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Attached herewith are seven copies of Project Evaluation for Project N°511-T-053, Agricultural Sector I.

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PAGE 1 OF PAGES 1

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PROJECT EVALUATION SUMMARY (PES) PART I

Report Symbol

1. PROJECT TITLE

Agricultural Sector I

2. PROJECT NUMBER
511-T-053

3. MISSION/AID/W OFFICE
USAID/Bolivia

4. EVALUATION NUMBER (Enter the number maintained by the reporting unit e.g., Country or AID/W Administrative Code, Fiscal Year, Serial No. beginning with No. 1 each FY) 78-4

☒ REGULAR EVALUATION ☐ SPECIAL EVALUATION

5. KEY PROJECT IMPLEMENTATION DATES

A. First PRO-AG or Equivalent	B. Final Obligation Expected	C. Final Input Delivery
FY 76	FY 79	FY 79

6. ESTIMATED PROJECT FUNDING ($000)

A. Total	$
B. U.S.	$ 9,200

7. PERIOD COVERED BY EVALUATION

From (month/yr.) 8/24/77

To (month/yr.) 9/24/78

Date of Evaluation Review

8. ACTION DECISIONS APPROVED BY MISSION OR AID/W OFFICE DIRECTOR

A. List decisions and/or unresolved issues; cite those items needing further study. (NOTE. Mission decisions which anticipate AID/W or regional office action should specify type of document, e.g., airgram, SPAR, PIO, which will present detailed request.)	B. NAME OF OFFICER RESPONSIBLE FOR ACTION	C. DATE ACTION TO BE COMPLETED
1) Revise Terminal Disbursement Date for construction of Agriculture Service Centers.	Richard T. Peters	Approximately April 1979
2) Increase Emphasis on University participation in MACA's regional reasearch activity.	Richard Peters	September 1979
3) Complete Staffing & Development of MACA's Ext. Service	Richard Peters	September 1979
4) Press for more extension agents to be hired by GOB as agreed to in original project documentation.	Richard Peters	September 1979
5) MACA's Economic & Statistics Office will begin publishing time series (quarterly) reports on agricultural production, crop forecasts and agricultural consumption.	Richard Peters	September 1979
6) Initiate talks with officials of Santa Cruz city government to resolve issue on the publishing of quarterly reports on price and marketing of agricultural products and inputs.	Richard Peters	September 1979

9. INVENTORY OF DOCUMENTS TO BE REVISED PER ABOVE DECISIONS

- ☐ Project Paper
- ☐ Implementation Plan
- ☐ Other (Specify)
- ☐ Financial Plan
- ☐ PIO/T
- ☐ Logical Framework
- ☐ Other (Specify)
- ☐ Project Agreement
- ☐ PIO/C

10. ALTERNATIVE DECISIONS ON FUTURE OF PROJECT

- ☐ Continue Project Without Change
- ☐ Change Project Design as Described Above
- ☐ Suspend Implementation Pending Review
- ☐ Terminate Project

11. PROJECT OFFICER AND HOST COUNTRY OR OTHER RANKING PARTICIPANTS AS APPROPRIATE (Names and Titles)

Richard T. Peters, Project Manager

12. Mission/AID/W Office Director Approval Signature

Typed Name

Daniel A. Craig, Acting Director

Date

Page 2 of 3

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13. Summary

This project has now entered its final year with definite prospects that the TDD will have to be extended due to construction being behind time.

The major purpose of technology development will be achieved in this project. This loan has significantly helped to develop the IBTA institutional capability for agricultural research.

The major purpose of improved technology extension has not yet been significantly achieved with this loan because basic policy changes beyond the scope of this project, were not made.

Agricultural credit for the small farmer has been improved in several ways. More money is now available for small farm credit and handling of small farmer credit has been accelerated.

14. Evaluation Methodology

This is a regular annual evaluation. The data used for this evaluation was collected from monthly reports, special reports and letters, conversations and personal observation.

Special contributions outside the USAID office of Rural Development included Ing. Francisco Pereira who is the Director of National Extension and Ing. Aníbal Guzmán, the Head of the Ministry of Agriculture Seed Department.

The main portion of this report was done by the USAID project manager, Richard J. Peters. Additional inputs were received from the RDD Economists, Barry Wine and Isaac Torrico, as well as some assistance from RDD Agronomist, Juan Starr.

15. Documents to be Revised

An Implementation letter will have to be issued extending the terminal disbursement date. The decision concerning necessity and length of extension will be made by April 1979.

16. External Factors

Project assumptions, as noted in the log frame, remain valid. Some, however, must be re-examined.

There are two assumptions for achieving the sub-goal targets, i.e.: number 5 "That adequate markets exist and function properly to absorb increased agricultural production" and number 7 "that farmers in target areas will have access to adequate credit."

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CID Economist, Dr. Allan LeBaron[1] presented his report on the status of the agricultural market in Bolivia. He presented the rather bleak opinion that most major small farm commodities cannot be significantly increased without surplus production and thus, decreased prices. Actually, the small farmer has several options. Potato growers often are forced to allow land to fallow, so that nematodes and other specific pest populations will decline. A farmer can plant wheat as an alternative crop and he will plant wheat if appropriate policies are formulated to encourage wheat production. Since Dr. LeBaron wrote his paper a significant demand for malted barley has developed, which could be another alternative for the small farmer. In addition, the production of quinua in the Altiplano could be increased to respond to the apparently increasing demand for this food product.

In the lowlands, the small farmer crops of rice, corn and oilseeds still have opportunity for expansion. Brazil is importing 2 million tons of corn this year from the USA. Oilseed production is still below national demand. Rice, if quality can be upgraded, may have a foreign market.

The flow of capital from the central government to the Bolivian Agricultural Bank has been erratic. The government's delay has resulted in funds not always being available to farmers at critical times. This has had an adverse effect on small farmer confidence in the agricultural credit system.

Assumptions for technology development include: 1. "that GOB will make available adequate funds to hire and retain qualified research staff, and to provide the necessary research budget." 2. "that technical assistance in the areas of animal and poultry production will continue to be provided by other donors."

Both these assumptions have not been completely valid in the reporting period. The GOB has cut its budget in agricultural research, which has hampered full utilization of technical assistance and reduced outputs of adequate new technology.

Technical assistance in animal and poultry production technology has been inadequate.

It was also assumed that the GOB would make available adequate funds to retain, support and expand the field efforts of the extension agents. The extension service has been maintained at above the same level as it was at the beginning of this loan period.

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[1] "Raising Campesino Incomes in the Short-Run" Allan LeBaron, CID Working Paper No. 011/70, May 1970.

17. Evaluation Findings About Goal/Subgoal

Sector Goal:

"To increase per capita income and standard of living of rural people."

Status

Under the Sector Goal within the Logical Framework, one of the Objective Verifiable Indicators was an increase in GDP for the agricultural sector from 2,320 million Bolivian pesos in 1975 to 2,611 millions in 1979 in constant terms. This is an increase over the period of 12.5 percent, or about 3 percent annually.

However, official figures of the Bolivian Central Bank for the GDP from 1972 to 1976 are presented in Table 1. It appears as though the figures originally stated in the Logical Framework are erroneous.

If the same rate of increase is projected (3% annually) from 1972 to 1979 using the Central Bank's figures, this would imply a positive change in GDP from 2,512 million Bolivian pesos in 1972 to 3,089 million Bolivian pesos in 1979 in constant terms. It may be observed that over the four year period for which official data exist (1972-76), the annual rate of increase has been 5 percent, considerably higher than the projected 3 percent.

TABLE 1

GROSS DOMESTIC PRODUCT CORRESPONDING TO THE AGRICULTURAL SECTOR (IN MILLIONS OF BOLIVIAN PESOS)

YEAR	1970 PESOS	CURRENT PESOS
1972	2,512	3,099
1973	2,628	4,738
1974 1/	2,725	8,265
1975	2,907	9,022
1976	3,099	10,006

1/ preliminary

Source: Banco Central de Bolivia: Cuentas Nacionales, La Paz June 1978.

Ketype

The attainment of this goal is also to be measured by the increase in the share of production of the small farm sector. In 1975, this was 47% and by 1979 this is supposed to reach 60%. The National Socio-Economic Farm Survey now being carried out under the Farm Policy project should provide this information by March or April of 1979.

The sub-goal "Increased production and increased factor productivity of basic food crops and livestock produced in the small farm sub-sector of the inter mountain valleys of Central Bolivia and the developing areas of the low lands of Eastern Bolivia." Measures of sub-goal achievement are to be based on the following: 1. Total production; 2. annual rates of growth; and 3. per hectare yields. Results are presented in the tables 2 and 3.

A fourth measure of sub-goal achievement is "Project impact by end of 1979 on 16,500 farm families of target group.

	1972	1979
Gross farm sales	$50	$600
Per family income	225	350
Per capita income	45	70

This information will become available from the National Socio-Economic Farm Survey.

8. Evaluation Findings About Purpose

The project has four purposes:

1. Technology Development: "To develop improved technologies for use by the small farm sector of the inter mountain valleys of Central Bolivia and the Eastern agricultural lands."

Objectively Verifiable Indicators

a) "A set of specific recommendations developed for adoption at the farm level for (1) increasing production of corn, wheat, barley, rice, soybeans, potatoes, and peanuts; (2) production of high yielding vegetables and (3) improving management practices for increased output of dairy products, poultry and pork."

Status

A set of specific recommendations have been developed for adoption at the farm level for increasing production of corn, wheat, barley, rice, soybeans, potatoes and peanuts.

TABLE 2

PRODUCTION OF KEY CROPS IN BOLIVIAN CENTRAL VALLEYS AND LOWLANDS 1972-78 (IN METRIC TONS)

Crops	1971-73 Average	1972	1973	1974	1975	1976	1977 1/	1978 2/	1976-78 Average	Goal	% 1976-78 of Goal	Rates of Annual Growth: Goal 1971 73/79	Rates of Annual Growth: 1971-73 1976-78
Wheat	52,563	53,790	57,000	62,460	61,750	69,815	48,085	59,925	59,275	66,158	89.6	3.[illegible]	1.82
Corn	280,307	268,500	275,820	276,660	305,000	342,120	299,190	351,135	324,148	355,236	91.2	3.44	1.95
Barley	69,400	70,100	72,400	75,120	79,600	91,770	59,805	74,815	75,463	82,490	91.5	2.50	1.09
Rice	73,824	85,240	77,810	85,235	126,560	113,045	111,715	88,580	104,447	105,646	98.9	5.25	5.19
Soybeans	1,933	1,200	3,400	8,000	11,930	15,370	8,855	26,225	16,817	5,142	327.1	15.0	96.25
Potatoes	710,000	703,585	729,705	749,460	834,050	823,890	678,560	793,000	765,150	966,241	79.2	4.50	0.97
Peanuts	7,560	10,100	11,750	14,500	15,300	14,290	16,045	17,550	15,962	12,632	126.4	7.61	13.89
Yuca	240,333	242,200	245,000	269,500	285,350	304,700	294,400	306,250	301,783	330,792	91.2	4.67	3.20
Vegetables 3/	191,533	NA	NA	NA	223,785	209,055	204,885	204,900	206,280	222,259	92.8	2.15	0.96
Pork	18,000	18,120	22,201	23,310	24,670	25,800	27,000	27,100	26,633	23,221	114.7	3.71	6.00
Milk	114,000									141,196		3.10	

Source: MACA Office of Statistics.
1/ Nationwide drought occurred in this year.
2/ Estimates based on production during first quarter of year.
3/ Sweet corn, onions, tomatoes, green peas.

NOTE: 1977 was a year of nationwide drought in which production declined considerably from the previous year. 1978 was a year of recuperation, but in most cases production did not reach pre-1977 levels. Consequently, a three-year average (1976-78) was used as a point of comparison with the production goals established in the logical framework of 053, since the average appeared to be more representative of overall progress than did the single year 1978. It should be noted that production of five crops in 1976 surpassed the goals, with corn, potatoes, vegetables and yuca falling short.

TABLE 3

YIELDS ON KEY CROPS IN BOLIVIAN CENTRAL VALLEYS AND LOWLANDS 1972-73 (IN KG/HA)

Crops	1971-73 Average	1972	1973	1974	1975	1976	1977 4/	1978 5/	1975-78 Average	Goal	% 1975-78 of Goal
Wheat	821	836	828	849	803	864	655	750	756	970	77.9
Corn	1,280	1,252	1,282	1,260	1,325	1,453	1,228	1,292	1,324	1,522	87.0
Barley	687	694	697	696	713	793	534	650	659	817	80.7
Rice	1,643	1,663	1,666	1,600	1,700	1,575	1,707	1,610	1,631	1,643	99.3
Soybeans	1,611	1,500	1,700	1,379	1,266	1,270	1,200	1,450	1,307	1,611	81.1
Peanuts	1,204	1,403	1,399	1,510	1,500	1,300	1,315	1,200	1,272	1,204	105.6
Potatoes	6,567	6,285	6,312	6,340	6,532	6,422	5,406	6,100	5,976	8,937	66.9
Yuca	13,109	13,308	13,032	12,913	13,101	13,850	12,800	12,500	13,050	13,109	99.5
Vegetables 1/	3,563	NA	NA	NA	3,861	3,623	3,573	3,633	3,610	3,563	101.3
Pork 2/	32.4						35	35		37.3	
Milk 3/	7.8									9.0	

Source: MACA Office of Statistics.

1/ Sweet corn, onions, tomatoes, green peas
2/ Kg. per animal dressed weight
3/ Lbs. of milk for cow
4/ A nationwide drought occurred in this year
5/ Estimates based on production during first quarter of year

No work has been done with production of high yielding vegetables, nor to improve management practices for increased output of dairy products, poultry and pork. Both were to have been carried out by MACA/IBTA with funds from other sources.

b) "Three regional Agricultural Service Centers, located in the target areas each staffed with at least 10 trained Bolivians planning, executing, and managing research, and extension programs relevant to specific production problems."

Status

The construction of three regional agricultural service centers is soon to start. This projected construction has been hindered by lack of land titles and poor design preparation, but these problems have now been resolved.

Long term participants, trained under this project, are now beginning to return and are taking up assignments to manage planning, research and extension programs.

c)"The MACA Research Division with 10 M.S. level Bolivians, identifying critical problem areas requiring research by Regional Agricultural Research and Service Centers."

"A total of eight M.S. trained Bolivians are assigned to the experiment stations of Toralapa, San Benito, Chinoli and Saavedra. Two of these are currently in training.

Most research at the experiment stations has been highly repetitive and very little evaluation of each years work has been used to guide the following years research. Recently, the technical assistance contractor, Consortium for International Development, pointed out the redundancy of research and is suggesting that more firm guidance be given the IBTA leadership. As a result, IBTA has requested that CID supply a counterpart for the IBTA Director.

d) "Two universities actively participating in MACA regional research activity and offering an expanded curriculum of relevant courses (including farm management, credit and marketing) and raising the level of educational qualification of faculty members in plant and animal sciences."

Status

The universities of San Simón in Cochabamba and René Moreno in Santa Cruz have expanded their curriculum of relevant courses to

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include entomology, irrigation and engineering, and several of the faculty members are receiving advanced training under loan T-053.

There is very little active participation from the universities in the MACA/IBTA research programs. What little has occurred has been the result of the Consortium for International Development staff initiative. This situation is expected to improve as commodities purchased under the loan begin to be utilized.

2. Technology Extension: "To extend to small farm operators in target areas improved technologies and modern production practices."

Objectively Verifiable Indicators

a) "Central MACA Extension Service staffed with two MS level extension programmers, developing, planning and directing extension programs."

Status

According to a study conducted by Dr. Howard Kay and completed in October 1978, the extension system in Bolivia remains woefully inadequate. It is apparent that little, if any, extension planning is carried out at the national office level. There is, perhaps, some planning carried out in some of the regional offices such as Cochabamba, even there, however, planning in extension is obviously inadequate.

b) "Forty additional trained extensionists, including 10 subject matter specialists, (for a total of 80 extensionists) planning, executing and managing regional extension programs."

Status

No additional extension agents have been employed. An approach has been suggested in Santa Cruz by the head of CIAT to create "sub-agents" out of farmers. This may be a more practical solution than adding more fully trained extension agents. Unfortunately CIAT has not yet attempted to implement this idea.

c) "MACA Extension Division extends results of research studies to farmers in target areas as follows:

1976	1977	1978	1979"
2,000	3,500	4,500	5,500

Status

There are, at present, eight extension agents in the Santa Cruz department and sixteen agents in the Cochabamba department.

To reach 4,500 farmers each extension agent would have had to reach an average of 187 farmers. Taking into consideration the existing communication systems, the lack of vehicles available to the extension service and the dispersion of small farmers in the Santa Cruz department, it is highly doubtful that 4,500 farmers were effectively reached with better technology. Even so, the IBTA chief of extension claims that improved technology has reached 4186 families.

d) "Distribution of improved seed by MACA among small farmers in target areas increases from 20,010 qq. in 1974 to 49,920 qq. in 1979."

Status

In the following table the details of seed production and distribution are shown:

PRODUCTION AND DISTRIBUTION OF SEED
CWT

	1975/76		1976/77		1977/78	
	Prod.	Dist.	Prod.	Dist.	Prod.	Dist.
Corn	-	-	-	-	1,500	1,500
Hard Corn	1,000	1,000	2,950	2,800	-	-
Wheat	14,000	9,000	10,000	7,000	10,400	4,000
Soybeans	5,000	5,000	4,500	4,500	9,000	9,000
Rice	300	300	3,500	1,000	-	-
Barley	-	50	50	-	600	300
Oats	100	100	100	100	100	100
Potatoes	2,500	2,500	5,350	3,500	1,700	1,700
Pasture	50	50	50	50	-	-
Total	22,950	17,950	26,500	19,950	23,300'	16,600'
% Dist.		78.2%		74.9%		71.2%

' Excess production is destroyed.

In 1978 the corn production was diminished because one 100 hectare producer contracted by the Seed Department had financial problems.

Rice seed multiplication was suspended in 1977/78 because of lack of demand from farmers. Pasture seed production was suspended because the SEFO-UMSS Co. has undertaken that responsibility.

While the seed department has a capacity to produce 50,000 cwt. or more of improved seed, demand for seeds from farmers does not reach this level for the following reasons:

1) Lack of an adequate marketing policy.

2) Lack of liaison between the credit program and improved seed.

3) Lack of an integral plan related to the various institutions.

4) Lack of an adequate extension service.

5) The seed programs' reputation with farmers is poor because of inadequate production technology and control.

e) "Number of days spent in field per extension agent increases by 100%." According to Ing. Francisco Pereira, IBTA Chief of Extension, this indicator is progressing according to plan.

3. Sectoral Management

To develop the capability of MACA's offices of Statistics, Marketing and Planning to generate and disseminate basic data, analyze problems and formulate coordinated policies and programs for the sector.

Objectively Verifiable Indicators:

a) "MACA's Economics and Statistics Office staffed with four trained (M.Sc.) professionals."

Status

One individual has returned from M.Sc. training and is presently working in this office. Three more are in training and should return by the end of the project.

b) "MACA's Economics and Statistics Office publishing time series (at least quarterly) on agricultural production, crop forecasts and consumption of agricultural products."

Status

Since annual agricultural production, area planted and yields information is useful only on an annual basis, these reports are being published on a year-by-year basis instead of quarterly. To date, no regular reports are being issued by this office on crop forecasts and consumption of agricultural products, although the office is actively participating with other entities on gathering consumption information.

c) "MACA's Marketing Office with an established and operating Market Information Service staffed with two trained (M.Sc.) professionals.

One individual has returned from M.Sc. training and is working in this office. A second individual is presently in training and will return in the next few months.

d) "MACA's Marketing Office publishing at least quarterly reports on prices and marketings of agricultural products and inputs."

Status

This Office continues to collect, tabulate and publish quarterly reports on prices and marketing.

A number of other marketing studies have been completed during FY-78.

To date, the market information service has not been established due to opposition from the city government, which feels as though the information might discredit their price control program. The possibility of making this service operational before the end of the project is very slight.

e) "MACA's Planning Office staffed with at least four trained (M.Sc.) professionals."

Status

One individual has returned from M.Sc. training and is in place. A second individual is presently in training for his Ph.D and should return September 1979.

Three M.Sc. level professionals were hired in this Office for an 18-month period using counterpart funds and are in place.

f) "MACA's Planning Office publishes each year an agricultural plan."

Status

Revisions are constantly being made on the Five-Year Agricultural Plan as new data becomes available. Also annual operating plans continue to be published by this office.

The CID long-term advisor to this office completed his two-year tour in July 1978. He provided advisory planning services to this office and undertook and guided various research projects, publishing 12 working papers or articles in collaboration with Bolivian technicians.

Work continued on the linear programming planning model to be used to study alternative use of resources for the agricultural sector. In addition, to the CID long-term advisor spending considerable time on this effort, short-term CID technical assistance was used to debug the model and make it operational on the Utah State University computer. It is now ready to be transferred to Bolivia and installed on a computer in-country. This should happen by September 1979.

g) "A sample frame developed and implemented for basis of national area and production statistics."

Status

The area frame sample, designed to obtain forward estimates of agricultural production at planting times and actual information on production and harvesting time, continued to be developed during 1977-78. A pilot survey using the frame was carried out in the Santa Cruz department in June 1977 and the results were presented in first draft at the time of this evaluation. The frame is approximately 4 percent completed for the whole country, with the principal delay being the inability to obtain complete aerial photography from the Bolivian Air Force. The departments of Cochabamba, Santa Cruz, Oruro and Potosí should be completed by the end of FY-79 and the frame 100 percent completed by the end of FY-80.

USDA short-term technical assistance has been employed during FY-78 to train Bolivian technicians.

The General Edit System, used to edit the data collected by the area frame, was debugged with hypothetical data in the United States and installed on the CENACO computer by USDA technicians.

However, several operational problems have occurred and at the time of this evaluation CENACO and USDA were attempting to solve the problems, so far without success.

4. Agricultural Credit

"To broaden the availability of, and assure the target small farmer improved access to, needed inputs, information, financing, and markets."

Objectively Verifiable Indicators

a) "An established and well functioning division of the Banco Agrícola de Bolivia channelling credit to small farmers producing basic foods. Within this institution a revolving credit fund established to handle the short and intermediate-term production credit needs of the small farmer target group."

Status

The small farmer credit program is functioning well in the areas designated by this loan.

b) "An established agricultural information system with the MACA providing farmers and credit institutions adequate production and marketing information."

Status

As already pointed out, the extension system is woefully inadequate.

19. Evaluation Findings About Outputs

1. Technology Development

	Target	Achieved in '78	Comment
a) Research studies	18	37	Target exceeded
b) Joint studies with University	3	4	Target exceeded
c) Thesis projects	8	10	Target exceeded
d) Improved curriculum studies	2	1	University often closed
e) Improved courses	2	0	Liaison with University needs improvement

	Target	Achieved in '78	Comment
f) M.S. degrees	14	23	For total life of project
In-Service training	40	60	Target exceeded
Short-term courses	10	4	Short of target
g) Student training	180	18	University often closed
2. Technology Extension			
a) Field demonstration	10	12	Target exceeded
b) Short courses	30	138	Target exceeded
c) Research bulletins	30	35	Target exceeded
d) M.S. degrees	3	4	For life of project
In-service training	60	4	No extension advisor in reporting period
Short-term training	5	6	Target exceeded
e) Ag Service centers constructed	3	0	Construction should start by April '79
3. Sectoral Management			
M.S. degrees	6	8	For life of project
In-service training	15	30	Target exceeded
Short term training	4	4	
4. Agricultural Credit			
a) Farmers receiving credit	2095	3059	Target exceeded
b) Volume credit placed	$3,500,000	5,000,000	Target exceeded
c) M.S. degree	1	1	In training

	Target	Achieved in '78	Comments
d) In-service training	75	55	For life of project
e) Short term training	8	6	For life of project

20. Unplanned Effects

None.

21. Changes in Design or Execution

See PES Cover Page

22. Lessons Learned

a) Because this project envisioned the construction of a number of facilities, an engineering advisor should have been employed to work with the MACA engineering office.

Construction in this project should have started at least in 1976, but due to poorly designed plans and because of land title problems, the first construction projects were only started in October 1978-two years later than planned.

Lack of the planned facilities has created many problems. Many Bolivian officials, not knowing the underlying cause of delay, have placed the blame on USAID. Consultants employed to work with technology development and extension have frequently voiced their disenchantment with incomplete facilities.

b) Commodity procurement has progressed in a very uneven manner.

"Bottle-necks" appeared in at least three areas:

i) The Ministry of Agriculture Loan Coordinating Office was either under staffed or lacked experience in dealing with letters of credit; and therefore, had difficulty in processing commodity procurement documents.

ii) The bank utilized to open letters of credit did not seem to have good coordination with its parent bank in the USA: and

iii) USAID handling of letters of commitment was often delayed. This has subsequently improved with the ability to open letters of commitment by cable.

It is difficult to determine precisely how future procurement can avoid the pitfalls described. Hopefully the office of coordination will retain its now experienced personnel. Possibly, the Ministry will decide to change to another bank.

c) With hindsight, it is obvious that the technology extension aspect of this project should have had a much higher emphasis.

Prior to project design, an evaluation of the existing extension service indicated that the existing extension service was inadequate*. The evaluation assumed that the first requirement was an improved agricultural research capability. The study also estimated the cost of an expanded extension program at approximately $2 million.

23. Special Comments or Remarks

None.

* Agricultural Development in Bolivia. A sector assessment. USAID, August 1974, pp. 211-217.