly manner
- Equipment usage and fuel reports without signatures

### *Recommendation*

IBTA/Chapare and SNC-CCVV, which have outstanding audit observations, will be required to establish procedures to prevent the deficiencies identified in the external audit report from reoccurring prior to any disbursement of funds under CONCADE. Additionally, all three GOB implementing entities will be required to develop and implement administrative procedures to assure that the internal control weaknesses identified in this Institutional Analysis do not continue. This should also be considered as a condition precedent under the Strategic Objective Agreement

**ASSISTANCE CHECKLIST FOR THE BOLIVIA COUNTERNARCOTICS STRATEGIC OBJECTIVE, RESULTS PACKAGE FOR INTERMEDIATE RESULTS 4**

Listed below are criteria applicable to the assistance resources themselves, rather than to the eligibility of a country to (A) both DA and ESF assistance, (B) DA only, or (C) ESF only

CROSS REFERENCE IS COUNTRY CHECKLIST UP TO DATE? Yes, the FY 98 Bolivia Country Checklist was finalized by the LAC Bureau in April, 1998

**A. DEVELOPMENT ASSISTANCE AND ECONOMIC SUPPORT FUND**

1 **Congressional Notification**  
a **General Requirement** (FY 1998 Appropriations Act Sec 515, FAA Sec. 634A) If the obligation has not previously justified to Congress, or is for an amount in excess of the amount previously justified to Congress, has a Congressional Notification been made?

Congress has been notified of planned obligations in accordance with standard USAID procedures. Obligations will not be incurred until the notification have expired

b **Special Notification Requirement** (FY 1998 Appropriations Act, "Burma" and "NIS" Title II headings and Sec 520) For obligations for NIS countries, Burma, Colombia, Haiti, Liberia, Pakistan, Panama, Peru, Serbia, Sudan or the Democratic Republic of Congo has a Congressional Notification been submitted, regardless of any justification in the Congressional Presentation?

Not applicable

c **Notice of Account Transfer** (FY 1998 Appropriations Act Sec 509) If funds are being obligated under an appropriation account to which they were not appropriated, has the President consulted with and provided a written justification to the House and Senate Appropriations Committees?

Not applicable

**d Cash Transfers and Nonproject Sector Assistance** (FY 1998 Appropriations Act Sec 532(b)(3)) If funds are to be made available in the form of cash transfer or nonproject sector assistance, has the Congressional notice included a detailed description of how the funds will be used, with a discussion of U S interests to be served and a description of any economic policy reforms to be promoted?

Not applicable

**2 Engineering and Financial Plans** (FAA Sec 611(a)) Prior to an obligation in excess of \$500,000, will there be (a) engineering, financial or other plans necessary to carry out the assistance, and (b) a reasonably firm estimate of the cost to the U S of the assistance?

Yes, the CN SOT has completed a strategic plan, results framework and results package documents defining planned activities and a firm estimate of the cost to the U S

**3 Legislative Action** (FAA Sec 611(a)(2)) If the obligation is in excess of \$500,000 and requires legislative action within the recipient country, what is the basis for a reasonable expectation that such action will be completed in time to permit orderly accomplishment of the purpose of the assistance?

No further legislative action in Bolivia is required to support the planned obligation

**4. Water Resources** (FAA Sec 611(b)) If the assistance is for water or water-related land resource construction, have benefits and costs been computed to the extent practicable in accordance with the principles, standards, and procedures established pursuant to the Water Resources Planning Act (42 U S C 1962, et seq)?

Yes

**5. Cash Transfer/Nonproject Sector Assistance Requirements** (FY 1998 Appropriations Act Sec 532) If assistance is in the form of a cash transfer or nonproject sector

Not applicable

111

assistance

a **Separate Account:** Are all such cash payments to be maintained by the country in a separate account and not commingled with any other funds (unless such requirements are waived by Congressional notice for nonproject sector assistance)?

Not applicable

b **Local Currencies:** If assistance is furnished to a foreign government under arrangements which result in the generation of local currencies

(1) Has A I D (a) required that local currencies be deposited in a separate account established by the recipient government, (b) entered into an agreement with that government providing the amount of local currencies to be generated and the terms and conditions under which the currencies so deposited may be utilized, and (c) established by agreement the responsibilities of A I D. and that government to monitor and account for deposits into and disbursements from the separate account?

Yes

(2) Will such local currencies, or an equivalent amount of local currencies, be used only to carry out the purposes of the DA or ESF chapters of the FAA (depending on which chapter is the source of the assistance) or for the administrative requirements of the United States Government?

Yes

(3) Has A.I D taken all necessary steps to ensure that the equivalent of local currencies disbursed from the separate account are used for the agreed purposes?

Yes

(4) If assistance is terminated to a country, will any

Yes

unencumbered balances of funds remaining in a separate account be disposed of for purposes agreed to by the recipient government and the United States Government?

## 6 Capital Assistance

a. (FAA Sec 611(e)) If capital assistance is proposed (e g , construction), and total U S assistance for it will exceed \$1 million, has Mission Director certified and Regional Assistant Administrator taken into consideration the country's capability to maintain and utilize the assistance effectively? Yes

b ( Jobs Through Export Act of 1992, Secs 303 and 306(b)), P L 102-549, 22 U S C 2421b and 2421d(b) If assistance is being provided for a capital activity, is the activity developmentally sound and will it measurably alleviate the worst manifestations of poverty or directly promote environmental safety and sustainability at the community level? Not applicable

## 7 Local Currencies

a Recipient Contributions (FAA Secs 612(b), 636(h)) Describe steps taken to assure that, to the maximum extent possible, the country is contributing local currencies to meet the cost of contractual and other services, and foreign currencies owned by the U S are utilized in lieu of dollars The COB will contribute 25% percent of the total cost of the project as counterpart

### b. US-Owned Foreign Currencies

(1) Use of Currencies (FAA Secs 612(b), 636(h) Are steps being taken to assure that, to the maximum extent possible, foreign currencies owned by the No U S -owned local currencies are available

U S. are utilized in lieu of dollars to meet the cost of contractual and other services

(2) **Release of**

**Currencies** (FAA Sec 612(d)) Does the U S own non-PL 480 excess foreign currency of the country and, if so, has the agency endeavored to obtain agreement for its release in an amount equivalent to the dollar amount of the assistance? No

**8 Trade Restrictions - Surplus Commodities** (FY 1998 Appropriations Act Sec 513(a)) If assistance is for the production of any commodity for export, is the commodity likely to be in surplus on world markets at the time the resulting productive capacity becomes operative, and is such assistance likely to cause substantial injury to U S producers of the same, similar or competing commodity?

Any commodities developed for export are unlikely to be in surplus on world markets

**9 Environmental Considerations** (FAA Sec 117, USAID Regulation 16, 22 CFR Part 216) Have the environmental procedures of USAID Regulation 16 been met?

A Threshold Environmental Determination is attached to the Result Package documents. Clauses will be included in the SOAG to ensure compliance

**10 PVO Assistance**

**a Auditing** (FY 1998 Appropriations Act Sec 549) If assistance is being made available to a PVO, has that organization provided upon timely request any document, file, or record necessary to the auditing requirements of USAID?

Only PVOs which are in compliance will be assisted

**b Funding Sources** (FY 1998 Appropriations Act, Title II, under heading "Private and Voluntary Organizations") If assistance is to be made to a United States PVO (other than a cooperative

Not Applicable

development organization), does it obtain at least 20 percent of its total annual funding for international activities from sources other than the United States Government? If not, has the requirement been waived?

11 **Agreement Documentation** (ADS 350 5 5, Case-Zablocki Act, 1 U S C Sec 112b, 22 C F R Part 181) For any bilateral agreement with an obligation of \$25 million or over, has the date of signing and the amount involved been cabled to State L/T immediately upon signing and has the full text of the agreement been pouched to State/L within 20 days of signing?

No bilateral obligation over \$25 million is anticipated

12 **Metric System** (Omnibus Trade and Competitiveness Act of 1988 Sec 5164, as interpreted by conference report, amending Metric Conversion Act of 1975 Sec 2, and as implemented through A I D policy) Does the assistance activity use the metric system of measurement in its procurements, grants, and other business-related activities, except to the extent that such use is impractical or is likely to cause significant inefficiencies or loss of markets to United States firms? Are bulk purchases usually to be made in metric, and are components, subassemblies, and semi-fabricated materials to be specified in metric units when economically available and technically adequate? Will A I.D specifications use metric units of measure from the earliest programmatic stages, and from the earliest documentation of the assistance processes (for example, project papers) involving quantifiable measurements (length, area, volume, capacity, mass and weight), through the implementation stage?

Yes

Bulk purchases are not planned, but if required they will comply with the metric requirements

Yes

13. **Abortions** (FAA Sec. 104(f), FY 1998 Appropriations Act, Title II, under heading " Development Assistance" and Sec. 518)

a Are any of the funds to be used for the performance of abortions as a method of family planning or to motivate or coerce any person to practice abortions? (Note that the term "motivate" does not include the provision, consistent with local law, of information or counseling about all pregnancy options )

No

b Are any of the funds to be used to pay for the performance of involuntary sterilization as a method of family planning or to coerce or provide any financial incentive to any person to undergo sterilizations?

No

c Are any of the funds to be made available to any organization or program which, as determined by the President, supports or participates in the management of a program of coercive abortion or involuntary sterilization?

No

d Will funds be made available only to voluntary family planning projects which offer, either directly or through referral to, or information about access to, a broad range of family planning methods and services? (As a legal matter, DA only )

No family planning assistance will be funded under the SO

e In awarding grants for natural family planning, will any applicant be discriminated against because of such applicant's religious or conscientious commitment to offer only natural family planning? (As a legal matter, DA only )

No family planning assistance will be funded under the SO

f Are any of the funds to be used to pay for any biomedical research which relates, in whole or in part, to methods of, or the performance of, abortions or involuntary sterilization as a means of family planning? No

g Are any of the funds to be made available to any organization if the President certifies that the use of these funds by such organization would violate any of the above provisions related to abortions and involuntary sterilization? No

#### 14 Procurement

a **Source, Origin and Nationality** (FAA Sec 604(a))  
Will all procurement be from the U S , the recipient country, or developing countries except as otherwise determined in accordance with agency rules? Yes

b **Marine Insurance** (FAA Sec 604(d)). If the cooperating country discriminates against marine insurance companies authorized to do business in the U S , will commodities be insured in the United States against marine risk with such a company? Yes

c **Insurance** (FY 1998 Appropriations Act Sec 529) Will any A I D contract and solicitation, and subcontract entered into under such contract, include a clause requiring that U S insurance companies have a fair opportunity to bid for insurance when such insurance is necessary or appropriate? Yes

d **Non-U.S. Agricultural Procurement** (FAA Sec 604(e)) If non-U S procurement of agricultural commodity or product thereof is to be financed, is there No provisions of agricultural commodities other than plant genetic

provision against such procurement when the domestic price of such commodity is less than parity? (Exception where commodity financed could not reasonably be procured in U S.)

material is planned under the project

**e Construction or Engineering Services (FAA Sec 604(g))** Will construction or engineering services be procured from firms of advanced developing countries which are otherwise eligible under Code 941 and which have attained a competitive capability in international markets in one of these areas? (Exception for those countries which receive direct economic assistance under the FAA and permit United States firms to compete for construction or engineering services financed from assistance programs of these countries )

No

**f Cargo Preference Shipping (FAA Sec 603)** Is the shipping excluded from compliance with the requirement in section 901(b) of the Merchant Marine Act of 1936, as amended, that at least 50 percent of the gross tonnage of commodities (computed separately for dry bulk carriers, dry cargo liners, and tankers) financed shall be transported on privately owned U S flag commercial vessels to the extent such vessels are available at fair and reasonable rates?

Activities under the SO will comply with the statutory requirements

**g Technical Assistance (FAA Sec. 621(a))** If technical assistance is financed, will such assistance be furnished by private enterprise on a contract basis to the fullest extent practicable? Will the facilities and resources of other Federal agencies be utilized, when they are particularly suitable, not competitive with private

Yes

Yes

enterprise, and made available without undue interference with domestic programs?

**h U.S. Air Carriers** (Fly America Act, 49 U S C Sec 1517)  
If air transportation of persons or property is financed on grant basis, will U.S carriers be used to the extent such service is available? Yes

**i Consulting Services** (FY 1998 Appropriations Act Sec 548)  
If assistance is for consulting service through procurement contract pursuant to 5 U S C 3109, are contract expenditures a matter of public record and available for public inspection (unless otherwise provided by law or Executive order)? Yes

**j Notice Requirement** (FY 1998 Appropriations Act Sec 546)  
Will agreements or contracts contain notice to the effect that it is the Sense of the Congress that, to the greatest extent practicable equipment and products purchased with funds appropriated under the FY 1998 Appropriations Act should be American-made? Yes

## 15 Construction

**a Capital Assistance** (FAA Sec 601(d)) If capital (e g , construction) assistance, will U S engineering and professional services be used? Most construction and engineering services will be carried out by Bolivian firms because of their small value

**b Large Projects - Congressional Approval** (FAA Sec 620(k)) If for construction of productive enterprise, will aggregate value of assistance to be furnished by the U S not exceed \$100 million (except for productive enterprises in Egypt that were described in the Congressional Presentation), or does assistance Not applicable

have the express approval of Congress?

16 **U.S. Audit Rights** (FAA Sec 301(d)) If fund is established solely by U S contributions and administered by an international organization, does Comptroller General have audit rights?

Yes

17 **Communist Assistance** (FAA Sec 620(h)) Do arrangements exist to insure that United States foreign aid is not used in a manner which, contrary to the best interests of the United States, promotes or assists the foreign aid projects or activities of the Communist-bloc countries?

Yes, the standard provision on this subject will be included in the SOAG

18 **Narcotics**

a **Cash Reimbursements** (FAA Sec 483) Will arrangements preclude use of financing to make reimbursements, in the form of cash payments, to persons whose illicit drug crops are eradicated?

Yes, no cash assistance will be provided to farmers growing illicit crops

b **Assistance to Narcotics Traffickers** (FAA Sec 487) Will arrangements take "all reasonable steps" to preclude use of financing to or through individuals or entities which we know or have reason to believe have either (1) been convicted of a violation of any law or regulation of the United States or a foreign country relating to narcotics (or other controlled substances), or (2) been an illicit trafficker in, or otherwise involved in the illicit trafficking of, any such controlled substance?

Assistance will be made available only to individuals or entities who have agreed not to plant coca and to replace coca planting with alternative licit crops

All required reasonable steps will be taken to comply with this section

19 **Expropriation and Land Reform** (FAA Sec 620(g)) Will assistance preclude use of financing to compensate owners for expropriated or nationalized property, except to compensate foreign nationals in

- accordance with a land reform program certified by the President? No
- 20 **Police and Prisons** (FAA Sec 660) Will assistance preclude use of financing to provide training, advice, or any financial support for police, prisons, or other law enforcement forces (see exceptions in section 660) ? Yes
- 21 **CIA Activities** (FAA Sec 662) Will assistance preclude use of financing for CIA activities? Yes
- 22 **Motor Vehicles** (FAA Sec 636(1)) Will assistance preclude use of financing for purchase, sale, long-term lease, exchange or guaranty of the sale of motor vehicles manufactured outside U S , unless a waiver is obtained? Yes
- 23 **Export of Nuclear Resources** (FY 1995 Appropriations Act Sec 506) Will assistance preclude use of financing to finance, except for purposes of nuclear safety, the export of nuclear equipment, fuel, or technology? Yes
- 24 **Publicity, Propaganda and Lobbying** (FY 1998 Appropriations Act Sec 545, Anti-Lobbying Act, 18 U S C § 1913 Will assistance be used to support or defeat legislation pending before Congress, to influence in any way the outcome of a political election in the United States, or for any publicity or propaganda purposes not authorized by Congress? No
- 25 **Commitment of Funds** (FAA Sec 635(h)) Does a contract or agreement entail a commitment for the expenditure of funds during a period in excess of 5 years from the date of the contract or agreement? Contracts and other agreements will not entail commitments extending beyond five years at any given point in time

26 **Impact on U.S. Jobs** (FY 1998 Appropriations Act, Sec. 538)

a Will any financial incentive be provided to a business located in the U S for the purpose of inducing that business to relocate outside the U.S in a manner that would likely reduce the number of U S employees of that business?

No

b Will assistance be provided for the purpose of establishing or developing an export processing zone or designated area in which the country's tax, tariff, labor, environment, and safety laws do not apply? If so, has the President determined and certified that such assistance is not likely to cause a loss of jobs within the U S ?

No

c Will assistance be provided for a project or activity that contributes to the violation of internationally recognized workers rights, as defined in section 502(a)(4) of the Trade Act of 1974, of workers in the recipient country, or will assistance be for the informal sector, micro or small-scale enterprise, or smallholder agriculture?

No Standard provisions implementing this statute will be included in the SOAG

**B. DEVELOPMENT ASSISTANCE ONLY**

1 **Agricultural Exports (Bumpers Amendment)** (FY 1998 Appropriations Act Sec. 513(b)), as interpreted by the conference report for the original enactment) If assistance is for agricultural development activities (specifically, any testing or breeding feasibility study, variety improvement or introduction, consultancy, publication, conference, or training), are such activities (a) specifically and principally designed to increase agricultural exports by the host country to a

No

122

country other than the United States, where the export would lead to direct competition in that third country with exports of a similar commodity grown or produced in the United States, and can the activities reasonably be expected to cause substantial injury to U S exporters of a similar agricultural commodity; or (b) in support of research that is intended primarily to benefit U.S producers?

**2 Recipient Country Contribution** (FAA Secs 110, 124(d)). Will the recipient country provide at least 25 percent of the costs of the activity with respect to which the assistance is to be furnished or is this cost-sharing requirement being waived for a "relatively least developed" country?

Yes, the GOB will make a 25 percent contribution of the total cost of the project

**3 Forest Degradation** (FAA Sec 118)

a Will assistance be used for the procurement or use of logging equipment? If so, does the an environmental assessment indicate that all timber harvesting operations involved will be conducted in an environmentally sound manner and that the proposed activity will produce positive economic benefits and sustainable forest management systems?

No assistance will be provided for procurement or use of logging equipment

b Will assistance be used for (1) actions which will significantly degrade national parks or similar protected areas which contain tropical forests, or introduce exotic plants or animals into such areas, (2) activities which would result in the conversion of forest lands to the rearing of livestock, (3) the construction, upgrading, or maintenance of roads (including temporary haul roads for logging or other extractive industries) which

No

pass through relatively undergraded forest lands, (4) the colonization of forest lands, or (5) the construction of dams or other water control structures which flood relatively undergraded forest lands? If so, does the environmental assessment indicate that the activity will contribute significantly and directly to improving the livelihood of the rural poor and will be conducted in an environmentally sound manner which supports sustainable development?

**4 Deobligation/Reobligation (FY 1998 Appropriations Act Sec 510)**  
 If deob/reob authority is being used under section 510 in the provision of DA assistance, are the funds being obligated for the same general purpose and for countries within the same region as originally obligated, and have the House and Senate Appropriations Committees been properly notified?  
 [Note Compare to no-year authority under section 511 ]

This authority is not being used

**5 Loans**

**a Repayment Capacity (FAA Sec 122(b))** Information and conclusion on capacity of the country to repay the loan at a reasonable rate of interest

Assistance is being provided on a grant basis

**b Long-Range Plans (FAA Sec 122(b))** Does the activity give reasonable promise of assisting long-range plans and programs designed to develop economic resources and increase productive capacities?

**c Interest Rate (FAA Sec 122(b))** If development loan is repayable in dollars, is interest rate at least 2 percent per annum during a grace period which is not to exceed ten years, and at least 3

percent per annum thereafter?

**d. Exports to United States** (FAA Sec 620(d)) If assistance is for any productive enterprise which will compete with U S enterprises, is there an agreement by the recipient country to prevent export to the U S of more than 20 percent of the enterprise's annual production during the life of the loan, or has the requirement to enter into such an agreement been waived by the President because of a national security interest?

**6 CITIES -Convention on International trade in Endangered Species of Flora and Fauna (New for FY 98) (FY 1998 Appropriations Act, Title II under "Development Assistance" heading)** Is the activity not in contravention of CITIES?

The activity is not in contravention of CITIES

**7 Planning and Design Considerations.** Has agency guidance or the planning and design documentation for the specific activity taken into account the following, as applicable?

Yes

**a Economic Development** FAA Sec 101(a) requires that the activity give reasonable promise of contributing to the development of economic resources or to the increase of productive capacities and self-sustaining economic growth.

As described in the Strategy Plan and Results Package documents, the SO will contribute to increase the productive capacity of Chapare farmers

**b. Special Development Emphases** FAA Secs 102(b), 113, 281(a)) require that assistance (1) effectively involve the poor in development by extending access to economy at local level, increasing labor-intensive production and the use of appropriate technology, dispersing investment from cities to small towns and rural areas, and insuring wide participation of the

This SO includes activities in area (1)

125

poor in the benefits of development on a sustained basis, using appropriate U.S. institutions, (2) encourage democratic private and local governmental institutions, (3) support the self-help efforts of developing countries, (4) promote the participation of women in the national economies of developing countries and the improvement of women's status, and (5) utilize and encourage regional cooperation by developing countries

**c Agriculture, Rural Development and Nutrition, and Agricultural Research** FAA Secs 103 and 103A require that (1) **Rural poor and small farmers:** assistance for agriculture, rural development or nutrition be specifically designed to increase productivity and income of rural poor, and assistance for agricultural research take into account the needs of small farmers and make extensive use of field testing to adapt basic research to local conditions, (2) **Nutrition:** assistance be used in coordination with efforts carried out under FAA Section 104 (Population and Health) to help improve nutrition of the people of developing countries through encouragement of increased production of crops with greater nutritional value, improvement of planning, research, and education with respect to nutrition, particularly with reference to improvement and expanded use of indigenously produced foodstuffs, and the undertaking of pilot or demonstration programs explicitly addressing the problem of malnutrition of poor and vulnerable people; (3) **Food security:** assistance increase national food security by improving food policies and management and by strengthening national food reserves, with

The CN SO provides assistance in area (1)

particular concern for the needs of the poor, through measures encouraging domestic production, building national food reserves, expanding available storage facilities, reducing post harvest food losses, and improving food distribution

**d Population and Health**

FAA Secs 104(b) and (c) require that assistance for population or health activities emphasize low-cost, integrated delivery systems for health, nutrition and family planning for the poorest people, with particular attention to the needs of mothers and young children, using paramedical and auxiliary medical personnel, clinics and health posts, commercial distribution systems, and other modes of community outreach

Not applicable

**e Education and Human**

**Resources Development** FAA Sec 105 requires that assistance for education, public administration, or human resource development (1) strengthen nonformal education, make formal education more relevant, especially for rural families and urban poor, and strengthen management capability of institutions enabling the poor to participate in development, and (2) provide advanced education and training of people of developing countries in such disciplines as are required for planning and implementation of public and private development activities

Training will be provided to farmer associations on alternative crop production

**f Energy, Private Voluntary Organizations, and Selected Development Activities.** FAA Sec. 106 requires that assistance for energy, private voluntary organizations, and selected development problems may be used for (1) data collection and

Not applicable

analysis, the training of skilled personnel, research on and development of suitable energy sources, and pilot projects to test new methods of energy production; and facilitative of research on and development and use of small-scale, decentralized, renewable energy sources for rural areas, emphasizing development of energy resources which are environmentally acceptable and require minimum capital investment, (2) technical cooperation and development, especially with U S private and voluntary, or regional and international development, organizations, (3) research into, and evaluation of, economic development processes and techniques, (4) reconstruction after natural or manmade disaster and programs of disaster preparedness, (5) special development problems, and to enable proper utilization of infrastructure and related projects funded with earlier U S assistance; (6) urban development, especially small, labor-intensive enterprises, marketing systems for small producers, and financial or other institutions to help urban poor participate in economic and social development

**g Appropriate Technology.**

FAA Sec. 107 requires that assistance emphasize use of appropriate technology (defined as relatively smaller, cost-saving, labor-using technologies that are generally most appropriate for the small farms, small businesses, and small incomes of the poor

Emphasis will be placed on appropriate technology

**h Tropical Forests.**

FAA Sec. 118 and FY 1991 Appropriations Act Sec. 533(c) as referenced in section 532(d) of the FY 1993 Appropriations Act) require that.

**(1) Conservation:**

assistance place a high priority on conservation and sustainable management of tropical forests and specifically (i) stress the importance of conserving and sustainably managing forest resources, (ii) support activities which offer employment and income alternatives to those who otherwise would cause destruction and loss of forests, and help countries identify and implement alternatives to colonizing forested areas, (iii) support training programs, educational efforts, and the establishment or strengthening of institutions to improve forest management; (iv) help end destructive slash-and-burn agriculture by supporting stable and productive farming practices, (v) help conserve forests which have not yet been degraded by helping to increase production on lands already cleared or degraded, (vi) conserve forested watersheds and rehabilitate those which have been deforested, (vii) support training, research, and other actions which lead to sustainable and more environmentally sound practices for timber harvesting, removal, and processing, (viii) support research to expand knowledge of tropical forests and identify alternatives which will prevent forest destruction, loss, or degradation, (ix) conserve biological diversity in forest areas by supporting efforts to identify, establish, and maintain a representative network of protected tropical forest ecosystems on a worldwide basis, by making the establishment of protected areas a condition of support for activities involving forest clearance or degradation, and by helping to identify tropical forest ecosystems and species in need of protection and establish and maintain

Part of the assistance will be provided to prevent forest degradation

appropriate protected areas, (x) seek to increase the awareness of U S. Government agencies and other donors of the immediate and long-term value of tropical forests; (xi) utilize the resources and abilities of all relevant U S government agencies; (xii) be based upon careful analysis of the alternatives available to achieve the best sustainable use of the land, and (xiii) take full account of the environmental impacts of the proposed activities on biological diversity

(2) **Sustainable**

**Forestry:** assistance relating to tropical forests assist countries in developing a systematic analysis of the appropriate use of their total tropical forest resources, with the goal of developing a national program for sustainable forestry

Part of the assistance will be provided to prevent forest degradation Where forests are degraded, assistance will be provided to plant trees, shrubs or grasses

1 **Biological Diversity** FAA

Sec. 119(g) requires that assistance (i) support training and education efforts which improve the capacity of recipient countries to prevent loss of biological diversity, (ii) be provided under a long-term agreement in which the recipient country agrees to protect ecosystems or other wildlife habitats, (iii) support efforts to identify and survey ecosystems in recipient countries worthy of protection; or (iv) by any direct or indirect means significantly degrade national parks or similar protected areas or introduce exotic plants or animals into such areas

Assistance does not relate to biological diversity

j. **Benefit to Poor Majority**

FAA Sec. 128(b) requires that if the activity attempts to increase the institutional capabilities of private organizations or the government of the country, or if it

Some of the assistance will increase the

attempts to stimulate scientific and technological research, it be designed and monitored to ensure that the ultimate beneficiaries are the poor majority

institutional capacity of farmer associations which are formed by small poor farmers

**k Indigenous Needs and Resources** FAA Sec. 281(b) requires that an activity recognize the particular needs, desires, and capacities of the people of the country, utilize the country's intellectual resources to encourage institutional development, and support civic education and training in skills required for effective participation in governmental and political processes essential to self-government

Assistance does not relate directly to self-government  
USAID/Bolivia has other programs to address that

**l Energy** FY 1991 Appropriations Act Sec. 533(c) as referenced in section 532(d) of the FY 1993 Appropriations Act) requires that assistance relating to energy focus on (1) end-use energy efficiency, least-cost energy planning, and renewable energy resources, and (2) the key countries where assistance would have the greatest impact on reducing emissions from greenhouse gases

Assistance does not relate to energy

**m Debt-for-Nature Exchange** FAA Sec 463 requires that assistance which will finance a debt-for-nature exchange (1) support protection of the world's oceans and atmosphere, animal and plant species, or parks and reserves; or (2) promote natural resource management, local conservation programs, conservation training programs, public commitment to conservation, land and ecosystem management, or regenerative approaches in farming, forestry, fishing, and watershed management.

Not applicable

**C. ECONOMIC SUPPORT FUND ONLY**

**1 Economic and Political Stability** (FAA Sec 531(a)) Does the design and planning documentation demonstrate that the assistance will promote economic and political stability? To the maximum extent feasible, is this assistance consistent with the policy directions, purposes, and programs of Part I of the FAA?

No ESF monies are anticipated for the SO INC money will fund this SO.

**2 Military Purposes** (FAA Sec 531(e)). Will this assistance be used for military or paramilitary purposes?

No

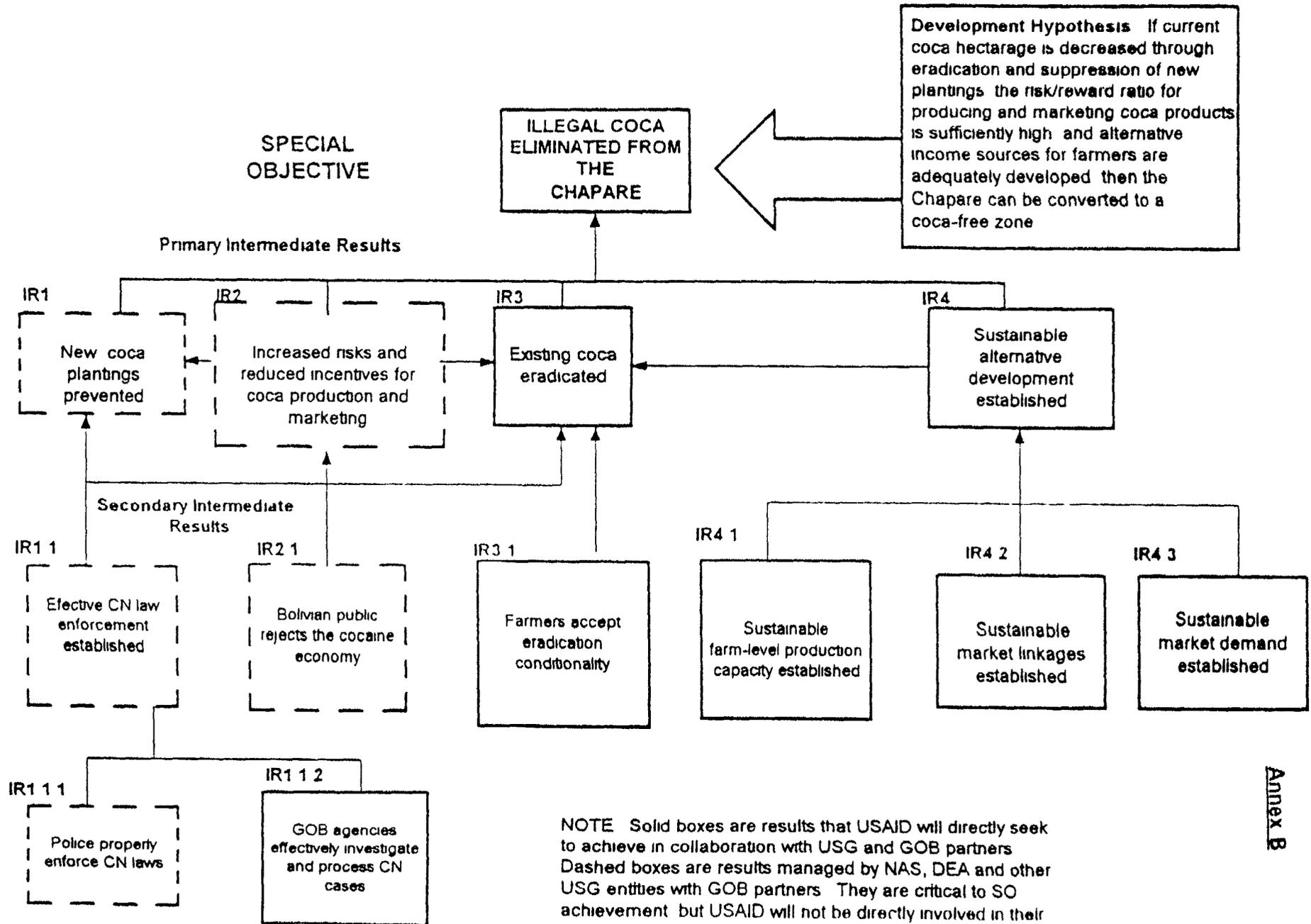
**3 Commodity Grants/Separate Accounts** (FAA Sec 609) If commodities are to be granted so that sale proceeds will accrue to the recipient country, have Special Account (counterpart) arrangements been made? (For FY 1998, this provision is superseded by the separate account requirements of FY 1998 Appropriations Act Sec 532(a), see Sec 532(a)(5) )

Not applicable

**4 Generation and Use of Local Currencies** (FAA Sec 531(d)) Will ESF funds made available for commodity import programs or other program assistance be used to generate local currencies? If so, will at least 50 percent of such local currencies be available to support activities consistent with the objectives of FAA sections 103 through 106? (For FY 1998, this provision is superseded by the separate account requirements of FY 1997 Appropriations Act Sec. 532(a), see Sec. 532(a)(5) )

Not applicable.

# RESULTS FRAMEWORK COUNTERNARCOTICS OBJECTIVE



153

AFFIRMATION STATEMENT OF ADHERENCE TO CURRENT POLICIES

I, Raymond Baum, as the Counter-Narcotics Special Objective Team Leader for USAID/Bolivia, do hereby certify that in my judgement all statutory and regulatory requirements that are applicable to the design and management of activities under the Results Package for the Counter-Narcotics Special Objective have been taken into consideration and conformed to in its development and will be adhered to in its implementation

Raymond Baum  
Chairman, Counter-Narcotics  
Special Objective Team

Date Ray Baum

h:\cn\design\wpd\state

CERTIFICATION PURSUANT TO SECTION 611(E)  
OF THE FOREIGN ASSISTANCE ACT OF 1961, AS AMENDED

I, Frank Almaguer, as the Mission Director and Principal Officer of the Agency for International Development Mission to Bolivia, having taken into account, among other things, the maintenance and utilization of funds for activities previously financed by USAID/Bolivia, do hereby certify that in my judgement, the participating Government of Bolivia institutions have, and that any United States and/or Bolivian private sector institutions and/or non-governmental organizations that are selected for participation in future designed activities under this intermediate result will be selected on the basis of having the financial capacity and human resources capability to effectively utilize and maintain funds received towards the implementation and achievement of the Results Package for the Counter-Narcotics Special Objective



Frank Almaguer  
Mission Director  
USAID/Bolivia

Date 8/27/98

Clearance

A/FMO J Funkey Q.L. Date 8/27/98

H \cn\design\rpd\certif