

PD - AAY-586

ISN 50010

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QUARTERLY REPORT JANUARY - MARCH, 1987

CHAPARE REGIONAL DEVELOPMENT
PROJECT

EXPERIENCE, INCORPORATED

COCHABAMBA, BOLIVIA

USAID CONTRACT NUMBER 511-0543-C-00-4214

USAID PROJECT NUMBER 511-0543

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With Input From:

IBTA/Chapare
Alfredo Alvarado
Joe Lopez

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QUARTERLY REPORT

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I. ACTIVITIES

A. Administrative and Institutional

IBTA/Chapare personnel numbered 88 at the end of the current quarter.

Director General	1
Station Directors	2
Technicians	33
Administrator	1
Architect	1
Station Administrators	2
Accountant	1
Purchasing Agent	1
Farm Managers	2
Nurserymen	2
Warehousemen	2
Secretaries	4
Chauffers	4
Tractor Drivers	3
Mechanics	3
Mechanic Assistants	2
Cowboy	1
Laborers	14
Cooks and Domestics	5
Guards	4

	88

Three of the thirty three technicians are in training abroad.

EI/Bolivia personnel spent an average of about 15 percent of their work time in the Chapare.

Dr. John Bieber, EI Cropping Systems Specialist, departed Bolivia on 6 January upon completion of his contract and review of his final report. (Taylor and Mondoñedo departed in October and December, 1986).

Dr. Alfredo Alvarado and family returned from home leave on 15 January. The Lopez family returned from home leave on 29 January.

The houses utilized by Taylor and Bieber were returned to their owners on 9 January after necessary repairs and maintenance. Mondoñedo's house was retained throughout the first quarter as storage for three households of furniture, pending instructions for disposition of furniture from USAID.

IBTA/Chapare and EI/Bolivia moved to new office at Martin Cardenas No. 15 in early February.

IBTA/Chapare and EI Bolivia jointly took inventory of project furniture and appliances at the staff house in Villa Tunari.

Lic. Victor Pelaez M. of Ruiz Bolivian Associates audited EI/Bolivia on 26 February. The audit was superficial because most accounts are maintained by EI in Washington or by USAID in La Paz.

EI/Bolivia assisted EI/Washington with budget estimates for contract revision.

IBTA/Chapare and EI/Bolivia moved again in late March to larger offices at Avenida Circumbalacion No. 0462.

Joe Lopez purchased the initial consignment of seeds and plants from Costa Rica and brought them to Bolivia, as requested by USAID and IBTA/Chapare. He also made arrangements through suppliers and a specialized export firm to have the balance of the requirements (some \$15,000 worth) shipped when funds become available.

Dwens provided assistance to IBTA/Chapare in drafting specifications for farm implements and audio visual equipment and in communicating with USAID.

Dr. Alvarado edited the EI/Bolivia quarterly and annual reports, and assisted in translating them to Spanish.

B. Technical

January, February and March are months of minimal field activity because of the rains. IBTA/Chapare and EI/Bolivia take advantage of this lull for planning, evaluation, report writing, obtaining genetic material, maintenance, training and general preparations for the upcoming planting season.

The monthly reports of IBTA/Chapare report activities in detail, by experiment stations. Despite the rains, extension personnel assisted communities in establishing coffee and cacao nurseries, and in transplanting several hectares of coffee in Jatum Pampa, Cesarzama, and San Julian. Over two tons of rice were harvested for seed, dried, cleaned and bagged. An hectare of corn for seed was harvested at Chipiriri. Training activities continued at a higher level than this time last year, and extensionists continued supervision of Production Demonstration Units (PDU).

1. Extension

Dr. Alvarado accompanied IBTA/Chapare technicians on visits to several PDU's. He attended a Farmers Union Meeting at Jatum Pampa along with Ings. Zannier, Inturias and Diaz.

Dr. Alvarado completed an Extension Bulletin entitled Soil Requirements of Some Tropical Crops.

Joe Lopez traveled to the communities of Jatum Pampa (twice), Cristal Mayo (twice) and Tita Pampa with extensionist German Inturias to observe PDU's and recommend practices for coffee and cardamon.

Ing. Lopez and extensionist Leandro Chirinos traveled to Villa Bolivar and Santisima Trinidad where they spent two days identifying needs and projects for the communities. A training program in coffee nursery management was scheduled.

Ing. Lopez and Javier Guevara assisted the promotor from San Julian in planting cacao on his PDU.

Ing. Lopez and Arturo Guispe held a meeting with the community of Cristal Mayo to orient farmers on the IBTA/Chapare project and to schedule a training program in coffee production.

Ing. Lopez and German Inturias inspected a proposed site for a citrus plantation in Ibuelo.

Ing. Lopez and Gumercindo Acosta inspected PDU's and made recommendations on citrus plantings in Gualberto Villarroel.

2. Research

Dr. Alvarado collaborated with Ing. Ayala in analyzing data and writing reports on 1986 corn experiments. Together, they presented the following papers at the National Annual Corn Meetings in Santa Cruz and Pairumani:

- Herbicidas en Maiz y su Efecto Residual Sobre Caupe y Frijol en el Chapare, by John Bieber, Eduardo Ayala, Juan Lennis and Alfredo Alvarado.
- Estudio de Encalado y Niveles de N,P,K en Maiz, by Eduardo Ayala and Alfredo Alvarado.
- Comparaciones de Rendimiento de Variedades de Maiz, by Eduardo Ayala.
- Fertilizacion y Encalado en Maiz en Diferentes Localidades del Chapare, by Eduardo Ayala and Alfredo Alvarado.
- Efecto del Tipo de Formula Fertilizante Aplicado a la Siembra Sobre el Rendimiento de Maiz, by John Bieber.

Dr. Alvarado assisted Ings. Juan Lennis, Roberto Delgadillo and Gumercindo Acosta with their theses.

Dr. Alvarado assisted Ing. Max Rojas in writing research plans for tembe, and Ing. German Inturias in planning for a regional experiment on the effects of liming on a corn-bean rotation.

Dr. Alvarado participated in overall research planning for 1987.

3. Training

Four training programs were completed during the current quarter. The main emphasis was on coffee and cacao nursery management at community level. See Table I.

EI Extension and Training advisor Joe Lopez feels that IBTA/Chapare trainers did excellent work in presenting and coordinating the programs.

4. Introduction and Production of Genetic Material

Ing. Joe Lopez collected and purchased genetic material for IBTA/Chapare while on home leave. The following seeds and plants were delivered upon his arrival in Bolivia on 29 January:

- 250 grafted macadamia plants
- 400 selected guanabana plants
- 80 kilograms of macadamia seeds

Ing. Lopez also arranged for the purchase and shipment of large quantities of additional genetic material which was subsequently requested and prepaid by letter of credit on 17 February. See Table II.

Ing. Lopez assisted in the planting of genetic material from Costa Rica.

Dr. Alvarado visited Saavedra Experiment Station in Santa Cruz on 29 - 30 January where a third of an hectare of CATIE Rosado cowpea are being grown for seed. This seed should be ready for distribution to Chapare farmers in early May.

Dr. Alvarado and Ing. Ayala visited El Vallecito Experiment Station at Santa Cruz on 18 - 19 March. New lines of Opaque type corn were obtained for introduction into the Chapare.

T A B L E I
FARMERS TRAINING PROGRAM

COMMUNITY	EXTENSIONIST	PROGRAM	DATE	No. PA
CENTRAL ISIBORO (Villa Bolivar)	J. Guevara L. Chirinos	Establishment and Management of Coffee and Cacao Nurseries	March 20 - 22	25
Ka 18	L. Vallejos	Establishment and Management of Coffee and Cacao Nurseries	March 20 - 22	28
JATUN PAMPA	G. Inturias	Coffee Production	February 7 - 9	27
CRISTAL MAYO GRUPO A	G. Inturias	Coffee Production	March 20 - 22	23

T A B L E I I

REVISED REQUEST FOR SEEDS AND PLANTS
FROM COSTA RICA

ITEM	ARTICLE	VARIETY	QUANTITY	UNIT PRICE	TOTAL PRICE
1	Macadamia	M. Integrifolia	100 kg	6.35	635.00
2	Coffee	Catuai Rojo	500 kg	10.40	5,200.00
3	Coconut	Malasion Dwarf	1000 units		6,528.00
		Pacific Giant	100 units	4.08	
		Filipino Dwarf	100 units		
		Hibrido (M.Dwarf x Pacific Giant)	400 units		
5	Ginger	Var. Israel	25 kg	8.95	223.75
4	Papaya	Var. Hawaiian	5 kg	23.60	118.00
6	Black Pepper		10 kg	10	100.00
7	Vanilla	2 varieties	307 shoots	4.3	1,320.25
8	Tembe	Var: s Varieties	Aprox. 100 kg.	18.75	1,875.00
T O T A L				\$US	16,000.00

NOTE: Requested 17 February, 1987

Dr. Alvarado made a 21 day trip to the Alto Beni from 12 February to 4 March. The purpose of the trip was to collect genetic material. Other members of the team were Ings. Max Rojas and Gerardo Rodrigues of IBTA/Chapare and Ing. D. Morales of IBTA/Nacional. About thirty species of tropical fruits and fourteen types of wild cacao were collected. The material is now growing and under observation at two experimental stations; Sapecho in the Alto Beni and La Jota in the Chapare.

II. ISSUES AND SOLUTIONS

IBTA/Chapare continues to suffer shortage of funds and to experience budgetary problems. Some of the delays in disbursement from USAID are due to the Pari Passu system. Delays in disbursement from GOB appear to be due to rigidities within the system which have been overcome by making the Director-General of IBTA/Chapare directly liable for funds. Possibly USAID can intercede for IBTA/Chapare with IBTA/Nacional or Ministry of Finance.

IBTA/Chapare feels that they are far ahead of USAID in the Pari Passu game, but that USAID refuses to consider the value of land, buildings and about a quarter million dollars worth of agricultural machinery and equipment contributed by the Government of Bolivia. Perhaps on review by USAID, this extra contribution by GOB could serve as a cushion in case monies for salaries and operating costs from GOB are delayed. USAID should also attempt to simplify the budgetary requirements and speed up the approval procedure.

As IBTA/Chapare matures, their balance of activities shifts. Specifically, more time is spent on data analysis, reporting and professional contact with national and international organizations. This shift affects the job descriptions of some employees, particularly Dr. Alvarado, who is obliged to spend more time in Cochabamba than previously.

IBTA/Chapare is affected in two ways by the shift in USAID policy which withdrew funds from the Chapare Regional Development Project (including some destined for Agricultural Production) and began emphasizing planning for development in the upper valleys (Aiquile).

Chapare residents are aware of this shift and the resulting decrease in confidence spills over to IBTA/Chapare. However, their major concern at present is the proposed eradication program, so IBTA/Chapare has been little affected so far. If the eradication program is implemented, the deemphasis on the Chapare Project is likely to become a serious political issue.

IBTA/Chapare and EI morale have suffered from the above mentioned shift, not only due to a feeling of abandonment and lack of recognition for what we feel a job well done, but because we feel the upper valley proposals are inappropriate and have small chance of being implemented.

Many IBTA personnel feel that the present bonus is insufficient and some are seeking employment elsewhere. Two good IBTA technicians (Rolando Escobar and Jaime Claure) have left within the past 5 months. IBTA technicians stress that the bonus is not as attractive as before because other institutions such as departmental corporations are paying more and in addition their personnel are not faced with possible retaliations because of the pending coca control and reduction law.

The total reimbursement to IBTA/Chapare technicians is \$240 - \$280 per month, compared to \$300 - \$450 paid by departmental development corporations.

The GOB is not likely to be able to increase salaries in view of the economic crisis. If bonuses cannot be increased, IBTA/Chapare is likely to lose personnel with a concomitant decrease in effectiveness. Even if replacement personnel can be hired, it will take months or years to train them.

The problem of insufficient salaries should be reviewed seriously by USAID.

IBTA/Chapare is quite concerned by the lack of approval for their construction program, which should be nearing completion according to the Project Paper. They are fully aware that delays introduced at various levels can continue until end of project. USAID should approve the plans as requested or scrap the program before it is too late to reprogram funds to optimum use. Scapping the construction program would be a serious blow to IBTA/Chapare's already damaged morale.

III. WORK PLANNED FOR NEXT QUARTER

Second Quarter, 1987, will bring increased field activities as the rains diminish and planting season begins. Extension activities will increase to supervise plantings and other activities on PDU's.

EI Technicians will work side by side with IBTA/Chapare, as usual, in planning and executing agricultural development activities of the Chapare project. More specifically:

Dr. Alvarado will assist IBTA/Chapare technicians in developing research plans for 1987-88.

Dr. Alvarado will work with IBTA/Chapare in establishing experiments to be conducted during the winter season as follows:

- Levels of lime on various cropping systems on Chapare farms.
- Effects of acidulated rock phosphate on corn yields.
- Effects of N.P.K on tembe.
- Regional lime - fertilizer trials on camote.
- Fertilization of walusa at Chipiriri.

Dr. Alvarado will assist and advise three IBTA/Chapare technicians with their theses, as follows:

- Juan Lennis - "Identification and Grouping of Cassava Entries Collected in the Chapare".
- Roberto Delgadillo - "Fertilization of Beans with Available Fertilizer Formulas".
- Arturo Quispe - "Production from Different Rubber Tree Varieties at La Jota".
- Gumercindo Acosta - "Planting Dates and Fertilization of Cowpeas at La Jota and Chipiriri".

Dr. Alvarado will assist with statistical analysis and the reporting of research findings:

- Liming and N.P.K levels on corn at La Jota.

- Residual effects of corn-herbicides on cowpea and beans.
- Regional trial on the effects of fertilizer and lime on corn in the Chapare.
- Yield of various corn lines at three locations in the Chapare.
- Yield of late-harvested sweet potato entries at La Jota.
- Yield of early harvested sweet potato entries at La Jota and Chipiriri.
- Walusa adaptation: Yields at La Jota and Chipiriri.
- Preliminary yields of Ñame at La Jota.

Dr. Alvarado will participate in the IBTA/Chapare training program. He will present courses on the following topics:

- Economic use of the soil/land resources of the Chapare - for technicians.
- Soil as a factor in crop production at Yacuiba - for technicians.
- Soil sampling and general soil characteristics - for paratechnicians.

Dr. Alvarado will work with Ing. Juan Lennis in planning the IBTA/Chapare input to a four day workshop on yuca and sweet potato to be held in Cali, Colombia.

Joe Lopez will act as EI Coordinator while Owens is on leave in April.

Ing. Lopez will play a major role in planning and executing the IBTA/Chapare training program for second quarter, 1987, which is summarized in Table III.

Ing. Lopez will travel with the various extension agents to visit PDU's, community nurseries and area farmers. These visits are for various purposes such as maintaining regular contact, inspecting demonstration plots and on-farm research, accessing problems such as disease or insect infestations, assist in establishing nurseries and demonstration plots, etc. Ing. Lopez will also assist some communities such as San Salvador in transplanting coffee seedlings to their permanent plantation site.

T A B L E III IBTA/Chapare Training Program
Second Quarter 1987

DATE	SUBJECT MATTER	LOCATION	AUDIENCE
3 - 5 April	Coffe Nursery Management	Senda D	Farmers
6 - 8 April	Coffe Nursery Management and Vegetable Gardening	Estrella	Farmers
17 - 18 April	Rehabilitation of Cacao Nurseries	Mejillones	Farmers
20 - 22 April	Coffe, Cacao Nursery Management and Vegetable Gardening	San Gabriel	Farmers
20 - 22 April	Swine Production	Puerto San Francisco	Farmers
22 - 24 April	Coffee Nursery Management	Dhocolatel	Farmers
1 - 3 May	Soil Conservation Techniques	Crystal Mayo	Farmers
4 - 6 May	Coffe Nursery Management	2nd of September	Farmers
5 - 6 May	Pesticide Management	Paraiso	Farmers
5 - 7 May	Coffe N. y Management	Cesarzama	Farmers
20 - 22 May	Coffee Nursery Management and Cacao Production	San Julian	Farmers
28 - 31 May	Non-traditional Crops	La Jota, Chipiriri	Technicians
1 - 3 June	Small Animal Establishment	Estrella	Farmers
2 - 4 June	Coffee and Cacao, Stage II	Km 18	Farmers
11 - 13 June	Establishment of Citrus Orchards	Gualberto Villarroel	Farmers
15 - 17 June	Coffee and Cacao, Stage II	Villa Boliviar	Farmers
22 - 25 June	Non-traditional, Crops, Stage I	La Jota, Chipiriri	Promotors
26 - 28 June	Coffee Plantation Management II	Estrella	Farmers

Ing. Lopez will assist in the establishment and management of IBTA/Chapare nurseries, particularly with respect to utilization of the large quantities of seed and plants expected from Costa Rica during the coming quarter.

Ing. Lopez will assist in obtaining coffee and cacao seed, fertilizers and chemicals at the specific request of communities such as Santisima Trinidad.

Ing. Lopez will write or participate in the writing of various bulletins and training material.

Owens will continue his administrative and reporting responsibilities, which require approximately fifty percent of his time. He will assist the communication unit with photography and video for technical, publication and public relations purposes.

Owens will cooperate with Alvarado and the EI computer section to assist IBTA/Chapare with statistical analysis and budgeting.

Owens will work with IBTA/Chapare in refining costs and returns studies for the following crops:

Black Pepper	Coca
Cacao	Coconut
Coffee	Vanilla
Cardamon	Macadamia

Costs and returns studies for other crops may be initiated during the second quarter.

Owens will cooperate with IBTA/Chapare and Joe Lopez in initiating farm management studies (farm budgets) if reliable and interested farmers can be identified and personnel are available to assist farmers with the long-term commitment to keeping accounts.

Owens will assist IBTA/Chapare and Dr. Alvarado in refining the zoning of the Chapare on the basis of productive capacity, climate, population, roads, crop yields, etc. The plan calls for utilizing the best information available and for taking advantage of the expertise of the various experts who will attend the soil workshop in May, 1987 at La Jota.