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AGENCY FOR INTERNATIONAL DEVELOPMENT

# BOLIVIA

# COUNTRY DEVELOPMENT STRATEGY STATEMENT

# FY 83

January 1981

UNITED STATES INTERNATIONAL DEVELOPMENT COOPERATION AGENCY
WASHINGTON, D.C. 20523

UNCLASSIFIED

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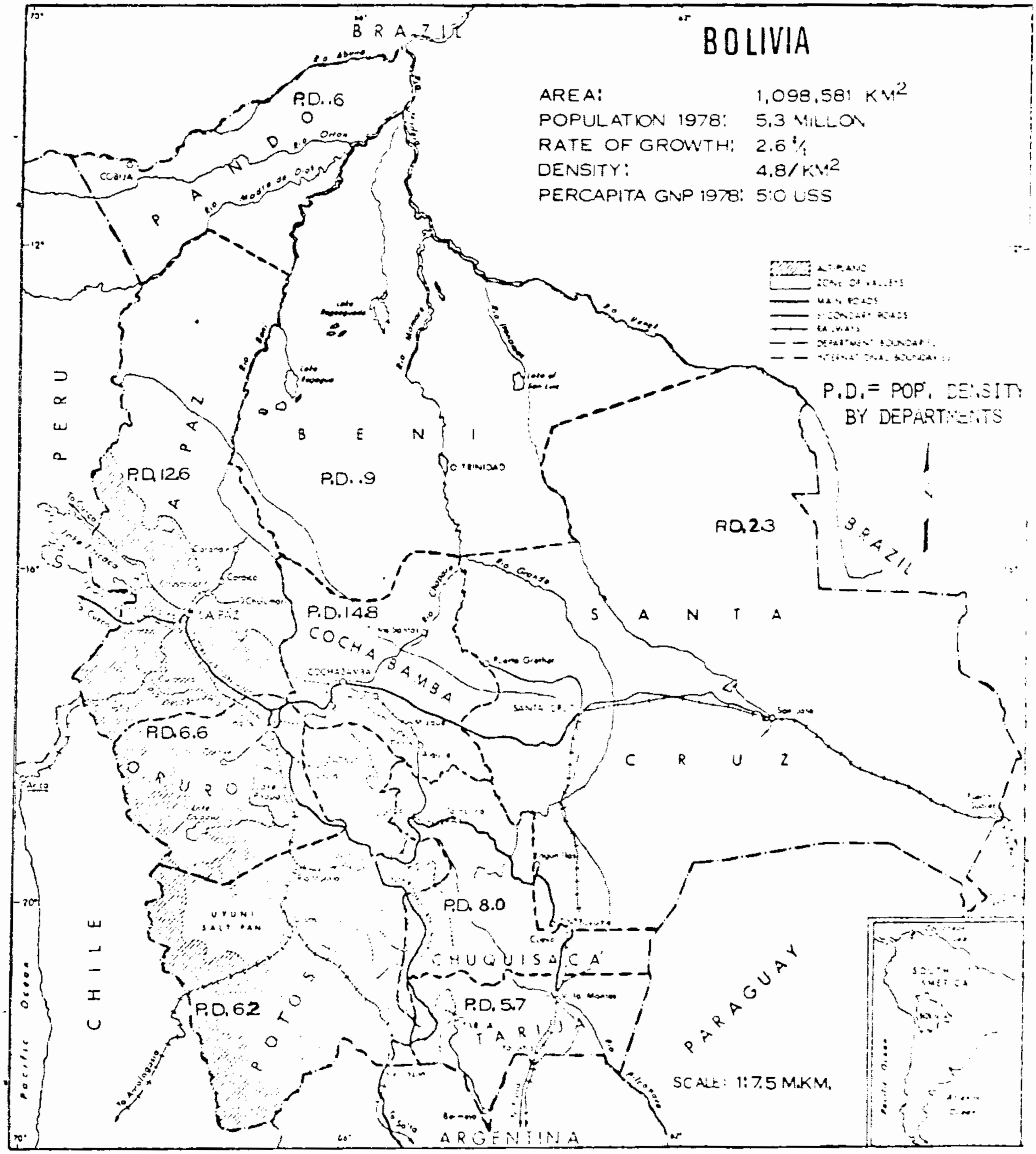
BOLIVIA
AREA: 1,098,581 KM2
POPULATION 1978: 5.3 MILLON
RATE OF GROWTH: 2.6 %
DENSITY: 4.8/KM2
PERCAPITA GNP 1978: 510 US$
P.D.= POP. DENSITY BY DEPARTMENTS
SCALE: 1:7.5 M.KM.
BRAZIL
PERU
CHILE
PARAGUAY
ARGENTINA
PANDO
P.D. .6
LA PAZ
P.D. 12.6
BENI
P.D. .9
SANTA CRUZ
P.D. 2.3
COCHABAMBA
P.D. 14.8
ORURO
P.D. 6.6
POTOSI
P.D. 6.2
CHUQUISACA
P.D. 8.0
TARIJA
P.D. 5.7
UYUNI SALT PAN
COBIJA
TRINIDAD
LA PAZ
COCHABAMBA
SANTA CRUZ
Pacific Ocean
SOUTH AMERICA

# I. INTRODUCTION

"There is an apparent paradox in the fact that Bolivia has all the natural resources to guarantee it a solid base for economic development and progress while at the same time, all through its history there is a pattern of moving from one crisis to another and from revolution to revolution. It appears that this paradox results from the political and administrative instability which has been characteristic of the nation." 1/

## A. Recent Political Events

Despite a wealth of natural resources, vast territory, and relatively minimal population pressures at this time, Bolivia is the poorest and least developed nation in South America. The major contributing factor to this underdevelopment has been the severe political instability that has plagued the country since its independence from Spain in 1825 -- there have been 169 governments in 155 years. Frequent changes in government continue to disrupt development plans and progress severely.

Since July 1978, this instability has been particularly disruptive -- there have been three general presidential and congressional elections, seven presidents (five of them military) and four military coups. The latest coup, led by Army General Luís García Meza Tejada on July 17, 1980, ousted the civilian government of Interim President Lydia Gueiler. The coup ended the progress toward constitutional democracy that began with the 1977 transition from military to civilian government by President General Hugo Banzer. In addition, the resulting policy uncertainty has contributed to Bolivia's declining economy and increasing debt service: by mid-1980 debt service requirements reached 65% of legal export earnings and GNP growth was turning negative. Despite the economic measures taken by the Gueiler

1/ Keenleyside Report, United Nations, 1951.

government, general business stagnation, lack of public and private sector investment, and reduced mining production, have seriously jeopardized short-term economic prospects. The impact of the partial emergency economic measures just announced by the Government of Bolivia (GOB), discussed below, has yet to be seen.

Short-run prospects for strengthening the economy and improving the conditions of life of the Bolivian people depend significantly on the ability of the GOB to continue to take difficult economic decisions, such as reform of the state enterprises, further reduction of subsidies, and tightening of government expenditures. Prospects also depend significantly on the degree to which national and international lending institutions and the international banking community are willing to provide assistance and negotiate the outstanding short-term debt. This applies equally to the development assistance of the United States, a key contributor to the progress being made prior to the July 1980 coup in achieving a higher standard of living for the rural poor. The international reaction to the coup and the suppression of constitutional government in Bolivia has been strong, however: Andean Pact nations, major European industrialized democracies, and others are maintaining less than normal relations with Bolivia; the OAS and the Andean Pact have condemned the new government; the United States has supported international condemnation of the Bolivian military regime and sharply reduced its assistance; and the multilateral donors are generally holding back on future obligations. (See Annex D for details on other donor activities).

B. Changes in Program and Staffing

Following the July 17 coup, the U.S. Government immediately suspended military assistance, curtailed economic assistance, sharply reduced its narcotics control assistance, recalled its Ambassador, and significantly reduced U.S. staff. To implement this decision, the Mission proposed and Washington approved a course of action which involved terminating certain projects, "freezing" others, and continuing activities involving humanitarian aid, research, and the private sector. This allowed the U.S. to express disapproval yet retain the flexibility to continue to support development other than through the central government and to resume assistance in response to favorable political developments.

Following this, A.I.D. had as of January 31, 1981 cancelled or otherwise withheld development resources amounting to $95.94 million (79.0% of the $121.39 million pre-coup pipeline). This included terminating eight projects and substantially reducing two others, thereby cancelling project resources totalling $44.84 million (37.0% of the pre-coup pipeline), and delaying an additional $51.10 million on project specific grounds (42.1% of the pre-coup pipeline). The remaining program consists of older, routinely terminating projects spending out approximately $7.60 million ($6.3% of the pre-coup pipeline) of commitments and continuing humanitarian, non-government and research activities amounting to $17.88 million (14.7% of the pre-coup pipeline). In addition, PL 480 Title II and III remain in place: the Title II program continuing to provide school child feeding, food for work projects, and support to maternal and child health activities; and the Title III program expending funds generated by wheat sales through FY 80 to support rural development activities. (See Annex B for status of the A.I.D. program by project.)

Correspondingly, USAID/Bolivia staffing has been reduced to the minimum necessary to manage remaining activities. As of January 31, 1981, authorized U.S. personnel[1/] had been reduced by 55% (40 to 18) and local personnel by 16.3% (80 to 67)[2/]. U.S. and TCN contractors have been reduced by 17% (36 to 30); guidance called for all contractors supporting Category III projects to remain in place, but no vacancies have been filled. Local personnel and contractor reductions will continue if conditions remain unchanged.

C. Purpose and Scope of the FY 83 CDSS

Following the country-specific guidance provided by the LAC Bureau (State 340556), the FY 83 CDSS is a modification of last year's CDSS. It updates that document and deals at length only with certain issues raised in the FY 82 CDSS review, with departures from last year's document in the analysis and strategy sections, and with alternatives for near-term program directions (FY 81-83) based on evolution of the current situation.

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1/ Includes USDH, PASA and PSCs.
2/ Includes two AAG employees.

## II. ANALYSIS SUMMARY AND UPDATE

### A. Country Profile[1/]

Bolivia remains the poorest and least developed nation in South America, with a per capita GNP of $510 (1978 dollars)[2/]. Although it is categorized as a middle-income country by the World Bank, most of the country's basic indicators are comparable to those of low income countries. (See Annex C, Bolivia: Comparison with Middle and Low Income Countries.)

The major factors in Bolivia's low level of development are: 1) political instability; 2) difficult terrain and geographic isolation; 3) a highly centralized and cumbersome bureaucracy; 4) scarcity of qualified personnel; and 5) inadequate social and physical infrastructure. The political instability has led to inconsistent sectoral and overall development policies, limiting efforts to assist Bolivia's rural poor. Although there were positive growth rates in 1971-1978 -- 5-6% from 1971-1976 and 3-4% in 1977-1978 -- externally borrowed resources were often used for capital-intensive investments in state corporations. This not only resulted in economically questionable projects but also increased the foreign debt to $3.8 billion as of September 1980, and contributed to today's stagnant economy. (See II.B.). The lack of sound economic and development policies also resulted in this agriculturally rich country increasing its dependence on external sources for basic food commodities such as wheat, lard and processed foods.

Development in rural areas is hampered by extensive minifundia, by poor soils, by long distances to markets, and by adverse topography which results in high costs for transportation and social services. Sixty three

1/ For background refer to FY 82 CDSS, pgs. 1-7.
2/ World Development Report, IBRD, August 1980, pg. 110.

percent of Bolivia's 5.3 million people are linguistically and culturally Indian, and 80% are rural dwellers concentrated in the highlands (30%) and valleys (50%). Approximately 3.2 million or 60% of the total population, primarily subsistence farmers, live in primitive rural areas where some of the region's lowest health and education levels are perpetuated by inadequate services. Only 12.5% of the rural population has access to potable water. The average rural dweller consumes only 77% of the recommended daily caloric intake and 49% of protein requirements. This is reflected in the national crude death rate of 15/1000, the highest infant mortality rate in South America (158/1000), and a life expectancy of 52 years.

Bolivia's demographic problem has received insufficient attention by the GOB. The population is unevenly distributed resulting in pockets of high density whose inhabitants face decreasing arable land, minimal social services and poor economic opportunities. Bolivia is also experiencing emigration of university and technically-trained professionals because of poor economic prospects or for political reasons.

The country's dependency on non-renewable resources for meeting its energy requirements is another serious problem which exists despite potentially abundant hydropower and other renewable energy sources. Although Bolivia was able to meet all its domestic needs as well as export substantial amounts of its petroleum through the mid-1970's, oil production is no longer sufficient to meet the country's internal requirements.

Despite the professed support of Bolivian governments since 1952 for improving the livelihood and living standards of both campesinos and urban wage-earners, economic development has generally favored the urban sector over the dispersed and less powerful rural population. Additional basic economic reform measures are needed both to solve the short-term financial crisis and to improve prospects for economic development and growth. These measures include further increasing prices of hydrocarbons, electricity and other services; eliminating remaining subsidies for wheat; cracking down on contraband; providing incentives for internal production; reforming state enterprises; and rationalizing government investment, tax, price, trade, wage and employment policies. The recently announced emergency economic measures have dealt partially with some of these problems, but much more is needed.

B. Macroeconomic Situation

Over the past several years, external and internal pressures have combined to create an increasing financial crisis in Bolivia. Despite efforts in the last year to respond to the problem, the situation will remain critical for the foreseeable future.

Historically, the base of the Bolivian economy has been exploitation of non-renewable natural resources, primarily tin and hydrocarbons. During the late 1960's and early 1970's, as production levels of tin and petroleum increased, GDP grew at an average annual rate of 5.6%. In the early 1970's, based on expectations of continued increases in production and exports, the GOB expanded public sector spending significantly, further contributing to the high growth rates achieved through the mid 1970's.

Although the total value of exports continued to increase from $5[illegible] million in 1976 to $777 million in 1979, revenues were falling short of projections by 1977. The principal cause of the shortfall was a decrease, rather than the expected increase, in petroleum production and a corresponding drop in petroleum export earnings from a high of $164 million in 1974 to just $44 million in 1979. Further, energy consumption has increased at an average of 11.3% annually, to the point where production no longer meets internal demand. Because of increased production of natural gas in the past two years, Bolivia remains a net exporter of hydrocarbons; but nonetheless faces a rising import bill for petroleum products.

While the growth of exports and earnings have decreased, imports have increased significantly, from \$562 million in 1976 to \$931 million in 1979. Imports began to increase to cover capital investment requirements of the increasing public sector spending. By 1977, imports exceeded exports, a trend which has continued through 1979 when commodity imports exceeded exports by more than \$150 million. The deficit would have been greater but for the stagnant economy. Although there are significant revenues from the illegal export of cocaine -- perhaps \$1.5 billion in 1980 -- this revenue remains largely outside the legal system.

The final external factor contributing to the current financial crisis is the increase in foreign debt. Increased public sector spending in the mid 1970's was financed primarily through external borrowing against expected petroleum revenues. Most foreign loans received during this period were three to five year loans and are now coming due. Because the anticipated revenues from exports have not been forthcoming, repayment of these loans has become a major foreign exchange drain. More recently foreign short-term borrowing has also been used to cover current expenditures. In 1978, debt service on foreign loans amounted to 8.5% of GNP and 48.7% of exports of goods and services, up from 2.2% and 10.9% in 1970 respectively; preliminary data obtained by the Embassy indicate that debt service rose to approximately 65% of export earnings in 1980.

The cumulative effect of these factors has been steady deterioration of the balance of payments position. In 1978, the current account balance before interest payments on external public debt was a negative \$301 million, an almost twenty-fold worsening from 1970; in 1979 the figure rose to minus $347 million, and as noted earlier would have been worse but for slackening of imports. Bolivian financial delegations travelled to New York in September and December 1980 to meet with private bankers to discuss rolling over and rescheduling the private debt. In the absence of promised economic measures, however, the bankers agreed only to a continued deferment of most amortization payments until April, 1981. This was far short of the expectations of the GOB and has had little appreciable impact on the financial situation.

Internal requirements have further contributed to the financial crisis. A large portion of the increased public sector spending of the mid 1970's went to finance major infrastructure projects of the state-owned corporations such as YPFB (petroleum) and COMIBOL (mining), but many of these projects have proved to be drains on the economy. Excess refinery capacity plagues YPFB while inefficient production techniques hamper COMIBOL, and the central government has been forced to subsidize heavily their operating costs; in 1979, their combined operating deficit was $116.7 million. The advantages of the November 1979 petroleum price increases and mining tax reforms have been consumed by the high operating costs of these corporations.

The subsidies which have long been provided to maintain low consumer prices for basic commodities such as gasoline and wheat have been another major internal pressure on government resources, although these have recently been reduced. The high fixed costs of the central government put additional pressure on scarce resources if any investment is to be made.

As these external and internal pressures have increased, the economy has faltered. After the encouraging record of the early and mid 1970's, GDP growth slowed to 3.4% in 1977 and is estimated to have been only 1.4% in 1979. Although 1980 data are not yet available, growth may have been negative. In per capita terms, growth has been negative since 1978. As growth has slowed, prices have increased sharply. Measured by the GDP deflator, prices rose by an average of 9.7% from 1975-77, by 17.6% in 1978, by 24.9% in 1979 and an estimated 40% in 1980. Contributing to the price increases has been an increase in money supply (M2), which rose by 12.5% in 1978, 4.9% in 1979 and 19.1% in 1980.

Although the signs of the worsening economic situation were evident as early as 1977, the Banzer government was unwilling to implement unpopular economic measures. Subsequent interim governments, military and civilian, were equally unwilling to implement needed measures until late 1979, when the Gueiler government put an initial package of reforms into effect. These included elimination of price controls on many basic agricultural commodities, elimination of the sugar subsidy, government-wide budget restrictions, a 135% increase in gasoline prices, a 30% increase in electricity and railroad tariffs, mining tax reforms, measures to stimulate local currency savings, and a 25% devaluation. The impact of these reforms was very positive, but constituted only a first step in dealing with the overall problem.

A subsequent series of reforms was originally planned for September, 1980, and a partial, emergency package was announced on January 9, 1981. Included in the new measures were a doubling of the price ceiling on wheat, increased petroleum prices (20% for gasoline, 50% for diesel), elimination of fuel subsidies for public transport, increased transportation costs, increased tariffs on electricity, tariff exemptions on some imported basic foodstuffs, and modified personal tax rates.

The government has also announced its intention to improve budget discipline by cutting back on public sector spending and giving investment priorities to selected programs designed to increase revenues. The constraints are evident throughout the civilian side of the government; current account expenditures are kept at a minimum and capital expenditures are limited. Restraint on the military side has been less successful; officer's salaries were recently increased by from 70 to 170%, and significant aircraft purchases will place additional burdens on external resources. Overall, the GOB has been unable to stay within the performance criteria agreed upon with the IMF in obtaining a one year standby agreement in early 1980.

C. Commitment Analysis

Bolivia has been thoroughly committed to growth with equity since the 1952 Revolution. This is reflected in the country's political and economic structure, under which the poor have steadily improved their well being and standard of living, although political and economic conditions have at times delayed progress and caused setbacks. For the poor, Bolivia's current macroeconomic problems mean unemployment and underemployment, rising prices for staples, the inability to save, and few opportunities to improve one's economic position. The new measures recently announced by the government, aimed at rationalization of the economy, are a necessary step toward addressing the long term needs of the poor even though the immediate impact will be adverse; according to the GOB the increase will reduce the purchasing power of salaries from 12 to 15%.

Some unsound policies which contributed to the current stagnation benefitted the poor in the short run. Subsidized fuel prices mean lower transportation costs for small farmers, and food price ceilings mean lower food prices for the urban poor; yet petroleum reserves have diminished in the absence of funds to finance exploration of new fields, and incentives to food production have been lacking. Recent economic measures have improved some of the inappropriate policies, but there will be a negative impact on the standard of living of the poor. The GOB has announced that there will be no wage increases to offset the higher prices resulting from the new measures. As noted above, however, the military received very sizeable salary increases only a month earlier. A critical question in ongoing analysis of the GOB's commitment to the poor will be how economic sacrifices yet to come are shared between income groups and between civilians and military.

On the other hand, the recent measures do include progressive features. An overall 80% increase in electricity rates involves a jump of only 14-21% for minimum domestic users. The income tax adjustments, while not economically significant, will apparently marginally favor wage earners.

Successive Bolivian governments have been committed to increasing employment, but the focus has been on the public sector. This has swelled the payrolls of inefficient public enterprises and contributed to budget deficits and inflation. Meanwhile economic problems and political instability have discouraged investment in the private sector. Stimulating private investment remains the key to increasing employment, and the present government seems to have a stronger orientation toward the private sector than its predecessors.

The 1952 Revolution resulted in extensive redistribution of rural land to campesinos, and this commitment continues through colonization programs which have relocated over 13,000 highland poor to the sparsely populated lowlands during the last decade. The Revolution has provided formerly subjugated Indian campesinos with increasing opportunities for advancement, and the formal social order no longer excludes any ethnic group from sharing the benefits of development.

After land, credit is the most important resource to small farmers. The Bolivian Agricultural Bank (BAB) has increased its Small Farmer Credit Fund to $8.3 million during the past five years. The Ministry of Agriculture's budget has increased at an annual average of 15% from 1975-1980, and the government is studying the reorganization of the sector to involve more personnel in directly providing services to the rural poor. During the past five years, approximately 600 kilometers of rural roads have been constructed, providing rural villages with better access to production inputs and markets. During the same period, approximately 5,000 kilometers of electric lines have been installed to extend service to more than 43,000 rural families.

The rural poor do not have access to adequate health and education services. The GOB and private voluntary organizations provide only a small portion of the rural population with health services, but the budget of the Ministry of Public Health has increased at an annual average of 43% since 1977 with the greatest changes taking place during 1979-1980. The budget for education has also increased in 1980 (24% of the 1979 national budget), providing more schools and teachers for rural areas. The present government's commitment to improving rural health and education, however, is unclear.

In recent years the GOB has not significantly improved the administration of the key agriculture, health and education ministries. They remain administratively weak, over-centralized, and without adequate data for sector planning. Though corruption continues and at times hampers project implementation, it does not cause a substantial diversion of resources from the poor.

Due in part to the GOB's concern to achieve rapid growth and its lack of sensitivity to environmental issues, its commitment to preserve soil, water and forestry resources has been inadequate. The GOB critically needs an institution with the capacity and authority to plan and coordinate conservation and forestry management efforts. Prior to the July coup, the Mission was discussing this problem with the GOB with a view toward developing a conservation project.

Although the GOB has long been extremely conservative as regards public assistance in family planning and birth control, it does not interfere with the operation of private clinics and organizations.

Bolivia today is not open to new or controversial ideas. The political situation gives the poor few opportunities to participate in decisions that affect them. Since the July coup there has been censorship of the press and other mass media; though indirect criticism of government policies is sometimes tolerated, it acts quickly when structures are breached. During the last week of December 1980, the government suspended publication of a leading La Paz newspaper. Since July, the government has supressed dissenters and critics through threats, imprisonment, torture, and exile. Though the number of political prisoners has decreased to approximately 200, recent arrests and the continuing threat of repression stifles free expression.

## III. STRATEGY SUMMARY AND MODIFICATIONS

The USAID/Bolivia assistance strategy states how the Mission proposes to respond to Bolivia's development needs as analyzed in the FY 82 CDSS and as summarized and updated in this document. It applies to both the near-term, FY 81-83, and the CDSS planning period FY 83-87. It assumes that there will in fact be a U.S. response to Bolivian needs, and therefore is meaningful only in the context of the last two assistance scenarios discussed in the next section (See IV.C.). The last year's political changes and the delicacy of the economic situation require the Mission to modify slightly the program strategy and several of the sector strategies developed in the FY 82 CDSS.

### A. Mission Goals and Objectives

The fundamental goal over the 1983-1987 planning period remains as stated in the FY 82 CDSS: promoting growth with equity to achieve an improved standard of living for Bolivia's poor. Flowing from the goal is a set of objectives which undergird the Mission's strategy. Although consistent with those defined in the FY 82 CDSS, the basic objectives for the planning period narrow the thrust of our assistance program to income and production-related activities as follows:

1. Increased agricultural production and farm income through better small farmer access to production inputs, technology, marketing systems, and improved management of natural resources.

2. Higher per capita income through expanded off-farm employment opportunities, increased access to cost-effective energy sources, and broader economic participation of women;

3. Enhancement of the human resources base through decreased malnutrition, morbidity and mortality and more appropriate educational opportunities for rural children and selected middle-level training programs tied to sectors of emphasis.

B. Program Strategy

In working toward the goal of growth with equity, an overall program strategy has evolved with elements which are integral to each sector strategy. Most of these were discussed in the FY 82 CDSS:

- Decentralization: The Mission will design activities which emphasize regional, local, and individual participation in decision-making and upward articulation of requirements. The Departmental Development Corporations, regional offices of central ministries, and private sector organizations will be stressed.

- Geographic Focus: Activites will continue to be focused in the five southern and eastern departments, although other loci for project activities will be considered as appropriate to individual projects.

- Reduction of Counterpart: Given the critical financial and administrative situation of the GOB, projects will be designed to minimize government commitments of funds, particularly new recurrent expenditures.

- Private Sector Involvement: In all sectors, we will seek to expand the use of private entities to reach the target group. Experience with the private sector convinces us that more can be done outside and around the institutional constraints which plague the GOB. Off-farm employment generation in market towns appears to be a viable area toward which to direct our private sector assistance strategy.

- Donor Coordination: Continued close communication on the long term direction of Bolivian development among major multilateral and bilateral donors will both reduce strains on the GOB financial and administrative capacities and magnify the efficiency and leverage of the A.I.D. program.

C. Sector Strategies

Agriculture and rural development will continue to be the focus of the Mission's strategy. This will include rural energy and natural resources management. Health and nutrition will be considered jointly with education to integrate and strengthen efforts in human resources; the former will be continued with caution due to changes in the attitude of the current GOB, while in the latter traditional sector projects will end. Population activities will also be included in this human resources focus and will be carried out in the private sector.

Agriculture and Rural Development. This sector will continue to receive greatest emphasis in the near-term and over the planning period. Sector objectives will be pursued by increasing local participation in decision-making through decentralization and strengthening of rural organizations, and by concentrating on fewer, larger activities which address priority problems and provide policy leverage.

Four priority areas for small farmer development will be emphasized during the planning period: (a) improvement in the delivery of agricultural inputs, technical assistance and credit; (b) expanded market accessibility and efficiency; (c) greater access to technology adapted to local requirements; and (d) better management of natural resources.

In the near-term, the Mission will concentrate on improving small farmer access to services, including credit, marketing and inputs, and on the local adaptation and diffusion of technology. A sector assessment will be completed in the near-term to refine program development efforts; this will include possibilities for focusing Mission assistance in these areas within an integrated regional context, including both the public and private sectors; and measures for capturing rural savings for agriculture. In technology, the Mission will emphasize establishing interactive processes of local adaptation and dissemination of farm technologies, stressing local participation. Finally an initial project in natural resources management will be undertaken, to lay the groundwork for future assistance by defining priority problems, identifying investment possibilities, and strengthening institutional capacities. Future field activities will be supported by PL 480, Title II Food for Work.

The Mission is fully prepared to initiate a development project in the Chapare to provide alternatives to coca production, assuming the GOB implements an effective narcotics program to control the illegal processing and trafficking of coca and its derivatives. The Mission further assumes that special funding will be made available for this activity, which lies outside its priority development efforts.

Energy. The major change in the Mission's energy strategy from the FY 82 CDSS is to substantially increase energy's priority in response to Bolivia's deteriorating situation (See Annex E) and the opportunties presented by the GOB's increasing concern with the sector.

As stated in last year's CDSS (Section II.D.4.), Bolivia remains heavily dependent on diminishing petroleum reserves despite the abundance of natural gas, hydro, solar and other renewable energy sources. If production and consumption remain at current rates, Bolivia will exhaust its proven petroleum resources in the early 1990's. Ending fuel price subsidies will likely result in an appropriate switch to gas, but also cause a return to traditional fuels such as dung and wood, exacerbating already serious pressures on Bolivia's fuelwood resources and contributing to environmental deterioration.

The Mission's objective is to promote development of a balanced national energy policy, including both renewable and conventional energy sources, to insure the most cost effective utilization of each. Over the near-term, the Mission will pursue this objective by developing the institutional capability within the Ministry of Energy and Hydrocarbons (MEH) to assess Bolivia's energy resources and demand and plan an effective program of resource utilization. Within this framework, the Mission will support efforts to install decentralized "mini-hydro" generation systems for productive uses and to demonstrate the feasibility of using proven renewable energy technologies to meet rural needs. The Mission will also seek to bring together the concerns of natural resource conservation with energy and particularly fuelwood management. PL 480 Title II resources will be programmed when community-based projects are involved.

Human Resources. Health and Nutrition. The Mission's goal remains to improve the standard of health of the low income rural population of

Bolivia to enable them to increase their productivity and income, and improve their standard of living. The principal objective is to decrease mortality and morbidity rates.

The overall strategy and activities outlined in the FY 82 CDSS remain valid for the planning period, but changes in priorities are required by the cancellation of the Rural Health Delivery Systems project following the coup; the highest priority is to reauthorize that project with necessary modifications. Whether this occurs in the near-term or later in the planning period depends on renewed GOB support for a community health care system. The other priority areas of nutrition and rural sanitation will most likely be postponed accordingly. PVOs working in potable water and primary health care will continue to complement public sector activities. The Title III program will provide $11,000,000 for nutrition improvement, TB detection and control, malaria eradication and control, and immunization to pre-school age children.

Education. This area will be deemphasized as a discreet sector over the planning period in response to the Agency's reduced emphasis and the Mission's continuing experience of disruptive, politically-motivated personnel turnovers and lack of continuity. These endemic problems have worsened following the July 17 coup.

Education strategy over the planning period will focus on three objectives: development of projects focussed on specific problems (e. g., bilingual education), support of innovative PVO approaches to non-formal education, and strengthening of human resources development components in projects in other sectors.

Over the near-term, the Mission will proceed with the Bilingual Education project (approved by the DAEC) assuming an appropriate ministerial support exists. This project is based on unique U.S. capability and experience in Quechua-Spanish bilingual education in Bolivia and expands the present pilot effort to make it self-sustaining in two departments and easily replicable in two others. Of secondary priority will be the development of a small project to train middle level administrators in key ministries and improve the capability of the Institute of Public Administration to provide practical long term training in project development and management.

Population. Given the current rate of population growth and potential for higher rates as infant mortality declines, the Mission will continue to attempt to work carefully around the GOB's negative attitude on family planning, capitalizing on the considerable interest expressed through private providers. The Mission will indirectly support family planning services by the small, effective group of local private providers who operate successfully without government or Church intervention.

In the FY 82 CDSS, the Mission stressed reaching key decision-makers to encourage more favorable attitudes toward reduced population growth and family planning services. This approach may now be less viable, but the Mission will recommend continued support to selected studies, such as the 1980 Demographic Study and the RAPID program scheduled for FY 81, to illustrate the consequences of population growth and the value of spacing children to reduce infant mortality and malnutrition. It may be possible to work sex education, contraceptive techniques, and referral to services into health and other sector projects.

PL 480 Title II and III. The program will continue to play an important role in the Mission's strategy both in the near-term and in the CDSS planning period.

Title II. The program will provide food commodities for continuing activities described in the FY 82 CDSS, principally school child feeding, food for work projects and support of maternal and child health activities. Over the CDSS planning period, expanded use of Title II activities will strengthen the Mission's efforts in key sectors by promoting increased community participation and employment generation in: natural resources, management and conservation (reforestation); energy (basic hydroelectric infrastructure); health (latrine and water systems construction); education (health and nutrition training activities); women's participation in development (further development of mothers' clubs which function as rural centers for non-formal education in literacy, health and nutrition, agricultural extension, coop formation and establishment of small cottage industries); and expanded involvement by associated private voluntary organizations. Title II commodities will also be utilized to complement Mission colonization and Departmental Development Corporation activities by providing: newly settled colonists with the necessary basic food staples thus allowing them the time necessary to plant and harvest their crops; colonists with subsistence foods while completing new village infrastructure projects; and feeding programs in support of agricultural extension, training and community development activities.

To assure greater efficiency in the utilization of Title II commodities in support of the above activities, the Mission proposes to work with new and existing PVOs and the Ministry of Planning's National Complementary

Food and Nutrition Office (which has the responsibility for formulating policies on the incorporation and use of food aid in development programs) to encourage and provide assistance for the establishment of a single and uniform food delivery mechanism for distributing the bulk of Title II commodities. Through employment of an A.I.D. financed OPG, this logistical entity will be provided with the necessary technical assistance from a qualified PVO with expertise in food management.

Title III. The Food for Development (FFD) program will continue as a basic component of the Mission's portfolio, given its striking success to date and its ability to provide scarce counterpart resources. The government has performed well in meeting its commitments to use the proceeds from domestic wheat sales for rural development projects, increase public sector investment in agriculture, and initiate policy measures to stimulate production by insuring a market for domestically-produced wheat.

The GOB in March 1980 announced a five-year wheat plan which would eliminate the need for imports by mid-1985. In September 1980 it raised wheat prices for the first time since 1974, from $164/MT to $225/MT (some $45/MT over international prices) and in November 1980 set aside 50,000 hectares of new land for growing wheat. The January 1981 economic measures included doubling the consumer price to allow the market price to approximate the import cost of wheat. Title III will also support domestic wheat production by establishing collection centers which will transport, purchase and store the farmers' grain.

The unique feature of the Title III program -- that the debt is cancelled when the government complies with its responsibilities -- is extremely important in view of counterpart constraints, which limit Bolivia's ability to undertake externally-financed projects. Title III funded activities are fully integrated into the Mission's portfolio and consistent with broad objectives. One major subproject promotes decentralization by financing local development activities through the Departmental Development Corporations (DDC's). Another provides initial subsidies to the integral cooperatives which receive technical assistance under the Small Farmers Organizations project. A nutrition subproject directly complements the Mission's larger Nutrition Improvement grant.

The follow-on Title III program planned for 1984 will adjust objectives to reflect the progress made by the government in increasing wheat production and changes in Mission priorities.

Private Sector. As part of the Mission's strategy to pursue a decentralized approach to project development, the Mission will involve private sector institutions as vigorously as possible over the near-term and throughout the planning period. Primarily, assistance will be provided to private sector institutions to expand their activities in the small farm sector by providing greater access to agricultural inputs (particularly credit), improving rural housing, and increasing off-farm productive employment. These activities are in addition to the areas of private sector development mentioned in the preceding sector discussions, such as expanded use of PVOs in human resources development and indirect assistance to providers of family planning services.

Current and past programs with the Central Bank have been effective in channeling development resources through the private banking system. Nonbanking private sector institutions such as the National Federation of Credit Unions (FENACRE), the Savings and Loan System, and independent multipurpose and integral cooperatives are well developed delivery systems which will be tapped to provide the target group wider access to needed inputs. Future project assistance to these institutions could help generate significant income by mobilizing and making available rural savings.

The PCGP pilot rural housing activities of the savings and loan system have demonstrated the feasibility of combining housing and income-producing loans to the same rural family. The current Housing Guaranty also has demonstrated that the S & L system can work effectively with low-income families. Combining these experiences, the Mission plans to develop an expanded rural housing/employment program.

## IV. ISSUES

The most pressing issues concerning assistance to Bolivia have to do with the short and medium term rather than the five-year time frame of the traditional CDSS. For this reason the Mission has been instructed to focus this modified CDSS on near-term issues, against the background of the long-term analysis submitted last year. With the important exceptions noted in previous sections, both the comprehensive analysis of Bolivian development requirements and the Mission's strategy to meet them, detailed in last year's document, remain valid.

### A. Program Balance

The FY 83 CDSS slightly modifies the Mission priorities described in the FY 82 CDSS based on the new opportunities and the changed economic and commitment factors described above. Agriculture and rural development remains the main focus and consequently requires the greatest portion of planned resources; energy receives substantially increased attention; human resources (health, nutrition, education) will concentrate on a reduced number of project activities based on GOB commitment and U.S. capabilities; population activities will be addressed through the private intermediaries; PL 480 Title II and III continue to play an important role; and private sector initiatives through institutions and PVOs increase as a means of pursuing a more decentralized approach to project development.

The Mission strongly believes this balance between sectors is appropriate given A.I.D. priorities and opportunities in Bolivia. Assuming political developments allow new starts, timing is extremely important regarding the development of activities in the near-term and in the early part of the CDSS planning period.

B. Category III Projects

Within the present Mission portfolio, six projects remain "frozen" on project-specific grounds in response to political considerations. Since July 1980, normal implementation of these projects has stopped and only those actions necessary to keep them viable have been taken. Despite this status, counterparts have remained in place for most projects and Bolivian project activities have continued to the extent permitted by the availability of funds from the GOB or from prior advances of project funds. However, the Mission is concerned about the continuation of the GOB support needed to keep these projects alive. Although circumstances vary considerably among the individual projects, in general, as more time passes with no additional inputs from project resources, the possibility increases that counterpart funds and personnel for the projects programmed in the GOB budget will be withdrawn. Should this occur, given the time already passed and the difficulty of re-obtaining resources, the result could in effect be the loss of the projects and much of the investment already made.

The projects were placed in the "frozen" category in order to provide a short-term turnaround capability in the event of favorable political developments. To preserve this capability, the length of time the projects can remain completely frozen should be carefully considered. The Mission will closely monitor these projects and recommend additional actions which may be necessary to protect our investments and preserve flexibility.

C. Program and Personnel Levels

Under the Mission's strategy, Bolivia requires more assistance than A.I.D. can reasonably be expected to provide given overall funding availabili

The issues, therefore, focus less on the country's aggregate development requirements than on immediate administrative and short-term financial support capacity. Choices between the following cases and funding levels also hinge very significantly on political considerations which are beyond the scope of this paper but which may be addressed during the Washington CDSS review. Personnel requirements, which follow program levels, are discussed in the analyses of the alternate program directions. (See Annex F for summary.)

Case I - Close-out of USAID/Bolivia

Under this scenario, the Mission would sign no new project agreements, seek grounds for terminating existing Category III and IV activities, cease active implementation of Category IV projects, replace no departing personnel, send home in-place contractor teams, and downgrade to an A.I.D. Representative who could be withdrawn in three to four years.

Potentially, as much as $57.15 million could be terminated on legal grounds within ninety days, largely in the rural development and education sectors; $19.4 million, largely in private sector activities, would spend out over the next three years. Both Title II and Title III programs would cease - the former for lack of adequate administrative support, the latter presumably as a result of a political decision not to provide the remaining $35 million in wheat sales credits and implicit foreign exchange support.

No new program funds would be required in this case; operating expense requirements would rise sharply from the current $2 million to $3 million next year, to fund the close-out, and then fall to zero within four years.

The decision to close-out the Bolivia program would be taken if relations between Bolivia and the U.S. cool still further, if the economic situation and development climate deteriorate completely, or if various factors combine to make this program, the largest in Latin America based on development needs, marginal to A.I.D.'s activities. It is obviously not justifiable on developmental grounds.

Case II - More of the Same

This scenario varies from Case I only in that the Mission would not actively look for grounds to terminate Category III projects but rather hold those decisions open, would continue to actively implement Category IV, and would continue to provide the necessary support to Title II. Issue B notes, however, that some Category III projects might not remain viable if completely "frozen" beyond an additional few months, and in this Case most would ultimately terminate without further development impact. No new major projects would be signed, although OPGs and SDA subprojects would continue on a selective basis. Because there is no technical basis to terminate Title III, and under this scenario no political decision to do so, it would continue, presumably tranched at low levels against political or economic criteria. Personnel would remain at the current level for the present.

Under these conditions, funding at $4-5 million would be required to maintain the active program, keep Category III projects alive, and make minimal investments in "turnaround" capability. Perhaps $13 million would be deobligated from languishing Category III projects in FY [illegible]. Operating expense requirements would stay constant at $2 million.

Case II may be chosen if the development or political climate does not improve or if for other reasons the U.S. wishes to hold its options open through FY 81. It is not viable over a longer period, nor is it consistent with the Agency's development objectives.

Case III - Cautious Movement on Development Objectives

This case would allow the Mission to meet development opportunities on a limited basis by implementing selected Category III projects and making certain new starts. PL 480 Titles II and III would proceed normally, as would OPGs and SDA activities. The Mission's focus would remain heavily in ongoing agriculture and rural development activities, but it would also begin to capitalize on the excellent opportunity for work in the energy sector. There would be no new starts in education beyond the approved Bilingual Education project. Health and nutrition would remain a viable possibility depending on institutional developments. Both new and reactivated projects would, to the extent possible, work around the central government. Personnel requirements would increase somewhat to support activation of Category III projects and new starts.

The Mission would require $12-15 million in the first calendar year following a decision for Case III, and that figure would rise toward $40 million through the planning period if development over this longer-term did not suggest going back to the fully active program discussed under Case IV.

Case III would be an appropriate choice if there is an improvement in political relations short of a return to the pre-coup closeness and assuming the economic picture improves as a result of recent and future measures. This Case envisions something considerably short of a full assistance relationship, although relations between the Mission and key sector ministries would again be quite close.

Case IV - A Resumed Assistance Relationship

If circumstances permit a resumed normal assistance relationship, USAID/Bolivia would return to its pre-July 1980 planning, with the various sectoral adjustments already discussed. Category III projects would be actively implemented, and the Mission would resume its previous pace in rural development, include energy as a priority sector, continue to move out of education, maintain its option to capitalize on opportunities in health, and look actively for new possibilities of providing support to small-scale housing and credit activities through the private sector. Title II and III would expand and a new Title III agreement would be proposed in 1984. The Mission would resume its close relationship with the GOB on economic issues and development strategy across the board. Personnel levels would correspondingly be increased to those projected a year ago.

Program levels would return to $25 million in the first twelve months, and following the projects of last year's CDSS move toward $60 million by the end of the period, as is appropriate for the poorest country in South America.

This Case would be appropriate to full and normal relations between Bolivia and the U.S., with an improved economic climate which allowed for effective planning and implementing jointly designed projects in areas of mutual concern. It would also be a logical outgrowth of an initial decision to implement Case III if conditions continued to improve.

# V. ANNEXES

A. Country Data

B. Current Status of Development Assistance Program

C. Bolivia: Comparison with Low and Middle Income Countries

D. Other Donor Activity

E. Status of Bolivia's Energy Sector

F. Summary of Cases I - IV

# ANNEX A - COUNTRY DATA 1/

| Basic Indicators | |
|---|---|
| Population Mid-1978 (millions) | 5.3 |
| Area (thousand square km.) | 1,099 |
| Socio-Ethnic Distribution: | |
| Indians | 60.0% |
| Mestizos | 25.0% |
| White | 15.0% |
| Population Density (per km. ) | 4.8 |
| Average Family Size (1979) | 5 |
| Rural Population as % of total population (1975) | 67.0% |

| Demographic Indicators | |
|---|---|
| Average Annual Rate of Growth of Population (1979-1978) | 2.6% |
| Crude Birth Rate per thousand Population (1978) | 44 |
| Crude Death Rate per thousand Population (1978) | 15 |
| Percentage Change in Crude Birth Rate (1960-1978) | -8.3% |
| Crude Death Rate (1960-1978) | -34.8% |

| Health Indicators | |
|---|---|
| Life Expectancy at Birth (1978) | 52 |
| Infant Mortality Rate (1977) | 158 |
| Child Death Rate (1978) | 22 |
| Population per Physician (1976) | 1,850 |
| Nursing Person (1977) | 3,070 |
| Percentage of Population with Access to Safe Water (1975) | 34.0% |
| Daily Per Capita Caloric Intake as % of Population (1977) | 83.0% |

| Education Indicators | |
|---|---|
| Adult Literacy Rate (1977) | 40.0% 2/ |
| School Teachers Distribution | |
| Urban Areas (1975) | 65.0% |
| Rural Areas (1975) | 35.0% |
| Numbers Enrolled in Primary School as % of Age Group | |
| Total (1977) | 80.0% |
| Male (1977) | 88.0% |
| Female (1977) | 72.0% |
| Number enrolled in secondary school as % of age group (1977) | 26.0% |

| Income Indicators | |
|---|---|
| Per Capita GNP, 1978 (US$) | 510 |
| Average Annual Growth of per Capita GNP, 1960-1978 | 2.2% |
| Average Annual Rate of Inflation 1970-1978 | 22.7% |

| Production Indicators | |
|---|---|
| Average Annual Growth Rate of GDP (1970-1978) | 5.6% |
| Agriculture (1970-1978) | 3.6% |
| Industry (1970-1978) | 5.1% |
| Manufacturing (1970-1978) | 6.8% |
| Services (1970-1978) | 6.5% |

| Merchandise Trade Indicators | |
|---|---|
| Merchandise Trade (million US$) | |
| Exports (1979) 3/ | 776.8 |
| Imports (1979) 3/ | 931.1 |
| Average Annual Growth Rate by Volume of Exports (1970-1978) | 1.7% |
| Imports (1970-1978) | 12.2% |
| Terms of Trade 1970 = 100 (1978) | 130 |

| Balance of Payments and Debt Service Ratios | |
|---|---|
| Current Account Balance before Interest Payments on External Public Debt (million US$) 1978 | -301 |
| Debt Service as Percentage of | |
| GNP (1978) | 8.5% |
| Exports of Goods & Serv. (1978) | 48.7% |

| External Public Debt and International Reserves | |
|---|---|
| External Public Debt Outstanding & Disbursed as % of GNP (1978) | 40.7% |
| Gross International Reserves in Months of Imports Coverage (1978) | 3.3 |

| Labor Force Indicators | |
|---|---|
| Labor Force Distribution | |
| Agriculture (1978) | 51.0% |
| Industry (1978) | 24.0% |
| Services (1978) | 25.0% |
| Average Annual Growth of Labor Force (1978-1980) | 2.4% |
| Percentage of Population of Working Age (15-64 years) 1978 | 53.0% |

| Energy Indicators | |
|---|---|
| Average Annual Growth Rates of | |
| Energy Production (1974-1978) | -2.0% |
| Energy Consumption (1974-1978) | 11.3% |

| Distribution of GDP 4/ | |
|---|---|
| Agriculture (1980) | 18% |
| Industry (1980) | 27% |
| Services (1980) | 55% |

1/ Source: World Development Report, IBRD, August 1980.
2/ Mission estimate based on fifth grade education.
3/ Source: International Financial Statistics, Volume XXXIII, IMF, 1980.
4/ Source: Central Bank preliminary estimate.

## ANNEX B - CURRENT STATUS OF DEVELOPMENT ASSISTANCE PROGRAM
(U.S.$ Millions)

| Project No. and Title | Loan/Grant | Status as of 1/31/81 Terminated | Status as of 1/31/81 Deobligated |
|---|---|---|---|
| **Category I Projects** | | | |
| A. Terminated | | | |
| 0483 - Rural Health Delivery System | L/G | 13.30 1/ | 10.90 |
| 0538 - Agricultural Credit | L/G | 16.00 1/ | 14.35 |
| HG005 - Shelter Program HIG (BANVI) | HG | 4.00 | 0.44 |
| 0510 - HIG Shelter Grant (BANVI) | G | 0.32 | 0.25 |
| 0364 - Sub Tropical Lands Development | L | 2.00 | 2.00 |
| 0888 - Rural Access Roads I | L | 2.10 | 2.10 |
| 0534 - Rural Electrification Management (NRECA) | G | 0.12 | 0.12 2/ |
| 0455 - Ag. Development Sector I | L | 0.40 | 0.40 |
| Sub-Total A | | 38.24 | 30.56 |
| B. Portions Terminated | | | |
| 0499 - Village Development | L/G | 5.00 | 5.00 |
| 0450 - Educational Management and Instructional Development | L/G | 1.60 | 1.60 2/ |
| Sub-Total B | | 6.60 | 6.60 |
| Total A and B | | 44.84 | 37.16 |

**Category II Projects**

All projects placed in Category II following the July 1980 coup have been subsequently terminated with the exception of 0466 - Rural Access Roads II - which is now in Category III .

| Project No. and Title | Loan/Grant | Status as of 1/31/81 Delayed |
|---|---|---|
| **Category III Projects** | | |
| A. Delayed | | |
| 0499 - Village Development | L/G | 8.90 |
| 0465/6 - Agriculture Sector II | L/G | 5.90 |
| 0482 - Rural Education II | L/G | 9.40 |
| 0511 - Departmental Development Corporations | L | 10.00 |
| 0458 - Rural Sanitation | L/G | 3.70 |
| 0466 - Rural Access Roads II | L/G | 13.20 |
| Total | | 51.10 |

| Project No. and Title | Loan/ Grant | Status as of 1/31/81 |
|---|---|---|
| | | Continuing3/ |
| Category IV Projects | | |
| A. Spending Out Pre-Coup Commitments | | |
| 049 - Rural Electrification II (TDD 12/31/80) | L | 0.70 |
| 0450 - Educational Management and Instructional Development | L | 3.10 |
| 0477 - Rural Education I (TDD 4/27/81) | L/G | 3.00 |
| 0453 - Rural Health Delivery Services (APD) - Montero (TDD 3/31/81) | G | 0.80 |
| Sub-Total A | | 7.60 |
| B. Continuing Activities | | Continuing3/ |
| 0472 - Agribusiness and Artisanry | L/G | 5.90 |
| 0452 - Small Farmers Organization I | L/G | 3.90 |
| HG005 - Shelter Sector HIG (CACEN) | HG | 3.50 |
| 0510 - Shelter Sector Grant (CACEN) | G | 0.05 |
| 0468 - Nutrition Improvement (APD) | G | 0.80 |
| 0451 - Basic Foods Production and Marketing (CID) | G | 0.70 |
| 0485 - Farm Policy Study | G | 0.70 |
| 0481 - Small Farmers Production (CHEMONICS) | G | 0.70 |
| 0514 - Consolidation of Colonization Program (FIDES) | G | 0.60 |
| 0477 - Rural Development Planning | G | 1.00 |
| PCGP - Productive Credit Guaranty Program | G | - |
| 0523 - PL 480 Title II | G | ( 7.27) 4/ |
| 0522 - PL 480 Title III | G | (18.40) 5/ |
| Sub-Total B | | 17.85 |
| PL 480 | | (25.67) |
| Total A and B | | 25.45 |
| PL 480 | | (25.67) |

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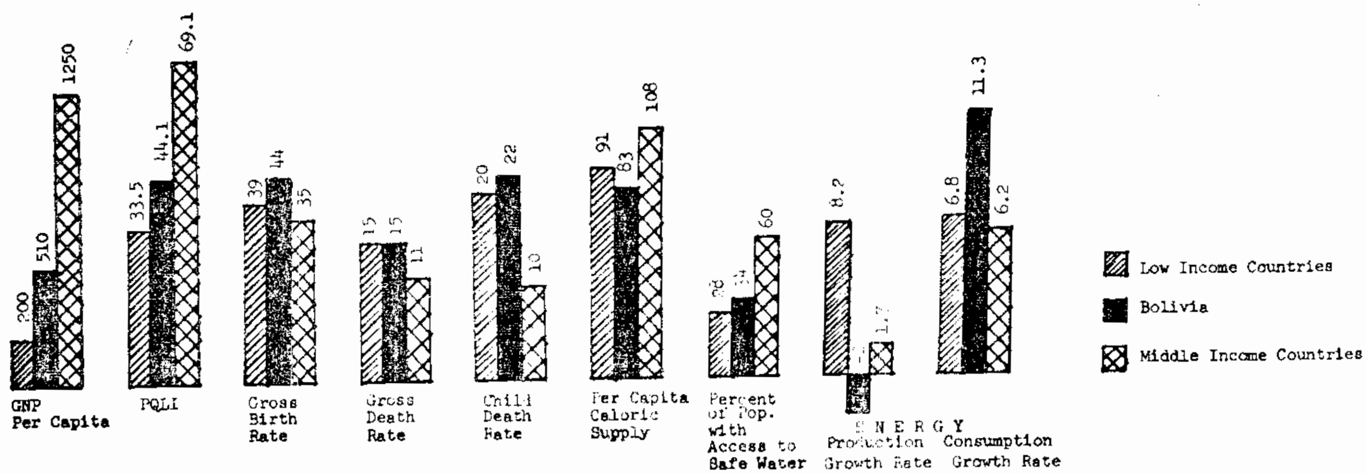
1/ LOP.
2/ Exact amount to be deobligated to be determined.
3/ Obligated less disbursed as of 12/1/80.
4/ FY 80 actual expenditures.
5/ FY 81 budgeted.

## ANNEX C - BOLIVIA: COMPARISON WITH MIDDLE AND LOW INCOME COUNTRIES (1978) 1/

| Indicator | Bolivia | Average Value 2/: Latin American Countries | Average Value 2/: Low Income Countries | Average Value 2/: Middle Income Countries | Average Value 2/: Industrial Countries |
|---|---|---|---|---|---|
| Per Capita GNP in 1978 US$ | 510 | 1,399 | 200 | 1,250 | 8,070 |
| PQLI | 44.1 | 70.4 | 33.5 7/ | 69.1 7/ | 96.5 |
| Infant Mortality (Aged 0-1) | 158 | 75.9 | NA | 71.9 7/ | 13 |
| Life Expectancy at Birth | 52 | 63.2 | 50 | 61 | 74 |
| Adult Literacy % (15 years or older) 3/ | 63 | 76.6 | 38 | 71 | 99 |
| Crude Birth Rate/1000 | 44 | 34.7 | 39 | 35 | 14 |
| Crude Death Rate/1000 | 15 | 8.8 | 15 | 11 | 9 |
| Children Death Rate/1000 (Aged 1-4) | 22 | 8.2 | 20 | 10 | 1 |
| Per capita Caloric Supply as % of Minimum Daily Recommended Requirement 4, 5/ | 83 | 107.7 | 91 | 108 | 131 |
| Percentage of Population with Access to Safe Water | 34 | 65.7 6/ | 28 | 60 | - |
| Energy - Average Annual Growth Rate % (1974-1978) | | | | | |
| Production | -2 | 6.3 | 8.2 | 1.7 | .8 |
| Consumption | 11.3 | 5.6 | 6.8 | 6.2 | 1.5 |




1/ Source: Information published in World Development Report, IBRD, August 1980.
2/ Weighted by population.
3/ Data for 1975. Literacy defined as having completed first grade.
4/ Note: Bolivia has the lowest caloric supply among Latin American countries.
5/ Data for 1977.
6/ Data for Venezuela, Trinidad and Tobago not available.
7/ Based on reduced sample due to unavailability of data (1968-1978).

## ANNEX D - OTHER DONOR ACTIVITY

Coordination of donor activities in Bolivia has improved significantly in the last year (See FY 82 CDSS, Section II.E. for Mission strategy). Monthly technical meetings between the major multilateral and bilateral donors, as well as regular policy level consultation, have brought donors to a clearer understanding and agreement regarding each other's role in Bolivian development. This pattern of consultation and exchange of views must continue, not only to insure that efficient counsel is provided the GOB, but also to magnify the impact of U.S. assistance efforts in Bolivia.

The FY 82 CDSS explained in detail the composite picture of multilateral and bilateral assistance to Bolivia, with sectors of emphasis and planned levels of assistance by the major donors. In responding to the current financial crisis in Bolivia, the Mission strategy recognizes that short term assistance with high resource levels must be left to other donors--primarily the World Bank, IDB and IMF (with the role of the IMF being particularly important while the new economic reforms are implemented). It focusses our program on those areas where, with limited resources, assistance can be effective in increasing productivity and ultimately addressing Bolivia's economic problems, such as in reducing counterpart requirements and promoting energy self-sufficiency.

Table I below provides more recent information available on 1979 levels. In the past year most external donors have curtailed their commitments to Bolivia in reaction to the July 17 military coup. Among the multilateral donors, the IDB and the UN have postponed consideration of new projects while maintaining previous commitments active. Although the World Bank's local posture has been less affected, its official policy from Washington has been cautious. It proceeded with the $25 million second tranche of the "structural adjustment" loan, signed with the previous government, but has moved slowly with other new initiatives.

The major bilateral donors reacted more sharply to political events. Germany and Great Britain have reduced their assistance to those projects already underway and shelved new or proposed activities, including in the case of the UK a $40 million import program aimed at the mining sector. After an initial delay, Japan has resumed new funding for ongoing projects, but has begun no new ones. Other bilateral donors have supported the new government financially, as in the case of Argentina, or with technical assistance, as in the cases of Israel, South Africa and Taiwan.

The Andean Group and the OAS, whose economic impact in Bolivia is somewhat limited, have also suspended new assistance and sought to exert international pressure to return Bolivia to civilian, democratic rule.

# TABLE I

## Other Donors Assistance Levels 1/

(U.S.$)

| | New Commitments 1979 |
|---|---|
| **Multilateral Donors:** | |
| IDB | 135,000,000 |
| World Bank | 20,000,000 |
| UNDP | 4,400,000 |
| Other UN Agencies | 10,500,000 |
| **Bilateral Donors** | |
| USAID | 20,000,000 |
| Democratic Republic of Germany | 15,145,250 |
| United Kingdom | 3,230,000 |
| Japan | 9,130,000 |
| Belgium | 2,679,000 |
| Denmark | 10,000,000 |

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1/ Complete 1980 data for other donors assistance levels not available.

## ANNEX E - SUMMARY OF BOLIVIA'S ENERGY ENVIRONMENT

The current sources of energy in Bolivia are natural gas, petroleum, wood, bagasse, hydroelectricity and bottled liquified petroleum gas (See Table I, page 2). In 1979, petroleum and natural gas constituted about 88% of current energy production and 73.3% of internal energy consumption. Most of that (64%) was consumption of petroleum derivatives. The second major source of energy for internal consumption is fuelwood (13.2%). The following briefly summarizes the status of each of the current major energy sources:

Natural Gas. It is estimated that Bolivia's proven and probable reserves of natural gas are about 4.35 trillion cubic feet. This would be sufficient to maintain the 1979 production level for at least 50 years. Little of the natural gas produced is consumed in Bolivia (less than 3% of production in 1977). Further, in 1979 about 46.8% of the total production of natural gas was marketed; the balance was flared, vented, or reinjected for lack of a market. The major market for natural gas currently is Argentina with exports approaching 200 million cubic feet per day. With the assistance of IDB and the World Bank, a study will soon be undertaken to determine and certify proved and probable reserves of natural gas. This will pave the way for the construction of a natural gas pipeline to the Rio de Janeiro - San Paulo area in Brazil and the sale of approximately 3 trillion cubic feet of gas over 20 years to Brazil's industrial consumers. Natural gas therefore is being developed primarily as an export product with current projections of domestic consumption not exceeding 1 trillion cubic feet over the next 20 years.

Petroleum. Proven reserves of petroleum are now estimated at approximately 111.8 million barrels. This is equivalent to 10 years of production at the 1978 level of production. From a production peak of 17.3 million barrels in 1973, production has declined steadily, dropping to 10.2 million barrels in 1979. As a result of declining production and rapidly increasing domestic consumption of petroleum derivatives, export of petroleum was discontinued at the end of 1978.

In recent years, consumption of petroleum derivatives, particularly diesel and gasoline, has been increasing at an annual rate of 10-15%. As a result of decreasing production and increasing demand, Bolivia will become a net importer of oil by the early 1980s.

Fuelwood. As indicated in Tables I and II, fuelwood constituted almost 13.2% of the total internal consumption of energy, most of which 59.8%) is used for domestic consumption (1979 figures). The Country Environmental Profile estimates that in 1976 almost 3.5 million cubic meters of harvested raw material was used for fuelwood and charcoal. This compares with 366,000 square meters (24,400 sq. km.) harvested for timber and wood products. Studies indicate that in addition to existing natural forest resources, Bolivia will require at least an additional 12,550 hectares of plantation forest to satisfy the demand for fuelwood in the early 1980s. The most urgent need for forest plantations or other energy sources to replace fuelwood use is in the central and northern Altiplano and throughout the inter-Andean valleys.

Hydroelectricity. Currently a major percentage of electricity consumed in Bolivia is from hydroelectric generation. Bolivia has a vast hydroelectric potential. With assistance from the United Nations, an evaluation of hydroelectric potential was undertaken in 1978. The study estimated that Bolivia has an economically exploitable potential of 18,000 MW, or sufficient to meet the country's estimated central station electric energy demands for the next 40 years. This estimate is based primarily on central station generating capability integrated into the national electric grid. Evidence is also strong that the decentralized hydroelectric potential is extremely significant, particularly in areas which are too isolated to be connected economically to the national power grid.

Other Sources. Based on preliminary work done by other donors and the Ministry of Energy and Hydrocarbons (MEH), there appears to be a good potential in Bolivia for non-conventional energy production. Although no detailed technical work has been done, there are reasonable prospects for developing solar energy for use in the Altiplano, geothermal energy in some regions of the south western and south central mountain ranges, and bio-mass or biogas sources of energy in the heavily forested areas of sub-tropical Bolivia. Although these sources of energy probably will never be adequate to make a significant contribution to the total supply of energy in Bolivia, they could be crucial sources of energy in specific areas of the country. This is particularly true in rural areas where the cost of providing alternatives such as central station electricity is prohibitive.

TABLE I

Composition of Production, Exportation and Internal Consumption (1979 data)

| Primary Energy Source | Gross Energy Production | Energy Exports | Internal Energy Consumption |
|---|---|---|---|
| Oil | 22.2% | 1.5% | 64.0% |
| Natural Gas | 65.7% | 98.5% | 9.3% |
| Hydro Electricity | 4.6% | - | 5.6% |
| Wood | 3.5% | - | 13.2% |
| Baggase | 2.6% | - | 7.8% |
| Other | 1.4% | - | 0.1% |
| T o t a l | 100.0% | 100.0% | 100.0% |

Source: Ministry of Energy and Hydrocarbons.

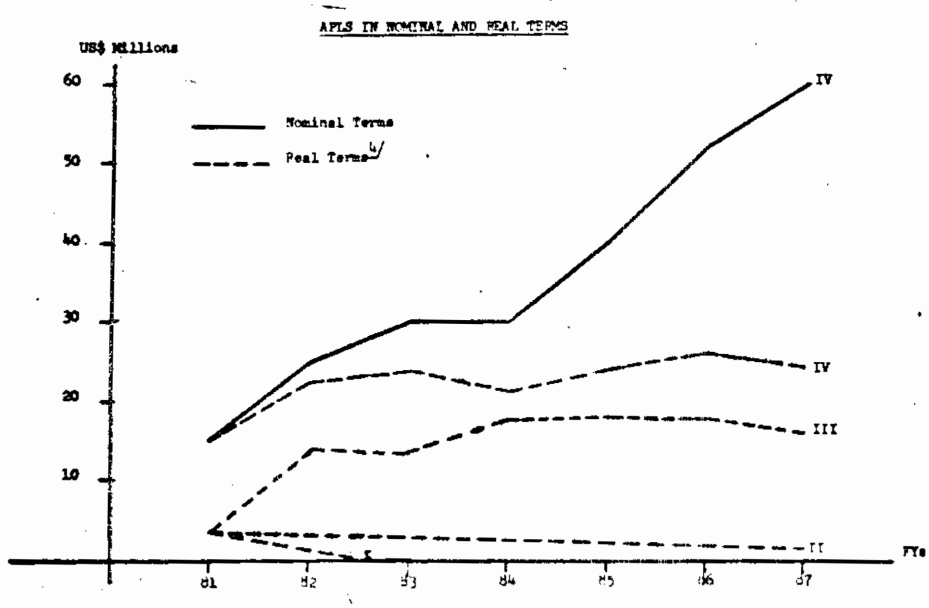
## TABLE II

### Internal Energy Consumption by Type & Economic Sector

| Direct Energy Source | Transportation | Industry | Domestic | Mining | Miscel. | Total |
|---|---|---|---|---|---|---|
| Oil | 68% | 19.5% | 8.7% | - | 3.8% | 100% |
| Natural Gas | - | 100.0% | - | - | - | 100% |
| Bottled (LPG) Gas | - | - | 90.0% | - | 10.0% | 100% |
| Electricity | - | 33.8% | 23.1% | 31.4% | 11.7% | 100% |
| Wood | - | 10.2% | 89.8% | - | - | 100% |
| Baggase | - | 100.0% | - | - | - | 100% |
| All sources | 58.5% | 19.8% | 16.3% | 3.4% | 2.0% | 100% |

ANNEX F - SUMMARY OF CASES I-IV

| | | CASE I | CASE II | CASE III | CASE IV |
|---|---|---|---|---|---|
| Category III | : | Terminate[1] | Continue frozen | Implement selectively | Implement |
| Category IV | : | Terminate or implement passively | Implement | Implement | Implement |
| Title II | : | End | Continue | Increase support | Increase support |
| OPGs, SDA | : | None | Selective starts | Continue | Continue |
| Title III | : | Terminate | Tranche cautiously | Continue | Extend[2] |
| New Starts | : | None | SDA; OPGs | Selective; energy, rural devel. | Continue rural devel. private sector |
| Personnel (USDH) | : | Reduce by attrition; AID/rep | Maintain at 16 | Increase to 21-23 | Build to 28-30 |
| Program Funds[3] | : | $ 2 M | $ 4 M | $15-40 M | $25-60 M |
| Operating Funds[3] | : | $ 2.5 M | $ 2 M | $ 2.5 M | $ 3 M |
| Deobligations | : | $57 M | $13 M | 0 | 0 |




1/ Assuming legal basis exists.
2/ New agreement in 1984.
3/ Increasing from FY 81/82 - FY 86/87.
4/ Assumes 10% deflator.