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UNCLASSIFIED

UNITED STATES INTERNATIONAL DEVELOPMENT COOPERATION AGENCY
AGENCY FOR INTERNATIONAL DEVELOPMENT
Washington, D. C. 20523

BOLIVIA

PROJECT PAPER

AGRIBUSINESS AND ARTISANRY
Amendment

AID/LAC/P-2253/1

Project Number: 511-0472
Loan Number: 511-T-060

UNCLASSIFIED

AGENCY FOR INTERNATIONAL DEVELOPMENT

PROJECT DATA SHEET

1. TRANSACTION CODE: C (A = Add, C = Change, D = Delete) — Amendment Number 1

DOCUMENT CODE: 3

2. COUNTRY/ENTITY: BOLIVIA

3. PROJECT NUMBER: 511-0472

4. BUREAU/OFFICE: LAC — 05

5. PROJECT TITLE (maximum 40 characters): Agribusiness and Artisanry

6. PROJECT ASSISTANCE COMPLETION DATE (PACD): MM 08 DD 31 YY 86

7. ESTIMATED DATE OF OBLIGATION (Under 'B.' below, enter 1, 2, 3, or 4)

A. Initial FY 78 B. Quarter 2 C. Final FY 85

8. COSTS ($000 OR EQUIVALENT $1 =)

A. FUNDING SOURCE	FIRST FY B. FX	C. L/C	D. Total	LIFE OF PROJECT E. FX	F. L/C	G. Total
AID Appropriated Total	335	6,050	6,385	1,150	16,250	17,400
(Grant)	(135)	(50)	(185)	(950)	(250)	(1,200)
(Loan)	(200)	(6,000)	(6,200)	(200)	(16,000)	(16,200)
Other U.S. 1.						
Other U.S. 2.						
Host Country	-	456	456	-	4,520	4,520
~~Other Donor(s)~~ Investor/ICIs	-	150	150	-	8,400	8,400
TOTALS	335	6,656	6,991	1,150	29,170	30,320

9. SCHEDULE OF AID FUNDING ($000)

A. APPROPRIATION	B. PRIMARY PURPOSE CODE	C. PRIMARY TECH. CODE 1. Grant	2. Loan	D. OBLIGATIONS TO DATE 1. Grant	2. Loan	E. AMOUNT APPROVED THIS ACTION 1. Grant	2. Loan	F. LIFE OF PROJECT 1. Grant	2. Loan
(1) FN	270	111	111	400	6,200	800	10,000	1,200	16,200
(2)									
(3)									
(4)									
TOTALS				400	6,200	800	10,000	1,200	16,200

10. SECONDARY TECHNICAL CODES (maximum 6 codes of 3 positions each)

11. SECONDARY PURPOSE CODE

12. SPECIAL CONCERNS CODES (maximum 7 codes of 4 positions each)

A. Code

B. Amount

13. PROJECT PURPOSE (maximum 480 characters)

To improve and expand the system for promoting and financing private agribusiness and artisanry enterprises through commercial banks and other financial institutions, thereby helping provide the investment capital required to assist them in contributing to Bolivia's economic recovery

14. SCHEDULED EVALUATIONS

Interim MM 08 YY 83 MM 07 YY 84 Final MM 05 YY 86

15. SOURCE/ORIGIN OF GOODS AND SERVICES

Grant [X] 000 Loan [X] 941 L/G [X] Local [ ] Other (Specify)

16. AMENDMENTS/NATURE OF CHANGE PROPOSED (This is page 1 of a 56 page PP Amendment.)

This amendment will increase AID's contribution to the Agribusiness and Artisanry refinancing facility within the Bolivian Central Bank, increase technical assistance to improve the capabilities of Central Bank and intermediate credit institution personnel involved in the project, and extend the PACD 32 months through August 31, 1986.

17. APPROVED BY

Signature: Henry H. Bassford

Title: Director USAID/Bolivia

Date Signed: MM 08 DD 24 YY 83

18. DATE DOCUMENT RECEIVED IN AID/W, OR FOR AID/W DOCUMENTS, DATE OF DISTRIBUTION

MM DD YY

AID 1330-4 (8-79)

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Second Amendment to

Project Authorization

Name of Country:	Bolivia
Name of Project:	Agribusiness and Artisanry
Number of Project:	511-0472
Number of Loan:	511-T-060

1. Pursuant to Section 103 of the Foreign Assistance Act of 1961, as amended, the Agribusiness and Artisanry Project for Bolivia was authorized on September 27, 1977. That authorization, as previously amended, is hereby amended as follows:

a. Delete the first two paragraphs of the first page of the authorization and insert in lieu thereof the following:

Pursuant to Section 103 of the Foreign Assistance Act of 1961, as amended, I hereby authorize the Agribusiness and Artisanry Project for Bolivia involving planned obligations of not to exceed $ 16.2 million in loan funds and $ 1.2 million in grant funds over a nine year period from date of authorization subject to the availability of funds in accordance with the A.I.D. OYB/allotment process, to help in financing foreign exchange and local currency costs for the project. The planned life of the project is eight years and eight months from the date of initial obligation. The project consists of improving and expanding the system for promoting and financing private agribusiness and artisanry enterprises through commercial banks and other financial institutions, thereby helping provide the investment capital required to assist them in contributing to Bolivia's economic recovery.

b. Paragraphs 2 and 3 are amended to read as follows:

2. Source and Origin of Goods and Services (Loan).

Commodities financed by A.I.D. under the Loan shall have their source and origin in Bolivia or in countries included in A.I.D. Geographic Code 941 except as A.I.D. may otherwise agree in writing. Except for ocean shipping, the suppliers

of commodities or services shall have Bolivia or countries included in A.I.D. Geographic Code 941 as their place of nationality, except as A.I.D. may otherwise agree in writing. Ocean shipping financed by A.I.D. under the Loan shall, except as A.I.D. may otherwise agree in writing, be financed only on flag vessels of any country included in A.I.D. Geographic Code 941 or Bolivia.

3. Source and Origin of Goods and Services (Grant).

Commodities financed by A.I.D. under the Grant shall have their source and origin in Bolivia or the United States, except as A.I.D. may otherwise agree in writing. Except for ocean shipping, the suppliers of commodities or services shall have Bolivia or the United States as their place of nationality, except as A.I.D. may otherwise agree in writing. Ocean shipping financed by A.I.D. under the Grant shall, except as A.I.D. may otherwise agree in writing, be financed only on flag vessels of the United States.

c. Delete the period at the end of paragraph 7 and add the following additional subparagraphs to paragraph 7:

(iv) Bolivia will expeditiously process the initial group of subproject, refinancing requests received by the Central Bank after the date of the signing of Amendment No. 2 to the Project Agreement;

(v) Bolivia will select the long term advisor for the Development Division of the Central Bank and the consulting firm to train Central Bank and intermediate credit institution (ICI) personnel within 90 days of the notice that all conditions precedent, except those in Section 5.3 of the Project Agreement, have been met;

(vi) The Central Bank as part of its review of refinancing requests requiring foreign exchange, at whatever authorized level within the Bank, will satisfy itself that no problem exists that would impede or delay approval by the Exchange Commission of the required foreign exchange and, concurrently with the approval of such refinancing requests, issue a statement to the Exchange Commission supporting the borrower's request to purchase foreign exchange, and requests to purchase foreign exchange for projects refinanced under the Central Bank's refinancing lines will be given special preference and processed expeditiously;

(vii) The Central Bank will ensure that A.I.D.'s regulations with regard to procurement with funds from the Agribusiness

and Artisanry refinancing facility are included in its agreements with participating ICIs and in each loan agreement issued by participating ICIs for projects partially financed through the refinancing facility and will take whatever steps are necessary to ensure that these procurement regulations are followed;

(viii) Bolivia will undertake, as soon as possible, analyses of the various alternatives available regarding national interest rate policies, price control and price subsidy policies, and export promotion policies, with special emphasis on how they affect private agribusiness development and the development of the system for the financing of agribusiness and artisanry ventures established under this Project;

(ix) The Central Bank will undertake, as soon as possible, studies of the capitalization standards and reserve requirements set for commercial banks, with a view to setting revised standards for the former, and possibly exempting bank participation in development lending from the latter;

(x) Bolivia will take appropriate measures to improve the implementation and make effective the provisions of its Export Promotion Law; and

(xi) The Central Bank will continue streamlining refinancing documentation and processing procedures and review continuously feasibility study requirements.

d. Add the following new paragraph 8 to the authorization:

8. Conditions Precedent to Disbursement of Additional Loan Funds

Except as A.I.D. may otherwise agree in writing, prior to disbursement or the issuance of any commitment documents for additional Loan funds authorized under the Second Amendment to the Authorization, the Government of Bolivia will furnish in form and substance satisfactory to A.I.D.:

a. a revised implementation and evaluation plan for the remainder of the project;

b. evidence that Central Bank regulations to effect changes in the following project-related rules have been issued:

(i) the authority of various levels within the Central Bank to approve refinancing requests;

(ii) ICI eligibility criteria;

(iii) subproject eligibility criteria;

(iv) refinancing terms and

(v) the terms of ICI participation in refinancing transactions;

c. evidence that the staff of the unit within the Development Department responsible for the Technical Assistance Program (TAP) has been augmented;

d. a revised TAP implementation plan; and

è. evidence that a special account has been opened for local currency project expenditures.

2. The authorization cited above remains in force except as hereby amended.

Henry H. Bassford
Director

Drafted by:
SRLA:TGeiger:glp. 09/22/83

Clearances:

PD&I:RJAsselin, Jr. _____

CONT:RZelaya _____

PS:TDJohnston _____

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A. Subproject Profiles

B. BCB List of Subprojects Being Developed

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D. Revised Project Checklist

E. Summary Description of Bolivian Development Credit System

ACRONYMS

A&A	-	Agribusiness and Artisanry Project
BCB	-	Banco Central de Bolivia
GOB	-	Government of Bolivia
ICI	-	Intermediate Credit Institution
TAF	-	Technical Assistance Fund

I. SUMMARY PROJECT DESCRIPTION

A. The Project

The Agribusiness and Artisanry (A&A) Project was initiated in January 1978. It established a $9 million refinancing facility within the Bolivian Central Bank (BCB),of which the AID contribution was $6 million, for the partial financing of credits from commercial banks and other financial institutions to private sector agribusiness and artisanry projects of benefit to the poor majority. A Technical Assistance Fund (TAF) was also created under the project to (a) provide assistance to sub-borrowers in subproject preparation, (b) finance the training of intermediate credit institution (ICI) personnel, and (c) promote use of BCB's refinancing facilities.

As of last April 1983, almost $25 million in credit had been approved for 875 projects under the A&A refinancing facility. The efficiency with which the refinancing facility has been managed has improved steadily since 1978, and the project has clearly been a success both in channelling required long-term credit to private sector agribusiness and artisanry enterprises and,through these enterprises, in benefitting Bolivia's poor.

Bolivia is currently going through its most difficult economic period in thirty years. The peso has been sharply devaluated, unemployment is high, and, due to a significant decrease in domestic purchasing power, internal demand is low. After years of economic neglect by previous governments, the democratic administration of President Hernán Siles Zuazo has begun to take a series of measures to restore stability and lay the groundwork for renewed growth. Bolivia's private sector agribusiness and artisanry enterprises and its commercial banking sector have also begun to take the steps necessary to adjust to the country's short term economic circumstances and to prepare to take advantage of new long-term opportunities (e.g., for import substitution and exports). At present, during this transitional period for Bolivia's economy, there is a severe shortage of medium to long-term investment capital. If additional resources are not made available, the country's private sector agribusiness and artisanry enterprises will not be able to play their essential role in contributing to Bolivia's recovery nor provide the additional economic benefits they are capable of bringing to Bolivia's poor in terms of employment, increased incomes, and agricultural market expansion.

The amended A&A project's goal is to enhance the role of private agribusiness and artisanry enterprises in the Bolivian economy and thereby increase the income and standard of living of small to medium size farmers and other poor Bolivians. The project's purpose is to improve and expand the system for promoting and financing private agribusiness and artisanry enterprises through commercial banks and other financial institutions, thereby helping provide the investment capital required to assist them in

contributing to Bolivia's economic recovery.

The amended project has been designed both to help meet the investment capital needs of private agribusiness and artisanry enterprises over the next three years and to improve the operation of the already established A&A refinancing facility. A series of important measures to improve the efficiency with which the A&A refinancing system operates has been negotiated with the BCB and will begin to be implemented immediately. Given the need to disburse AID's additional contribution to the project as quickly as possible in order to enhance its effect on the recovery of the Bolivian economy, both through the assistance it will provide to the private sector and its immediate balance-of-payments contribution, a group of eleven subprojects currently being prepared for refinancing were examined in depth. Ten of these subprojects were found to be financially and economically feasible. Final feasibility studies for all of these projects should be presented to the BCB in the next three months, thus enabling the rapid disbursement of $9.76 million.

The amended project provides for a 32-month extension of the PACD, an addittional AID loan of $ 10 million for the A&A refinancing facility, and $ 800,000 in additional grant funds for technical assistance to improve the capacity of the BCB and participating ICIs to analyze loan applications and manage the refinancing system. The additional GOB and private sector contribution to the project will be at least $6,274,000.

The summary incremental budget for the project is as follows:

	($ 000)			
	AID	Investors/ ICIs	GOB	TOTAL
Refinancing Facility	10,000 (L)	-	-	10,000
Other Subproject Investment	-	5,624	-	5,624
Technical Assistance	800 (G)	-	-	800
Administrative Costs	-	-	650	650
	10,800	5,624	650	17,074

B. Issues.

The issues summarized below are treated in more depth in the body of the PP Amendment.

1. Willingness of Private Sector to Invest.

Given the current economic and political uncertainty in Bolivia, how willing is the private sector to undertake new investments?

It is true that Bolivia's economic situation, though somewhat improved as a result of the Siles Government's initial economic measures, is still uncertain because several basic decisions regarding the budget, price controls, interest rates and the exchange rate remain to be made. Also, although the Siles Government officially supports a mixed economy, its attitude toward the private sector is often ambivalent. The private sector, however, realizes that if it is to survive under Bolivia's new economic conditions, it must make the investments necessary to modify existing operations and respond to new investment opportunities. Demand for long-term investment credit for agribusiness and artisanry projects, despite the recession, is very high. About half of the credit extended under the A&A facility to date was disbursed between February 1982 and April 1983, the worst economic period in Bolivia in thirty years.

The initial set of subprojects prepared for this PP Amendment will involve total BCB lending of $ 9.76 million, and the current list of additional projects being investigated or prepared for BCB credit involve a total demand for BCB refinancing of $ 19.3 million. This evidence clearly points to the continued and augmented demand for agribusiness and artisanry credit in Bolivia.

2. Feasibility of Improving ICI Participation in the Refinancing System.

Given the somewhat passive attitude on the part of many of the commercial banks participating in the A&A refinancing system and their mixed performance to date in analyzing credit applications and monitoring loans, what assurances are there that their performance can be improved with the additional assistance to be provided under the project?

The willingness of the ICIs to participate more actively in the A&A project and adhere to the stricter rules to be imposed by the BCB will depend on the degree to which they accept the basic operational changes necessary to adapt to Bolivia's current economic situation. An important factor will also be the extent to which they find longer term development lending financially attractive. Most banks have already begun to change their operating procedures. The transition will take time, but it has started. For instance, there now is competition among banks to attract savings deposits; some banks have already begun to strengthen their development credit analysis capability, and the higher recent demand for A&A credit shows that banks realize they must respond to their clients' needs for longer term credit.

The banks interviewed in the course of developing this PP Amendment expressed satisfaction with the measures taken to increase the profitability of their refinanced credits and indicated their willingness to take the measures the project contemplates to improve their administrative capacity. The technical assistance provided by the project will be an important catalyst to help them do so.

3. The BCB's Revised Role.

What confidence is there that the Central Bank will be willing to turn over loan analysis and monitoring responsibilities fully to participating ICIs and decentralize management of the A&A refinancing facility?

One of the project's chief implementation constraints to date has been the BCB Development Department's practice of managing the subloan approval process on a day-to-day basis from La Paz. This has contributed to the reluctance of ICIs to improve their credit administration capabilities and delayed loan approvals. USAID's principal objective in the negotiations with the BCB to extend this project has been to gain full acceptance of the necessity for the Development Department to give as much responsibility as possible to the ICIs, which bear virtually all of the lending risk, and to increase the incentives for the ICIs to engage in longer term development lending. A new attitude on the part of the BCB is finally evident. The Development Department's management not only now recognizes the need to strengthen the ICIs, but also realizes that trying to manage the credit approval process directly leaves them no time for their legitimate functions, i.e. planning, monitoring and evaluating the BCB's refinancing operations. As a result, agreement has already been reached on steps to strengthen ICI participation and on a decentralized credit approval system within the BCB. This change of attitude on the part of the BCB is very encouraging.

4. Economic Policy Constraints.

How can the project reach its goal of enhancing the role of the private sector in the economy without a more conducive economic environment and better key economic policies?

Although influencing the GOB to take appropriate measures to improve the environment for private sector expansion is beyond the specific scope of this project, USAID is cooperating on a broader front with other donors and the IMF and is working through other projects in the Mission's portfolio to encourage economic policy changes. The Siles Government has taken important initial steps to strengthen the economy and further measures are expected shortly. The process of encouraging policy changes will be an ongoing one.

Three of the most important specific economic policy issues which will affect the success of this project concern interest rates, price controls and export constraints. Pending a final decision by the GOB on a system of indexation to provide for real rates of interest, it has been agreed, within the context of negotiations to extend this project, to raise the rate of interest charged on all of the BCB's refinancing lines to 55%. The previous refinancing rate was 25%. In addition, it has been agreed that interest rate policy will

be among the first group of topics to be investigated by the Economic Policy Analysis Unit for which an AID grant was just signed.

The Siles Government has already moved to raise the price of several consumer goods and plans to take further action in the near future. The Government also realizes that its Export Promotion Law has not been effective because of the overly bureaucratic way in which it has been administered and that other disincentives are preventing the private sector from taking advantage of the greatly enhanced export opportunities presented by the devaluation of the peso. Consequently, it has been agreed that covenants will be included in the amended ProAg whereby the GOB will commit itself (1) to take the necessary measures to make the Export Promotion Law effective and (2) to study the effects on private sector investment and economic growth of price controls and artificial constraints to exportation. Through its several projects involving the private sector and its ongoing policy dialogue with the GOB, USAID will continue to encourage the GOB to adopt sound economic policies conducive to private sector growth.

5. Improvement of the TAF.

Given the TAF's relatively meager results to date, what are the prospects that it can be made more effective?

The TAF is still a vital part of the A&A project's system to help promote and finance agribusiness and artisanry investment, especially in small to medium size concerns. Its problems have been due primarily to poor management by the BCB's Development Department. Although the Mission would have preferred to have the BCB contract for most of the tasks for which that TAF staff is responsible, leaving it with overall coordination responsibilities, this was not acceptable to the BCB. However, agreement has been reached to augment and improve the TAF managment staff and to contract for important specialized duties as necessary (e.g. promotion and training programs). Furthermore, under the current leadership of the Development Division, the TAF unit has already begun to improve its performance noticeably. If the currently agreed strategy to make the TAF operate more effectively fails to bring results, USAID and the BCB have already agreed that more of the TAF unit's duties will be contracted to qualified local consulting firms.

C. Project Development Committee.

BCB

Dante Pino, Director, BCB Development Department
Alejandro Zegarra, Deputy Director, BCB Development Department
Carlos Bustamante, Section Chief, BCB Development Department
Félix Miranda, BCB Development Department

USAID

Luis Ampuero, Private Sector Division
Oscar Antezana, Economist, USAID/DP
Robert J. Asselin, Jr., Project Development Officer, USAID/B
Douglas Chiriboga, Assistant Project Development Officer, LAC/DR/SAFD
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Marcelo Miranda, Private Sector Division
Luis Montero, Financial Analyst, USAID/CONT
Raul Pinto, Financial Analyst, USAID/CONT
Gustavo Vega, Consultant, A&A Project
Jaime Vizcarra, USAID/PD&I

Project Paper Amendment reviewed by:

David A. Cohen, Acting Director
Rafael Zelaya, Acting Controller

Project Paper Approved by:

Henry H. Bassford, Director

II. PROJECT RATIONALE AND DESCRIPTION

A. Background

1. The Current Agribusiness and Artisanry Project

The A&A project was initiated on January 9, 1978. Its purpose was to establish a system for promoting and financing agribusiness and artisanry activities which would benefit the rural poor through the expansion of markets for small farmer products, the provision of agricultural goods and services, and/or the generation of employment. The project established a refinancing facility in the BCB with an initial investment of $9 million, of which $6 million was financed by AID and $3 million by the GOB. Currently, this facility is used to refinance up to 70% of the value of loans extended by participating intermediate credit institutions (mainly commercial banks) to investors in eligible agribusiness and artisanry projects. It is managed by the BCB's Development Department.

The project also established a Technical Assistance Fund (TAF) to finance pre-investment assistance (mostly feasibility studies) to sub-borrowers, investment surveys and training for participating ICIs, and promotional activities. The TAF was initiated with $400,000, of which $200,000 was contributed by the BCB and $200,000 by AID (grant). Additional funding for the TAF has been generated by the contribution of a portion of the interest rate spread (2% to 4.5%) on subloans under the BCB's various refinancing lines.

AID grant funding under the project has also financed a long-term advisor to the BCB and a limited amount of training. An additional $200,000 was provided in loan funding for the purchase of a computer system for the BCB Development Department and for short-term TA.

The financial status of AID's contribution to the project as of June 30, 1983 was as follows:

($ 000)

	Budget	Committed	Disbursed	Pipeline
Refinancing Facility (L)	6,000	5,938	5,938	-
BCB Mechanization (L)	150	-	-	-
TA (L)	50	21	8	13
TA (G)	177	177	137	40
Training (G)	23	8	8	-
TAF (G)	200	200	72	128
TOTALS	6,600	6,344	6,163	181

The direct beneficiaries of the project have been the owners and investors in rural and urban agribusiness and artisanry enterprises which have received financing. Small farmers and the rural poor have benefitted indirectly through the provision of market outlets, enhanced availability of agricultural inputs and services, a new employment opportunities. The eligibility criteria for refinanci under the A&A credit line emphasize linkages to small farmers and other rural and urban poor.

The A&A project currently is scheduled to terminate on December 31, 1983. Nearly all of AID's contribution to the refinancing line was disbursed by December 1982, despite a considerable delay in loan disbursements during the project's first year and a half and a ten-month suspension of A&A disbursements between November 1980 and August 1981 pending a GOB decision to adjust refinancing rates. The initial delay was due to difficulties in satisfying conditions precedent and the relatively long time required to train ICI loan officers and publicize the program. The A&A refinancing facility and the TAF are now fully operational in all nine of Bolivia's departmental jurisdictions. The project enjoys broad-based participation from 15 intermediate credit institutions (twelve commercial banks and three development banks). Through April 1983, 875 agribusiness and artisanry subprojects were approved for refinancing totalling $24.9 million, including A&A reflows relent by the BCB.

Examples of the types of projects financed under the A&A loan range from small rural artisanry projects (woodworking, traditional textiles, folkloric musical instruments, ceramics, carpentry shops, etc.) having credit requirements between $1,000 and $5,000, to small to medium size agribusiness ventures, such as produce marketing, tanneries, grain mills, dairies, and small manufacturing activities (coffee grinders, batteries, coal, etc.), requiring credit for the purchase of equipment and machinery from $10,000 to $25,000. More recently, a few larger agro-industrial firms, involved in food processing for local consumption and export, have had investment and operational credits approved for several hundred thousand dollars. The following tables summarize lending activities under the project through April 1983.

Type of Project	Disbursements ($b million)	Percentage of Total
Urban Agribusiness	254.4	31.8
Rural Agribusiness	513.1	64.0
Rural Artisanry	25.0	3.1
Urban Artisanry	8.6	1.1
Total	$b 801.1 ($16.9 million)	100.0

Department	Disbursements ($b million)	Percentage of Total
La Paz	375.5	46.9
Cochabamba	108.3	13.5
Santa Cruz	223.0	27.8
Oruro	1.3	0.2
Potosí	.3	-
Chuquisaca	7.4	0.9
Tarija	5.5	0.7
Beni	68.7	8.6
Pando	11.1	1.4
Total	$b 801.1	100.0

ICI	Total Disbursements ($b million)	Percentages of Total
Banco Industrial	6.0	0.7
Banco Nacional	20.9	2.6
Banco Mercantil	53.7	6.7
Banco Popular del Perú	0.7	-
Banco Boliviano Americano	1.4	0.2
Banco Hipotecario	63.6	8.0
Banco de Crédito Oruro	8.3	1.0
Banco de Santa Cruz	6.3	0.8
Banco de Cochabamba	454.9	56.8
Banco de Potosí	4.7	0.6
Banco de La Paz	11.8	1.5
Banco Big Beni	101.7	12.7
Banco de Financiamiento S.A.	0.8	-
Banco del Estado	3.5	0.5
Banco Agrícola de Bolivia	62.8	7.9
Total	$b 801.1	100.0

Two evaluations of the project have been carried out. The first was completed in April 1980, and a first draft of the second has just been submitted to the BCB and USAID. The first evaluation found that the number of subloans and total disbursements compared favorably with projections in the Project Paper, notwithstanding delays in project initiation. Much of the early financing provided under the project went into working capital and expansion or modernization of production facilities. The initial evaluation pointed to the uncertain political and economic situation as the reason why few new ventures were financed at first.

The latest evaluation confirmed the success the project has had in establishing a workable system for supporting agribusiness

and artisanry projects, in financing several hundred investments, and in providing economic benefits to the rural poor. It pointed out the significant impact the project has had on its direct beneficiaries, the borrowers, in terms of increased incomes and expanded markets for their products. The evaluation also found that the project's ultimate beneficiaries, small farmers and other rural poor, have received benefits from the project in terms of significantly increased employment opportunities (average increases of 32% in the participating enterprises surveyed) and the provision of markets for their expanded agricultural production.

Both evaluations also highlighted project implementation problems the Mission has been bringing to the BCB's attention during the life of the project. In preparation for the possible extension of the project and increase in AID funding, the Mission has spent several months in negotiations with BCB officials and ICI representatives working out mutually acceptable plans to resolve the A&A Project's most important implementation difficulties. Some of the key problems which have been addressed by the Mission, the BCB, and participating ICIs in the reprogramming exercise have been:

- GOB policy constraints to greater private sector agribusiness investment (e.g. price controls and subsidies, disincentives to exportation, interest rate policies).
- Unduly restrictive refinancing eligibility criteria.
- Inadequate incentives for fuller ICI participation, and poor performance by ICIs in loan processing, analysis and monitoring.
- Over-centralization of decision-making within the Central Bank, over-involvement of BCB personnel in subloan analysis and approval, and delays in loan processing.
- Failure of the TAF to finance a significant number of feasibility studies, training programs and promotional activities.
- Overly complex loan application forms and procedures.
- A generally passive attitude on the part of most ICIs and BCB personnel.

The measures to resolve these implementation problems are described in Section II C 3 below.

The most recent evaluation's principal finding was that the project has been successful in meeting its objectives despite its implementation problems. This evaluation concluded that additional funding for the A&A refinancing facility was required if it was to attain the degree of socio-economic impact originally desired, especially under current economic conditions.

2. Current Economic Situation

The economic situation which the civilian government of President Siles Zuazo inherited in October 1982 was plagued by a serious balance of payments deficit, internal price subsidies, poorly managed state-owned companies, uncontrolled government expenditures, high inflation, and increasing unemployment. To address these problems, the Siles Government implemented a series of initial reform measures in November 1982. It abolished the officially recognized parallel foreign exchange market and fixed the exchange rate at 200 pesos to the dollar, discontinued the practice of tying all domestic bank loans and deposits to the dollar, imposed strict controls on imports, and increased the prices of several basic commodities, thereby in part correcting market distortions created by government subsidies.

Faced with a debt repayment schedule which could not be met (with the debt service ratio potentially over 80%), the GOB initiated efforts to renegotiate outstanding balances due to Argentina, Brazil, and a consortium of private international banks. The amount renegotiated so far has been $342 million, and Argentina has agreed to reschedule an additional $250 million. The consortium of international banks with loans outstanding to Bolivia has agreed to an extension to October 1983 of a moratorium on principal repayments; the GOB hopes to renegotiate over $400 million of the $2 billion owed to the consortium at that time. In addition, in order to prevent continued impositions of sanctions under Sections 517 and 620 (q) of the FAA, the GOB has paid over $20 million in arrearages due to the USG.

The economic measures taken by the GOB to date are far from sufficient, and the widespread drought and flooding which has recently affected Bolivia have aggravated the already precarious economic situation. Under the circumstances, it is clear that measures must be taken not only to stabilize the economy in the short to medium term but also to lay the groundwork for the most significant structural adjustment the country has had to go through since the Revolution thirty years ago. The Siles Government has been forced to make difficult decisions as a result of several years of economic neglect by previous governments. It has begun to do so, but more complex and sensitive issues lie ahead.

In May 1983, a joint IMF/World Bank team completed a one-month visit to La Paz. Its purpose was to lay the groundwork for negotiation of an Extended Fund Facility (EFF) arrangement by exploring possible options the GOB could adopt to cut the forecasted 1983 budget deficit. Discussions focused on the fiscal deficit since this was the chief area not addressed by the GOB in the November 1982 economic package. Initial agreement was reached with members of the Siles Government's economic team to reduce the budget by at least $b. 70 million and to establish a system for indexing commercial bank loans and deposits which would provide for positive real rates of interest and avoid the heavy losses in the value of the BCB's refinancing currently being experienced. These actions, if adopted, would have a significant stabilizing impact on the economy and help restore confidence in government policies. Additional measures and a consistently applied policy for economic recovery will, however, need to be applied over the next two to three years in order for the economy to recover from its current crisis.

Although Bolivia's private sector is small (estimates of the portion of GDP attributable to the private sector range from 20% to 30%), its role in helping to stabilize the economy and lay the groundwork for more balanced growth is indispensible. Bolivia's over-burdened public sector enterprises are politicized and grossly inefficient, whereas the private sector has demonstrated that it is capable of managing efficiently run, productive agribusiness enterprises which provide an engine for growth within the agricultural sector. Private artisanry enterprises are a very significant factor in rural employment and economic development in rural areas. Without a more active private sector, Bolivia's economic prospects will be significantly limited.

The Siles Government has made relatively good start at putting together a stabilization program. Although government actions to improve the economic environment are of paramount importance, it is the private sector itself which must take the measures necessary to adapt existing operations to Bolivia's new economic circumstances and take advantage of new opportunities. While the past eighteen months have seen a severe downturn in domestic output, significant decreases in real purchasing power, and high unemployment, there is evidence that private sector agribusiness firms and artisanry enterprises are beginning to make the adjustments necessary to survive. From February 1982, when the peso began its precipitous decline, through April 1983, over 46% (in dollar terms) of the total disbursements made from the A&A refinancing line since its inception took place.* Part of the reason for the heavy demand on the BCB's

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* The percentage in peso terms is, of course, higher - 72%.

refinancing facilities has been the shortage of loan capital within the Bolivian banking sector, but this only points to the need to ensure the availability of credit resources while the private sector, including the commercial banking sector, is going through the current adjustment period.

Even under current depressed economic conditions, private agribusiness and artisanry enterprises require more credit than the banking sector can provide. The evidence is strong that Bolivia's private banking sector is beginning to respond to the need to ensure a more reliable supply of iternally generated credit resources and to satisfy clients' needs for longer term credits. There is more competition between banks to attract savings deposits, for instance, and commercial banks are in the process of strengthening their credit analysis departments. There is a demonstrable need now, however, for more resources to help meet the projected demand for agribusiness and artisanry credit during the next three-year recovery period. Based on the trend in total credit extended by the commercial banking sector for agribusiness and artisanry over the last several years, it is estimated that over one billion dollars will be required during the next three years for agribusiness and artisanry investments nationwide. Looking just at prior disbursements from the A&A refinancing line, it is projected that over $42 million in additional credit from the BCB will be required during the next three years, whereas projected reflows from outstanding loans will be only about $13 million. As noted earlier, at present, projects requiring over $29 million in BCB credit are already being investigated. This indicates that the probable demand for A&A refinancing during the next three years will exceed what might otherwise be expected on the basis of prior disbursements from the A&A facility. The additional $10 million AID loan amendment will help meet that demand.

B. Revised Project Strategy

The project's basic objective - establishing a well-functioning system for the promotion and financing of agribusiness and artisanry investments which bring real benefits to the poor - remains unchanged. Aside from financial profitability, the key criterion for lending to an agribusiness or artisanry project is its linkage, either backward or forward, to poor farmers and rural and urban laborers. The subprojects A&A resources support assist Bolivia's poor through provision of market outlets, supply of agricultural inputs and technical assistance, or creation of new sources of employment.

The project has been successful in establishing the BCB's A&A refinancing facility. Given Bolivia's current economic problems and the need to address several important implementation difficulties which are impeding the project from having even greater success, the proposed amendment has been designed (1) to help meet the investment

capital needs of small, medium and large private agribusiness enterprises over the next three years, so that they can contribute to Bolivia's economic recovery, and (2) to improve the operation of the A&A refinancing facility and, ultimately, the capacity of the country's commercial banking sector for meeting agribusiness financing requirements internally.

Two changes have been made in the project's strategy in this regard. First, both the Mission and the BCB agree that it will be important to provide financing for Bolivia's relatively larger agribusiness concerns in addition to small and medium size firms. Such enterprises, which are large for Bolivia but still relatively small in relation to companies in other countries, have a very important role to play in the recovery and in providing benefits to Bolivia's poor. Therefore, it has been agreed that larger Boliviar firms will also be eligible for A&A refinancing. In fact, the BCB already has extended a few loans under the A&A refinancing facility to larger firms which have clearly demonstrated that they are providing benefits to the rural poor.

Another modification in the project's strategy concerns the eligibility criteria for A&A financing established in 1977. The latest project evaluation confirmed the Mission's impression that the current criteria are unduly restrictive - perhaps because of an incomplete understanding by AID when they were written as to how best to assist the rural poor. The GOB has agreed that these criteria should be simplified and that projects which benefit farmers with both small and medium size farms should be eligible for financing. The revised criteria are given in Section II.C.2.

With respect to the amended project's objective of improving the way the A&A refinancing facility is administered and the effectiveness of the project in promoting agribusiness investments, efforts will be made: (a) to influence the GOB to modify policies in areas such as interest rates, export promotion and price controls which impede private sector agribusiness development and internal financing of investment requirements; (b) to decentralize authority within the BCB for the management of all its refinancing lines and to get the Development Department to focus on planning, monitoring and evaluation rather than on day-to-day project administration; (c) to improve the capabilities of, and incentives offered to, participating ICIs; and (d) to rehabilitate the TAF.

AID's assistance strategy for Bolivia is to assist the Government with its economic stabilization program and its efforts to respond to recent natural disasters, to support private sector solutions to the country's development problems, and to focus as-

sistance in the country's most promising growth pole, the La Paz-Cochabamba Santa Cruz Corridor. The revised A&A project is a key element in AID's assistance strategy. It will provide vitally needed investment capital for private sector ventures which will contribute to the recovery. The additional $ 10 million AID contribution to the A&A refinancing facility will be disbursed relatively rapidly since there is a backlog of unfunded investment proposals on hand in the BCB and an over-all shortage of credit resources within the economy. The quick disbursement of additional foreign exchange will also provide Bolivia with much needed balance-of-payments support. The revised project will also strengthen Bolivia's private commercial banking system and help to improve and make more self-sufficient an already functioning system for promoting and financing private agribusiness and artisanry investment. Also, it is expected that most of the additional financing provided under the A&A line will be directed to the La Paz-Cochabamba-Santa Cruz Corridor, the primary target area of the USAID/Bolivia CDSS strategy. Eighty-eight percent of the refinancing provided to date under the A&A line has been in the Departments of La Paz, Cochabamba, and Santa Cruz.

C. Revised Project Description

1. Goal, Purpose, Outputs, Inputs

a. Goal

The revised goal of the project is to enhance the role of private agribusiness and artisanry enterprises in the Bolivian economy and thereby increase the income and standard of living of small to medium size farmers and other poor Bolivians.

Bolivia's economy has been dominated by public sector enterprises for the last thirty years. The country has suffered from a long-term misallocation of resources and inefficient production and marketing within the economy due to the dominance of state-owned enterprises. Poorly conceived and constantly changing GOB economic policies have worsened the situation. It is not an exaggeration, given the plethora of examples of failed public sector enterprises, to say that what economic progress Bolivia has made in recent years has been due in large measure to the success of its relatively small private sector. Today, the evidence of this is most conspicuous in the economically active Department of Santa Cruz where private sector enterprises dominate the economy.

The A&A project has also demonstrated that the growth of private sector agribusiness and artisanry enterprises has brought significant benefits both to investors in those businesses and to rural and urban poor.

As explained earlier, Bolivia's economy is currently going through its worst period since the 1952 Revolution. Private enterprises are having to adjust not only to the significant effects of the precipitous drop in the exchange rate on their costs of production, but also to a widespread drop in purchasing power and internal demand. To make the adjustments necessary to enable private firms to survive and contribute to the country's economic recovery, additional investment capital is required. If existing viable enterprises are allowed to fail and advantage is not taken of new investment opportunities, the prospects for recovery will be bleak and a major opportunity for benefitting Bolivia's poor will be lost.

b. Purpose

The revised purpose of the project is to improve and expand the system for promoting and financing private agribusiness and artisanry enterprises through commercial banks and other financial institutions, thereby helping provide the investment capital required to assist them in contributing to Bolivia's economic recovery.

In addition to the investment needs of Bolivia's relatively large agribusiness enterprises, early drafts of the Private Sector Assessment being carried out for the Mission indicate that, for the foreseeable future, one of the economy's key potential growth sectors will be the small and medium size agribusiness sector. The Assessment notes that most of these businesses will be located in the Corridor and that the major constraint to increased investment, in addition to certain GOB economic policies, is lack of capital. The Private Sector Assessment has also confirmed that credit for artisanry enterprises is still very difficult to obtain, both because of the relatively small size of many of these businesses and their lack of collateral. Artisanry enterprises are important to Bolivia's rural economy, and collectively they make a significant contribution to employment. The refinancing system for agribusiness and artisanry projects developed under this project does not work perfectly, but it has proven to be an important, and at times indispensible, source of needed investment capital. The amended project will augment the resources available through the A&A refinancing system and improve its operations, thereby contributing significantly to Bolivia's economic recovery.

c. Outputs

Over the three-year extension of the project, the principal additional outputs to be achieved by the project will be:

- An improved A&A refinancing facility.
- A functioning system for the financing of feasibility studies, investigation of investment opportunities,

and training for both investors and ICI personnel.

- Strengthened ICIs with better trained personnel, improved lending practices, and increased internal sources of lending capital.

- Approximately 200 additional subprojects financed.

- Approximately 80 additional BCB and ICI credit officers trained.

- At least 25 additional feasibility studies financed.

d. Project Components/Inputs

The project's three principal components will continue to be the A&A refinancing facility, technical assistance, and the TAF.

(i) Refinancing Facility

An additional $10 million in AID loan funds will be contributed to the A&A refinancing facility. These additional resources will initially be used to help finance new investments worth over $18 million based on minimum estimates of the equity capital and direct ICI credit which will be invested in them. This additional $10 million contribution to the refinancing facility, and the A&A funds currently invested in existing projects, will also be available to finance additional investments as they are rolled-over.

(ii) Technical Assistance

The total grant TA budget for the amended project is $750,000. In order to improve and strengthen the administrative and technical capabilities of BCB program officials and ICI credit personnel and facilitate the delivery of credit through Central Bank rediscount lines, the following technical assistance will be provided nder the project.

(a) Long-term technical assistance for the BCB's Development Department.

A long-term development banking advisor will be contracted for a period of two years to assist the Development Department (1) in analyzing sectoral credit requirements and recommending priority areas for concentration of credit resources within the economy, (2) in determining the appropriatness of refinancing credit terms and conditions, (3) in reviewing subloan analysis and reveiw procedures, (4) in establishing procedures for monitoring ICI lending performance as well as improving ICI loan information and reporting techniques, (5) in increasing the usage and improving the efficiency of the TAF, (6) in evaluating the socio-economic impact

of A&A subloans, and (7) in making recommendations for improving the overall effectiveness of the Central Bank's refinancing lines. The long-term advisor also will supervise the provision of technical assistance to the BCB's regional officers and the ICIs, coordinating the activities of other consultants contracted under the project. In addition, the long-term advisor will serve as liaison between USAID/Bolivia and the Central Bank.

(b) Short-term technical assistance for the Development Department.

Up to 12 person-months of short-term expert assistance will be available to assist the Development Department in carrying out specific tasks related to the revised functions it has agreed to undertake in managing the BCB's refinancing lines (i.e. planning, ICI monitoring, and program evaluation).

(c) Technical assistance for the training of regional officers of the Central Bank and ICI personnel.

The revised project calls for increasing the responsibilities of the Central Bank's regional offices in project review and loan approval, and for improving the project development and loan analysis capabilities of participating ICIs. Most refinancing requests will now be approved by the BCB's regional offices whose staffs will be augmented and will require credit analysis training. Participating ICIs will also require intensive training in development credit analysis aimed at strengthening current credit review procedures and practices. Each ICI will establish or improve a development credit department with a fully qualified staff devoting its time exclusively to promoting, analyzing and monitoring the ICI's development portfolio. One or two additional loan officers will have to be hired by each major ICI branch and will be trained by A&A project advisors in loan analysis and monitoring techniques. Training for both ICI and BCB personnel will last one year and be carried out through on-the-job training and seminars which will be provided by a consulting firm with international experience in private banking and development credit analysis.

(iii) More Effective TAF.

To revitalize the TAF Program, the BCB has agreed to augment the staff managing the program to include at a minimum the following personnel:

- A program coordinator.
- An economist.
- An administrator responsible for contracting short-term consultants to assist with training and promotional activities.
- An administrative assistant and a secretary.

The above mentioned personnel will have full responsibility for accomplishing all functions related to the administration of the TAF. In those instances where additional assistance is necessary, however, the BCB will contract appropriate technicians and consulting firms for specific assignments (e.g. promotion, training). AID will provide an additional grant of $50,000 to pay for 50% of the cost of selected consulting contracts required to carry out specific TAF programs. The remaining 50% will be paid out of the TAF's own resources.

(iv) GOB contribution

It is estimated that the cost to the GOB of managing the A&A refinancing line and the TAF during the project's three-year extended life will be $650,000. These costs include partial personnel and operating costs of the Development Department and the BCB's regional offices administering the A&A refinancing facility. Partial costs of new regional offices to be established by the BCB are also included.

2. Revised Subproject Eligibility Criteria

a. Project Categories

Agribusiness concerns and artisanry operations of any size will be eligible for refinancing. Financing will be available for new projects, expansion of existing operations, and working capital. It is expected that the average A&A loan will be larger than in the past given the fact that larger firms will now also be eligible; however, given the limited resources available in the A&A fund, the maximum refinancing available to any one firm will be $1 million unless a larger loan for a subproject clearly contributing to the A&A project's objectives can be accomodated without unduly affecting the availability of funds in the A&A credit line. Three such projects are included in the initial set of subprojects presented in this PP Amendment.

Agribusiness projects are defined as those which (a) process and/or market products produced by farmers with small

to medium size farms, (b) manufacture and/or market production inputs required by farmers, or (c) provide agricultural production-related services in the form of credit, TA, machinery services, etc. Other types of agribusiness ventures which the BCB and USAID agree meet the project's objectives can also be considered. Artisanry projects are defined as those small-scale manufacturing activities, owned and operated by small investors, which provide a market for agricultural products, create employment, or produce widely needed products at reasonable prices.

b. Socio-economic Impact

In general, projects will be eligible for refinancing which (a) increase incomes of participating employees, suppliers and/or consumers in rural areas, (b) earn foreign exchange, (c) provide employment, and/or (d) provide technical and/or management training to their employees. These criteria are consistent with those developed by the PRE Bureau for AID-assisted private investment projects.

It will continue to be imperative that each investor applying for a loan to be refinanced under the A&A line clearly demonstrate how his project will directly impact on the rural poor. As noted earlier, the specific criteria to demonstrate a linkage to the project's intended ultimate beneficiaries which were included on the Project Agreement have been simplified. To be eligible for refinancing, projects must meet as many as possible of the following specific criteria:

(i) Processing/Marketing Projects

- Evidence of an agreement with small to medium size farmers, reached prior to planting, regarding prices to be paid for their produce and formulas for the adjustment of prices according to yields obtained or produce quality.

- Provide an opportunity for participating farmers to increase the value added to their products through participation in basic processing activities or improving handling and marketing techniques.

- Provide an opportunity for participating farmers to increase their incomes through improving the quality and/or yield of their produce.

(ii) Input Supply Projects

- Manufacture and/or market agricultural production inputs required by small to medium size farmers, such as seeds, fertilizers or tools, at reasonable prices.

- Increase the supply of agricultural inputs in specific geographic areas.

(iii) Farmer Service Projects

- Provide, on a commercial or cooperative basis, production-related services to small to medium size farmers at reasonable prices.

(iv) Artisanry Projects (up to $25,000)

- May be located in urban or rural area, but must be owned and operated by small-scale entrepreneur(s) and provide a market for farm produce, offer new sources of employment, or manufacture a widely used product at a reasonable price.

c. Feasibility Standards

Projects refinanced under the A&A facility must be demonstrated to be financially, economically, technically, socially and administratively feasible.

(i) Financial Feasibility

A reasonable internal rate of return (e.g., minimum of 10%), with appropriate sensitivity analyses carried out, must be demonstrated. The amount of equity investment (from the investor's own resources) required for any project, whether new or an expansion of existing operations, will depend on the nature and riskiness of the investment and on the financial status of the enterprise in the case of projects to expand existing operations or loans for additional working capital. Unless otherwise agreed, however, the equity investment required for projects undertaken by existing firms will be no less than 15% of the total investment. For projects undertaken as independent new ventures, a minimum equity investment of 25% of the total investment will be required. Loans purely to finance additional working capital can be made with no additional equity investment, depending on the current debt/equity position of the borrowing enterprise and its projected financial status. Grace periods granted by ICIs will also depend on the nature of project, and the financial status of the borrowing entity in the case of existing enterprises, but in no case exceed two years.

(ii) Economic Feasibility

A positive economic return must be demonstrated, using a 15% discount rate (international opportunity cost of capital), with appropriate sensitivity analyses carried out.

(iii) Technical Feasibility

Appropriate production and engineering analyses must be completed. Sources of supply, production costs, prices, markets

and competition must be fully investigated. Government policies affecting the proposed project must be fully analyzed.

(iv) Social Feasibility

Important social factors affecting the viability of the proposed project must be fully investigated, especially those affecting the receptivity of small farmers and the rural poor to participation in the project.

(v) Administrative Feasibility

Evidence that the investor has the administrative capability and financial capacity to undertake the project must be given.

The current A&A manual on project analysis and the application forms required for refinancing requests cover the above feasibility considerations fairly well. There is a need, however, to simplify the forms, clarify and improve the procedures for project analysis and, above all, ensure that ICI personnel are adequately trained in project feasibility analysis. Measures to address all of these concerns are contemplated in the amended project.

3. Project Implementation Constraints and Measures to Address Them

Over the past several months, USAID and BCB representatives have carried out extensive negotiations regarding policies and practices which have inhibited the full attainment of project objectives. These negotiations have dealt not only with the A&A refinancing facility, but with all of the BCB's credit lines, since the problems discussed are common to all of them. These talks have been very successful, and actions to revolve almost all of these constraints have been agreed upon.

a. Policy Constraints

The full attainment of the project's objectives of establishing a well functioning and self-sufficient system for financing agribusiness and artisanry enterprises and enhancing the role of the private sector in the Bolivia economy is currently being impeded by certain GOB economic policies which are beyond the scope of this project, by itself, to resolve fully. Some of the most important policies affecting this project are in the areas of interest rates, price controls and subsidies, and export promotion. These and other policy concerns are being pursued by the Mission, in cooperation with other concerned donors, on a broader level. Progress on the policy front comes slowly and has been complicated by constant changes in GOB personnel. The Siles Government, recognizing the necessity for better analyzed and more consistent economic policies, several months ago requested AID to help it

set up an Economic Policy Analysis Unit. A project to establish the Unit has just been negotiated and signed, and the Mission is hopeful that it can be used as a vehicle to encourage GOB action on policies of importance to economic recovery and progress. In fact, two of the three policy areas mentioned above which directly affect the A&A project-interest rates and price controls and subsidies - are on the Unit's initial agenda to be analyzed on a priority basis.

Within the context of negotiations to extend this project, agreement has been reached to raise refinancing rates and to analyze GOB policies regarding interest rates, price controls and subsidies, and export promotion as they affect the attainment of the project's basic objectives. Appropriate covenants will be added to the Project Agreement to help ensure that these studies are carried out.

The Mission has long been concerned with GOB interest rate policies on two grounds: (a) the arbitrary way in which rates are set and (b) their subsidized nature. The GOB periodically decrees rate of interest, the primary ones being rates for commercial lending and time deposits. The current rates were just announced and are 68% and 45% respectively. When adjusted upward or downward, the commercial lending rate is applied automatically to all outstanding loans, regardless of their maturity or purpose. The uncertainty implicit in such a system for both investors and lenders is obvious. With inflation currently running at an annual rate well above 100%, current lending rates are also highly subsidized, which means that the BCB's refinancing lines are being decapitalized, investments are being unduly and automatically subsidized, and resources may be being poorly allocated. On the savings side, depositors' balances are also being decapitalized, and low interest rates are a major impediment to the mobilization of resources by credit institutions.

The GOB is well aware of the problems with its current interest rate policies. Discussions regarding an indexation system which would provide for real rates of interest are underway with the IMF. It appears likely, although it is not yet certain, that indexation will be adopted; hence, the financial analysis of the subprojects included in the PP Amendment have been carried out assuming indexation. For the time being, however, it has been agreed that the refinancing rate to be employed by the BCB for all of its refinancing lines, which was 25% until last April while the commercial banking rate was 36%, and has been 38% with commercial lending rates at 54%, will be raised to 55%, seven points below the new rate for commercial credits (68%) minus taxes of 6%, which have never been charged on development loans. The GOB has committed itself to re-examining its interest rate policy within a period of six months of the signing of the amended ProAg for this project, with a view to raising the refinancing rate to the same level as the commercial lending rate minus taxes. A covenant to this effect will be included in the amended ProAg. As long as the current variable interest rate scheme remains in effect, the refinancing rate will be adjusted automatically with the official rate on commercial credits.

The 55% rate will not apply to loans to small farmers and artisans. The GOB plans, whether or not indexation is adopted, to apply a rate of 38% to the refinanced portion of credits for small farmers in view of the price controls on most of what they produce. This rate will also be applied to the refinanced portion of loans to artisans. Larger farmers will receive BCB resources at 48%.

Under the current interest rate scheme, industrial borrowers will pay a combined rate of 56.4% on their refinanced loans; i.e., 55% on the refinanced portion (normally 80%) of their loans and 62% on the ICI portion. Small farmers and artisans will pay a combined rate of 42.8%; i.e., 38% on the refinanced portion of their credits (80% assumed) and 62% on the ICI financial portion of their credits. This is very close to the 43% rate for loans under the Small Farmer Credit Program which also receives USAID support.

b. Financial Incentives for ICIs

A basic principle adhered to by the Mission in its negotiations regarding the revision of this project has been that the responsibility for making the A&A refinancing system work and the financial rewards for doing so should be focused on the participating ICIs, which shoulder the risk involved in each subloan. Until recently, USAID was concerned, based on an informal survey of participating ICIs that adequate financial incentives were not being provided for undertaking the extra work and running the additional risk involved in longer term development lending. ICIs were required to put up at least 30% of the funds for each refinanced loan and received only an 8% spread on BCB funds. This spread compared very poorly with that available on short-term commercial lending. In addition, banks have been charging commissions, requiring counterbalancing deposits, and lending on very short-terms in order to roll over their loan resources and charge additional fees. Considering that reserve requirements have recently been very high (and hence credit availability very tight), and that the measures that USAID and the BCB want the ICIs to implement to improve their project analysis and monitoring capabilities will add to administrative costs, the Mission has been convinced that, unless the profitability to the ICIs of using the BCB's refinancing facilities was enhanced, the ICIs would not participate to the extent desired.

To remedy this situation, it has been agreed (1) to raise spreads to increase ICI profitability, (2) to lower the minimum required ICI participation in refinanced credits in view of the tight credit situation and the tendency of ICIs to prefer putting their own resources into short-term lending, and (3) to provide for the ICIs to receive their portions of principal repayments first, thus enabling them to roll these resources over more quickly into other types of credit or new refinanced loans. The percentage participation of an ICI in a refinanced credit will determine how high a spread it receives, according to the following table:

ICI Participation	Spread
10% - 14%	10%
15% - 19%	12%
20% and above	14%

It is expected that most refinanced credits will contain at least 20% direct ICI financing. For such credits, participating ICIs will increase their spreads 75%, from 8% to 14%. The higher spreads will be contingent, however, on each ICI creating or improving its own credit analysis department (see next section). The adequacy of ICI spreads will be examined at least twice a year and modified as necessary. If an indexation system is adopted, the ICI spread will naturally be lower; but it has been agreed that it will be set to provide a clear incentive to the ICIs to participate.

c. Financial Strength and Capabilities of ICIs

The banking sector is currently having to adapt to a completely new economic environment. In the past, when the peso was stable, banks were able to: (1) attract an appreciable portion of their working capital from overseas sources and put little effort into internal savings mobilization; (2) tie lending to the dollar to provide for real returns and avoid exchange risks; and (3) take a generally passive attitude toward their operations. Now with virtually no foreign sources of capital, de-dollarization, negative interest rates, and clients in need of more credit than they can provide, Bolivia's banks and other financial institutions have been forced to begin to make fundamental operating changes or go out of business. Although some of the changes necessary in the banking sector are beyond the scope of this project alone to address, Bolivia's bankers are well aware of the operational changes they need to make to survive. Thus, given the fact that sources of capital for long-term lending are scarce, it is a very opportune time for the BCB to encourage improvements in ICI administration of BCB refinancing lines.

The principal project-related problems encountered to date with the ICIs involve (a) their relative lack of interest in assisting borrowers to complete the necessary documentation and studies to obtain refinanced credits, (b) the relatively weak project analysis capabilities of some ICIs, (c) turnover among personnel dealing with development credits, (d) the absence of loan monitoring, and (e) dangerously high lending-to-capital ratios.

This last problem is in a separate category. After last November, existing "dollarized" loans were converted to pesos, and the peso amount of ICI loan portfolios increased considerably. There has been a delay in the allowed revaluation of bank assets.

Therefore, lending-to-capital ratios, which are very high, currently look astronomical. When the economy was "dollarized", the limit set by the BCB for this ratio was 25 to 1. All banks now exceed this limit, but it is difficult to tell which ones are in relatively worse condition. Until bank assets are revalued and their loan portfolios analyzed, the BCB will not be able to enforce a lending-to-capital ratio limit.

To address this problem, it has been agreed that the BCB's Departamento de Fiscalización will examine the question in depth, issue a new regulation and give participating ICIs a mutually agreed deadline to comply or be suspended from eligibility for refinanced credits. After the initial adjustment period, banks which later exceed the new lending-to-capital limit will be suspended from eligibility for refinancing until they take appropriate corrective actions.

It will take time to improve the ability of ICIs to assist clients to meet the requirements for obtaining longer term loans, especially in the case of individuals and smaller clients in rural areas. It is already evident, however, that many banks are modifying working relationships with their traditional clients because they need to do so in order to retain their business. With regard to smaller clients, it is anticipated that, with the TA to be provided under the project and help from the TAF, ICI performance can be improved.

The revised agreements to be negotiated between the BCB and each ICI governing its participation in, and access to, the Bank's refinancing facilities will require that they significantly improve their loan analysis and monitoring capabilities. Specifically, each participating ICI will be required to establish or upgrade a central project analysis and control unit with responsibility for its refinanced credits within 90 days. The units will include, at a minimum, a chief loan officer, an economist, an agronomist, an industrial engineer, and an accountant. Those assigned to the units will remain in them at least three years to avoid the problems previously encountered due to personnel turnover. In addition, in each of the ICI's major regional offices dealing with refinanced credits, a loan officer and an accountant will have to be assigned full time to work on such loans. These personnel will be trained in project preparation, credit analysis and loan monitoring by the consulting firm hired with project grant funds.

The BCB-ICI agreements will also require periodic site visits to borrowers' projects by ICI personnel, the maintenance of files on progress under each refinanced loan, and quarterly reporting to the BCB on loan approvals, disbursements, repayments, arrearages and the projected use of the BCB's refinancing lines for the next quarter. Periodic submissions on the socio-economic impact of sub-

TEN PROJECTS TOGETHER
($ 000)

	NPV	Year 0	Year 1	Year 2	Year 3	Year 4	Year 5	Year 6	Year 7	Year 8	Year 9	Year 10
A. Investment	18,544	17,419	551	551	348							
Revenues			9,537	11,916	14,114	14,830	15,211	14,572	14,788	15,018	11,880	12,146
Costs			5,520	6,426	7,459	7,712	7,924	7,315	7,171	7,466	5,488	6,049
Net Flow	31,633		4,017	5,490	6,650							
Net Flow (including investment)		(17,419)	3,466	4,939	6,307	7,118	7,287	7,557	7,617	7,552	6,392	6,097
NPV	13,093											
IRR	30.45											
B/C	1.71											
B. Investment	18,544	17,419	551	551	348							
Revenues down 10%			8,583	10,724	12,703	13,347	13,690	13,115	13,309	13,516	10,692	10,931
Costs			5,520	6,426	7,459	7,712	7,924	7,315	7,171	7,466	5,488	6,049
Net Flow	24,929		3,063	4,298	5,244							
Net Flow (including Investment)		(17,419)	2,512	3,747	4,896	5,635	5,766	5,800	6,138	6,050	5,204	4,882
NPV	6,385											
IRR	22.90											
B/C	1.34											
C. Investment	18,544	17,419	551	551	348							
Revenues			9,537	11,916	14,114	14,830	15,211	14,572	14,788	15,018	11,880	12,146
Cost up 110%			6,072	7,069	8,205	8,483	8,716	8,047	7,888	8,283	6,037	6,654
Net Flow	28,056		3,465	4,847	5,909							
Net Flow (including Investment)		(17,419)	2,914	4,296	5,561	6,347	6,495	6,525	6,900	6,735	5,843	5,492
NPV	9,513											
IRR	26.46											
B/C	1.51											

projects will also be required.

d. Role and Performance of the BCB

One of the principal problems with the administration of the project to date, and one that has had a lot to do with the fact that the performance of the ICI's has not been as strong as desired, has been the BCB's weak management. The Central Bank has always felt that its primary role was to manage the process of subproject preparation and loan approval itself, rather than to help the ICIs to do so. Furthermore, there has been a pronounced tendency to centralize the loan approval process in La Paz, which has significantly delayed and complicated loan processing. Even though ICIs already have the authority to approve loans up to $15,000 automatically, they rarely have done so because they know they will be second guessed by the BCB and thus risk having an already disbursed loan disqualified for refinancing. Some loans have had to go through five reviews (the ICI, OTR (Regional Technical Office), BCB Departmental Agency, the Development Department, and the BCB's Central Credit Committee) before finally being approved. The BCB's regional offices and the Development Department have often been involved in periodic loan disbursement decisions which should be resolved between borrowers and their banks. Besides retarding loan processing, such deep involvement in the day-to-day management of the refinanced loans has left little or no time for the BCB to carry out its legitimate functions of planning, ICI monitoring, and program evaluation.

To address this problem, it has been agreed that it will be made clear to the ICIs that they are responsible for subproject analysis, control and monitoring. Loan approval authorities throughout the BCB system will be raised immediately, and organizational changes made so that only the very largest loans from other departments will require approval in La Paz. Approvals obtained at the appropriate level within the BCB will be final so that ICIs will no longer have to guide loan requests through several levels within the BCB. The new approval limits are as follows:

ICIs: up to $15,000
OTRs: $15,000 - $25,000
Agencies and Development Dept.: $25,000 - $300,000
BCB Credit Committee: over $300,000
USAID concurrence: over $600,000

The staffs of the OTRs and Agencies will be augmented as necessary to meet their new responsibilities, and they will receive training from the grant-funded consulting firm to be hired. The approval limits of the ICIs and the OTRs will be gradually raised as the project proceeds and they become more proficient in loan analysis.

In addition, it has been agreed that new OTRs will be established where needed to attend to refinancing requests at regional

levels. The most conspicuous absence of OTRs has been in the Departments of Oruro and La Paz. Refinancing requests from these two departments have had to be sent directly to the Development Department. The BCB has just taken action to establish an OTR in Oruro and is currently considering whether to establish a separate section within the Development Department or an autonomous OTR-type unit within the BCB to handle refinancing requests for the Department of La Paz. Current plans also call for establishment of other new OTRs in various parts of the country.

The Development Department is currently staffed and organized adquately to handle its planning, monitoring and evaluation functions, with two exceptions. The staff of the Department's unit which manages the TAF needs to be augmented and retrained. The measures contemplated to improve that unit are elaborated in Section II C.3.f below. The other longstanding area needing improvement is the Department's record keeping. The existing AID loan includes $150,000 for purchase of a computer. Numerous studies have been carried out to determine what type of facility should be installed to meet the Department's requirements, but, to date, no decision has been made. The Department's information management system must be designed to respond to its legitimate planning, monitoring, and evaluation functions. Now that agreement has been reached to decentralize loan approval authority, it should be possible to design a system and complete the purchase of a computer within six months. A covenant to this effect will be included in the revised Project Agreement. Funds reserved for the computer purchase will be reprogrammed if they are not committed within six months.

A revised list of duties for the Development Department related to its planning, monitoring and evaluation functions has been agreed by USAID and the BCB and is included in Section IV.A below. The project's long-term advisor will assist the Department in making the transition required to carry out these duties.

e. Loan Application Documentation

The loan application documents required by the BCB for approval of refinancing requests have tended to be cumbersome and designed more to meet the perceived needs of BCB officials rather than the credit analysis needs of the ICIs. An examination of the documentation made by a development banking expert hired by the Mission revealed that the forms required by the BCB contain information of relatively little value to those involved in approving refinancing requests and, at the same time, lack some vital information, such as debt service ratios, needed by ICI loan officers to decide whether to approve credit requests. This consultant also felt that too much information was required for small loans.

As a result of the recommendations made by the USAID consultant and the agreement reached to transfer loan analysis and

approval authority to the ICIs, initial steps to simplify loan documentation requirements and review procedures have already been agreed. In addition, the consulting firm hired to instruct BCB regional officials and ICI loan officers in loan analysis will undertake a thorough review of the forms and procedures used for loan approval with a view to streamlining them as much as possible. It has also been agreed that a review will be made of feasibility study requirements to ensure that they are complete and meet the criteria outlined in Section II.C.2.

Two measures have already been taken to simplify loan documentation and processing. First, the funding limits applicable to the use of the BCB's refinancing forms (which do not require supplemental feasibility studies) have been raised as follows:

- Artisan Loan Form - $25,000
- Agriculture Loan Form - $50,000
- Livestock Loan Form - $100,000
- Working Capital Loan Form - $250,000

These forms contain the information required to make a decision whether or not to extend credit but do not present it in as detailed or comprehensive fashion as does a feasibility study. Secondly, the amount of information required to be submitted by the borrower and how it is disbributed have been revised in accordance with the objective of forwarding to the decision-making level within the BCB only that information which it actually requires. ICIs will keep in their files proforma invoices and construction budgets and plans. They will forward the following to the BCB office responsible for making the decision whether to approve refinancing:

- Loan Form or Feasibility Study
- ICI Loan Analysis Summary
- Statement that ICI has on file various legal documents

f. Poor Performance of Technical Assistance Fund (TAF)

The TAF was set up to meet a variety of needs: (i) finance feasibility studies and management assistance for subborrowers; (ii) finance sector investment studies for ICIs; (iii) train ICI personnel in the project's lending criteria and project analysis techniques; (iv) finance promotional programs to increase public awareness and use of the BCB refinancing facilities; and (v) fund selected administrative support costs of the BCB (e.g. vehicle purchases). To date, the TAF has been used to finance 15 feasibility studies, 25 seminars and courses for ICI personnel, a few publicity campaigns, two special investment studies, various publications (including a TAF manual), support equipment, and assistance to bor-

rowers in filling out loan applications. The level of TAF activities has never really met established objectives. The primary fault for this rests with the staff which manages the program within the Development. They have handled the program in a highly bureaucratic way instead of responding to the real needs of ICIs and borrowers. Adequate contacts have not been maintained with consultants capable of carrying out feasibility studies. Applications for assistance with studies take much too long to process. Training has not been carried out on a continuing basis. Most borrowers and many ICI loan officers are unaware that assistance from the TAF is available, despite the promotional activities which have been undertaken.*

In an attempt to circumvent the current TAF bottlenecks and improve the program's management, USAID initially proposed that management of the program be contracted out. This was unacceptable to the BCB. However, the BCB did agree to augment the TAF staff, make certain personnel shifts within the unit, and use outside consultants for specific key tasks. For instance, it has been agreed that a publicity firm will be hired within the next several weeks to design and carry out a much needed national promotion program in conjunction with the extension and increase in AID assistance to the A&A refinancing line. Proposals from several firms are currently under consideration. In addition, when specific training programs are required, it has been agreed that outside consultants will be used to design and implement them.

The enlarged and hopefully improved TAF staff will be given six months to improve its administration of the program's feasibility study program. Revised guidelines for use of TAF resources have already been issued. If clear improvements are not evident, it has been agreed that this function will also be contracted out. USAID is hopeful that these measures will improve the administration of the TAF, and plans to monitor this component of the project more closely than in the past.

g. Availability of Foreign Exchange to Sub-borrowers

The GOB currently maintains an official exchange rate of $b200 to US$1. The Government unofficially tolerates the operation of a parallel market (current rate about $b500 to US$1) because very little foreign exchange is available for sale to the public by the BCB at the official rate. Since the official rate is the only legal rate, investors requiring foreign exchange to purchase imported goods must obtain permission from an interministerial exchange commission to purchase foreign exchange at the 200 rate in order to import legally. Recently, there have been

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* In fairness to the TAF staff, it should be mentioned that experience has shown that most medium to large size borrowers and the ICIs they use tend to have a working relationship with a particular consulting firm and often are unwilling to go through the selection procedures imposed by the BAB for TAF financing. The sort of assistance provided by the TAF, therefore, naturally appeals more to smaller borrowers.

cases of loans approved for refinancing through BCB facilities for which approval of necessary foreign exchange purchases has taken several months.

The Mission has pointed out to the BCB the obvious fact that, in the case of projects requiring foreign exchange, the BCB's approval of refinancing is useless unless the borrower receives prompt approval from the Exchange Commission to purchase required foreign exchange. The Commission is not controled solely by the BCB; however, it operates under the auspices of the Minister of Finance, who will be signator to the amended project agreement. It therefore has been agreed that a covenant will be included in the ProAg which a) will require that, as part of its review process, the BCB will fully investigate with the Exchange Commission whether there is any problem with making foreign exchange available for those projects which require foreign exchange, and issue a statement to the Exchange Commission concurrently with its approval for refinancing which supports the borrowers' requests to purchase foreign exchange, and b) will commit the GOB to process such requests on a preferential and expeditious basis.

4. Initial Group of Subprojects

When the amendment to the A&A project was proposed, it was agreed that most of AID's additional contribution to the project should be disbursed as quickly as possible in order for the foreign exchange provided to have the most positive effect possible on Bolivia's economic recovery. Accordingly, during the intensive review, eleven subprojects, which are in varying stages of preparation for submission to ICIs and the Central Bank, were examined in depth. Profiles of the projects are presented in Annex A along with preliminary financial and economic analyses carried out by the project development committee to verify that the subprojects were good potential candidates for financing. The methods used to analyze these projects are explained in Sections V.C. and V.D.

Based on these analyses, ten of the eleven projects, which will require financing from the A&A refinancing facility totalling $9.76 million, were found feasible*. Some of the ten projects which were found acceptable initially for the purpose of this PP Amendment will require more study and analysis before they can be approved for refinancing by the BCB to ensure that complete financial and economic feasibility analyses are carried out and to design the projects to maximize the benefits they bring to the poor. Although the results of the analyses carried out in conjunction with the PP are preliminary, it is expected that all of the projects examined

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*The San Roque cattle project's profitability was found to be relatively low. Given the indirect benefits this project will bring to small-scale Santa Cruz cattlemen, it will be re-examined in depth.

will be ready for final approval within the next few months. Of the eleven projects, six have almost completed feasibility studies and five require feasibility studies which should be completed within three months. All of the projects will have to be formally approved by the BCB once all necessary studies have been completed.

The projects examined for this PP Amendment are:

	Type of Project	Total Cost	A&A Loan
1. Santa Cruz Slaughterhouse	slaughterhouse	3,936,000	2,128,000
2. Industrias de Aceite S.A.	soy flour	1,444,500	739,200
3. La Criollita	rice seed	187,000	72,000
4. Sociedad Industrial y Comercial	vaccines	2,356,000	1,400,000
5. Universaltex Ltda.	wool cloth	6,870,000	3,849,600
6. La Lana Ltda.	sweaters	382,300	260,300
7. Curtiembre Oriental	tannery	1,246,500	734,900
8. Avícola Chulumani	poultry	92,000	64,000
9. PROAVE	poultry	432,000	185,600
10. Hacienda Santa Rosa Grossberger	turkeys	480,000	326,000
11. San Roque	cattle breeding	1,287,000	642,400
TOTALS		$18,713,300	$10,402,000

III. COST ESTIMATE AND FINANCIAL PLAN.

Tables showing the additional LOP contributions to the project from AID, the GOB, participating investors and ICIs, and a disbursement schedule are shown starting on the following page.

Disbursement procedures will be as follows:

- Refinancing Facility: AID will deposit pesos in the A&A refinancing facility on an as-needed basis; i.e., reflows will be used to finance approved subloans before additonal AID funds are deposited into the refinancing account. Subloan disbursements from ICIs to borrowers will be made according to disbursement schedules agreed to between those parties. Disbursement from the BCB to ICIs will be made at the request of the ICIs as required to meet scheduled disbursements to borrowers.

- Local Costs: Peso disbursements for TA contracts will be made directly by the BCB project manager from a special project account established to receive quarterly advances of AID funds which will be made according to implementation plans and quarterly budgets mutually agreed to by USAID and the BCB.

- Dollar Costs: Dollar disbursements for TA will be made directly by USAID.

COST ESTIMATE AND FINANCIAL PLAN

(US$ 000)

	AID				TOTAL			GRAND
	GRANT		LOAN		AID	GOB	INVESTOR/	TOTAL
	FX	LC	FX	LC		LC	ICI LC	
Technical Assistance								
Long-Term	230				230			230
Short-Term	520	50			570			570
Refinancing Facility/Subprojects				10,000	10,000		5,625	15,625
Administrative Support						650		650
	750	50		10,000	10,800	650	5,625	17,075

DISBURSEMENT SCHEDULE

(US$ 000)

	1983		1984		1985		1986		TOTAL
	FX	LC	FX	LC	FX	LC	FX	LC	
AID									
GRANT									
Technical Assistance									
Long-Term			115		115				230
Short-Term			200	20	200	20	120	10	570
LOAN									
Refinancing Facility		5,000		5,000					10,000
TOTAL AID		5,000	315	5,020	315	20	120	10	10,800
GOB									
Administrative Support		90		216		216		128	650
INVESTOR/ICI									
Subprojects		2,812		2,813					5,625
GRAND TOTAL		7,902	315	8,049	315	236	120	138	17,075

IV. IMPLEMENTATION PLAN.

A. Implementation Responsibilities.

1. Development Department.

The primary responsibilities of the Development Department are currently undergoing a change in focus from direct attention to day-to-day credit processing and approval to the broader management areas of policy making, planning, monitoring and evaluation of the Central Bank's refinancing facilities. The Development Department will be responsible for carrying out the following tasks:

a. Planning.

- Estimation of domestic credit requirements in various productive sectors and determination of whether they are being met, as well as assessment of the need for greater savings mobilization and/or additiona external lending resources.

- Continuous analysis of domestic credit markets to ensure that lending terms and conditions are appropriate.

- Establishment of procedures for BCB review and analysis of refinanced credit applications.

- Establishment of ICI subloan monitoring and reporting requirements.

- Review and coordination of procedures for the use of TAF resources.

- Establishment of survey and evaluative instruments to determine the socio-economic impact of refinanced credits.

b. Monitoring.

- Promotion of the use of BCB refinancing lines to meet sectoral credit requirements, through a more active TAF program.

- Monitoring the operation of BCB refinancing facilities to see that credit funds are flowing smoothly, taking corrective action when necessary.

- Monitoring ICI performance through (i) financial statements and reports and (ii) spot checks of ICI offices and random samplings of subloans to verify accurancy of reporting.

- Undertaking post approval review of selected subloans approved by ICIs, OTRs, and Agencies to ensure compliance with refinancing criteria and analytical requirements.

- Management of the ICI reporting system to ensure that adequate data is collected on loan approvals, delinquencies, anticipated credit demand, and subproject impact.

- Supervision of the consultants providing technical assistance to BCB regional offices and participating ICIs.

- Supervision of the promotion, investigation, training, and feasibility study activities undertaken with TAF resources.

c. Evaluation.

- Review of annual ICI reports on subproject socio-economic impact and reporting to USAID/Bolivia as necessary.

- Carrying out of periodic evaluations of both the efficiency of the BCB refinancing facilities and the impact of subproject financing.

2. Agencies and Regional Technical Offices.

The BCB Development Department is supported outside of La Paz by two BCB agencies, one in Cochabamba and the other in Santa Cruz, and by five Regional Technical Offices (OTRs) in Tarija, Sucre, Potosí, Oruro, and Trinidad. The BCB agencies are larger than the OTRs and have more authority for loan review and approval. The agencies have administrative and technical staffs which are primarily responsible for monitoring ICI performance and will have authority to approve loans of up to $300,000 in refinancing from the BCB's lines of credit. The four OTRs, which were established in 1974-1975, are staffed with an economist and an agronomist who provide technical assistance to branches of ICIs with development credit portfolios. Loan approval authority for the OTRs will be set initially at $25,000. Loan proposals above this amount will be forwarded for review directly to the corresponding BCB agency or the Development Department.

3. ICIs.

In order for the ICIs to remain eligible to draw down funds from the A&A line of credit, they will have to establish new or upgrade existing development credit analysis units. These units will be set up with the following minimum number of technical personnel and will be responsible for credit analysis, control and follow-up. Each ICI central office will therefore be required to incorporate the following personnel into the bank's credit analysis unit:

- Director of development credit
- Economist in charge of project evaluation
- Agronomist specializing in project development, supervision and evaluation
- Industrial engineer also specializing in project development, supervision and evaluation
- An accountant/financial analyst in charge of internal control and portfolio management

In addition, each ICI branch office handling refinanced credit will be required to incorporate the following personnel to support development credit operations.

- A credit analyst
- An accountant/financial analyst in charge of internal control and portfolio management

All ICIs participating in the project will strictly adhere to reporting and credit information requirements of the Development Department for each line of credit available through the BCB rediscount system.

B. USAID Monitoring.

An officer within the USAID Private Sector Division is currently assigned as the project manager for the A&A project. The project manager has already established good working relationships with appropriate BCB officials within the Development Department. He will also have to interface more directly with officials of participating ICIs as a means of gathering information on subproject activities and determing the effectiveness of the refinancing line and ongoing AID-funded technical assistance. In these endeavors, the project manager will receive support from the USAID Controller, Project Development and Implementation, and Executive Offices and also work closely with the project's long-term technical advisor.

C. Procurement Procedures.

AID procurement regulations with respect to ICI projects will be followed. These regulations will be clarified in a project implementation letter and included in loan agreements between the BCB and participating ICIs and in each subloan contract. The rules to be applied are as follows:

a) Normal AID source and origin and procurement procedures must be followed by the BCB, ICIs or sub-borrowers if AID-provided dollars are used.

b) AID will not require adherence to any special procurement requirements for subloans under $5,000.

c) Procurement for subloans over $5,000 must be undertaken following good commercial practices, which include obtaining pro-forma invoices from several suppliers for major purchases. In addition, AID commodity restrictions apply (e.g. vehicle procurement rules), as do source and origin requirements.

The BCB will be responsible for seeing that these regulations are followed.

With regard to contracting of consultants, direct AID contracts will be used to the maximum extent possible except, of course, for contracting under TAF auspices.

D. Schedule of Major Events.

1.	Mission approval of A&A PP amendment.	August 19, 1983
2.	A&A amendment authorized and loan agreement signed.	August 31, 1983
3.	Conditions precedent to disbursement of additional project funds met by BCB.	October 15, 1983
4.	TAF project promotional activities underway by the BCB.	October 15, 1983
5.	RFP for consulting firm completed.	October 15, 1983
6.	New TAF work plan approved.	September 15, 1983
7.	Initial set of subprojects submitted to ICIs and BCB.	October 31, 1983
8.	Selection of consulting firm to work with ICIs on establishing development credit units.	November 15, 1983
9.	Selection of long-term consultant to work within the Development Department of Central Bank.	December 1, 1983
10.	Initial phase of training programs underway for ICIs, regional agencies and OTRs.	January 31, 1984
11.	First year project evaluation completed with corresponding adjustments made to the TAF, BCB technical assistance program and ICI training programs.	August 30, 1984

12.	All A&A amendment loan funds fully disbursed.	July 31, 1985
13.	End of project status reflects completion of major objectives of the project. Final project evaluation completed.	July 31, 1986

A revised schedule will be prepared for TAF activities which will be incorporated into the detailed project implementation schedule to be prepared by the BCB. The BCB's schedule will also include specific targets for approval of refinancing requests.

V. PROJECT ANALYSES.

This section of the PP Amendment is intended to supplement the analyses presented in the original PP and to discuss briefly selected feasibility issues which were not addressed in the original analyses or have arisen since that PP was completed. Where applicable, concurrence with the conclusions of the original analyses is noted.

A. Technical Analysis.

1. Availability of Consultants.

The positive conclusion in the original technical analysis regarding the availability of consultants locally to assist sub-borrowers in project elaboration remains valid. This has most recently been reconfirmed when the Mission was able to hire the services of several firms to prepare feasibility studies for the Chapare Regional Development project which had similar analysis requirements.

2. Demand for Agribusiness and Artisanry Credit.

In the discussion of Bolivia's current economic situation (Section II.A.2), it was estimated that there is a potential total demand within the Bolivian economy for agribusiness and artisanry credit of over one billion dollars over the next three years. The Private Sector Assessment currently being completed for USAID/Bolivia points out both that the agribusiness sector is the most promising area for future growth within the Bolivian economy and that artisan enterprises will continue to be key factors in the development of the rural economy.

Another clear indicator of unmet demand for agribusiness and artisanry credit is the fact that projects with over $ 29 million in credit requirements from the A&A refinancing facility are currently being investigated. It should also be noted that over 46% of the A&A refinancing facility's disbursements to date were made during the last year and a half, a period during which Bolivia has been experiencing its worst economic crisis in 30 years. These facts clearly support the basic assumption of this project amendment that demand for agribusiness and artisanry credit exists as a result of the economic crisis, both because of the adjustments in existing operations needed to be made by existing firms and the new opportunities for exports and import substitution the large devaluation of the peso has presented to the private sector.

3. ICI Willingness to Participate.

The revised project's design depends more than ever on the willingness and ability of participating ICIs to take a more active role in assisting their clients to develop bankable projects and in ensuring that the A&A refinancing facility works as intended. The technical

ability of participating ICIs to do so will be improved with project assistance. Their willingness to create stronger loan analysis and monitoring units and assume a more active role in promoting development lending will depend on the extent to which they realize and accept the operational changes they need to make to respond to Bolivia's new economic situation and the extent to which they find longer term development lending financially attractive.

In recent interviews with participating banks, it was made clear to both BCB and USAID officials that most bankers are very cognizant of the more competitive and risky environment in which they must now operate. For instance, given the lack of external sources of lending capital and currently high reserve requirements, for the first time ever, banks are competing for savings deposits by offering different interest rates. (The GOB dictates a floor rate.) The recent higher demand for A&A refinancing points to the fact that bankers realize that, in order to attract and keep clients, they must be able to help them meet their longer term financing needs. The required transition within the Bolivian banking sector will not occur overnight, and all existing banks may not survive; but a change of attitude on the part of bankers is clearly evident.

Before agreeing on the elements of a revised incentive package to encourage more active ICI use of the BCB's refinancing lines, meetings were held with all of the major banks to get their reaction to the proposed changes in requirements for their participation in BCB refinancing activities and to the measures contemplated to increase the profitability of such participation to the ICIs. With no exceptions, the bankers interviewed indicated their willingness to create loan analysis divisions (many had already begun to do so) and to participate actively in efforts to streamline loan analysis and review procedures. They also welcomed the proposed change in spreads and other measures designed to encourage their more active participation.

4. Investor Willingness.

Although there is a large potential demand for investment credit, if entrepreneurs and the owners of existing enterprises are not willing to risk investing given the current Bolivian economic and political situation, the project will not be able to attain its overall goal. There are two major impediments to investing in Bolivia today: the uncertain economic situation and antagonism from certain elements of the current Government towards the private sector.

The economy is currently going through a wrenching adjustment period which has been aggravated by several years of economic neglect on the part of a number of previous governments. The Siles Government has taken an initial set of steps to help stabilize the economy and is currently in the midst of negotiations with the IMF concerning the elements of an economic stabilization program and an Extended Fund Facility arrangement.

Although the economic situation is better than it was before October 1982, the oulook is still farm from certain. At the same time, the Siles Government's attitude toward the private sector can best be described as ambivalent. Despite this, private businessmen know that, as always, they have to look out for themselves. Most of them are very aware of the adjustments their firms will have to make in order to survive and the opportunities which the revised economic situation has brought, and many are making the investments necessary to respond to new economic circumstances. This is an important reason why demand for refinancing under the BCB's A&A refinancing line has been higher during the past year and a half than during any previous period.

Two investment projects with which USAID has been involved recently illustrate this point. The Taquiña Brewery has invested large sums of money to expand its production capacity and borrowed heavily to finance contracts for the purchase of barley produced locally which it will process into malt. It is doing so because of the fall in the value of the peso which now makes it prohibitively expensive to import malt as in the past and which will make exports much more feasible.

Dillmann, a food processing and canning company, also has increased its production capacity significantly. It is in the process of establishing supply relationships with farmers in the Chapare region near its plant in Cochabamba in order to reduce its production costs and maintain more reliable supply channels. It also looks forward to increasing exportation of some of its products.

There is no doubt that as the economic stabilization program becomes more advanced and the Siles Government's attitude turns less ambivalent and more supportive of private sector expansion, investors will feel more comfortable about investing, and more new investment will be taking place. It is one of USAID's primary objectives to help move the GOB in this direction. Even under current conditions, however, the need for resources to finance new private sector investments is clear.

B. Financial Analysis

1. Methodology

This section explains the methods used to carry out the preliminary financial analyses of the eleven subprojects investigated for initial financing from AID's additional contribution to the A&A refinancing facility. The standards for final financial analysis of these and other subprojects to be applied during the remaining life of the project are outlined in Section II. C. 2.

All eleven of the subproject reviewed are in the La Paz-Cochabamba-Santa Cruz Corridor. Studies of the possible projects were begun by the involved firms within the last 18 months. Four of the projects have

feasibility studies which were recently concluded; two have feasibility studies which required updating for this analysis; and the remaining five projects have prefeasibility studies. It is understood that all of the firms whose projects were investigated for this PP Amendment must still submit formal loan applications and feasibility studies to their ICIs and the BCB in order to receive A&A financing. It is expected that this process will be completed within 90 days of the signing of the ProAg Amendment.

In order to prepare the subproject profiles and analyses included in Annex A of this PP Amendment, the managers of each of the eleven firms were interviewed by members of the BCB/AID project development team. Based on the information received regarding product supply and demand, projected sales volume, product prices and anticipated production and administration and marketing costs, the team forecasted income statements and cash flows for each subproject. From these figures, proforma balance sheets were developed and projected financial ratios were derived. All financial projections were constructed on an incremental basis, i.e., only the subprojects themselves were analyzed. For the purposes of the PP Amendment, no attempt was made to analyze the financial condition of entire firms with the addition of the proposed activities. This will be done, of course, in the submissions to the ICIs and the BCB.

A basic and important assumption made in the financial projections is that revenues and costs will be equally affected by inflation. Mid-1983 unit price and cost data was used and projected forward without change in accordance with this assumption.

Gross sales volumes were estimated by the firms' executives based on market demand and potential competition. In some analyses, adjustments were made if the investors' projections seemed unrealistic. For example, in cases where maximum capacity production and sales were assumed to be achieved in the first or second year, more conservative estimates were used.

The cost of sales figures usually include only actual production costs. Depreciation (in all cases) and administrative costs (in most cases) were netted out of production cost figures supplied by the firms. The figures for other costs in the income statements include all fixed costs, except in a few cases where administrative costs could not be segregated from operating costs.

Financial costs represent the interest to be paid for the subproject's refinanced loans. The GOB is currently considering adoption of a system for indexing all commercial loans. It would involve adjusting balances due according to an index reflecting internal inflation in Bolivia. Loans would carry an interest rate covering only the cost of capital, profit and risk. Total scheduled repayments would increase due to indexation, and the net result would be equivalent to charging real interest

rates under conditions of high inflation. In the financial projections, indexation is ignored. This is consistent with the assumption regarding the equal effect of inflation on both revenues and costs, and assumes that the financial costs due to indexation would always be offset by the effect of inflation on revenues. An 8% interest rate on refinanced loans was used in the financial projections. This is the "real" rate Bolivian lenders would expect to be paid after adjustment for inflation. This rate was chosen to reflect a higher risk charge by Bolivian ICI lenders and to present more conservative financial analyses. The terms of the refinanced loans for the subprojects range from two years for working capital loans to five to eight years for loans for construction and equipment.

Taxes are 30% of net income, and all losses were carried forward to successive profitable years for tax purposes. A basic assumption is that all net earnings are retained and revinested in the subprojects. Also, it was decided to show any residual value of fixed assets in the financial year of analysis as depreciated in that year in the income statements.

Total cash flows were determined by adding back non-cash expenses, most notably depreciation, to estimated net income after taxes shown in the income statements. The incremental investment figures shown in the cash flows include both equity and loan portions.

Pro-forma balance sheets were developed from the estimated income statements. The balance sheets reflect only the activities related to the subprojects and do not reflect the status of the entire companies. The balance sheets are constructed as of the end of each year of operation, after all appropriate payments have been made and all accounts closed.

The financial ratios shown were derived from the projected financial statements. The following efficiency ratios are presented:

- Return on Equity to indicate periodic return to the firm's investors.
- Return on Assets to indicate the overall efficiency with which the total assets of the firm are employed.
- Debt to Equity Ratio to indicate the leverage employed in the subproject investment.
- Current Ratio to determine the adequacy of liquidity.
- Total Assets to Total Liabilities to give an indication of the security of the loan.

A financial internal rate of return (IRR) on the total investment in each project was calculated by discounting the net cash flows from each subproject's operations against the total initial incremental investment. The financial IRR indicates the profitability of the total investment.. The IRR must be reasonable (e.g. over 10%) to qualify for BCB refinancing. Discounted return on equity was also calculated which discount each subproject's net cash flows against the investors' initial investment in the project. Since the opportunity cost of capital in Bolivia currently is 45% - the maximum interest rate being paid on savings deposits - the discounted return on equity should be in excess of 45%. Any exceptions to the above minimum return criteria are explained in the individual subproject descriptions in Annex A.

2. Results.

The following table summarizes the results of the financial analysis of each subproject.

Project	IRR	Discounted Return on Equity
1. Santa Cruz Slaughterhouse	16%	47%
2. IASA Soy Flour Production	21.8%	54%
3. La Criollita Rice Seed Production	28%	57%
4. SIC Vaccines Production	18.7%	68%
5. Universaltex Wool Production	21%	69%
6. La Lana Ltda. Sweaters	12%	110%
7. Curtiembre Leather Tanning	36.8%	109%
8. Avícola Chulumani Poultry	39.6%	265%
9. PROAVE Poultry	17.5%	47%
10. Grossberger Turkeys	27%	142%
11. San Roque Cattle Production*	7.2%	29%

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* This project will require further study both of its profitability to San Roque and of its indirect economic benefits determine whether it merits refinancing.

C. Economic Analysis.

1. Economic Overview: The Impact of Agribusiness.

In Bolivia, as in a large portion of the developing world, the economic linkages among agricultural production, industrialization and consumption have not been developed to the point where a satisfactory degree of efficiency has been obtained. This has been primarily because the first phases of industrialization have been heavily concentrated in

the petroleum and mining industries. Given the limited overall financial resource base, the development of agribusinesses, with forward and backward linkages to the on-farm production process, has fallen far behind industrial capacity in other areas. What has emerged in the agricultural sector is a complicated series of intermediate interventions, comprising commercial and financial transactions, which increase costs disproportionately to the actual value added to the final product. These interventions have increased inefficiencies in the economy by distorting prices both to farmers and consumers, manipulating supply and demand conditions and, in many cases, creating disincentives to additional farm production.

The importance of developing and reinforcing agribusiness structures further in countries such as Bolivia stems for their value as a link between production and consumption of food and other raw materials. Whereas population increases as well as a generally improving standard of living put substantial pressure on the agricultural sector to increase production, it has not responded sufficiently, thus increasing demand for imports and adding to balance of payment pressures.

In general, small farmers in Bolivia make their economic decisions (including planting, harvesting and marketing) within an overall system characterized by a high degree of uncertainty and inadequate knowledge of markets. In the majority of cases, not knowing actual market conditions for a variety of produce, farmers will produce what commercial intermediaries tell them is their optimal production. At the moment of harvest, whether by foresight or chance, market conditions may be far less favorable than farmers were originally led to believe. In the case of perishables, farmers have no alternative but to sell at whatever price they are offered, frequently at such a minimal profit that there is no incentive to increase production or the quality of produce during the next planting season.

While individual farmers frequently do not have the technical or economic know-how to determine market conditions, agribusiness enterprises -whether a private company, cooperative or other form of associative enterprise-- must have this information, since it is a fundamental factor for financial success. Armed with such information, the agricultural enterprise is a logical and effective means of transmitting consumer preferences and demands to the farmer. Because an enterprise depends upon farmers to provide it with inputs --or purchase its products or services-- it must operate in such a way that farmers receive real and measurable benefits as a result of dealing with one particular enterprise rather than another or simply returning to dealing with the traditional commercial intermediary.

Once the basis of mutual dependence is established, the atmosphere of uncertainty in which the majority of farmers currently operate is reduced. There are incentives to produce more and higher quality crops, to diversify production according to consumer preferences

as passed down through the enterprise, and, as economic benefits are felt, to bring new or marginal lands into production. As the enterprise reaches new markets and expands production, it must simultaneously pass on benefits to the farmers it serves in order to stimulate increased production at the farm level and/or increased participation of new farm units.

Theoretically, the enterprise will operate at optimal equilibrium when demand for its output exceeds supply capacity and all possible farm units capable of participating are thus engaged. While this would be the ideal, any point on the continuum between the present situation and the optimal equilibrium would represent an economic improvement to participating farmers.

The proposed project will promote structural integration among producer and agribusiness activities designed not only to bring about changes in the agricultural production system, but to increase the value-added at each stage throughout the system, provide on-farm incentives and production economies of scale, and produce higher quality products at lower costs to consumers.

2. Methodology Employed for Economic Analysis.

Each of the eleven subprojects summarized in Annex A was evaluated for its economic and social impact. It is important to note that only direct benefits to the investors in each project were included in the economic analysis. Naturally, this understates the economic benefits of the subprojects, but the objective was to verify that the subprojects would meet the A&A project's economic viability criteria, even on this more narrow basis, because of the difficulty of quantifying indirect economic benefits.

All financial costs, taxes and depreciation were eliminated from the financial projections for each project. The assumptions regarding inflation and indexed real interest rates used in the financial analyses made it unnecessary to adjust for subsidized interest rates. Shadow prices were not used for foreign exchange costs because of the difficulty of determining an appropriate shadow rate; however, the final economic analysis of each project presented to the BCB will take any foreign exchange cost subsidies into full account.

The economic analysis tables in the project profiles in Annex A present the fixed investment, yearly revenues, yearly costs and cash flows for each project. Net present values (NPV) and benefit-cost (B/C) ratios were calculated using three discount rates: 8%; 10% and 15%. Economic internal rates of return (IRR) were also calculated. Sensitivity analyses were performed on these three economic indicators by (a) increasing yearly costs by 10% and 20%, and (b) by decreasing yearly revenues by 10% and 20%. The results of the sensitivity analyses of each subproject are presented in the aforementioned project profile tables. The first

table in Section V.C.3 below lists the ten projects for which the benefit/cost ratio remained above 1 with a 15% discount rate even with costs increased 10% or revenues decreased 10%. The San Roque project is not included because further study of its indirect economic benefits is required to ascertain whether it can be approved for refinancing.

In order to assess the economic feasibility of the amended A&A project as a whole, it was assumed that all of the subprojects financed with the additional AID contribution over the three-year extended LOP (initially and with reflows) would be, on the average, at least as economically viable as the ten projects in the sample examination included herein. If the net economic benefits from these ten projects for which $ 9.76 million of AID's additional $ 10 million contribution to the A&D facility will initially be used, outweigh the additional indirect costs of undertaking the project (i.e. technical assistance and BCB administrative costs), then it is clear that the economic benefits of the total number of subprojects to be financed during the three-year life of project from AID's $ 10 million additional contribution (including those financed from reflows of these funds) will far outweigh project costs. For the overall economic analysis of the project, therefore, the $800,000 cost of TA and the BCB's $650,000 in administrative costs were included as fixed investment items. A benefit/cost ratio, net present value and economic IRR were derived for the ten projects as a whole with these "project overhead" costs included, with a 15% discount factor. These economic indicators were also derived for the ten projects and the "project overhead" costs (a) increasing costs 10% and (b) decreasing revenues 10%.

3. Results of Economic Analysis

a. Individual Projects

	B/C	NPV	IRR	B/C -10% Rev.	B/C +10% Cost
Santa Cruz Slaughterhouse	1.45	1776	24	1.09	1.23
IASA Soy Flour	1.85	1228	31	1.61	1.79
La Criollita Rice Seed	1.77	138	41	0.92*	1.09
SIC Vaccines	1.77	1803	30	1.43	1.61
Universaltex Wool	1.85	5849	32.7	1.51	1.70
La Lana Sweaters	1.53	203	32.4	1.19	1.35
Curtiembre Leather	2.66	2076	55.4	1.97	2.23
Avícola Chulumani Poultry	3.02	186	74	2.61	2.91
PROAVE Poultry	1.57	248	30.2	1.16	1.32
Grossberger Turkeys	2.27	611	41.8	1.60	1.83

* This project's indirect socio-economic benefits are judged to outweigh the negative B/C ratio with revenues reduced 10%.

b. Agregate Analysis

The results of the aggregate economic analysis of the ten projects as a whole, plus the A&A project's "overhead costs" of administration and technical assistance, are as follows:

	As is	-10% Revenues	+10% Cost
NPV	13.1 million	6.4 million	9.5 million
B/C	1.71	1.34	1.51
IRR	30.45%	22.90%	26.46%

Taking into account the fact that economic benefits of the initial ten subprojects to the ultimate beneficiaries and the GOB are not included in this analysis and that, with reflows, AID's contribution to the A&A refinancing facility will finance many more projects than the original ten, it can be concluded that the A&A project, as a whole, will be very beneficial economically to Bolivia. Additional unquantifiable benefits to the Bolivian economy derived from this project include the US$ 10 million in foreign exchange needed by the GOB to alleviate the current shortage of Central Bank reserves, and direct and indirect benefits garnered by small farmers and other productive sectors resulting from enhanced economic activity and employment generation.

4. Maintenance of Value.

One issue regarding the project's economic feasibility which deserves mention is the maintenance of value of the refinancing facility. A covenant was included in the original ProAg which requires the GOB to maintain the dollar value of the refinancing facility. The effect of this provision has been to require the GOB to increase the peso amount of the line with its own treasury's funds each time the peso has been officially devaluated. While the Mission intends to retain this covenant, it is a very poor way to maintain the value of the A&A refinancing line. Interest rates charged by the BCB have always been subsidized, but never as much as they are now. The only real solution to the maintenance of value problem is to charge real interest rates. The Mission will continue supporting IMF and other donor efforts to encourage the GOB in this direction (e.g., by adopting an indexation system). It is hoped that the interest rate policy study to be undertaken by the Policy Analysis Unit will significantly help in these efforts.

D. Social Soundness Analysis.

The conclusions of the original PP regarding the project's cultural feasibility, spread effect and beneficiary incidence remain valid and have been confirmed by the project's satisfactory operation to date. The project has successfully reached a variety of small to medium size investors and helped them undertake beneficial investments. With an improved TAF program, it is hoped that greater success can be obtained in promoting relatively small investment projects.

One additional important issue is the extent to which relatively larger investors will be willing to design their projects to include backward and forward linkages to the project's ultimate intended beneficiaries. The BCB's insistance on clear linkages in recent dealings with larger investors has demonstrated that this is not a problem. Again, Taquiña and Dillmann are good examples. The former established contracts for the purchase of barley at a very fair price with farmers organized through a large cooperative. The latter is begining to do the same with farmer groups in the Chapare and is setting up technical assistance efforts to help participating farmers improve the quality of their produce and possibly undertake initial processing activities. The leverage resulting from being one of the few available sources of longer term credit in Bolivia enhances the ability of the BCB and USAID to insist that projects receiving A&A financing meet strict beneficiary criteria.

E. Administrative Analysis.

Under the present organizational structure of the Central Bank, the Development Division in La Paz employs a staff of 22 people divided into two sections. The Technical Analysis Section is comprised of six engineers and agronomists, two economists, a statistician, a Section Chief and a

Deputy. This section is currently responsible for reviewing and approving loan applications under the various BCB development credit lines and is also in charge of overall program promotion and information distribution. The Operations Section is headed by a Section Chief and Deputy and contains a staff of six clerks who are primarily responsible for monitoring and control of the BCB's lending activities and all financial reporting. Also included in the Development Department are special units to manage the Productive Credit Guarantee Program (PCGP) and the TAF.

In addition to the A&A program, the Development Division administers a line of credit to public sector enterprises financed with funds from the Instituto de Financiamiento Exterior (INDEF), a branch of the Ministry of Finance, and several other refinancing programs. See Annex E for a short description of each.

The BCB's refinancing lines are also partially administered by the two regional BCB agencies in Cochabamba and Santa Cruz and by Regional Technical Officer (OTRs) located in Tarija, Sucre, Potosí, and Trinidad.

Additional trained personnel are needed in the TAF unit and the OTRs. The BCB has agreed to increase staff as necessary in these offices. The staffs of each OTR and the TAF unit will be trained by grant-funded consultants. The creation of additional OTRs and a section for processing refinancing requests from La Paz will also be considered. Aside from these changes, the BCB is already adequately organized and staffed to fulfill its revised project management functions. As noted earlier, there has been a pressing need to decentralize authority with regard to the management of the refinancing lines within the BCB and modify the role of the Development Department. This has been accomplished.

With respect to the administrative capacity of participating ICIs, as has been noted previously, staff improvement will be required. Adequate provisions have been made under the project to accomplish the necessary improvements.

F. Environmental Concerns.

Under Section 22CFR, Part 216.2c(2)(x) of Chapter 2 of AID Handbook 3, intermediate credit institution projects, such as the A&A project, are exempt from the environmental review procedures prescribed for AID-assisted projects. Nevertheless, on those subprojects submitted for USAID/B review and approval, the Mission will ensure that environmental considerations have been adequately taken into account. In addition, the BCB will be instructed to do the same for subprojects it approves.

VI. CONDITIONS AND CONVENANTS

Although a letter of understanding has been signed by the Acting Director and the General Manager of the BCB regarding the changes already negotiated for the project, USAID plans to add a number of additional conditions and convenants to the existing Project Agreement to record our agreements more officially and help ensure that actions not yet completed are taken expeditiously.

A. Conditions

The following conditions will be added to the ProAg.

1. Section 5.3. Condition Precedent to Disbursement for a Computer Terminal.

A sentence will be added to Section 5.5: If all of the conditions specified in Section 5.3. have not been met within 180 days from the date of Amendment No. 2 to this Agreement, or such later date as A.I.D. may agree to in writing, A.I.D., at its option, may unilateraly reprogram the funds intended for the mechanization component for use in other components of the project, and so advise Bolivia.

2. Conditions Precedent to Disbursement of Additional Loan Funds

Prior to the disbursement of the additional $10 million in loan funds provided under Section 3.1. of this Agreement or the issuance by AID of documentation pursuant to which disbursements will be made, Bolivia will, except as AID may otherwise agree in writing, furnish to AID in form and substance satisfactory to AID:

a. A legal opinion of the Attorney General of Bolivia or other counsel acceptable to A.I.D. to the effect that the Project Agreement, as amended by Amendment No. 2, has been duly authorized and/or ratified by, and executed on behalf of Bolivia, and that it constitutes a valid and legally binding obligation of Bolivia in accordance with all of its terms;

b. a revised implementation and evaluation plan for remainder of the project;

c. evidence that BCB regulations to effect changes in the following project-related rules have been issued:

(i) the authority of various levels within the BCB to approve refinancing requests;

(ii) ICI eligibility criteria;

(iii) subproject eligibility criteria;

(iv) refinancing terms; and

(v) the terms of ICI participation in refinancing transactions;

d. evidence that the staff of the unit within the Development Department responsible for the TAF has been augmented;

e. a revised TAF implementation plan; and

f. evidence that a special account has been opened for local currency project expenditures.

B. Convenants

The following convenants will be added to the ProAg:

1. Interest Rates for Refinancing Operations

Bolivia agrees that real interest rates should, in principle, be charged for all credits, whether of a purely commercial nature or of a development nature. In order to avoid subsidizing development credits in relation to normal commercial credits, Bolivia agrees to establish, as soon as possible, an interest rate for credits extended to agro-industry enterprises and other similar activities under the BCB's refinancing lines of credit, which equals the established commercial lending rate, excluding taxes and other charges. Within six months of the signing of Amendment No. 2 to the Project Agreement, Bolivia will review its current interest rate policy with a view toward eliminating the discrepancy between the interest rate charged on normal commercial loans and the refinancing rate for industrial development credits. Once the refinancing rate for industrial development credit is equal to the normal commercial lending rate, minus taxes and other charges, the refinancing rate will be adjusted automatically whenever there are increases or decreases in the commercial lending rate. Bolivia also will constantly review the refinancing rate for credits to small farmers and artesans to ensure that it at least stays above the interest rate on savings deposits and that the final rate to small farmers on credits financed under the Small Farmer Credit Program and on credits refinanced by the BCB are comparable. If the Government of Bolivia should decide to adopt a system of indexation for commercial rates of interest, the refinancing rate for all BCB lines of credit will automatically be adjusted according to the indexation system for commercial loans, excluding taxes and other charges.

2. Approval of Initial Group of Subprojects.

Bolivia will expeditiously process the initial group of subproject refinancing requests received by the Central Bank after the date of the signing of Amendment No. 2 to this Agreement.

3. Selection of Long-Term Advisor and Consulting Firm

Bolivia will select the long-term advisor for the Development Division and the consulting firm to train BCB and ICI personnel within 90 days of the notice that all conditions precedent, except that in Section 5.3, have been met.

4. Foreign Exchange Sales to Borrowers from the BCB's Refinancing Facilities.

The BCB, as part of its review of refinancing requests requiring foreign exchange, at whatever authorized level within the Bank, will satisfy itself that no problem exists that would impede or delay approval by the Exchange Commission of the required foreign exchange and, concurrently with the approval of such refinancing requests, issue a statement to the Exchange Commission supporting the borrower's request to purchase foreign exchange; and requests to purchase foreign exchange for projects refinanced under the BCB's refinancing lines will be given special preference and processed expeditiously.

5. AID Procurement Regulations

The BCB will ensure that AID's regulations with regard to procurement with funds from the Agribusiness and Artisanry refinancing facility are included in its agreements with participating ICIs and in each loan agreement issued by participating ICIs for projects partially financed through the refinancing facility, and will take whatever steps are necessary to ensure that these procurement regulations are followed.

6. Policy Studies

Bolivia will undertake, as soon as possible, analysis of the various alternatives available regarding national interest rate policies, price control and price subsidy policies, and export promotion policies, with special emphasis on how they affect private agribusiness development and the development of the system for the financing of agribusiness and artisanry ventures established under this Project.

7. Commercial Bank Capitalization and Reserve Requirements

The BCB will undertake, as soon as possible, studies of the capitalization standards and reserve requirements set for commercial banks, with a view to setting revised standards for the former, and possibly exempting bank participation in development lending from the latter.

8. Export Promotion Law

Bolivia will take appropriate measures to improve the implementation and make effective the provisions of its Export Promotion Law.

9. Refinancing Application Forms and Procedures

The BCB will continue to streamline refinancing documentation and processing procedures and to review continuously feasibility study requirements.

VII. REPORTS AND EVALUATIONS.

A. Reports.

Two basic reporting documents will be required of each participating ICI: quarterly loan activity statements and annual socio-economic impact reports. Special reports on critical issues which arise during the life-of-project may also be required of the ICIs.

On a quarterly basis, the participating ICIs will supply the Development Department of the Central Bank reports on the lending activities of the past quarter. The Development Department, in turn, will consolidate the information provided by the ICIs for its own quarterly reports to the Private Sector Division of USAID/Bolivia. Each quarterly report will contain sections on: (1) loan approvals, (2) disbursements, (3) repayments, (4) overdue payments aggregrated by thirty-day intervals, (5) projected uses of the refinancing lines, and (6) special problems identified by the ICIs during the quarter which require Central Bank and/or USAID attention.

The quarterly reports are basically the same as those required under the original project. The principal difference is that the data gathered for these documents will now be assembled by the ICIs themselves rather than by the Development Department. During the first year of implementation, the quarterly reporting requirements will be modified as project implementation is evaluated by the ICIs, the Central Bank and USAID officials, and as additional information becomes necessary.

The other routine reporting requirements will be an annual analysis of the socio-economic impact of each subloan. The annual reports, like the quarterly ones, will be prepared by the participating ICIs, not by the Central Bank. The report will outline (a) the benefits to primary and secondary target populations in terms of job creation, market expansion, increased incomes, and more reliable and less costly input supply, and (b) the economic benefits of the subloans in terms of increases in foreign exchange earnings, etc. Formats for these reports will be develped by the BCB.

B. Evaluations.

The Evaluation Plan calls for two evaluations during the remaining life of the amended project. The first evaluation will take place in July-August 1984 and will focus on the effectiveness of the changes made in Central Bank and ICI's lending procedures. The other evaluation will be carried out in May-June 1986 and will stress the socio-economic impact of the project. The results of these evaluations will be presented to the participating ICIs, the Central Bank, USAID/Bolivia and to the appropriate offices in AID/W.

The first evaluation will examine the revised refinancing and subproject promotion procedures designed under the Amendment. Through the results of this study, modifications will be made in those procedures which will enhance the overall effectiveness of the project. Components of this evaluation will include analyses of (1) the utility of the revised interest rate structure for both the ICIs and sub-borrowers, (2) the efficiency of revised loan application procedures, (3) the effectiveness of incentives for ICI participation, (4) the project analysis capabilities of the ICIs, (5) foreign exchange availabilities for subprojects, (6) the modification of the role of the Development Department and the decentralization of loan approval authority, (7) the appropriatness of the revised subproject eligibility criteria and feasibility standards, (8) the adequacy of the feasibility study requirements for the various types of projects, and (9) the results of project-funded technical assistance, and promotional and feasibility study activities undertaken by the TAF.

The second and final evaluation of the amended project will take place in May-June 1986 and will study the socio-economic impact of selected subprojects on their intended beneficiaries, the benefits of continuing the A&A refinancing facility and the performance of the BCB and participating ICIs. Both evaluations will be carried out by BCB and USAID officials with the assistance of locally contracted evaluation specialists. The TAF will be used to finance contracts with the local evaluation consultants needed for the two evaluations.

SUBPROJECTS INVESTIGATED FOR INITIAL FINANCING

A. Santa Cruz Slaughterhouse

1. Background

The objective of this project is to replace the existing Santa Cruz slaughterhouse with a new one. This is considered essential because the existing slaughterhouse cannot properly satisfy the needs of the rapidly growing population of the city of Santa Cruz. The existing slaughterhouse is too small and unsanitary. The proposed capacity for the new slaughterhouse has been set at 50 head of cattle per hour and 20 head of swine per hour. It is estimated that this will satisfy demand for the next twenty years, assuming 16-hour workdays, five days per week. In addition to the provision of slaughter services, the new facility will process and market offal, feet, edible and non-edible fats, blood meal, and proteic meal.

A feasibility study has been prepared for this project which requires updating. The project will be undertaken jointly by the Federación de Ganaderos de Santa Cruz (FEGASACRUZ), the Municipality of Santa Cruz, and several private sector investors. FEGASACRUZ is a powerful private organization comprised of most of the 400 cattlemen in the department of Santa Cruz. The Municipality owns and operates the existing slaughterhouse, levies a hide tax on cattle producers who use the facility, and establishes price controls on meat.

The Municipality will sell the land on which the current slaughterhouse sits in order to make its equity contribution to the project. Its participation in the project has been sought by the private investors to help ensure coordination in slaughtering activities, the marketing of meat in Santa Cruz, and the marketing of hides taken by the Municipality as a tax from cattlemen. This project has the full support of the Santa Cruz community, which is anxious to proceed with it. The project is a good example of how the local government in Santa Cruz cooperates with the private sector to meet community needs.

2. Linkages

The project will bring increased benefits to cattle growers in the Department of Santa Cruz, most of whom are small operators, in the following forms:

a. FEGASACRUZ, which will partly own the slaughter facilities, will obtain dividends which may later be channelled in the form of better services to cattle growers (e.g.cheaper input supplies, market information).

b. With the improved slaughter and cold storage facilities, beef exports to Peruvian and Chilean markets will be possible. If realized,

these exports, in expanding product demand, are likely to increase the incomes of cattle growers.

c. FEGASACRUZ' involvement in the administration of the slaughterhouse is likely to introduce greater rationality (e.g. grading, improved sales methods) in the marketing of livestock, meat, and other animal byproducts which will provide increased incentives and revenues to cattle growers.

d. Lastly, because the project will include a cold store, it will be possible to stabilize product prices and reduce market uncertainty for producers.

3. Production Plan

The cattle slaughter technology to be used in the project has been used in Argentina for over a decade and is an adaptation of the processes used in the U.S. by ANCO, BOSS, KOCH and other large firms. The new slaughterhouse is to be located on a ten-hectare site 8 kms. north of the fourth ring of the city of Santa Cruz, along the Santa Cruz-Cotoca road. This location was selected after a careful analysis, in which access to energy, water and labor distance to market, land value, and waste treatment considerations were all taken into account.

Initially, the slaughterhouse will require eight technical and administrative personnel, and 96 workers. The number of employees will increase gradually at an estimated rate of three positions per year. Only one-half of the initial work positions are expected to be new, the remainder will be jobs transferred from the existing slaughterhouse. Given that the project involves the replacement of an existing facility, it is expected that there will be no difficulty in obtaining all the necessary technical and managerial staff.

4. Marketing Plan

All services to be provided and products to be sold are directed at the internal market. Initially, no exports are being planned, even though the prospects for limited sales of properly slaughtered beef and pork in Chile and Perú are good. Projected cattle slaughter levels have been estimated in relation to historical population trends in the city of Santa Cruz, an average annual growth rate of 7.25 percent, and existing consumption levels of beef and pork.

Offal sales will be channelled through the Sindicato de Menudencieros in accordance with existing practices. An analysis of blood and protein meal demands among poultry producers has revealed the need is several times larger than the expected slaughterhouse production. Specifically, blood meal could substitute up to four percent (3,680 tons) of balanced feed used in the poultry industry, and 3,200 tons of proteic

meal could be sold for poultry production as well. There is a market for 1,800 tons per year of non-edible fats for the production of soap. Bolivia's production of edible fats is presently negligible; 90 percent of its needs are imported from Argentina (28,800 tons in 1979). The initial expected slaughterhouse production levels of edible fats are projected to be less than two percent of current imports.

In Bolivia, beef is considered an essential commodity whose price has been subject to government control since 1959. Specifically, price ceilings have been established to permit beef consumption by households considered to be impoverished. The Ministry of Industry and Commerce fixes maximum wholesale prices at the national level, while municipalities fix maximum retail prices in their own jurisdictions. With the implementation of the slaughterhouse project, it is expected that coordination among the Municipality and FEGASACRUZ in the setting of meat prices will improve.

5. Financial Analysis

The establishment of the Santa Cruz slaughterhouse will require an investment of $3,935,879. A $2,660,000 loan will be financed 80 percent ($2,128,000) by the BCB and 20 percent by the ICI. As a counterpart contribution, FEGASACRUZ, some other private groups and the Municipality will invest a total of $1,276,000. These funds will be used to purchase equipment and machinery, construct the necessary infrastructure, and provide for working capital according to the following schedule:

(US$)

	FEGASACRUZ/HAM	Credit	Total
Plant Site	100,000	-	100,000
Infrastructure	670,020	1,166,000	1,836,020
Machinery & Equipment	373,859	1,494,000	1,867,859
Working Capital	132,000		132,000
TOTAL	1,275,879	2,660,000	3,935,879

The prices to be paid for slaughter services per head of cattle and pigs are $4 and $2, respectively. Slaughtering costs are based on experience to date in the existing slaughterhouse and the efficiencies to be obtained from the improved slaughtering practices to be used. The project's total cost of operation ranges from $1,464,831 in year one of operations to $2,158,423 in the tenth year.

The slaughterhouse project has an estimated internal rate of return of 16 percent. The discounted return on equity is 47 percent. The Net Present Value of the project is $2,135,000 on an initial investment of $3.9 million.

SANTA CRUZ SLAUGHTERHOUSE
($US 000)

	Incremental Investment	Year 0	Year 1	Year 2	Year 3	Year 4	Year 5	Year 6	Year 7	Year 8	Year 9	Year 10
A. Balance Sheet												
Assets												
Current Assets	132	132	562	1,059	1,292	1,650	2,109	2,707	3,413	4,230	5,170	7,654
Non-Current Assets	3,804	3,804	3,565	3,326	3,087	2,848	2,609	2,370	2,131	1,892	1,653	-
Total Assets	3,936	3,936	4,127	4,385	4,379	4,498	4,718	5,077	5,544	6,122	6,823	7,654
Liabilities												
Current Liabilities	-	-	-	333	333	332	333	332	333	332	332	-
Non-Current Liabilities	2,660	2,660	2,660	2,327	1,994	1,662	1,329	997	664	332	-	-
Equity	1,276	1,276	1,276	1,276	1,276	1,276	1,276	1,276	1,276	1,276	1,276	1,276
Retained Earnings	-	-	191	449	776	1,228	1,780	2,472	3,271	4,187	5,215	6,378
Total Liabilities and Equity	3,936	3,936	4,127	4,385	4,379	4,498	4,718	5,077	5,544	6,122	6,823	7,654
B. Income Statement												
Sales			2,188	2,350	2,519	2,745	2,943	3,126	3,342	3,572	3,819	4,085
Cost of Sales			1,464	1,530	1,600	1,675	1,756	1,765	1,856	1,952	2,052	2,158
Gross Profit			724	820	919	1,070	1,187	1,361	1,486	1,620	1,767	1,927
Other Costs			239	239	239	239	239	239	239	239	239	239
Financial Cost			213	213	213	186	159	133	106	80	53	27
Net Income before Taxes			272	368	467	645	789	989	1,141	1,301	1,475	1,661
Tax (30%)			81	110	140	193	237	297	342	390	442	498
Net Income After Taxes			191	258	327	452	552	692	799	911	1,033	1,163
C. Cash Flow												
Net Income after Taxes			191	258	327	452	552	692	799	911	1,033	1,163
Plus Depreciation			239	239	239	239	239	239	239	239	239	1,653
Less incremental investment	(3,936)	(3,936)	-	-	-	-	-	-	-	-	-	-
Total Monetary Cash Flow	(3,936)	(3,936)	430	497	566	691	791	931	1,038	1,150	1,272	2,816
D. Financial Ratios												
1. Efficiency Ratios												
a. Return on Sales: Net Income/Revenues			8.7%	10.9%	13.0%	16.4%	18.7%	22.0%	24.0%	25.5%	27.0%	28.0%
b. Return on Equity: Net Income/Equity			13.0%	15.0%	15.9%	18.1%	18.1%	18.5%	17.6%	16.7%	15.9%	15.2%
c. Return on Assets: Net Income/Assets			4.6%	5.9%	7.4%	10.0%	11.7%	13.6%	14.4%	14.9%	15.1%	15.2%
2. Debt Ratios												
a. Total liabilities/total equity			1.82	1.54	1.13	.80	.54	.36	.22	.12	.05	.0
b. Current Assets/Current Liabilities			[illegible]	3.1	3.8	4.9	6.3	8.1	10.2	12.7	15.6	[illegible]
c. Assets/Total Liabilities			1.5	1.6	1.8	2.2	2.8	3.8	5.5	9.2	20.5	[illegible]

3. Internal Rate of Return = 16%
Equity Internal Rate of Return = 47%

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USAID ECONOMIC ANALYSIS OF PROJECTS

	YEAR 0	YEAR 1	YEAR 2	YEAR 3	YEAR 4	YEAR 5	YEAR 6	YEAR 7	YEAR 8	YEAR 9	YEAR 10
SANTA CRUZ SLAUGHTERHOUSE											
F.INVES'T	3936										
REVENUES		2138	2350	2519	2745	2945	3126	3342	3572	3819	4085
COSTS		1464	1530	1600	1675	1756	1765	1856	1952	2052	2158
CASH FLOW	-3936	724	820	919	1070	1189	1361	1486	1620	1767	1927
NPV: 8%		$	2134								
NPV: 10%		$	3338								
NPV: 15%		$	198								
B/C: 8%			2.05								
B/C: 10%			1.85								
B/C: 15%			1.45								
IRR:	23.96 %	= $	0								
COSTS+10%		1610	1683	1760	1843	1932	1942	2042	2147	2257	2374
CASH FLOW	-3936	578	667	759	903	1013	1185	1300	1425	1562	1711
NPV: 8%		$	2975								
NPV: 10%		$	2279								
NPV: 15%		$	923								
B/C: 8%			1.76								
B/C: 10%			1.58								
B/C: 15%			1.23								
IRR:	19.76 %	= $	0								
COSTS+20%		1757	1836	1920	2010	2107	2118	2227	2342	2462	2590
CASH FLOW	-3936	431	514	599	735	838	1008	1115	1230	1357	1495
NPV: 8%		$	1811								
NPV: 10%		$	1220								
NPV: 15%		$	70								
B/C: 8%			1.46								
B/C: 10%			1.31								
B/C: 15%			1.02								
IRR:	15.37 %	= $	0								
REV'S-10%		1969	2115	2267	2471	2651	2813	3008	3215	3437	3677
CASH FLOW	-3936	505	585	667	796	895	1048	1152	1263	1385	1519
NPV: 8%		$	2168								
NPV: 10%		$	1552								
NPV: 15%		$	352								
B/C: 8%			1.55								
B/C: 10%			1.39								
B/C: 15%			1.09								
IRR:	16.87 %	= $	0								
REV'S-20%		1750	1880	2015	2196	2356	2501	2674	2858	3055	3268
CASH FLOW	-3936	286	350	415	521	600	736	818	906	1003	1110
NPV: 8%		$	196								
NPV: 10%		$	-235								
NPV: 15%		$	-1072								
B/C: 8%			1.05								
B/C: 10%			0.94								
B/C: 15%			0.73								
IRR:	8.87 %	= $	0								

6. Economic Analysis

The project's economic benefit/cost ratio, using a 15 percent discount rate, is 1.45. According to the sensitivity analyses, the project would still be feasible with costs increased up to 20% and with revenues decreased 10%.

This project should be ready for financing as soon as its feasibility study is completely updated.

B. Soy Flour for Human Consumption

1. Background

The project will be implemented by Industrias de Aceite S.A. (IASA), a Bolivian firm located in Santa Cruz. IASA initiated its operations in Cochabamba in 1954 by establishing a processing system for oleaginous seeds. As a result of the increasing production of oleaginous seeds in the Santa Cruz area, the firm's extraction plant was moved to Santa Cruz while the final-product refining plant remained in Cochabamba. The plant in Santa Cruz was later expanded between 1974 and 1979 and currently has a 24,000 MT/year seed extraction capacity. IASA currently produces edible oils, margarine and soy flour for animal consumption.

IASA's strategy is to expand its operations through the installation of a plant to process soy flour for human consumption. The soy flour will be sold as a partial substitute for wheat flour used in the production of bread and pastas, up to the allowable 5% portion prescribed by Supreme Decree 18883 of March 15, 1982. The purpose of the project is to substitute soy flour for 12,000 MT per year of wheat flour currently used to produce bread and pasta, and thereby create a more nutritious final product and save foreign exchange.

A feasibility study has been prepared for the project which requires some updating.

Bolivia currently imports 84% of the wheat it consumes. Taste tests of breads and pastas processed with soy flour have been conducted which indicate consumer acceptance of the nutritiously improved wheat products. The GOB's intent in issuing Supreme Decree No.18883 was to promote better nutrition and save foreign exchange. To date, however, soy flour has not been produced in Bolivia.

2. Linkages

The construction of the proposed plant will provide a market for increased production of soy in the Department of Santa Cruz. Three-fourths of the soy to be purchased by IASA will come from small farmers organized through cooperatives or colonization area projects.

3. Production Plan

Since 80% of the soy currently being produced in Bolivia comes from the Department of Santa Cruz, the plant's location there is logical. The scale of the plant was determined on the basis of availability of raw materials and market studies. The feasibility study determined that plant capacity would reach 100% (i.e. 12,000 MT/year) by year six. Planned plant capacity has been kept lower than projected demand because of the expectation that other soy flour plants will be started. The plant will be supervised and administered by the current IASA management and will require 24 additional unskilled workers. The technology to be employed by the plant is well developed and will not be difficult to undertake in Bolivia.

4. Marketing Plan

Soy flour will be sold to Bolivian millers for mixing with the wheat flour they produce. The GOB has been subsidizing the sale of wheat to millers for many years in order to control bread prices. Currently, soy flour costs more than subsidized wheat flour. The marketing plan assumes that the GOB will lift its wheat price subsidy within two years, thus making soy flour cheaper than wheat flour and providing millers with a financial incentive. The sales projections assume that there will be a depressive effect on demand for bread and pasta under these circumstances due to the rise in their unsubsidized prices. Even if wheat subsidies continue, however, it is expected that the GOB will raise bread prices sufficiently to allow millers to continue making a profit while blending soy flour with wheat flour in accordance with the aforementioned Supreme Decree.

The Ministry of Industry has projected the following demand for wheat flour:

Year	Wheat Flour (MT)
1982	243,213
1983	257,152
1984	271,884
1985	287,472
1986	303,947
1987	321,366
1988	339,789
1989	359,258
1990	379,848

The projected supply and demand for soy flour (MT) is as follows:

Year	Total Supply	Demand for Animal Feeds	Demand for Human Consumption	Surplus (Exports)
1981	43,241	16,433	12,639	14,169
1982	45,578	17,823	13,363	14,392
1983	47,914	19,213	14,130	14,571
1984	50,250	20,603	14,938	14,709
1985	52,586	21,993	15,795	14,798
1986	58,846	23,383	16,700	18,763
1987	61,349	24,773	17,657	18,919
1988	63,852	26,163	18,669	19,020
1989	66,355	27,554	19,739	19,062
1990	68,857	28,944	20,871	19,042

IASA will increase its production of soy flour for human consumption incrementally from 5,000 MT the first year to 12,000 MT by year six. All output will be geared to the local market.

5. Financial Analysis

The expansion of IASA's operation will require a total investment of $1,444,500, of which $520,500 will be financed with IASA's own resources, and the remaining $924,000 will be financed by the BCB (80%) and the participating ICI (20%). The funds will be used for construction, machinery and equipment, as follows:

	Equity	Loan	Total
Construction	250,000	-	250,000
Machinery/Equipment	181,000	924,000	1,105,000
Working Capital	89,500	-	89,500
	520,500	924,000	1,444,500

The internal rate of return of the project is 21.8%, and the discounted return on equity is 54%. The project's Net Present Value calculated at a 8% discount rate is equal to $2,078,000.

6. Economic Analysis

The project's benefit/cost ratio, using a 15% discount rate, is 1.85. It remains feasible with costs increased 20% or revenues decreased 20%.

This project should be ready for financing as soon as the updating of its feasibility study is completed.

INDUSTRIAS DE ACEITE S.A.

Production of Soy Flour for Human Consumption
(000's $US)

	Incremental Investment	Year 0	Year 1	Year 2	Year 3	Year 4	Year 5	Year 6	Year 7	Year 8	Year 9	Year 10
A. Balance Sheet												
Assets												
Current Assets	-	-	165	372	495	657	926	1,191	1,700	2,209	2,728	3,705
Non-Current Assets	1,445	1,445	1,328	1,211	1,094	1,006	918	830	742	654	566	-
Total Assets	1,445	1,445	1,493	1,583	1,589	1,663	1,844	2,021	2,442	2,863	3,264	3,705
Liabilities												
Current Liabilities	-	-	-	231	231	231	231	-	-	-	-	-
Non-Current Liabilities	924	924	924	693	462	231	-	-	-	-	-	-
Equity	521	521	521	521	521	521	521	521	521	521	521	521
Retained Earning	-	-	48	138	375	680	1,092	1,500	1,921	2,342	2,763	3,184
Total Liabilities and Equity	1,445	1,445	1,493	1,583	1,589	1,663	1,844	2,021	2,442	2,863	3,264	3,705
B. Income Statement												
Sales			375	450	675	750	900	900	900	900	900	900
Cost of Sales			106	121	136	161	176	201	201	201	201	201
Gross Profit			269	329	539	589	724	699	699	699	699	699
Other Costs			127	127	127	98	98	98	98	98	98	98
Financial Costs			74	74	74	55	37	18	-	-	-	-
Net Income before taxes			68	128	338	436	589	583	601	601	601	601
Taxes 30%			20	38	101	131	177	175	180	180	180	180
Net Income after taxes			48	90	237	305	412	408	421	421	421	421
C. Cash Flow												
Net income after taxes			48	90	237	305	412	408	421	421	421	421
Plus Depreciation and Amortization			117	117	117	88	88	88	88	88	88	88
Less Incremental Investment	(1,445)											
Total Monetary Cash Flow	(1,445)		165	207	354	393	500	496	509	509	509	987
D. Financial Ratios												
1. Efficiency Ratios												
a. Return on Sales: Net Income/Revenues			12.8%	20.0%	35.1%	40.7%	45.8%	45.3%	46.8%	46.8%	46.8%	46.8%
b. Return on Equity: Net Income/Equity			8.4%	13.7%	26.5%	25.4%	25.5%	20.2%	17.2%	14.7%	12.8%	11.4%
c. Return of Assets: Net Income/Assets			3.2%	5.7%	14.9%	18.3%	22.3%	20.2%	17.2%	14.7%	12.8%	11.4%
2. Debt Ratios												
a. Total Liabilities/Equity			1.62	1.40	.77	.39	.14	NM	NM	NM	NM	NM
b. Current Assets/Current Liabilities			NM	1.61	2.14	2.84	4.01	NM	NM	NM	NM	NM
c. Assets/Liabilities			1.62	1.71	2.29	3.60	7.98	NM	NM	NM	NM	NM

3. Internal Rate of Return = 21.79%
Equity Internal Rate of Return = 53.97%

USAID ECONOMIC ANALYSIS OF PROJECTS

	YEAR 0	YEAR 1	YEAR 2	YEAR 3	YEAR 4	YEAR 5	YEAR 6	YEAR 7	YEAR 8	YEAR 9	YEAR 10
PRODUCTION OF SOY FLOUR FOR HUMAN CONSUMPTION (CONT.)											
COSTS+20%		139	157	175	154	223	253	253	253	253	253
CASH FLOW	-1445	236	293	500	596	677	647	647	647	647	647
NPV: 8%		$	2078								
NPV: 10%		$	1737								
NPV: 15%		$	1066								
B/C: 8%			2.44								
B/C: 10%			2.20								
B/C: 15%			1.74								
IRR:	29.03 %	= $	-1								
REV'S-10%		338	405	608	675	810	810	810	810	810	810
CASH FLOW	-1445	222	274	462	547	624	599	599	599	599	599
NPV: 8%		$	1816								
NPV: 10%		$	1501								
NPV: 15%		$	880								
B/C: 8%			2.26								
B/C: 10%			2.04								
B/C: 15%			1.61								
IRR:	26.86 %	= $	-1								
REV'S-20%		300	360	540	600	720	720	720	720	720	720
CASH FLOW	-1445	184	229	394	472	534	509	509	509	509	509
NPV: 8%		$	1328								
NPV: 10%		$	1060								
NPV: 15%		$	531								
B/C: 8%			1.92								
B/C: 10%			1.73								
B/C: 15%			1.37								
IRR:	22.47 %	= $	0								
PRODUCTION OF SOY FLOUR FOR HUMAN CONSUMPTION											
F.INVES'T	1445										
REVENUES		375	450	675	750	900	900	900	900	900	900
COSTS		116	131	146	128	186	211	211	211	211	211
CASH FLOW	-1445	259	319	529	622	714	689	689	689	689	689
NPV: 8%		$	2304								
NPV: 10%		$	1941								
NPV: 15%		$	1228								
B/C: 8%			2.59								
B/C: 10%			2.34								
B/C: 15%			1.85								
IRR:	30.94 %	= $	0								
COSTS+10%		128	144	161	141	205	232	232	232	232	232
CASH FLOW	-1445	247	306	514	609	695	668	668	668	668	668
NPV: 8%		$	2191								
NPV: 10%		$	1839								
NPV: 15%		$	1147								
B/C: 8%			2.52								
B/C: 10%			2.27								
B/C: 15%			1.79								
IRR:	29.97 %	= $	1								

C. "La Criollita" Seed Processing Project

1. Background

"La Criollita" is a 400 hectare farm located in the vicinity of the Saavedra Research Station in the department of Santa Cruz. It is the property of the Montes de Oca family and has traditionally produced soybeans and rice. During the last two years, the farm has also begun producing improved soybean and rice seeds which sell under the brand name of "Semillas Horizonte".

Mr. Fernando Montes de Oca, who has been the general manager of "La Criollita" since 1974, wants to construct a new plant to dry, clean, classify, and bag the rice seed the farm will produce under a program coordinated by the Centro de Investigación Agrícola Tropical (CIAT) and the Oficina de Certificación de Semillas (OCS), which will certify processed seed.

A feasibility study has been completed for the project. The participating ICI will be the Banco de Cochabamba.

2. Linkages

The improved rice seed the plant will produce will benefit small farmers in the Santa Cruz region. Over 90 percent of the 38,000 hectares presently being cultivated with rice in that Department belong to small farmers. Current yields of 1.2 tons of rice per hectare are expected to increase to 1.5 tons with the use of improved seeds.

3. Production Plan

Rice seed processing technology is now well established in the Santa Cruz area following successful implementation of a program sponsored by the Ministry of Agriculture and AID. Because of this program, several public entities and private investors have been motivated to produce and process seeds.

The "La Criollita" seed processing plant is located close to the city of Montero, which is favorably situated in the center of the rice growing area of Santa Cruz. Because "La Criollita" will produce the seed it processes, it will have an assured input supply. Additionally, its position next to the Saavedra Research Station will assure the permanent supervision of seed growing and processing activities.

The proposed infrastructure, consisting of an access road, processing area and storage facilities, will be similar to that presently existing at another seed processing facility in Warnes.

This project will generate new employment for four persons in technical and administrative areas, six plant workers,and four sales

persons. Considering that the seed processing techniques to be used are relatively simple and well known in the area, it is expected that there will be no difficulties in obtaining all the necessary personnel. All inputs to the production and marketing process are available locally, except certain chemicals to be imported from the U.S.

4. Marketing Plan

Current levels of improved rice seed used in the Department of Santa Cruz amount to 480 metric tons per year, representing less than one-third of the existing rice hectarage. With appropriate promotion and extension, it has been projected by experts in the area that use levels of improved rice seed in Santa Cruz could reach 1,000 metric tons per year. Moreover, there exists a potential market of 450 metric tons of improved rice seed in the Chapare. The "La Criollita" plant will sell its production through four commissioned agents. At present, no exports of improved rice seed are being planned.

Initially, "La Criollita" will increase its annual production of improved rice seed to 300 metric tons and gradually raise this level to a maximum of 600 metric tons by the third year. The firm's production will represent 60% to 75% of projected demand during the life of the project.

The "La Criollita" seed processing plant will have to compete with the CIAT plant at Warnes and a plant presently under construction by Japanese colonists at Okinawa. All three plants will be located in the Santa Cruz region. These three plants are expected to satisfy improved seed demands in the Santa Cruz Department for the coming five years. The "La Criollita" plant will be capable of attaining an acceptable share of the improved rice seed market because the plant at Warnes is primarily devoted to the production of soybean seeds, and the plant at Okinawa will mainly serve its cooperative owners.

There is no government regulation of prices of processed rice seeds, but there exist price ceilings on rice which largely determine the price of seeds. Presently, rice prices are set at $b70/kg., while improved seeds sell for $b90/kg. Because rice seed is a farming input, no sales taxes are charged.

5. Financial Analysis

"La Criollita" will require a loan of $90,000 in addition to its $97,000 equity contribution. The loan will be financed 80 percent by the BCB and 20 percent from the Banco de Cochabamba. These funds will be used (a) for construction, totalling $119,000, including processing area, storage facilities, offices, laboratories and an access road,

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and (b) for the purchase of machinery and equipment totalling $68,000. Sixty percent of the machinery will be imported from the U.S. and 30 percent from Brazil. The remaining 10 percent will be produced locally.

This seed processing project has an internal rate of return of 28 percent, and a discounted return on equity of 57 percent. Net Present Value of the project is $165,000 on an initial investment of $187,000.

6. Economic Analysis

The economic analysis of the project shows a benefit/cost ratio of 1.77 using a 15% discount rate. The sensitivity analyses show that the project remains viable with costs increased 10%. If revenues are decreased 10%, the B/C ratio dips below 1.0 to 0.92. It has been decided that the potential benefits of the project outweigh the risks associated with less than expected revenue generations. In addition, economic benefits to other than the plant's owners have not been included in the economic analysis (e.g. to rice farmers).

This project should be ready for financing in the very near future.

"La Cric[illegible] Seed Processing Plant
(Figures in Thousands of U.S. Dollars)

	Incremental Investment	Year 0	Year 1	Year 2	Year 3	Year 4	Year 5	Year 6	Year 7	Year 8	Year 9	Year 10
A. BALANCE SHEET												
Assets												
Current Assets	-	-	9	48	103	159	384					
Non-Current Assets	187	187	183	179	175	171	-					
Total Assets	187	187	192	227	278	330	384					
Liabilities												
Current liabilities	-	18	18	18	18	18	-					
Non-current liabilities	90	72	54	36	18	-	-					
Equity	97	97	97	97	97	97	97					
Retained earnings	-	-	23	76	145	215	287					
Total Liabilities and Equity	187	187	192	227	278	330	384					
B. INCOME STATEMENT												
Revenues												
- Sales			270	450	540	540	540					
- Sale Costs			236	387	463	463	463					
Gross Profits			34	63	77	77	77					
Other Costs			4	4	4	4	4					
Financial Costs			7	6	4	3	1					
Net Income Before Taxes			23	53	69	70	72					
Tax = 30%			-	-	-	-	-					
Net Income After Taxes			23	53	69	70	72					
C. CASH FLOW												
Net Income After Taxes			23	53	69	70	72					
Plus Depreciation			4	4	4	4	171					
Less Incremental Investment	(187)	(187)	-	-	-	-	-					
Total Monetary Cash Flow	(187)	(187)	27	57	73	74	243					
D. FINANCIAL RATIOS												
1. Efficiency Ratios												
a. Return on Sales												
Net Income/Revenues			8.5%	11.8%	12.8%	12.9%	13.3%					
b. Return on Equity												
Net Income/Equity			19.2%	30.6%	28.5%	22.4%	18.8%					
c. Return on Assets												
Net Income/Assets			12%	23.3%	24.8%	21.2%	19%					
2. Debt to Equity Ratio												
a. Total Liability/Total Equity			.60	.31	.15	.06	0					
b. Current assets/current liabilities			.5	2.6	5.7	8.8	N.M.					
c. Assets/total liabilities			2.66	4.2	7.7	18.3	N.M.					

3. Financial IRR = 78%; Equity IRR = 57%

USAID ECONOMIC ANALYSIS OF PROJECTS (US$ 000)

	YEAR 0	YEAR 1	YEAR 2	YEAR 3	YEAR 4	YEAR 5
LA CRIOLLITA SEED PLANT						
INVEST	187					
REVENUES		270	450	540	540	590
COSTS		230	293	459	459	459
CASH FLOW	-187	40	157	81	81	131
NPV: 8%		$	165			
NPV: 10%		$	184			
NPV: 15%		$	138			
B/C: 8%			2.14			
B/C: 10%			2.02			
B/C: 15%			1.77			
IRR:	41.07 %	= $	0			
COSTS+10%		253	322	505	505	505
CASH FLOW	-187	17	128	35	35	85
NPV: 8%		$	57			
NPV: 10%		$	44			
NPV: 15%		$	17			
B/C: 8%			1.32			
B/C: 10%			1.25			
B/C: 15%			1.09			
IRR:	18.65 %	= $	0			
COSTS+20%		276	352	551	551	551
CASH FLOW	-187	-6	98	-11	-11	39
NPV: 8%		$	-91			
NPV: 10%		$	-95			
NPV: 15%		$	-105			
B/C: 8%			0.49			
B/C: 10%			0.47			
B/C: 15%			0.42			
IRR:	-15.10 %	= $	0			
REV'S-10%		243	405	486	486	531
CASH FLOW	-187	13	112	27	27	72
NPV: 8%		$	18			
NPV: 10%		$	8			
NPV: 15%		$	-15			
B/C: 8%			1.10			
B/C: 10%			1.04			
B/C: 15%			0.92			
IRR:	11.60 %	= $	0			
REV'S-20%		216	360	432	432	472
CASH FLOW	-187	-14	67	-27	-27	13
NPV: 8%		$	-168			
NPV: 10%		$	-168			
NPV: 15%		$	-168			
B/C: 8%			0.07			
B/C: 10%			0.07			
B/C: 15%			0.07			
IRR:	-60.08 %	= $	0			

D. Sociedad Industrial y Comercial - Vaccine Project

1. Background

This project is intended to assist the Sociedad Industrial and Comercial (SIC) to manufacture a triple-effect vaccine for cattle and sheep. At present, SIC is primarily an importer and distributor of a number of grain products (corn flour, cereals, etc.). It is headquartered in Santa Cruz and has four major branch offices throughout the country. SIC is owned by a family which has been in the ranching business for many years.

A pre-feasibility study has been carried out for the project. SIC plans to undertake a final feasibility study of the project and begin negotiating with a group of banks in the near future.

2. Linkages

Currently, livestock raisers in Bolivia have access to single-effect vaccines of uneven quality, manufactured in Brazil and Paraguay. Since only about 50% of potential demand can be met, Bolivian cattle and sheep are not vaccinated adequately. The proposed triple-effect vaccine will help bridge the gap in vaccine supply and ensure that cattlemen and sheep herders have access to high quality, effective vaccines that will keep their animals healthier and increase productivity and incomes. Most of the beneficiaries will be small scale producers since most cattlemen and owners of sheep in Bolivia are relatively small operators. The project will ultimately increase the supply of meat, hides, wool, dairy products and animal by-products available to the public.

3. Production Plan

The proposed plant will be the first of its kind in Bolivia. It will be located on a 1.4 hectare plot in the industrial park in Santa Cruz. This site offers access to utilities and will be within easy reach of the plant's main customers in the Department of Santa Cruz and the southern Beni. The plant will initially be constructed with a capacity to produce vaccines to meet up to 25% of Bolivia's demand. Once the production process is established and sales goals are reached, consideration will be given to expanding production facilities in view of the shortage of vaccine supplies in Bolivia.

The production technology to be used is well known. Essential raw materials, such as amino acids, antibiotics and vitamins, will be imported and mixed at the plant. Thirty technicians and laborers will be employed.

4. Marketing Plan

For the past few years, only half of the actual demand for vaccines has been met by imports from Brazil and Paraguay. Because of the

shortage of vaccines, livestock owners do not vaccinate as often as they should. Therefore, the actual shortfall in supply is much greater than half of the potential demand. In 1982, 2.8 million doses of vaccine were imported. Much of these vaccines entered Bolivia at prices subsidized by the Brazilian and Paraguayan governments. There have been appreciable quantities of contraband also. Because of the current shortfall in vaccine supply, there is plenty of room in the market for the vaccines to be produced by SIC even if contraband and existing legal imports continue. The triple effect vaccines to be produced by SIC will be very price competitive with existing single-effect vaccines and be of higher quality. Single-effect vaccines currently sell for about $b50 per 5 m.g. dose. SIC plans to sell its vaccines at about $b80 per dose, which will be more advantageous to livestock owners who have had to buy several doses of imported vaccines to vaccinate their animals against the diseases that the single SIC vaccine will treat.

SIC plans to produce 2.5 million doses of its vaccine in the first year of operation and double production by the sixth year of operation.

5. Financial Analysis

The project will require an investment of $2,356,000, $606,000 in equity and a $1,750,000 loan:

	Loan	Equity	Total
Equipment	1,213	-	1,213
Construction	368	235	603
Land	-	161	161
Working Capital	-	210	210
Start-up Costs	169	-	169
	1,750	606	2,356

The loan term will be eight years, with a two-year grace period. The project's projected IRR is 18.7% and the discounted return on equity is 68%. The project's Net Present Value discounted at 8% is equal to $3,442,000, based on an inicial incremental investment of $2,356,000.

6. Economic Analysis

The project's economic analyses indicates that its benefit/cost ratio, using a 15% discount rate, is 1.77. The project is still feasible with revenues decreased by 20% or costs increased by 20%.

This project will require a full feasibility study before it can be financed. The investors have indicated that they plan to complete the study as soon as possible.

SIC S.R.L.
"VACCINES"
(Figures in Thousands of Dollars)

	Before the New Loan	Incremental Investment	Year 0	Year 1	Year 2	Year 3	Year 4	Year 5	Year 6	Year 7	Year 8	Year 9	Year 10
A. BALANCE SHEET													
Assets													
Current Assets		379.1	379.1	670.1	972.0	1,172.0	1,553.5	1,990.0	2.532.5	3.066.0	3,650.5	4,226.0	4.812.5
Non-Current Assets		1,976.3	1,976.3	1,820.3	1,664.3	1,508.3	1,352.3	1,196.3	1,040.3	884.3	728.3	572.3	416.3
Total Assets		2,355.4	2,355.4	2,490.4	2,636.3	2,680.3	2,905.8	3,186.3	3,572.8	3,970.3	4,378.8	4,798.3	5,228.8
Liabilities													
Current Liabilities		168.0	168.0	168.0	282.0	197.5	197.5	197.5	197.5	197.5	197.5	197.5	-.-
Non-Current Liabilities		1,581.0	1,581.0	1,581.0	1,383.0	1,185.4	987.9	790.4	593.0	395.3	197.9	-.-	-.-
Equity		606.4	606.4	606.4	606.4	606.4	606.4	576.4	576.4	576.4	576.4	576.4	576.4
Retained Earnings		-.-	-.-	135.0	365.0	691.0	1,114.0	1,622.0	2,206.0	2,801.7	3,407.0	4,024.0	4,652.0
Total Liabilities and Equity		2,355.4	2,355.4	2,490.4	2,636.4	2,680.3	2,905.8	3,186.3	3,572.9	3,970.2	4,378.8	4,797.9	5,228.4
B. INCOME STATEMENT													
Revenues													
- Sales				1,000.0	1,200.0	1,400.0	1,600.0	1,800.0	2,000.0	2,000.0	2,000.0	2,000.0	2,000.0
- Sale Costs				418.0	474.0	536.0	611.0	698.0	797.0	797.0	797.0	797.0	797.0
Gross Profits				582.0	726.0	864.0	989.0	1,102.0	1,203.0	1,203.0	1,203.0	1,203.0	1,203.0
Other Costs				249.0	255.0	265.0	274.0	281.0	290.0	290.0	290.0	290.0	290.0
Financial Costs				140.0	142.0	133.0	111.0	95.0	79.0	63.0	47.0	32.0	16.0
Net Income Before Taxes				193.0	329.0	466.0	604.0	726.0	834.0	850.0	866.0	881.0	897.0
Taxes				58.0	99.0	140.0	181.0	218.0	250.0	255.0	260.0	264.0	269.0
Net Income After Taxes				135.0	230.0	326.0	423.0	508.0	584.0	595.0	606.0	617.0	628.0
C. CASH FLOW													
Net Income After Taxes				135.0	230.0	326.0	423.0	508.0	584.0	595.0	606.0	617.0	628.0
Plus Depreciations and Amortizations				156.0	156.0	156.0	156.0	156.0	156.0	156.0	156.0	156.0	156.0
Less Incremental Investment								(30.0)					
Total Monetary Cash Flow		2,356.1		291.0	386.0	482.0	579.0	634.0	740.0	751.0	762.0	773.0	784.0
D. FINANCIAL RATIOS													
1. Efficiency Ratios													
a. Return on Sales													
Net Income/Revenues				.135	.191	.232	.264	.282	.292	.297	.303	.309	.314
b. Return on Equity													
Net Income/Equity				.192	.237	.251	.246	.231	.210	.176	.152	.134	.120
c. Return on Assets													
Net Income/Assets				.054	.087	.121	.145	.159	.163	.149	.138	.129	.120
2. Debt to Equity Ratio													
a. Total Liabilities/Total Equity				2.36	1.71	1.06	.69	.45	.28	.17	.10	.04	-.-
b. Current Assets/Current Liabilities				3.98	3.45	5.93	7.86	10.07	12.82	15.62	18.48	21.40	-.-

3. Financial IRR = 18.73%; Equity IRR = 68.16%

USAID ECONOMIC ANALYSIS OF PROJECTS

PRODUCTION OF COW VACCINES (SIC SRL)

	YEAR 0	YEAR 1	YEAR 2	YEAR 3	YEAR 4	YEAR 5	YEAR 6	YEAR 7	YEAR 8	YEAR 9	YEAR 10
F.INVEST'T	2356										
REVENUES		1000	1200	1400	1600	1800	2000	2000	2000	2000	2000
COSTS		511	576	645	729	823	931	931	931	931	931
CASH FLOW	-2356	489	624	755	871	977	1069	1069	1069	1069	1069
NPV: 3%		$	3442								
NPV: 10%		$	2890								
NPV: 15%		$	1803								
B/C: 3%			2.46								
B/C: 10%			2.23								
B/C: 15%			1.77								
IRR:	30.04 %	= $	0								
COSTS+10%		562	634	710	802	905	1024	1024	1024	1024	1024
CASH FLOW	-2356	438	566	691	798	895	976	976	976	976	976
NPV: 3%		$	2931								
NPV: 10%		$	2427								
NPV: 15%		$	1435								
B/C: 3%			2.24								
B/C: 10%			2.03								
B/C: 15%			1.61								
IRR:	27.23 %	= $	-1								
COSTS+20%		613	691	774	875	988	1117	1117	1117	1117	1117
CASH FLOW	-2356	387	509	626	725	812	883	883	883	883	883
NPV: 3%		$	2421								
NPV: 10%		$	1965								
NPV: 15%		$	1067								
B/C: 3%			2.03								
B/C: 10%			1.83								
B/C: 15%			1.45								
IRR:	24.31 %	= $	-1								
REV'S-10%		900	1080	1260	1440	1620	1800	1800	1800	1800	1800
CASH FLOW	-2356	339	504	615	711	797	869	869	869	869	869
NPV: 3%		$	2352								
NPV: 10%		$	1903								
NPV: 15%		$	1019								
B/C: 3%			2.00								
B/C: 10%			1.81								
B/C: 15%			1.43								
IRR:	23.95 %	= $	-1								
REV'S-20%		800	960	1120	1280	1440	1600	1600	1600	1600	1600
CASH FLOW	-2356	289	384	475	551	617	669	669	669	669	669
NPV: 3%		$	1261								
NPV: 10%		$	916								
NPV: 15%		$	235								
B/C: 3%			1.54								
B/C: 10%			1.39								
B/C: 15%			1.10								
IRR:	17.21 %	= $	-1								

E. Universaltex Ltda.

1. Background

Universaltex Ltda. is a privately owned manufacturer of textiles which has been in business since 1965. The company's current product line includes acrylic blankets, cashmere cloth, and wool cloth - all sold domestically. The project will expand and modernize Universaltex's textile plant to increase the production of wool yarn and fabric for sale domestically and overseas. This will represent a major expansion of the company's current operations, whose owners are anxious to take advantage of the country's supply of good wool and the export opportunities enhanced by the devaluation of the peso. Total investment in the proposed new facilities will be $6.87 million, of which $4.8 million will be borrowed. The BCB will refinance $3.84 million of the total loan. The BCB is willing to consider such a large loan because of the project's potential benefits.

A favorable pre-feasibility study of the project has been carried out, and a consortium of ICIs is interested in managing the loan. There is a possibility that the final project could be scaled back, depending on the findings of the final feasibility study.

2. Linkages

The project will stimulate growth in a sector in which Bolivia has a comparative advantage (i.e. production of wooden products), generate on-farm and factory-related employment, and earn foreign exchange. The project will promote an increase in the quantity and quality of wool production, provide technical assistance to sheep herders and guarantee them a profitable, secure market, thus appreciably increasing the incomes of small-scale herders.

3. Production Plan

In a study of the Bolivian textile industry, the Werner Management Consulting firm found that current wool yarn and textile manufacturing was very inefficient due to use of obsolete equipment, work methods, and technologies. Universaltex has concluded that it must completely modernize its expanded wool production facilities and improve production quality and efficiency significantly in order to meet its domestic and export sales goals. Rather than build entirely new facilities, Universaltex's current plant will be expanded to take advantage of its convenient location in terms of marketing, existing infrastructure, and the supply of labor and technicians from La Paz.

Wool will be purchased from herders in the Departments of La Paz, Oruro, Potosí and Cochabamba. In 1982, the estimated production of wool was 5,300 metric tons, of which 3,000 metric tons was marketed. By 1985, Universaltex is expected to require 18% of the country's projected wool

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production.

The wool will be processed into cloth using modern methods. Various qualities of cloth will be produced for different uses and markets. Certain detergents and other imported chemical products will be required in the production process, but their relative cost is not large. Other manufacturing and marketing supplies will be purchased locally. Universaltex already operates a laboratory which can test the quality of both production inputs and finished products. New machinery to be purchased includes a wool processor, a cleaning machine, a sorting machine,and dyeing facilities.

4. Marketing Plan

Universaltex plans to market wool yarns and textiles both domestically and in the United States. National plans call for the sale of blankets, simple heavy clothing and some flannel. Exports of wool blankets, yarn and wool cloth are projected. About 60% of the firm's products will be sold in Bolivia, with wool yarn accounting for about 40% of those sales. Exports will be almost evenly divided between yarn and textiles.

Initial market investigation has been carried out in the U. S. where it is believed that annual sales of up to $2 million can be developed by 1987. The above figures are preliminary, and will be adjusted when a final feasibility study and the selection of product lines is completed.

5. Financial Analysis

A financial analysis was carried out of the project as proposed in the pre-feasibility study. The total investment is $6.87 million, broken down as follows ($000):

	Loan	Equity	Total
Equipment	3,869	460	4,329
Land and buildings	55	525	580
Working Capital	888	488	1,376
Start-up Costs	-	585	585
	4,812	2,058	6,870

A loan for working capital will be made for two years, with a one-year grace period. The remainder of the loan will be made for five years with a two-year grace period.

The project as currently designed has a 21% IRR and a discounted return on equity of 69%. The Net Present Value of the project's projected net cash flow, discounted at an estimated cost of capital of 8%, is equal to $10,556,000 over the 10 year life of project, based on an initial incremental investment of $6,870,000.

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6. Economic Analysis

The project's benefit/cost ratio, using a 15% discount rate, is 1.85. The sensitivity analyses carried out indicate that the project would remain feasible even if revenues decreased 20% or costs increased 20%.

The project is potentially very profitable and would bring significant socio-economic benefits to Bolivia. The chief questions to be examined in the final feasibility study are the potential size of the facility, means of servicing the U.S. market, and the optimal capacity of the wool production facilities. The final feasibility study should be completed by October.

UNIVERSALTEX LTDA.
PLANTA TEXTIL DE LANA OVINA
(Figures in Thousands of Dollars)

	Before the New Loan	Incremental Investment	Year 0	Year 1	Year 2	Year 3	Year 4	Year 5	Year 6	Year 7	Year 8	Year 9	Year 10
A. BALANCE SHEET													
Assets													
Current Assets		1,376.4	1,376.4	2,306	2,853.0	3,975.2	5,166.8	6,401.8	7,680.9	9,994.1	11,156.5	13,308.9	15,461.3
Non-Current Assets		5,493.9	5,493.9	5,008.5	4,523.1	4,037.7	3,552.3	3,066.9	2,581.5	2,096.1	1,610.7	1,125.3	639.9
Total Assets		6,870.3	6,870.3	7,314.5	7,376.1	8,012.9	8,719.1	9,468.7	10,262.4	11,100.2	12,767.2	14,434.2	16,101.2
Liabilities													
Current Liabilities		888.7	888.7	888.7	765.3	784.8	784.8	784.8	784.8	-.-	-.-	-.-	-.-
Non-Current Liabilities		3,924.2	3,924.2	3,924.2	3,139.3	2,354.1	1,569.3	784.5	-.-	-.-	-.-	-.-	-.-
Equity		2,057.4	2,057.4	2,057.4	2,057.4	2,057.4	2,057.4	2,057.4	2,057.4	2,057.4	2,057.4	2,057.4	2,057.4
Retained Earnings		-.-	-.-	444.2	1,394.5	2,816.6	4,307.6	5,842.0	7,420.5	9,043.1	10,710.1	12,377.1	14,044.1
Total Liabilities & Equity		6,870.3	6,870.3	7,314.5	7,376.5	8,012.9	8,719.5	9,468.7	10,262.7	11,100.5	12,767.5	14,434.5	16,101.5
B. INCOME STATEMENT													
Revenues													
- Sales				3,090	4,108	5,161	5,161	5,161	5,161	5,161	5,161	5,161	5,161
- Sale Costs				1,353.6	1,623.6	1,999.6	1,999.6	1,999.6	1,999.6	1,999.6	1,999.6	1,999.6	1,999.6
Gross Profits				1,736.4	2,484.4	3,161.4	3,161.4	3,161.4	3,161.4	3,161.4	3,161.4	3,161.4	3,161.4
Other Costs				716.7	741.8	780.4	780.4	789.4	780.4	780.4	780.4	780.4	780.4
Financial Costs				385.1	385.1	349.5	251	189	126	63	-.-	-.-	-.-
Net Income Before Taxes				634.6	1,357.5	2,031.5	2,130	2,192	2,255	2,318	2,381	2,381	2,381
Taxes				190.4	407.2	609.4	639	657.6	676.5	695.4	714	714	714
Net Income After Taxes				444.2	950.3	1,442.1	1,491	1,534.4	1,578.5	1,622.6	1,667	1,667	1,667
C. CASH FLOW													
Net Income After Taxes				442.2	950.3	1,442.1	1,491	1,534.4	1,578.5	1,622.6	1,667	1,667	1,667
Plus Depreciat. & Amortiz.				485.4	485.4	485.4	485.4	485.4	485.4	485.4	485.4	485.4	485.4
Less Incremental Investment													
Total Monetary Cash Flow		6,870.3		929.6	1,435.7	1,907.5	1,976.4	2,019.8	2,036.9	2,108.0	2,152.4	2,152.4	2,152.4
D. FINANCIAL RATIOS													
1. Efficiency Ratios													
a. Return on Sales													
Net Income/Revenues				.143	.231	.275	.258	.297	.305	.314	.323	.323	.323
b. Return on Equity													
Net Income/Equity				.178	.275	.292	.234	.194	.167	.146	.131	.115	.103
c. Return on Assets													
Net Income/Assets				.06	.128	.177	.171	.162	.153	.146	.13	.115	.103
2. Debt to Equity Ratio													
a. Total Liabilities/Total Equity				1.92	1.14	.644	.369	.198	.082	-.-	-.-	-.-	-.-
b. Current Assets/Current Liabilities				2.59	3.63	5.06	6.58	8.16	9.79	-.-	-.-	-.-	-.-

3. Financial IRR = 21.14%; Equity IRR = 68.55%

USAID ECONOMIC ANALYSIS OF PROJECTS

EXPANSION & MODERNIZATION OF WOOL/TEXTILE PLANT (UNIVERSALTEX LTDA.)

	YEAR 0	YEAR 1	YEAR 2	YEAR 3	YEAR 4	YEAR 5	YEAR 6	YEAR 7	YEAR 8	YEAR 9	YEAR 10
F.INVES'T	6870.30										
REVENUES		3090.00	4108.00	5161.00	5161.00	5161.00	5161.00	5161.00	5161.00	5161.00	5161.00
COSTS		1584.90	1880.00	2294.60	2294.60	2294.60	2294.60	2294.60	2294.60	2294.60	2294.60
CASH FLOW	-6870	1505.10	2228.00	2866.40	2866.40	2866.40	2866.40	2866.40	2866.40	2866.40	2866.40
NPV: 8%		$	10556	B/C:	8%		2.54				
NPV: 10%		$	8977	B/C:	10%		2.31	IRR:	32.65 %	= $	-1
NPV: 15%		$	5849	B/C:	15%		1.85				
COSTS+10%		1743	2068	2524	2524	2524	2524	2524	2524	2524	2524
CASH FLOW	-6870	1347	2040	2637	2637	2637	2637	2637	2637	2637	2637
NPV: 8%		$	9117	B/C:	8%		2.33				
NPV: 10%		$	7666	B/C:	10%		2.12	IRR:	29.70 %	= $	-1
NPV: 15%		$	4790	B/C:	15%		1.70				
COSTS+20%		1902	2256	2754	2754	2754	2754	2754	2754	2754	2754
CASH FLOW	-6870	1188	1852	2407	2407	2407	2407	2407	2407	2407	2407
NPV: 8%		$	7679	B/C:	8%		2.12				
NPV: 10%		$	6355	B/C:	10%		1.93	IRR:	26.66 %	= $	1
NPV: 15%		$	3732	B/C:	15%		1.54				
REV'S-10%		2781	3697	4645	4645	4645	4645	4645	4645	4645	4645
CASH FLOW	-6870	1196	1817	2350	2350	2350	2350	2350	2350	2350	2350
NPV: 8%		$	7375	B/C:	8%		2.07				
NPV: 10%		$	6081	B/C:	10%		1.89	IRR:	26.09 %	= $	1
NPV: 15%		$	3519	B/C:	15%		1.51				
REV'S-20%		2472	3286	4129	4129	4129	4129	4129	4129	4129	4129
CASH FLOW	-6870	887	1406	1834	1834	1834	1834	1834	1834	1834	1834
NPV: 8%		$	4194	B/C:	8%		1.61				
NPV: 10%		$	3186	B/C:	10%		1.46	IRR:	18.96 %	= $	1
NPV: 15%		$	1188	B/C:	15%		1.17				

4. Marketing Plan

The firm plans to market its sweaters directly to retail outlets, primarily in New York City. It has been estimated that a market for fine sweaters of at least 200,000 units per year exists there. La Lana already has tentative orders from several specialty shops for delivery by next March. The firm's owners have extensive experience in marketing Bolivian handicraft products in the U.S., have already developed strong ties with specialty stores in the northeastern U.S., and are actively developing new outlets for the sale of their sweaters. They expect to have little difficulty selling all the sweaters the factory can produce. The sweaters to be produced will be of top quality and design and compete at the high end of the market, retailing for $80 to $150 apiece. The low cost of production (about $21) in Bolivia and the fact that the sweaters can enter the U.S. duty-free will impact favorably on the firm's profitability.

5. Financial Analysis

The total cost of the investment will be $382,340. Approximately $57,000 will be invested by the owners. Although this is only 15% of the total investment, the BCB has decided that this is acceptable given the project's social benefits and good prospects for success. The $225,340 loan will be financed 80% by the BCB and 20% by the Banco Hipotecario. The working capital portion of the loan will be extended for two years, with a one-year grace period. The remainder will be lent for five years with a two-year grace period.

The firm plans to purchase ten knitting machines for product production. Additional funding will be required to cover the initial organizational costs of the firm, office furniture and equipment, a vehicle, and working capital.

Vehicle, machinery and installation	$ 58,645
Office furniture and equipment	4,200
Organizational costs	12,000
Freight, insurance, other costs	10,180
Working capital	297,315
	$382,340

A large amount of working capital, relative to the low cost of machinery, will be required to establish inventories of raw materials and to pay for salary costs (including the expatriate designer).

The internal rate of return on the total investment is estimated to be 12.02%. The discounted rate of return of the equity portion of the investment is estimated to be 109.63%. The project's Net Present Value, estimated over the 5 year life of project at a discount rate of 8% and an initial incremental investment of $382,000, is a positive $332,000.

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F. La Lana Ltda.

1. Background

The purpose of the project is to construct a small plant capable of producing high quality alpaca sweaters for export, principally to the United States. The project's strategy is to employ fine quality Bolivian alpaca yarn together with top quality designs consistent with current styles and North American tastes to produce a highly marketable product.

La Lana Limitada is a small textile firm, privately owned by William S. Siegal and Bernd Abendroth, and legally organized as a limited concern. The general manager, William S. Siegel, is an expert in fabric design, weavings, and the sale of fine articles of clothing. La Lana Ltda. has already contracted the services of a qualified designer from the United States. A full feasbility study has been prepared for the project. The participating ICI is the Banco Hipotecario.

2. Linkages

The project will benefit poor alpaca herders from the Altiplano by providing a steady, lucrative market for alpaca wool. In addition, La Lana Ltda. has contacted the Occupational Rehabilitation Center in the Ministry of Social Welfare and Public Health for the purpose of contracting up to ten handicapped individuals to be employed as laborers in its factory. Lastly, La Lana Ltda. will generate indirect employment for alpaca shearers, wool spinners and other rural workers.

3. Production Plan

With the installation of ten relatively unsophisticated knitting machines, the plant will be able to produce 9,600, top-quality sweaters per year. The firm's management expects this level of production to be attained in the second year of operation. The plant will be located in La Paz for easy access to raw material sources found in the Bolivian altiplano region. Also, the La Paz international airport will allow for timely export shipments of finished products. A building currently being rented by the firm provides sufficient space for plant operations as well as storage area and administrative offices.

During the first years of the project, alpaca yarn will be purchased from an intermediary, Instituto de Fomento Lanero (INFOL), with which La Lana has negotiated an agreement that will ensure a sufficient supply of wool. Since the yarn supplied by INFOL contains only natural color, any yarn that requires special coloring will be obtained from Universaltex Ltda., a textile processing company which is also a potential borrower under the A&A Amendment.

6. Economic Analysis

The economic analysis of the project shows that it has a benefit/cost ratio of 1.53 using a 15% discount rate. The sensitivity analyses show that the project would continue to be feasible with costs increased by 20% and with revenues decreased by 15%.

This project should be ready for financing in the very near future.

LA LANA LTDA.
(Figures in Thousands of U.S. Dollars)

	Increrental Investment	Year 0	Year 1	Year 2	Year 3	Year 4	Year 5	Year 6	Year 7	Year 8	Year 9	Year 10
A. BALANCE SHEET												
Assets												
Current Assets	297	297	305	166	288	411	540					
Non-Current Assets	85	85	72	55	38	21	-					
Total Assets	382	382	377	221	326	432	540					
Liabilities												
Current Liabilities	253	253	253	24	24	24	-					
Non-Current Liabilities	72	72	72	48	24	-	-					
Equity	57	57	57	57	57	57	57					
Retained Earnings	-	-	(5)	92	221	351	483					
Total Liabilities and Equity	382	382	377	221	326	432	540					
B. INCOME STATEMENT												
Revenues												
- Sales			150	432	480	480	480					
- Sale Costs			77	196	217	217	217					
Gross Profits			73	236	263	263	263					
Other Costs			52	73	73	73	73					
Financial Costs			26	26	6	4	2					
Net Income Before Taxes			(5)	137	184	186	188					
Taxes = 30%			-	40*	55	56	56					
Net Income After Taxes			(5)	97	129	130	132					
C. CASH FLOW												
Net Income After Taxes			(5)	97	129	130	132					
Plus Depreciations and Amortizations			13	17	17	17	21					
Less Increrental Investment	(382)											
Total Monetary Cash Flow	(382)		8	114	146	147	153					
D. FINANCIAL RATIOS												
1. Efficiency Ratios												
a. Return on Sales												
Net Income/Revenues			N.M.	22.5%	26.9%	27.1%	27.5%					
b. Return on Equity												
Net Income/Equity			N.M.	65.1%	46.4%	31.8%	24.4%					
c. Return on Assets												
Net Income/Assets			N.M.	43.9%	39.6%	30.1%	24.4%					
2. Debt Ratios												
a. Total Liabilities/Total Equity			6.25	.48	.17	.06	N.M.					
b. Current Assets/Current Liabilities			1.21	6.92	12.0	17.13	N.M.					
c. Assets/Total Liabilities			1.16	3.06	6.79	18.0	N.M.					
3. IRR = 12.02% Equity IRR = 109.63%												

* Loss carried forward for tax purposes.

USAID ECONOMIC ANALYSIS OF PROJECTS

PRODUCTION OF ALPACA SWETERS (LA LANA LTDA.)

	YEAR 0	YEAR 1	YEAR 2	YEAR 3	YEAR 4	YEAR 5				
F.INVEST'T	382									
REVENUES		150	432	480	480	480				
COSTS		116	172	273	273	270				
CASH FLOW	-382	34	260	207	207	210				
NPV: 8%	$	332	B/C:	8%	1.87					
NPV: 10%	$	291	B/C:	10%	1.76		IRR:	32.42% =	$	0
NPV: 15%	$	203	B/C:	15%	1.53					
COSTS+10%		128	189	300	300	297				
CASH FLOW	-382	22	243	180	180	183				
NPV: 8%	$	246	B/C:	8%	1.64					
NPV: 10%	$	210	B/C:	10%	1.55		IRR:	26.83% =	$	0
NPV: 15%	$	133	B/C:	15%	1.35					
COSTS+20%		139	206	328	328	324				
CASH FLOW	-382	11	226	152	152	156				
NPV: 8%	$	161	B/C:	8%	1.42					
NPV: 10%	$	130	B/C:	10%	1.34		IRR:	20.82% =	$	0
NPV: 15%	$	63	B/C:	15%	1.16					
REV'S-10%		135	389	432	432	432				
CASH FLOW	-382	19	217	159	159	162				
NPV: 8%	$	175	B/C:	8%	1.46					
NPV: 10%	$	143	B/C:	10%	1.37		IRR:	21.86% =	$	0
NPV: 15%	$	74	B/C:	15%	1.19					
REV'S-20%		120	346	384	384	384				
CASH FLOW	-382	4	174	111	111	114				
NPV: 8%	$	18	B/C:	8%	1.05					
NPV: 10%	$	-5	B/C:	10%	0.99		IRR:	9.58% =	$	0
NPV: 15%	$	-54	B/C:	15%	0.86					

G. Curtiembre Oriental Ltda. - Leather Production

1. Background

Curtiembre Oriental is a tannery located in Cochabamba which processes cowhide, pigskin and other hides. The purpose of this project is to expand existing plant capacity and to improve processing techniques through the use of chemical compounds to be blended by Curtiembre itself. The project will enable the firm to improve the quality of its leather and cut its processing costs.

Curtiembre Oriental is an established tannery with export contracts for most of the leather it produces. It is a family-owned company which has been operating for about 20 years. A pre-feasibility study has been completed for the project. The participating ICI will be the Banco de Oruro.

2. Linkages

The project will benefit (a) small-scale owners of livestock by ensuring them a good market for hides (cowhides are sold to the tannery by the municipalities), (b) artisan shoemakers and other leather workers who will be provided with a realiable source of good raw materials (to the extent some of Curtiembre's leather is marketed locally), and (c) artisan owners of tanneries who will purchase semi-processed hides and tanning chemicals produced by Curtiembre.

3. Production Plan

Two tanning processes are utilized by Curtiembre. The first involves partially processing skins to the "wet blue" stage and then selling them to other facilities which complete the tanning process. The majority of Curtiembre's processing, however, involves the complete tanning of rawhides which are developed into high quality leathers. The leather is then sold to manufacturing concerns in Bolivia and abroad to be made into various fine leather products. Curtiembre's Cochabamba plant is conveniently located, both in terms of the supply of hides, and for marketing in Bolivia and overseas.

The process to be employed for blending chemical compounds to be used for tanning is relatively simple. Instead of importing finished compounds, Curtiembre will import the necessary ingredients at a much lower cost and mix them itself for its own use. Curtiembre will also sell to other tanneries. The lower price charged to these artesanal tanneries, which now must also import tanning chemicals, will be an additional benefit of the project.

4. Marketing Plan

Curtiembre Oriental currently has a production capacity of approximately 84,000 skins, processed into 400,000 square feet of leather per year, which generate annual sales revenues of approximately $1,000,000. By expanding plant capacity, the firm will be able to process in excess of 150,000 skins and produce more than 1,600,000 square feet of leather, with corresponding total sales estimated at $2,400,000. The firm's managmenet strongly believes this level of production and sales can be attained during the first full year of expanded operations. The chemical blending process will produce two metric tons of solutions per day and is expected to generate an additional $624,000 in annual sales revenues.

Curtiembre's markets for leather, partially processed hides, and tanning chemicals are already developed. The latter two products will be sold to small local artesanal tanning operations. The principal market for Curtiembre Oriental's finished leather is the United States. Contacts have also been made in various European countries, most notably Germany, with several large sales contracts already signed.

Some finished leathers will continue to be sold locally. Demand is also growing in Bolivia for leather since the cost of finished imported leather products is now high. Whether it decides to sell leather in Bolivia or overseas, Curtiembre is assured of a ready market.

5. Financial Analysis

The total required investment is approximately $1,246,500, of which $816,500 will be borrowed.

	Equity	Loan	Total
Construction	-	156,800	156,800
Machinery	-	659,700	659,700
Working Capital	430,000	-	430,000
	$ 430,000	$ 816,500	$ 1,246,500

A five-year loan with a two-year grace period is contemplated. The Banco de Oruro prefers that the BCB refinance 90% of the loan because its funds for long-term lending are in short supply.

Unit cost and price projections for the financial analysis were made as follows. Since different leathers have different costs, due to different raw material and processing costs, an average cost for various types of leather, weighted according to planned production

of each, was used. Similarly, a weighted average price per square foot of leather was used. Chemical compound processing costs and sales prices were worked out based on current market prices and an examination of processing costs.

Although Curtiembre's management believes the plant can reach full capacity in the first year of operations, the financial analysis assumes a more conservative estimate of sales, based on 80% production capacity in year one and 90% in year two, with full capacity achieved in year three. The IRR of the project is 36.8%, whereas the discounted return on equity is 109%. A Net Present Value of $3,045,000 was calculated on the project's incremental investment of $1,247,000, with net cash flows dicounted at a cost of capital of 8%.

6. Economic Analysis

The project's benefit cost ratio, using a 15% discount rate, is 2.66. The sensitivity analyses carried out show that the project remains feasible when revenues are reduced 20% or costs increased 20%.

The feasibility study for this project will have to pay particular attention to how it can be designed to provide maximum benefits to the poor and the removal of possible GOB disincentives to exportation of leathers.

CURTIEMBRE ORIENTAL, LTD.

(Figures in Thousands of US$)

	Incremental Investment	Year 0	Year 1	Year 2	Year 3	Year 4	Year 5	Year 6	Year 7	Year 8	Year 9	Year 10
A. BALANCE SHEET												
Assets												
Current Assets	430	430	865	1,349	1,596	1,859	2,135	2,700	3,265	3,903		
Non-Current Asset	817	817	724	631	538	445	352	259	166	-		
Total Assets	1,247	1,247	1,589	1,980	2,134	2,304	2,487	2,959	3,431	3,903		
Liabilities												
Current Liabilities	-	-	-	272	272	273	-	-	-	-		
Non-Current Liabilities	817	817	817	545	273	-	-	-	-	-		
Equity	430	430	430	430	430	430	430	430	430	430		
Retained Earnings			342	733	1,159	1,601	2,057	2,529	3,001	3,473		
Total Liabilities and Equity	1,247	1,247	1,589	1,980	2,134	2,304	2,487	2,959	3,431	3,903		
B. INCOME STATEMENT												
Sales			1,611	1,875	2,059	2,059	2,059	2,059	2,059	2,059		
Cost of Sales			894	1,067	1,189	1,189	1,189	1,189	1,189	1,189		
Gross Profit			717	808	870	870	870	870	870	870		
Other Cost			164	184	196	196	196	196	196	196		
Financial Cost			65	65	65	43	22	-	-	-		
Net Income Before Taxes			488	559	609	631	652	674	674	674		
Taxes = 30%			146	168	183	189	196	202	202	202		
Net Income After Taxes			342	391	426	442	456	472	472	472		
C. CASH FLOW												
Net Income After Taxes			342	391	426	442	456	472	472	472		
Plus Depreciation and Amortizations			93	93	93	93	93	93	93	166		
Less Incremental Investment	(1,247-)											
Total Monetary Cash Flow	(1,247-)		435	484	519	535	549	565	565	638		
D. FINANCIAL RATIOS												
1. Efficiency Ratios												
a) Return on Sales												
Net Income/Revenues			21.2%	20.9%	20.7%	21.5%	22.1%	22.9%	22.9%	22.9%		
b) Return on Equity												
Net Income/Equity			44.3%	33.6%	26.8%	21.8%	18.3%	16.0%	13.8%	12.1%		
c) Return on Assets												
Net Income/Assets			21.5%	19.7%	20.0%	19.2%	18.3%	16.0%	13.08%	12.1%		
2. Debt Ratios												
a) Total Liabilities/Total Equity			1.06	.70	.34	.13	N.M.	N.M.	N.M.	N.M.		
b) Current Assets/Current Liabilities			N.M.	4.96	5.87	6.81	N.M.	N.M.	N.M.	N.M.		
c) Assets/Total Liabilities			1.96	2.42	3.92	8.44	N.M.	N.M.	N.M.	N.M.		

3. IRR = 36.83% Equity IRR = 108.85%

USAID ECONOMIC ANALYSIS OF PROJECTS (US$ 000)

	YEAR 0	YEAR 1	YEAR 2	YEAR 3	YEAR 4	YEAR 5	YEAR 6	YEAR 7	YEAR 8
TANNERY PLANT EXPANSION AND CHEMICAL PRODUCCION (CURTIEMBRE ORIENTAL)									
F.INVES'T	1247								
REVENUES		1611	1875	2059	2059	2059	2059	2059	2059
COSTS		965	1158	1292	1292	1292	1292	1292	1219
CASH FLOW	-1247	646	717	767	767	767	767	767	840
NPV: 8%		$	3045						
NPV: 10%		$	2728						
NPV: 15%		$	2076						
B/C: 8%			3.44						
B/C: 10%			3.19						
B/C: 15%			2.66						
IRR:	55.42 %	= $	0						
COSTS+10%		1062	1274	1421	1421	1421	1421	1421	1341
CASH FLOW	-1247	550	601	638	638	638	638	638	718
NPV: 8%		$	2348						
NPV: 10%		$	2083						
NPV: 15%		$	1537						
B/C: 8%			2.88						
B/C: 10%			2.67						
B/C: 15%			2.23						
IRR:	45.96 %	= $	0						
COSTS+20%		1158	1390	1550	1550	1550	1550	1550	1463
CASH FLOW	-1247	453	485	509	509	509	509	509	596
NPV: 8%		$	1652						
NPV: 10%		$	1437						
NPV: 15%		$	993						
B/C: 8%			2.32						
B/C: 10%			2.15						
B/C: 15%			1.80						
IRR:	35.98 %	= $	0						
REV'S-10%		1450	1688	1853	1853	1853	1853	1853	1853
CASH FLOW	-1247	485	530	561	561	561	561	561	634
NPV: 8%		$	1919						
NPV: 10%		$	1685						
NPV: 15%		$	1205						
B/C: 8%			2.54						
B/C: 10%			2.35						
B/C: 15%			1.97						
IRR:	39.83 %	= $	0						
REV'S-20%		1289	1500	1647	1647	1647	1647	1647	1647
CASH FLOW	-1247	324	342	355	355	355	355	355	428
NPV: 8%		$	793						
NPV: 10%		$	643						
NPV: 15%		$	333						
B/C: 8%			1.64						
B/C: 10%			1.52						
B/C: 15%			1.27						
IRR:	22.50 %	= $	0						

H. Avícola Chulumani

1. Background

The purpose of this subproject is to improve the efficiency of Avícola Chulumani (A.C.), a poultry producer with main production facilities in Chulumani, Yungas. It will finance the production of corn and soy by the firm to be used to produce a balanced feed supplement for the production of chickens.

Avícola Chulumani was founded in 1965, with initial activities focussing on the production of poultry. Since that time, the firm has gradually moved into the related activity of producing balanced feed for chickens. Currently, Avícola Chulumani is one of the leading producers of balanced feed in the La Paz area in terms or production volume and feed quality. Recently, the high cost of purchasing soy and corn in the Santa Cruz market required for the production of its balanced feed has led A.C. to the conclusion that it can lower the cost of its raw materials through promotion of the production of corn and soy in the Yungas.

Avícola Chulumani's current production capacity for poultry is 40,000 birds per month. Its balanced feed production capacity is 100 tons per month. The firm has a feed preparation plant in La Paz where feed concentrates are produced for the Chulumani plant and other clients. The capacity of the La Paz plant is 250 tons of balanced feed per month.

The corn and soy A.C. purchases from Santa Cruz at a very high price account for 85% of the firm's cost of feed production. As a result of the high cost of production, and due to strong price competition within the Santa Cruz and Cochabamba markets, Avícola Chulumani has decided to expand its operations one step further to include the direct production of corn and soy. During the first year of operation, an estimated 240 tons of corn and 60 tons of soy will be produced, gradually increasing through the fourth year until a target of 700 tons of corn and 350 tons of soy is reached. The estimated full-capacity production will satisfy less than 50% of the firm's current annual demand for soy and corn. The remaining demand will be met through increased production of corn and soy by small farmers in the Yungas. It is expected that these farmers can be motivated to produce these crops after they witness the success A.C. will have in cultivating them in the Yungas and given the fact they will be paid competitive prices by Avícola Chulumani and other poultry producers.

2. Linkages

The management of A.C. has discussed the project with the Banco Big Beni. The loan application has not yet been completed, and

a feasibility study of the project is still required.

The A.C. soy and corn production project will encourage production by small farm agriculturalists in the Yungas to meet its increased demand for inputs for the production of balanced feed for broiler chickens. The balanced feed will also be purchased by small producers of poultry wishing to use it to improve the quality of their chicken. The subproject will generate 17 jobs; two positions in technical and managerial areas and 15 laborers. It is estimated that approximately 50 families will benefit from the project through indirect employment, and thus will increase their net annual incomes correspondingly.

3. Production Plan

A.C. will use imported fertilizers and locally produced seed for soy and corn production at a cost of approximately $1,500 per year. One crop production cycle is planned for the first year of operation, with two harvests expected in the second year. This method of land rotation requires greater usage of fertilizers and will lead to higher production costs in the last two years of the project. Nevertheless, the cost of production in the Yungas should still be competitive in relation to buying corn and soy inputs from the Santa Cruz market.

Agricultural equipment will be imported from the United States at an approximate cost of US$73,000 to initiate the project. Construction of an irrigation system and other civil works and purchase of a grain harvester will require an additional investment of approximately US$75,000 in years 2 and 3, derived from revenues generated under the project.

The firm has gained much experience in the poultry and balanced feed industry over the past 18 years and should have no difficulty implementing the project. The Yungas offers a more than sufficient labor supply as a result of relatively high unemployment in the area.

4. Marketing Plan

Avícola Chulumani's current yearly soy and corn demand is 2,400 tons (65% corn and 35% soy). It is expected that its production capacity will reach 1,050 tons in year four of operation. Therefore, this subproject will meet less than half of A.C.'s current demand for soy and corn. The rest will be provided by small farm production within the region.

Reduced poultry production costs realized as a result of this project will permit A.C.'s sale of poultry to be more competitive

within the national market. The Bolivian poultry market has become increasingly competitive because of the rapid growth in production and marketing of chickens brought on by the participation of Santa Cruz firms. Most of the Santa Cruz firms are vertically integrated (i.e. they produce their own balanced feed and have their own broiler distribution systems) and have greater plant capacity allowing them to profit from economies of scale.

Avícola Chulumani's main chicken market is located in the Yungas, where 60% of the firm's production is sold. Cochabamba is its second most important broiler market with 20% of its production sold there. The remaining output is sold in La Paz and other areas.

5. Financial Analysis

The production of soy and corn in Yungas will require Avícola Chulumani to borrow $80,000. Approximately 80% of this loan will be refinanced by the Central Bank. Avícola Chulumani will utilize this loan for the purchase of agricultural machinery as well as for working capital. As a counterpart contribution to the project, Avícola Chulumani will invest US$12,000 of its own funds to be applied toward project start-up costs and operating capital. In addition, the firm has already invested US$22,000 in fixed assets (land, housing and facilities, and tools) not included as part of the incremental investment, but considered essential infrastructure to achieve the project's planned agricultural production.

Since this subproject's objective is to enable A.C. to cut the cost of one of its production inputs, the financial analysis discounts the net cost savings against the cost of the investment, i.e. the difference between what A.C. would have to pay for the corn and soy it will produce if it did not undertake the project (its sales price) and A.C.'s projected cost of producing that corn and soy, against the initial incremental investment costs incurred in setting up corn and soy production facilities. The subproject's internal rate of return, based upon an incremental investment of US$92,000, is estimated to be 39.6%. The discounted return on equity is over 200%. The project's initial incremental investment of $92,000 yields a Net Present Value of $242,000 when net cash flows are discounted at an 8% cost of capital over the life of the project.

6. Economic Analysis

The project's economic benefit/cost ratio, using an average cost of capital of 15 percent, is 3.02. Sensitivity analyses calculated with either increased costs of 20 percent or decreased corn and soy sales prices of 20% do not affect the project's high profitability.

The feasibility study to be carried out for this project will have to pay particular attention to projected prices for chicken in Bolivia as more firms enter the market and to ensuring that measures to bring maximum benefits to poor farmers are incorporated in the project's design.

FINANCIAL EXHIBIT

CHAROBAMBA PROJECT

(Avícola Chulumani)
(Figures in Thousands of U.S. Dollars)

	Incremental Investments	Year 1	Year 2	Year 3	Year 4
CASH FLOW					
Total cost of purchasing soy and corn.		57.4	120	154.8	235
Less total cost of producing soy and corn.		30.1	55.1	71.8	83.5
Less additional required investment.		-	(25)	(50)	-
Net cost savings	(92)	27.3	39.9	33	151.5

Financial IRR: 39.6%

Equity IRR: 265%

USAID ECONOMIC ANALYSIS OF PROJECTS

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	YEAR 0	YEAR 1	YEAR 2	YEAR 3	YEAR 4

PURCHASE OF AGRICULTURAL EQUIPMENT TO PRODUCE CHICKEN (AVICOLA CHULUMANI)

COSTS+20%		24	36	53	62
CASH FLOW	-92	33	84	102	173
NPV: 8%		$	242		
NPV: 10%		$	202		
NPV: 15%		$	166		
B/C: 8%			3.37		
B/C: 10%			3.20		
B/C: 15%			2.80		
IRR:	68.46 %	= $	0		
REV'S-10%		51	108	139	212
CASH FLOW	-92	31	78	95	160
NPV: 8%		$	197		
NPV: 10%		$	181		
NPV: 15%		$	148		
B/C: 8%			3.14		
B/C: 10%			2.97		
B/C: 15%			2.61		
IRR:	63.69 %	= $	0		
REV'S-20%		46	96	124	188
CASH FLOW	-92	26	66	80	136
NPV: 8%		$	152		
NPV: 10%		$	139		
NPV: 15%		$	110		
B/C: 8%			2.65		
B/C: 10%			2.51		
B/C: 15%			2.20		
IRR:	53.22 %	= $	0		

PURCHASE OF AGRICULTURAL EQUIPMENT TO PRODUCE CHICKEN (AVICOLA CHULUMANI)

F.INVES'T	92				
REVENUES		57	120	155	235
COSTS		20	30	44	52
CASH FLOW	-92	37	90	111	183
NPV: 8%		$	242		
NPV: 10%		$	224		
NPV: 15%		$	186		
B/C: 8%			3.63		
B/C: 10%			3.44		
B/C: 15%			3.02		
IRR:	74.02 %	= $	0		
COSTS+10%		22	33	48	57
CASH FLOW	-92	35	87	106	178
NPV: 8%		$	230		
NPV: 10%		$	213		
NPV: 15%		$	176		
B/C: 8%			3.50		
B/C: 10%			3.32		
B/C: 15%			2.91		
IRR:	71.18 %	= $	0		

I. PROAVE Reproducer Chickens

1. Background

This project proposes to import breeder chickens (abuelas) for the production and marketing of broiler chickens in Bolivia. Complejo Industrial Avícola la Rivera (CIARAVE), a Bolivian poultry complex with headquarters and breeding plants in Cochabamba, will manage all project activities. Progenitor de Ave (PROAVE), a wholly owned subsidiary of CIARAVE, will be responsible for the design and implementation of this part of CIARAVE's poultry operations. The project involves the importation of 4,320 breeder chickens which will produce "reproducer" hens for CIARAVE. These hens will produce chicks which CIARAVE will raise as broiler chickens. Up to now, CIARAVE has had to import all of its "reproducer" hens. As a result of this project, its import requirements will be cut in half and it will realize significant cost savings.

In 1968, CIARAVE began its poultry operations on a small scale, focussing on the raising and fattening of imported baby chicks for commercialization as broiler chickens. CIARAVE now is the leading poultry production and marketing complex in Cochabamba. Sales of its broiler chickens are widespread both in Cochabamba and in La Paz, as well as through nationwide marketing channels. Currently, CIARAVE owns one poultry incubator plant in Cochabamba and has five breeding farms for raising broiler chickens. Four of these farms are currently operational, and are located within a 50 mile radius of Cochabamba. In addition, CIARAVE owns a chain of retail outlets throughout the country for the sale of its broilers. The complex has gained valuable experience in the poultry industry over the past 15 years. The Rivera brothers, owners of CIARAVE, provide efficient management to the complex. The older brother is the general manager, and two of his younger brothers have been trained in Brazil and provide expert technical guidance.

CIARAVE has conducted its own pre-feasibility study of the project and is in the process of negociating a loan with the Banco Boliviano Americano.

2. Linkages

CIARAVE's poultry complex already benefits small farmers (approximately 60 families) within the Cochabamba area who supply it with its chicken feed inputs (corn and soy). The project also will generate new employment for 20 additional workers and indirectly create employment opportunities in poultry transport and distribution.

3. Production Plan

In order to reach the projected full production capacity, it will be necessary to put the fifth, currently unutilized, CIARAVE poultry breeding farm into operation. This farm is located 8 miles from Cochabamba. In addition, it will be necessary to purchase

additional equipment (1 incubator) and construct civil works essential for the effective operation of the farm. CIARAVE currently produces 90,000 chickens per month and markets them throughout Bolivia. This level of production will be maintained in the first few years of project operations, with the PROAVE subproject financing the production of a sufficient amount of reproducer chickens to save CIARAVE foreign exchange costs of approximately $100,000 a year.

The project's incubator plant is located next to three of CIARAVES largest chicken farms and is easily accessible by good paved roads. Other existing infrastructure advantage include civil works with adequate sanitary and climatic conditions, gravel access roads to farms from the principal paved road, and a sufficient supply of vehicles for product and personnel transportation.

The subproject will utilize imported vitamins, vaccines and animal proteins in raising "reproducer" hens. In addition, corn, soy, bone flour, and other supplements for chicken feed will be supplied locally. The abuelas will be imported from Perú at an approximate cost of US$50,000. An incubator and vehicles will be imported from the United States at a total cost of US$90,000. Housing facilities, an administrative office, 4 chicken coops, 1 access bridge, 1 water tank and water and electrical installations, totalling US$16,000, will be constructed. In addition, most poultry production implements will be purchased locally at a cost of approximately US$20,000.

Currently, CIARAVE and all its plants and farms employ 252 persons, 14 of whom hold administrative positions. It is envisioned that additional experienced administrative and technical personnel will be employed under the project. This subproject will generate 20 new jobs, involving 2 positions in technical/managerial areas and 18 as direct labor hires.

4. Marketing Plan

The project will satisfy approximately 50% of CIARAVE's current total demand for "reproducers". Therefore, all of PROAVE's "reproducers" will be sold to CIARAVE. "Reproducer" poultry production does not have significant competition in Bolivia at this time. PROAVE will be the first poultry firm to import abuelas and raise "reproducers."

5. Financial Analysis

The project's production of "reproducer" chickens will require an investment of US$432,000. The project loan of US$232,000 will be financed 80% by the Central Bank and 20% from ICI resources. PROAVE will use the loan for purchases (incubator equipment, a pick-up truck, a standard flat-bed truck and tools for poultry production),

FINANCIAL EXHIBIT

PROAVE PROJECT
(Progenitores de Aves de Rivero Hnos.)
(Figures in Thousands of U.S. Dollars)

	Incremental Investments	Year 1	Year 2	Year 3	Year 4	Year 5	Year 6	Year 7	Year 8
CASH FLOW									
Total cost of purchasing reproducers.		332.7	381	419.2	419.2	419.2	419.2	419.2	419.2
Less total cost of producing reproducers.		244.3	277.1	307	289.9	293.7	310	308	248.8
Less additional required investment		-	-		(69.6)				
Net cost savings	(432)	88.4	103.9	112.2	59.7	125.5	109.2	111.2	170.4

Financial IRR: 17.5%

Equity IRR: 47.2%

USAID ECONOMIC ANALYSIS OF PROJECTS (US$ 000)

	YEAR 0	YEAR 1	YEAR 2	YEAR 3	YEAR 4	YEAR 5	YEAR 6	YEAR 7	YEAR 8
REPRODUCTION OF CHICKENS (PROAVE-RIVERA HNOS.) (CONT.)									
COSTS+20%		253	285	318	300	308	282	330	326
CASH FLOW	-432	80	102	101	119	111	137	89	93
NPV: 8%		$	162						
NPV: 10%		$	118						
NPV: 15%		$	28						
B/C: 8%			1.37						
B/C: 10%			1.27						
B/C: 15%			1.06						
IRR:	16.85 %	= $	0						
REV'S-10%		300	348	377	377	377	377	377	377
CASH FLOW	-432	89	111	112	127	121	142	102	106
NPV: 8%		$	216						
NPV: 10%		$	168						
NPV: 15%		$	70						
B/C: 8%			1.50						
B/C: 10%			1.39						
B/C: 15%			1.16						
IRR:	19.60 %	= $	0						
REV'S-20%		266	310	335	335	335	335	335	335
CASH FLOW	-432	55	72	70	85	79	101	61	64
NPV: 8%		$	-14						
NPV: 10%		$	-45						
NPV: 15%		$	-108						
B/C: 8%			0.97						
B/C: 10%			0.90						
B/C: 15%			0.75						
IRR:	7.17 %	= $	0						
REPRODUCTION OF CHICKENS (PROAVE-RIVERA HNOS.)									
F.INVES'T	432								
REVENUES		333	337	419	419	419	419	419	419
COSTS		211	237	265	250	257	235	275	272
CASH FLOW	-432	122	150	154	169	163	184	144	148
NPV: 8%		$	446						
NPV: 10%		$	382						
NPV: 15%		$	248						
B/C: 8%			2.03						
B/C: 10%			1.88						
B/C: 15%			1.57						
IRR:	30.20 %	= $	0						
COSTS+10%		232	261	292	275	282	258	302	299
CASH FLOW	-432	101	126	127	144	137	161	117	121
NPV: 8%		$	304						
NPV: 10%		$	250						
NPV: 15%		$	138						
B/C: 8%			1.70						
B/C: 10%			1.58						
B/C: 15%			1.32						
IRR:	23.76 %	= $	0						

construction, and working capital costs. To meet the remaining portion of the project's investment requirements, PROAVE will contribute US$---200,000 of its own funds to be utilized for the construction and installation of civil works, and for working capital purposes.

As in the case of the Avícola Chulumani project, since this project's objective is to cut PROAVE/CIARAVE production costs, the financial analysis discounts the cost savings accruing to the production rather than importation of "reproducer" hens against the initial cost of the investment.

The project's IRR of 17.5% was estimated based on 80% of installed capacity in operation in year one, with full capacity reached by year three. The project's discounted return on equity is 47.5%. A Net Present Value of $162,000 is derived from net cash flows discounted at 8%, on an initial incremental investment of $432,000.

6. Economic Analysis

The benefit/cost ratio of the project, utilizing a 15% discount rate, is 1.57. The ratio remains above the break even point of 1 even when production costs are increased by 20% and the imported cost of "reproducers" is decreased by 10%.

In the feasibility study for this project, a final determination of the size of PROAVE's reproducer production operations will have to be made, and measures to ensure that maximum benefits accrue to the rural poor will have to be elaborated.

J. Hacienda Santa Rosa Grossberger Ltda.

1. Background

The purpose of this project is to initiate turkey breeding in Bolivia and thereby make the marketing of turkeys in Bolivia financially feasible under the country's new economic conditions.

Hacienda Santa Rosa Grossberger Limitada is a turkey farm which raises and markets turkeys, but currently has no turkey breeding facilities; i.e. until now, the firm has imported turkey chicks and raised them for local sale. The farm is privately owned by José Grossberger Z. and is legally organized as a limited concern. The firm's experience with the production and commercialization of turkeys began in 1968 with the importation of 500 turkey chicks. This increased to 20,000 chicks per year by 1979. The management of the firm is experienced in the production and commercialization of turkeys in Bolivia. Two members of the management team are professional agriculturalists, while another is a specialist in feed technology.

Because of the drop in the value of the Bolivian peso, it is no longer financially possible to base Grossberger's turkey

business on the importation of turkey chicks. This project will enable Grossberger to import breeders for the production of its own chicks. The firm will purchase and install an incubator with a production capacity of 12,000 turkey chicks per year. A turkey breeder plant built with project funds will have the capacity to house 1,200 imported breeder turkeys. The installation of a radio communications system and the purchase of computer equipment and a soy toasting machine for use in the preparation of turkey feed are also contemplated. A feasibility study has been completed on the project by a private consultanting firm and presented to the Banco de Cochabamba for financing.

2. Linkages

An integral part of the project is the requirement for turkey feed inputs to be blended at the Grossberger plant and used to fatten turkey chicks. Purchase of these essential feed inputs, consisting primarily of soy, corn and sorghum, will continue to be made from small farmers located in the surrounding Cochabamba area, thus stimulating farm productivity and generating both direct and indirect employment opportunities. Furthermore, positions for 21 full time and 10 part time laborers will be created with total annual salaries projected to be $30,000.

3. Production Plan

Grossberger will support the project with existing infrastructure worth approximately $650,000. Hacienda Santa Rosa Grossberger Ltda. is located 7 kms. outside of Cochabamba. This location includes administrative offices, a feed plant, warehouses, freezers, and turkey coops. The turkey breeder plant will be located 49 kms. outside of Cochabamba and the incubation plant is approximately 10 Kms. from the breeder facility. Sufficient electricity and water supplies exist for the respective operations. In addition, the average temperature is 20°C at the breeder plant and 18°C at the commercial growth center, both of which are considered ideal for production and growth of turkeys. Commercial prospects are deemed excellent with all areas easily accessed by primary roads.

New computer and communications equipment will be imported from the United States, and incubation equipment will be purchased in Brazil. All constructions work and materials will be supplied locally. Most of the breeders will be imported from a California turkey breeding farm, with a small supply coming from Chile. Under normal operations, approximately 30% of production inputs will be imported. The majority of imports are in the form of vaccines and other food additives. With the expansion of local reproduction capacity, the firm will become gradually less dependent of foreign imports and, hence, will not require as much foreign exchange.

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Hacienda Santa Rosa Grossberger Ltda. currently produces 30,000 turkeys per year for commercial sale. The addition of the incubation plant and equipment, allowing for the production of Grossberger's own breeder turkey chicks, will result in a production of 72,000 turkey eggs per year.

The project will require the employment of four additional administrative and technical personnel. One of these will be a marketing specialist.

4. Marketing Plan

Hacienda Santa Rosa Grossberger Ltda. is the only producer of turkeys in Bolivia. The market for turkeys in Bolivia is somewhat limited. Turkey is the traditional dish for Christmas and New Year celebrations as well as for special celebrations, such as wedding and religious gatherings which call for large family meals. Grossberger intends to undertake a marketing campaign to promote more consumption of turkey. Although the projected price of $b 1,100 per kg. of turkey is high relative to the price of red meats, sales in Perú, Argentina, Chile and Venezuela should generate sufficient profits to allow Santa Rosa to gradually reduce its internal market price, thus making local sales more competitive. Grossberger has established markets in Venezuela, Argentina and northern Chile for its turkeys. Recently, it received large orders for turkeys from Arica, Chile and Cuzco, Perú, and the firm is currently selling exported turkeys at a higher price than that paid for turkies sold in Bolivia. Based on Grossberger's historical records for demand for turkeys and using a two-variable regression analysis to project future demand for both local consumption and exports, total sales are estimated at 46,000 turkeys in year one, increasing to 55,000 turkey sales in year five.

5. Financial Analysis

The expansion of Grossberger's operations to include the incubation and reproduction of breeder turkeys and to revitalize the commercialization of turkeys in Bolivia, will require a total incremental investment of $480,000. This amount will be used as follows:

Incubation plant and incubator	$ 61,785
Turkey breeder plant and imported breeder chicks.	18,195
Radio and computer	13,020
Soy toaster	10,000
Working capital	377,000
	$ 480,000

HACIENDA SANTA ROSA GROSSBERGER LTDA.

(Figures in Thousands of U.S. Dollars)

	Incremental Investment	Year 0	Year 1	Year 2	Year 3	Year 4	Year 5	Year 6	Year 7	Year 8	Year 9	Year 10
A. BALANCE SHEET												
Assets												
Current Assets	384	384	476	234	386	551	745	973	1,201	1,426		
Non-Current Assets	96	96	87	73	59	45	31	17	3	-		
Total Assets	480	480	563	307	445	596	776	990	1,204	1,426		
Liabilities												
Current Liabilities	311	311	311	32	32	32	-	-	-	-		
Non-Current Liabilities	96	96	96	64	32	-	-	-	-	-		
Equity	73	73	73	73	73	73	73	73	73	73		
Retained Earnings			83	138	308	491	703	917	1,131	1,353		
Total Liabilities and Equity	480	480	563	307	445	596	776	990	1,204	1,426		
B. INCOME STATEMENT												
- Sales			463	544	706	841	907	907	907	907		
- Sale Costs			282	384	406	525	552	552	552	552		
Gross Profits			181	160	300	316	355	355	355	355		
Other Costs			30	49	49	49	49	49	49	38		
Financial Costs			33	33	8	5	3	-	-	-		
Net Income Before Taxes			118	78	243	262	303	306	306	317		
Taxes = 30%			35	23	73	79	91	92	92	95		
Net Income After Taxes			83	55	170	183	212	214	214	222		
C. CASH FLOW												
Net Income After Taxes			83	55	170	183	212	214	214	222		
Plus Depreciations and Amortizations			9	14	14	14	14	14	14	3		
Less Incremental Investment	(480)											
Total Monetary Cash Flow	(480)		92	69	184	197	226	228	228	225		
D. FINANCIAL RATIOS												
1. Efficiency Ratios												
a. Return on Sales												
Net Income/Revenues			17.9%	10.1%	24.1%	21.8%	23.4%	23.6%	23.6%	24.5%		
b. Return on Equity												
Net Income/Equity			53.2%	26.1%	44.6%	32.4%	27.3%	21.6%	17.8%	15.6%		
c. Return on Assets												
Net Income/Assets			14.7%	17.9%	38.2%	30.7%	27.3%	21.6%	17.8%	15.6%		
2. Debt Ratios												
a. Total Liabilities/Total Equity			2.61	.46	.17	.06	N.M.	N.M.	N.M.	N.M.		
b. Current Assets/Current Liabilities			1.53	7.31	12.06	17.22	N.M.	N.M.	N.M.	N.M.		
c. Assets/Liabilities			1.38	3.20	6.95	18.63	N.M.	N.M.	N.M.	N.M.		

3. IRR = 26.97% Equity IRR = 142.07%

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USAID ECONOMIC ANALYSIS OF PROJECTS (US$ 000)

PURCHASE, INCUBATION, GROWTH & COMMERCIALIZATION OF TURKEYS (SANTA ROSA-GROSSBERGER LTDA.)

	YEAR 0	YEAR 1	YEAR 2	YEAR 3	YEAR 4	YEAR 5	YEAR 6	YEAR 7	YEAR 8
F.INVES'T	480								
REVENUES		463	544	706	841	907	907	907	907
COSTS		303	419	441	560	587	587	587	587
CASH FLOW	-480	160	125	265	281	320	320	320	320
NPV: 8%	$	971	B/C:	8%	3.02				
NPV: 10%	$	853	B/C:	10%	2.78	IRR:	41.80 %	= $	0
NPV: 15%	$	611	B/C:	15%	2.27				
COSTS+10%		333	461	485	616	646	646	646	646
CASH FLOW	-480	130	83	221	225	261	261	261	261
NPV: 8%	$	688	B/C:	8%	2.43				
NPV: 10%	$	592	B/C:	10%	2.23	IRR:	33.20 %	= $	0
NPV: 15%	$	396	B/C:	15%	1.83				
COSTS+20%		364	503	529	672	704	704	704	704
CASH FLOW	-480	99	41	177	169	203	203	203	203
NPV: 8%	$	405	B/C:	8%	1.84				
NPV: 10%	$	331	B/C:	10%	1.69	IRR:	23.80 %	= $	0
NPV: 15%	$	181	B/C:	15%	1.38				
REV'S-10%		417	490	635	757	816	816	816	816
CASH FLOW	-480	114	71	194	197	229	229	229	229
NPV: 8%	$	543	B/C:	8%	2.13				
NPV: 10%	$	459	B/C:	10%	1.96	IRR:	28.65 %	= $	0
NPV: 15%	$	287	B/C:	15%	1.60				
REV'S-20%		370	435	565	673	726	726	726	726
CASH FLOW	-480	67	16	124	113	139	139	139	139
NPV: 8%	$	115	B/C:	8%	1.24				
NPV: 10%	$	65	B/C:	10%	1.13	IRR:	12.99 %	= $	0
NPV: 15%	$	-37	B/C:	15%	0.92				

Of this amount, the Grossberger family will invest approximately $72,500 of its own funds toward working capital expenditures. Loan monies amounting to $407,500, of which 80% will be provided by the BCB and 20% from ICI funds, will finance the remaining working capital requirements ($311,500) and fixed investments ($96,000).

If Grossberger does not undertake this project, it will have to go out of business because the cost of imported turkey chicks is now too high. The financial analysis was therefore carried out as if this were a completely new project, except that sunk costs in existing fully depreciated fixed assets were not included.

The estimated internal rate of return on the entire incremental investment is 26.97%, with a return on equity IRR of 142%. The project's Net Present Value of cash flows, discounted at a cost of capital of 8% and based on an initial incremental investment of $480,000, is equal to $971,000.

6. Economic Analysis

The economic analysis of the project indicates a positive benefit cost ratio of 2.27. The sensitivity analyses indicate that the project remains viable even with costs increased by 20% or revenues decreased by up to 15%.

It is expected that this project will be approved shortly.

K. San Roque Ltda.

1. Background

San Roque Ltda. is a privately owned cattle ranch legally organized as a limited concern. It is located approximately 500 kms. outside of the city of Santa Cruz and 200 kms. from San Ignacio in a low altitude area with sufficient height to eliminate danger of flooding. The pasture land consists of 80% natural grasses and 20% planted grasses. The ranch is located on the Paraguay River. A number of tributaries are scattered throughout the property, plus a small lake. A secondary road from San Ignacio is accessible during the dry season, although during the rainy season air transportation is necessary to reach the property.

The project will enable San Roque to purchase a new breed of Nellore bloodline cattle stock, breed and raise calves and sell them to small cattle ranchers in the Santa Cruz Department. The small cattle ranchers will raise and fatten the Nellore calves for sale in the Santa Cruz market. In addition, the ranchers will use a portion of their mature Nellore bulls and cows for breeding purposes, thus increasing the size of their own herds of Nellore stock. A feasibility study of the project has been undertaken. The project is currently being reviewed by the Banco de Santa Cruz.

2. Linkages

The project will benefit both San Roque and the small cattle ranchers in the Department of Santa Cruz who will raise and sell the Nellore cattle they purchase from the San Roque ranch.

3. Production Plan

San Roque will purchase 2,000 cows and 170 bulls of nearly pure-breed Nellore blood. The project will also finance the planting of 50 hectares of pasture land for the production of cattle feed during the dry season when adequate natural pastures are scarce. The San Roque Ranch covers 20,426 hectares of land and can support a maximum of 5,107 head of cattle. Management expects to reach this level of production before the end of the second year of the project.

Raw materials required for the project include wood (which is abundant on the property) and fence wire, block salt, grass seed and vaccines, all of which are available in Santa Cruz. The Nellore cattle are sold by various large breeding ranches in the Department of Santa Cruz and will be shipped to the San Roque Ranch by truck and by air.

The project will require ten ranch hands and one foreman. In addition, the project expects to employ fifty part-time laborers throughout the year. The San Roque management team is considered qualified and experienced in the area of cattle breeding and production. The team consists of an agricultural engineer, a technical administrator and a general administrator.

4. Marketing Plan

According to the National Meat Board of the Ministry of Industry, Commerce and Tourism, the Department of Santa Cruz will have an estimated demand for beef, ranging from 24,436 tons in 1984 to 44,308 tons in 1990 (estimated consumer sales by weight). There exists additional demand from outside the department for 6,374 tons throughout 1984 which is projected to increase to 6,844 tons by 1990. Overall production of beef in Bolivia during this same time span is estimated to increase from 24,386 tons in 198 to 26,803 tons in 1990, resulting in a deficit of $24,349. Estancia San Roque itself proposes to produce 273 tons of beef under full production, or about one percent of the estimated 1990 supply. The projected deficit should induce existing ranchers to increase production of cattle. Therefore, San Roque should have no difficulty selling the calves it breeds to Santa Cruz cattlemen.

5. Financial Analysis

The total amount of the incremental investment is $1,287,000. It will be used as follows:

Cattle	$1,146,000
Construction (improvement of facilities for ranch hands, repair and improvement of air-strip, etc.)	38,000
Equipment and machinery (for pick-up truck, generator, radio equipment)	15,000
Pasture land (planting) 50 hectares	14,000
Other fixed assets	4,000
Working capital requirements	70,000
	$1,287,000

Of this amount, San Roque will invest approximately $484,000 from its own resources, primarily to cover the purchase of cattle, machinery and equipment, the cost of facility rennovation, and working capital. Total loan requirements are $803,000, 80% to be provided by the BCB ($642,400) and 20% ($160,600) by the Banco de Santa Cruz for the purchase of breeding cattle.

Project revenues are calculated based on a livestock weight price of $b. 160 per kilo (US$ 80 ¢ per kilo), derived from the sale of Nellore stock from San Roque to the small cattle ranchers in Santa Cruz. The estimated internal rate of return of the project is 7.15%. The estimated discounted rate of return on San Roque's own equity investment is 28.53%. A Net Present value of $361,000 is based on an initial incremental investment of $1,287,000, with the project's net cash flows discounted at an 8% cost of capital.

6. Economic Analysis

As mentioned, the project has relatively low IRR of 7.15%. Its economic benefit/cost ratio, with a 15% discount factor, is 0.91. accruing directly to San Roque have been included in the economic analysis. When benefits accruing to small cattle ranchers in the form of increased herds of quality livestock and grater sales revenues, along with direct and indirect employment stimulated by the project are included, the project will be found to be economically viable. At the same time, San Roque Ranch must investigate whether it can sell its calves at a higher price in order to increase the profitability of the project. Pending the outcome of the additonal required analyses, this project has not yet been included in the group to be initially financed with AID's additonal contribution to the A&A refinancing line.

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ESTANCIA SAN ROQUE
(Figures in Thousands of U.S. Dollars)

	Incremental Investment	Year 0	Year 1	Year 2	Year 3	Year 4	Year 5	Year 6	Year 7	Year 8	Year 9	Year 10
A. BALANCE SHEET												
Assets												
Current Assets	70		72	101	211	318	428	522	642	759	1,003	1,228
Non-Current Assets	1,217		1,067	917	767	617	467	320	173	26	22	–
Total Assets	1,287		1,139	1,018	978	935	895	842	815	785	1,025	1,228
Liabilities												
Current Liabilities	63		63	123	123	123	123	124	124	–	–	–
Non-Current Liabilities	740		740	617	494	371	248	124	–	–	–	–
Equity	484		484	484	484	484	484	484	484	484	484	484
Retained Earnings			(148)	(206)	(123)	(43)	40	110	207	301	541	744
Total Liabilities and Equity	1,287		1,139	1,018	978	935	895	842	815	785	1,025	1,228
B. INCOME STATEMENT												
Revenues												
- Sales			136	236	377	362	373	365	394	379	437	290
- Sale Costs			63	67	66	65	66	67	66	66	65	64
Gross Profit			73	169	311	297	307	298	328	313	372	326
Other Costs			157	163	169	168	168	169	170	169	29	26
Financial Costs			64	64	59	49	39	30	20	10	–	–
Net Income Before Taxes			(148)	(58)	83	80	100	100	138	134	343	290
Taxes = 35%			–	–	– *	– *	17*	30	41	40	103	87
Net Income After Taxes			(148)	(58)	83	80	83	70	97	94	240	203
C. CASH FLOW												
Net Income After Taxes			(148)	(58)	83	80	83	70	97	94	244	203
Plus Depreciations and Amortizations			150	150	150	150	150	147	147	147	4	22
Less Incremental Investment	(1,287)											
Total Monetary Cash Flow	(1,287)		2	92	233	230	233	217	244	241	244	225
D. FINANCIAL RATIOS												
1. Efficiency Ratios												
a. Return on Sales												
Net Income/Revenues			N.M.	N.M.	22.0%	22.1%	22.3%	19.2%	24.6%	24.8%	54.9%	53.4%
b. Return on Equity												
Net Income/Equity			N.M.	N.M.	23.0%	18.1%	15.8%	11.8%	14.0%	12.0%	23.4%	16.5%
c. Return on Assets												
Net Income/Assets			N.M.	N.M.	8.5%	8.6%	9.3%	8.3%	11.9%	12.0%	23.4%	16.5%
2. Debt Ratios												
a. Total Liabilities/Equity			2.39	2.66	1.71	1.12	.71	.42	.18	N.M.	N.M.	N.M.
b. Current Assets/Current Liabilities			1.14	.82	1.72	2.59	3.48	4.21	5.18	N.M.	N.M.	N.M.
c. Assets/Total Liabilities			1.42	1.38	1.59	1.89	2.41	3.40	6.57	N.M.	N.M.	N.M.

3. IRR = 7.15% Equity IRR = 28.53%

* Loss carried forward for tax purposes.

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USAID ECONOMIC ANALYSIS OF PROJECTS (US$ 000)

PRODUCTION OF COWS & BULLS FOR SALE TO SMALL FARMERS (ESTANCIA SAN ROQUE)

	YEAR 0	YEAR 1	YEAR 2	YEAR 3	YEAR 4	YEAR 5	YEAR 6	YEAR 7	YEAR 8	YEAR 9	YEAR 10
F.INVES'T	1287										
REVENUES		136	236	377	362	373	365	394	379	437	380
COSTS		70	80	85	83	84	88	89	88	90	86
CASH FLOW	-1287	66	156	292	279	289	277	305	291	347	294
NPV: 8%		$	361								
NPV: 10%		$	200								
NPV: 15%		$	-116								
B/C: 8%			1.28								
B/C: 10%			1.16								
B/C: 15%			0.91								
IRR:	12.97 %	= $	0								
COSTS+10%		77	88	94	91	92	97	98	97	99	95
CASH FLOW	-1287	59	148	284	271	281	268	296	282	338	285
NPV: 8%		$	305								
NPV: 10%		$	149								
NPV: 15%		$	-157								
B/C: 8%			1.24								
B/C: 10%			1.12								
B/C: 15%			0.88								
IRR:	12.24 %	= $	0								
COSTS+20%		84	96	102	100	101	106	107	106	108	103
CASH FLOW	-1287	52	140	275	262	272	259	287	273	329	277
NPV: 8%		$	249								
NPV: 10%		$	98								
NPV: 15%		$	-198								
B/C: 8%			1.19								
B/C: 10%			1.08								
B/C: 15%			0.85								
IRR:	11.47 %	= $	0								
REV'S-10%		122	212	339	326	336	329	355	341	393	342
CASH FLOW	-1287	52	132	254	243	252	241	266	253	303	256
NPV: 8%		$	140								
NPV: 10%		$	1								
NPV: 15%		$	-274								
B/C: 8%			1.11								
B/C: 10%			1.00								
B/C: 15%			0.79								
IRR:	10.01 %	= $	0								
REV'S-20%		109	189	302	290	298	292	315	303	350	304
CASH FLOW	-1287	39	109	217	207	214	204	226	215	260	218
NPV: 8%		$	-80								
NPV: 10%		$	-199								
NPV: 15%		$	-433								
B/C: 8%			0.94								
B/C: 10%			0.85								
B/C: 15%			0.66								
IRR:	6.79 %	= $	0								

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Annex B

Subprojects Being Developed

Name	Location	Amount	Use	Execution	Status
1. Planta de Alimentos Balanceados "Sachojere"	Beni	$ 560,500	Operating-Investment Capital	84 - 85	Feasibility Study
2. Curtiembre "Trinidad"	Beni	2,600,000	Operating-Investment Capital	84 - 85	Feasibility Study
3. Aserradero "Chimanes"	Beni	1,370,000	Operating-Investment Capital	84 - 85	Feasibility Study
4. Complejo Lechero "Trinidad"	Beni	566,000	Operating-Investment Capital	84 - 85	Feasibility Study
5. Empresa Agroindustrial "San Alberto"	Beni	110,000	Investment Capital	83 - 84	Approval BCB
6. Fábrica de Embutidos	Chuquisaca	17,500	Investment Capital	84	Consultation ICI
7. Pool de Maquinaria	Chuquisaca	2,500,000	Investment Capital	84 - 85	Consultation ICI
8. Perforación de Pozos	Chuquisaca	500,000	Investment Capital	84 - 85	Consultation ICI
9. Fábrica de Fideos	Chuquisaca	500,000	Operating-Investment Capital	84 - 85	Consultation BCB
10. Agrocentral - Fideos, Panadería, Tostadora Maní	Chuquisaca	75,000	Operating-Investment Capital	84	Consultation ICI
11. Curtiembre Vega	Chuquisaca	75,000	Operating-Investment Capital	84	Feasibility Study
12. Cooperativa Agropecuaria San Martín de "Iquiara"	La Paz	608,000	Investment Capital	84 - 85	Consultation ICI
13. Cooperativa Agroindustrial "Exaltación"	La Paz	600,000	Investment Capital	84 - 85	Consultation ICI
14. Avícola Coroico	La Paz	50,000	Operating-Investment Capital	83	Approval BCB
15. Alimentos Balanceados "Ferrari Ghezzi"	Oruro	290,000	Operating Capital	83	Approval BCB
16. Molinos y Fábrica de Fideos "Ana María"	Tarija	800,000	Operating-Investment Capital	84 - 85	Consutation ICI
17. Fábrica de Conservas "Gerardo Aguirre"	Tarija	70,000	Operating-Investment Capital	84 - 85	Consultation ICI
18. Molino de Cereales	Tarija	18,000	Operating-Investment Capital	84 - 85	Approval BCB
19. Empresa Frigorífica	Cochabamba	180,000	Operating-Investment Capital	84 - 85	Consultation ICI
20. Alimentos Balanceados Concentrados M.H.	Cochabamba	250,000	Operating-Investment Capital	83 - 84	Feasibility Study
21. Laboratorios Alvarez Edible Oil	Cochabamba	125,000	Operating Capital	83 - 84	Consultation ICI
22. Empremetal Silos	Cochabamba	150,000	Operating-Investment Capital	84 - 85	Feasibility Study
23. Primbol Flowers Export	Cochabamba	140,000	Operating Capital	83 - 84	Feasibility Study
24. ASAR Potato Conservation	Cochabamba	250,000	Operating-Investment Capital	83 - 84	Consultation ICI
25. Hacienda Playa Ancha Daisy	Cochabamba	50,000	Operating-Investment Capital	84 - 85	Consultation ICI
26. Curtiembre Alligator	Cochabamba	325,000	Operating-Investment Capital	84 - 85	Consultation ICI
27. Dillmann	Cochabamba	2,500,000	Operating Capital	83 - 84	Consultation ICI
28. Industrias Del Valle	Cochabamba	100,000	Operating Capital	83 - 84	Consultation ICI
29. COBEPAN - Almonds	Cochabamba	100,000	Operating Capital	83 - 84	Consultation ICI
30. Empresa Agroindustrial "La Chonta" (saw mill)	Santa Cruz	400,000	Operating-Investment Capital	83	Approval BCB

Name	Location	Amount	Use	Execution	Status
31. Alimenta S.R.L. (balanced food)	Santa Cruz	310,000	Operating-Investment Capital	83 - 84	Feasibility Study
32. Estancia San Juan (protein and aminoacid concentrates)	Santa Cruz	160,000	Operating-Investment Capital	83 - 84	ICI Approval
33. Granos del Oriente (silos)	Santa Cruz	765,000	Investment Capital	84 - 85	Feasibility Study
34. José Ontairo (manufacture of silos)	Santa Cruz	250,000	Operating-Investment Capital	83 - 84	ICI Approval
35. Federación de Ganaderos de Santa Cruz (Central de Abastecimiento de Insumos)	Santa Cruz	481,000	Operating-Investment Capital	84 - 85	Feasibility Study
36. Industrias Oleaginosas Edible vegetable oil	Santa Cruz	250,000	Raw material purchase (soybean)	84	Consultation ICI
37. Inabol Cassava starch	Santa Cruz	250,000	Instalation of centrifugues, separators and mill	84	Consultation ICI
38. Cambagras Manufacturing of soap, detergents made from animal fat.	Santa Cruz	250,000	Purchase of domestic inputs	84	Consultation ICI
39. Café Ideal Whole green coffee processing.	Santa Cruz	50,000	Relocation of facilities and purchase of inputs (coffee bean and sugar)	84	Consultation ICI
40. Café La Familia Whole green coffee processing.	Santa Cruz	25,000	Purchase of inputs (coffee bean and sugar)	84	Consultation ICI
41. El Palmar Chicken and hog farm. Manufacturing of balanced feed.	Santa Cruz	50,000	Swin racing facility	84	Consultation ICI
42. Hilandería Santa Cruz Manufacturing of cotton fabrics.	Santa Cruz	650,000	Purchase of replacement parts and raw materials.	84	Consultation ICI
43. IMBA Ltda. Manufacturing of balanced animal feed.	Santa Cruz	150,000	Purchase of inputs (corn)	84	Consultation ICI
44. Ingenio Arrocero La Asunta. Rice Processing	Santa Cruz	150,000	Purchase of inputs (rice)	84	Consultation ICI
45. Café Criollo Whole green coffee processing.	Santa Cruz	30,000	Purchase of inputs (coffee)	84	Consultation ICI
TOTAL		$ 19,701,000			

ANNEX C

MINISTERIO DE FINANZAS
BOLIVIA

La Paz, septiembre 21 de 1983

Señor
Henry H. Bassford
Director
USAID/Bolivia
Presente.

Señor Director:

En atención a las negociaciones y acuerdos arribados entre el Banco Central de Bolivia, Ministerio de Finanzas y USAID/Bolivia, mediante la presente solicitamos una ampliación del préstamo 511-T-060, Agroempresas y Artesanías, por diez millones de dólares americanos.

La ampliación de esta línea de refinanciamiento administrada por el Banco Central de Bolivia coadyuvará en la recuperación de la crisis económica que atraviesa el país otorgando refinanciamientos a la agroempresa y artesanía privada, los cuales resultarán en una mejora en las normas de vida y la dotación de oportunidades de trabajo a los sectores de ingresos medios y bajos.

La enmienda al proyecto requerirá en adición a los diez millones de dólares de préstamo, ochocientos mil dólares en calidad de donación que serán utilizados en asistencia técnica al Banco Central de Bolivia para mejorar su capacidad en los programas de refinanciamiento así como la de las instituciones de crédito intermediario para mejorar el análisis de solicitudes de préstamos y la administración de los mismos.

En espera de una buena acogida a la presente solicitud, me suscribo de usted con toda atención.

Fernando Baptista Gumucio
MINISTRO DE FINANZAS

Annex D

Revised Checklists

5C(2) PROJECT CHECKLIST

Listed below are statutory criteria applicable to projects. This section is divided into two parts. Part A. includes criteria applicable to all projects. Part B. applies to projects funded from specific sources only: B.1. applies to all projects funded with Development Assistance Funds; B.2. applies to projects funded with Development Assistance loans, and B.3. applies to projects funded from ESF.

CROSS REFERENCES: IS COUNTRY CHECKLIST UP TO DATE? HAS STANDARD ITEM CHECKLIST BEEN REVIEWED FOR THIS PROJECT?

A. GENERAL CRITERIA FOR PROJECT

1. FY 1982 Appropriation Act Sec. 523; FAA Sec. 634A; Sec. 653(b).

   (a) Describe how authorizing and appropriations committees of Senate and House have been or will be notified concerning the project; (b) is assistance within (Operational Year Budget) country or international organization allocation reported to Congress (or not more than $1 million over that amount)?

   Appropriate Congressional Notifications have been sent.

2. FAA Sec. 611(a)(1). Prior to obligation in excess of $100,00, 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?	Already completed in PP Amendment.
3. FAA Sec. 611(a)(2). If further legislative action is required within recipient country, what is basis for reasonable expectation that such action will be completed in time to permit orderly accomplishment of purpose of the assistance?	N/A.
4. FAA Sec. 611(b); FY 1982 Appropriation Act Sec. 501. If for water or water-related land resource construction, has project met the standards and criteria as set forth in the Principles and Standards for Planning Water and Related Land Resources, dated October 25, 1973? (See AID Handbook 3 for new guidelines.)	N/A.
5. FAA Sec. 611(e). If project is capital assistance (e.g., construction), and all U.S. assistance for it will exceed $1 million, has Mission Director certified and Regional Assistant Administrator taken into consideration the country's capability effectively to maintain and utilize the project?	N/A

6.	FAA Sec. 209. Is project susceptible to execution as part of regional or multilateral project? If so, why is project not so executed? Information and conclusion whether assistance will encourage regional development programs.	No.
7.	FAA Sec. 601(a). Information and conclusions whether project will encourage efforts of the country to: (a) increase the flow of international trade; (b) foster private initiative and competition; and (c) encourage development and use of cooperatives, and credit unions, and savings and loan associations; (d) discourage monopolistic practices; (e) improve technical efficiency of industry, agriculture and commerce; and (f) strengthen free labor unions.	(a) and (b) yes, definitely; (c) to the extent subloans are made to cooperatives and credit unions, if could; (d) and (e) yes (f) no.
8.	FAA Sec. 601(b). Information and conclusions on how project will encourage U.S. private trade and investment abroad and encourage private U.S. participation in foreign assistance programs (including use of private trade channels and the services of U.S. private enterprise).	Project targeted for Bolivian private sector. U.S. private sector free to participate with Bolivian investors in subprojects, but this is not expected.

9.	FAA Sec. 612(b), 636(h); FY 1982 Appropriation Act Sec. 507. 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.	Bolivian contribution to project is the maximum that can prudently be expected under current economic conditions.
10.	FAA Sec. 612(d). Does the U.S. own excess foreign currency of the country and, if so, what arrangements have been made for its release?	No.
11.	FAA Sec. 601(e). Will the project utilize competitive selection procedures for the awarding of contracts, except where applicable procurement rules allow otherwise?	Yes.
12.	FY 1982 Appropriation Act Sec. 521. 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?	Yes. No.
13.	FAA 118(c) and (d). Does the project comply with the environmental procedures set forth in AID Regulation 16? Does	Yes.

the project or program take into consideration the problem of the destruction of tropical forests?	N/A.
14. FAA 121(d). If a Sahel project, has a determination been made that the host government has an adequate system for accounting for and controlling receipt and expenditure of project funds (dollars or local currency generated therefrom)?	N/A.

B FUNDING CRITERIA FOR PROJECT

1. Development Assistance Project Criteria

a. FAA Sec. 102(b), 111, 113, 281(a). Extent to which activity will (a) effectively involve the poor in development, by extending access to economy at local level, increasing labor-intensive production and the use of appropriate technology, spreading investment out from cities to small towns and rural areas, and insuring wide participation of the poor in the benefits of development on a sustained basis, using the appropriate U.S. institutions; (b) help develop cooperatives, especially by technical assistance, to assist rural and urban poor to help themselves toward better life, and	(a) Subprojects must have beneficial linkages to the poor to be eligible for refinancing. (b) Project could assist cooperatives financially, as noted above.

otherwise encourage democratic private and local governmental institutions; (c) support the self-help efforts of developing countries; (d) promote the participation of women in the national economies of developing countries and the improvement of women's status; and (e) utilize and encourage regional cooperation by developing countries?	(c) Project will support private banks and private enterprises to take steps necessary to become more self-sufficient under current economic conditions. (d) No barriers to participation of women in project-funded activities. (e) No affect.
b. FAA Sec. 103, 103A, 104, 105, 106. Does the project fit the criteria for the type of funds (functional account) being used?	Yes.
c. FAA Sec. 107. Is emphasis on use of appropriate technology (relatively smaller, cost-saving, labor-using technologies that are generally most appropriate for the small farms, small businesses, and small incomes of the poor)?	Appropriate technologies that help earn a profit will be employed
d. FAA Sec. 110(a). Will the recipient country provide at least 25% of the costs of the program, project, or activitiy with respect to which the assistance is to be furnished (or is the latter cost-sharing requirement being waived for a "relatively least developed" country)?	Yes. No waiver.

e. FAA Sec. 110(b). Will grant capital assistance be disbursed for project over more than 3 years? If so, has justification satisfactory to Congress been made, and efforts for other financing, or is the recipient country "relatively least developed"? (M.O. 1232.1 defined a capital project as "the construction, expansion, equipping or alteration of a physical facility or facilities financed by AID dollar assistance of not less than $100,000, including related advisory, managerial and training services, and not undertaken as part of a project of a predominantly technical assistance character.	No.
f. FAA Sec. 122(b). Does 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?	Yes.
g. FAA Sec. 281(b). Describe extent to which program recognizes the particular needs, desires, and capacities of the people of the country; utilizes the country's intellectual resources to encourage	See PP Amendment.

institutional development; and supports civil education and training in skills required for effective participation in governmental processes esential to self-government.

2. Development Assistance Project Criteria (Loans Only)

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

Bolivia should be able to repay the loan on the terms contemplated.

b. 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% of the enterprise's annual production during the life of the loan?

N/A.

c. ISDCA of 1981, Sec. 724 (c) and (d). If for Nicaragua, does the loan agreement require that the funds be used to the maximum extent possible for the private sector? Does the project provide for monitoring under FAA Sec. 624(g)?

N/A.

3. Economic Support Fund Project Criteria

a. FAA Sec. 531(a). Will this assistance promote economic or political

STANDARD ITEM CHECKLIST

A. Procurement

1. FAA Sec. 602. Are there arrangements to permit U.S. small business to participate equitably in the furnishing of commodities and services financed?	Yes.
2. FAA Sec. 604(a). Will all procurement be from the U.S. except as otherwise determined by the President or under delegation from him?	Yes.
3. 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?	Bolivia does not so discriminate.
4. FAA Sec. 604(e); ISDCA of 1980 Sec. 705(a). If offshore procurement of agricultural commodity or product is to be financed, is there 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.)	N/A.
5. FAA Sec. 604(g). Will construction of engineering services be procured from firms of countries otherwise eligible under Code 941, but which have attained a competitive capability in international markets in one of these areas?	N/A.
6. FAA Sec. 603. Is the shipping excluded from compliance with requirement in section 901(b) of the Merchant Marine Act of 1936, as amended, that at least 50 percentum 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 that such vessels are available at fair and reasonable rates.	No.
7. FAA Sec. 621. If technical assistance is financed, will such assistance be furnished by private enterprise on a contract basis to the fullest extent practicable? If the facilities of other Federal agencies will be utilized, are they particularly suitable, not competitive with private enterprise, and made available without undue interference with domestic programs?	Yes.

8. International Air Transport. Fair Competitive Practices. Act. 1974. 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.

9. FY-1982 Appropriation Act Sec. 504. If the U.S. Government is a party to a contract for procurement, does the contract contain a provision authorizing termination of such contract for the convenience of the United States? Yes.

B. Construction

1. FAA Sec. 601(d). If capital (e.g. construction) project, will U.S. engineering and professional services to be used? N/A.

2. FAA Sec. 611(c). If contracts for construction are to be financed, will they be let on a competitive basis to maximum extent practicable. N/A.

3. FAA Sec. 620(k). If for construction of productive enterprise, will aggregate value of assistace to be furnished by the U.S. not exceed $100 million (except for productive enterprises in Egypt that were described in the CP)? N/A.

C. Other Restrictions

1. FAA Sec. 122(b). If development loan, is interest rate at least 2% per annum during grace period and at least 3% per annum thereafter? Yes.

2. 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? N/A.

3. 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 Communist-bloc countries? Yes.

4. Will arrangements preclude use of financing:

a. FAA Sec. 104(f); FY 1982 Appropriation Act Sec. 525: (1) To pay for performance of abortions as a method of family planning or to motivate or coerce persons to Yes.

practice abortions; (2) to pay for involuntary sterilization as method of family planning, or coerce or provide financial incentive to any person to undergo sterilization; (3) to pay for any biomedical research which relates, in whole or part, to methods or the performance of abortions or involuntary sterilizations as a means of family planning; (4) to lobby for abortion?

b. FAA Sec. 620(g). To compensate owners for expropriated nationalized property? — Yes.

c. FAA Sec. 660. To provide training or advice or provide any financial support for police, prisons, or other law enforcement forces, except for narcotis programs? — Yes.

d. FAA Sec. 662. For CIA activities? — Yes.

e. FAA Sec. 636(i). For purchases, sale, long-term lease, exchange or guaranty of the sale of motor vehicles manufactured outside U.S., unless a waiver is obtained? — Yes.

f. FY 1982 Appropriation Act, Sec. 503. To pay pensions, annuities, retirement pay, or adjusted service compensation for military personnel? — Yes

g. FY 1982 Appropriation Act, Sec. 505 To pay U.S. assessments, arrearages or dues? — Yes.

h. FY 1982 Appropriation Act, Sec. 506. To carry out provisions of FAA section 209(d) (Transfer of FAA funds to multilateral organizations for lending)? — Yes.

i. FY 1982 Appropriation Act, Sec. 510. To finance the export of nuclear equipment, fuel, or technology or to train foreign nationals in nuclear fields? — Yes.

j. FY 1982 Appropriation Act, Sec. 511. Will assistance be provided for the purpose of aiding the efforts of the — No

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government of such country to repress the legitimate rights of the population of such country contrary to the Universal Declaration of Human Rights.

k.	FY 1982 Appropriation Act, Sec. 515. To be used for publicity or propaganda purposes within U.S. not authorized by Congress?	Yes

SUMMARY DESCRIPTION OF BOLIVIAN DEVELOPMENT CREDIT SYSTEM

A. The Structure of the Bolivian Development Credit System

Development credit is administered by the Banco Central de Bolivia (BCB) through the nation's banking system by means of refinancing facilities. The Bolivian banking system is made up of the BCB, nineteen private commercial banks (13 national and six foreign), one public commercial bank, and six development banks (3 private and 3 public). Fifteen of these 26 banks currently participate in the BCB's refinancing activities: 11 private commercial banks, the one public commercial bank and three development banks. The National Federation of Credit Unions (FENACRE) also has recently been included in the list of ICIs eligible to participate in the BCB's refinancing activities.

Through branch offices, the commercial banking system reaches virtually every region of Bolivia. The nineteen private commercial banks have more than 90 branches throughout Bolivia. The Banco del Estado, the only state-owned commercial bank, has its central office and three branches in La Paz and 44 agencies around the country. The development banks also have offices in La Paz and in other major cities. FENACRE is made up of more than 180 credit unions distributed throughout the urban and rural areas of the country.

The BCB's refinancing facilities are managed by the Development Department of the BCB, with the assistance of two BCB agencies and five regional technical offices. The Department was created in 1967 to manage AID-financed credit lines (FRA-1, FRA-2, FRI and the Special Fund for Development), the Productive Credit Guarantee Program and Technical Assistance Fund.

B. Refinancing Lines Initiated with AID Assistance

1. Special Fund for Economic Development

In 1967, USAID assisted in the creation of a new channel for financing development projects. It was agreed with the GOB to deposit the peso reflows of Loans 511-L-014 ($5,000,000) and 511-L-029 ($1,100,000) to COMIBOL and Loan 511-L-032 ($4,750,000) to ENDE in the Central Bank to form the Special Fund for Development (SFD). The SFD is administered by the BCB for relending through ICIs for industry, agriculture and livestock, export industries, civil construction and housing.

2. Agricultural Refinancing Fund - FRA 1

Loan 511-L-042, valued at $8,000,000, was signed in 1971. FRA 1 finances loans for production, storage and marketing of wheat, corn, edible oil, animal feeds, milk and milk products.

3. Basic Food Production - FRA 2

In view of the need to provide financing for loans to small farmers, loan 511-T-052 was signed in 1975 for $8,000,000 with a $3,000,000 counterpart contribution from GOB. The program finances the production, processing, and marketing of basic foods such a wheat, corn, sorghum, rice, quinoa, soy beans, potatoes, peanuts, milk products, fruit, poultry, forrage and cattle. The maximum amount of each production subloan is $5,000 for periods of up to two years for working capital and ten years for investment capital.

4. Industrial Refinancing Fund (FRI)

Loan 511-L-043 was signed in 1972 for $7,000,000 and was developed to finance subloans for the creation, expansion and modernization of industrial enterprises.

C. Other AID-Assisted BCB Programs

1. Productive Credit Guaranty Program (PCGP)

The principal objective of the PCGP in Bolivia is to facilitate the provision of credit to persons or groups who presently cannot borrow because they do not possess sufficient collateral to meet the requirements of lending institutions. The program established in 1978 a fund in the BCB for the purposes of guarantying 75% of eligible loans made by private financial institutions in Bolivia. The fund is capitalized with a guaranty commission of 10% on each loan made under the system. It is backed by $ 2.5 million in AID guaranty authority and $ 1.25 million by the BCB. Funds for lending come from the resources of the participating financial institutions or from the refinancing lines administered by the BCB. Eligible loans must fall into one of the following categories: 1) agricultural production and related infrastructure and services; 2) small scale, privately owned agro-industries; 3) business enterprises located in rural areas or market towns; 4) artisanry projects located in rural or urban areas; 5) self-financing, self-help community development projects; or 6) rural housing. Although the PCGP authority will terminate at the end of fiscal year 1983, the Mission has requested that AID Washington extend the guarantee authority through December 31, 1985, to allow for fund leveraging and overall program demand to be met.

2. Technical Assistance Fund (TAF)

The TAF was initiated under the A&A Project but was later enlarged to cover all of the refinancing lines administered by the Central Bank. The TAF finances pre-investment assistance to investors, promotion, training, and information activities. One of its principal purposes is to assist potential investors with feasibility studies and the filling out of the BCB's detailed loan application forms.

D. Other BCB Refinancing Facilities

1. BCB's Own Resources

The BCB has budgeted $b. 3,245,000,000 of its own funds to create its own refinancing line. Under it, subloans are a refinancial for construction, tourism, industry, agriculture, services, printing, rural housing, restaurants and hotels.

2. Cattle Fund

The IDB has loaned $7,000,000 and BCB has contributed $2,000,000 to establish a cattle fund. This fund is designed to promote cattle breeding and raising in the Chaco area of the Departments of Tarija, Chuquisaca and Santa Cruz.

3. IDB Agricultural Credit

In March 1983 the IDB signed a loan for agriculture and cattle production of $32,000,000 with a GOB participation of $11,000,000. The activities of this loan will be carried out only in the Departments of Santa Cruz, Chuquisaca, Tarija and Potosí.

4. IDB Mining Credit

Also in March 1983, another IDB loan for $15,000,000 with a GOB counterpart contribution of $8,400,000 was signed for the mining sector and industrial reactivation. Disbursements from the above two loans have not yet begun.

5. CAF Industry Credit

A loan with the Andean Development Corporation (CAF) was signed in March 1983. This loan for $15,000,000, with a $3,750,000 GOB participation, will be used for industrial reactivation.