524-0123 64439 PD-AAI-345

AGENCY FOR INTERNATIONAL DEVELOPMENT

PROJECT PAPER FACESHEET

TO BE COMPLETED BY ORIGINATING OFFICE

1. TRANSACTION CODE ("X" appropriate box)
[x] Original [ ] Change [ ] Add [ ] Delete

PP

DOCUMENT CODE 3

2. COUNTRY/ENTITY
NICARAGUA/FUNDE

3. DOCUMENT REVISION NUMBER

4. PROJECT NUMBER
524-0123

5. BUREAU
a. Symbol: LA
b. Code: 3

6. ESTIMATED FY OF PROJECT COMPLETION
FY 78

7. PROJECT TITLE - SHORT (stay within brackets)
Rural Education Centers (FUNDE)

8. ESTIMATED FY OF AUTHORIZATION/OBLIGATION
a. INITIAL mo. yr. 76 b. FINAL FY 77

9. ESTIMATED TOTAL COST ($000 or equivalent, $1 =)

a. FUNDING SOURCE	FIRST YEAR FY____ b. FX	c. L/C	d. Total	ALL YEARS e. FX	f. L/C	g. Total
AID APPROPRIATED TOTAL		72.7	72.7		114.9	114.9
(Grant)	( )	( )	( )	( )	( )	( )
(Loan)	( )	( )	( )	( )	( )	( )
Other U.S. 1.						
Other U.S. 2.						
HOST GOVERNMENT		42.2	42.2		89.1	89.1
OTHER DONOR(S)		47.7	47.7			56.7
TOTALS		162.6	162.6			260.7

10. ESTIMATED COSTS/AID APPROPRIATED FUNDS ($000)

a. Appropriation (Alpha Code)	b. Primary Purpose Code	c. Primary Tech. Code	FY 76 d. Grant	e. Loan	FY 77 f. Grant	g. Loan	FY____ h. Grant	i. Loan	ALL YEARS j. Grant	k. Loan
EH			72.7		42.2					
		TOTALS								
11. ESTIMATED EXPENDITURES										

12. PROJECT PURPOSE(S) (stay within brackets) [x] Check if different from PID/PRP

Extend and strengthen experimental Rural Education Program as prototype for innovations in public agricultural education.

13. WERE CHANGES MADE IN BLOCKS 12, 13, 14, or 15 OF THE PID FACESHEET? IF YES, ATTACH CHANGED PID FACESHEET.

[X] Yes [ ] No

14. ORIGINATING OFFICE CLEARANCE

Signature: Robert K. Lechtenberg

Title: USAID/Nicaragua Mission Director

Date Signed: mo. 12 day 24 yr. 75

15. Date Received in AID/W, or For AID/W Documents, Date of Distribution
mo. day yr.

AID 1330-4 (7-75)

-1-

TITLE: Rural Education Centers (CFER)

LOCATION: Rural Nicaragua

PVO NAME AND LOCATION: FUNDE (FUNDACION NICARAGUENSE DE DESARROLLO)

DATE OF SUBMISSION: November, 1975

I. Project Purpose and Description

In rural Nicaragua, school drop out and illiteracy rates are high and access of the small farmer to relevant agricultural technical information is still limited to those adults that an extension service can reach. The result is that rural youth develop few modern agricultural skills. Thus, they either follow their parents into subsistence farming with its meager incomes or move to urban areas to search for a better life. Alternative methods of education from those offered by traditional formal systems can reach and train these rural youth with reduced economic hardship on the parents.

The purpose of this project is to consolidate and expand an experimental program which has been functioning in Nicaragua for three years, promoted by the Nicaraguan Development Foundation (FUNDE) and with cooperation from the ministries of Education and Agriculture and the Agrarian Institute (IAN). The program, called Rural Family Education Centers (CFER), has influenced general education with its success and provided valuable social knowledge from its failures. CFER's seven currently operating centers (see map) would be strengthened and two new centers would begin functioning. Thus, during the two years of proposed AID financing, this experiment could continue testing the viability of CFER-type training in the most vulnerable rural areas, with the most knowledgeable assumptions, based on past experience.

The direct beneficiaries would be 25 rural students, on the average, per class per center with each center running two class-years, or 50 students per center, or 450 for all nine centers by the end of the second project year (with no drop-outs). These students, both boys and girls, are from 14 to 20 years of age, and children of small farmers. Those who have not completed primary are given special accelerated literacy training. The indirect beneficiaries, as will be described, are the families of the students, who in addition to being able to participate in decisions affecting their children's education, receive technical knowledge through their children and through the regular visits

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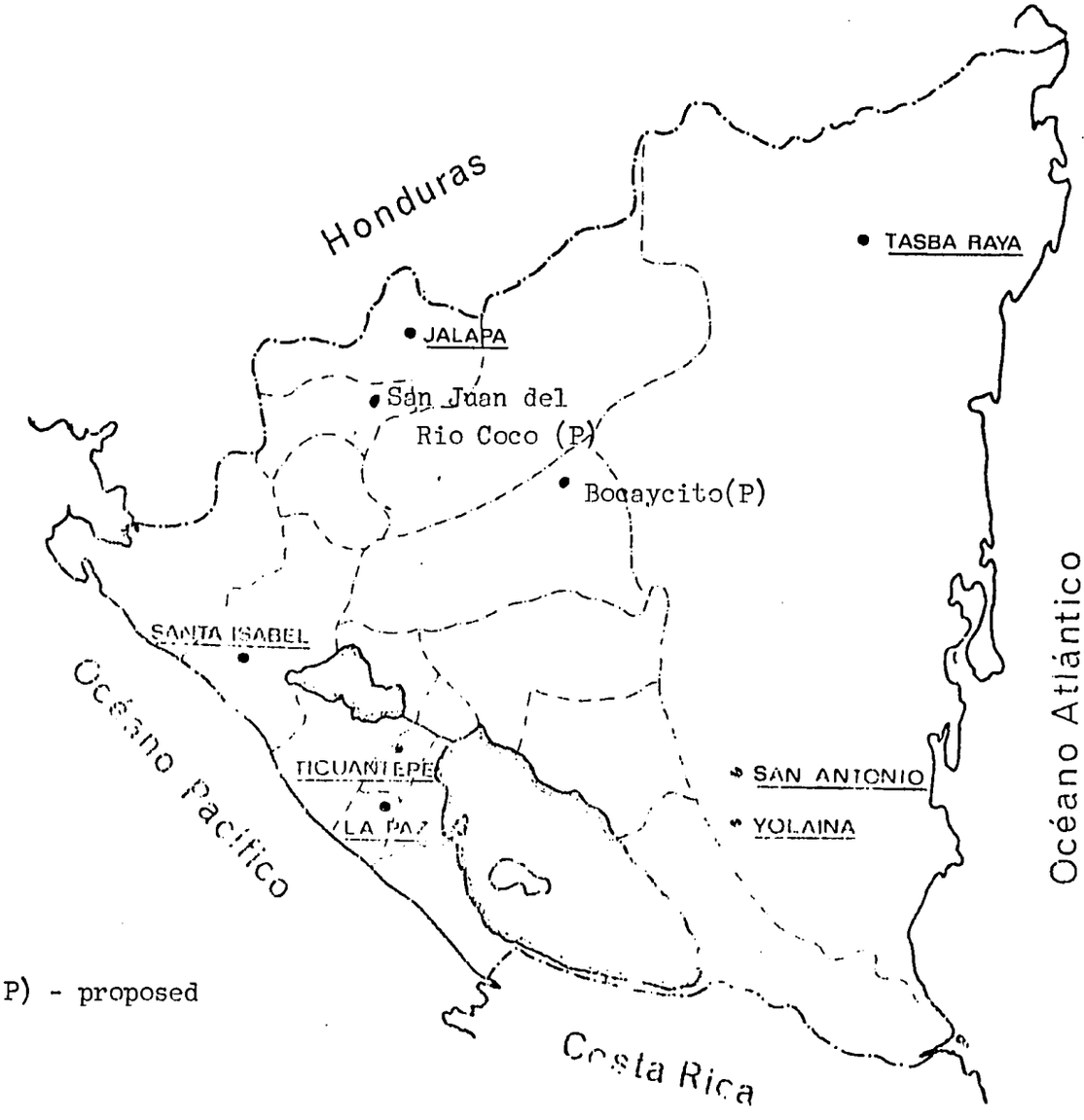


(P) - proposed

of their center's agronomist monitor. Third-hand beneficiaries, experience has shown, are the other small farmers almost equal in number to parents in the zones where centers are located, whose curiosity has brought them to take advantage of agronomist's visits to their neighbors or of knowledge their neighbors' children have learned at the center.

The conditions expected at the end of this project will be nine-equipped rural education centers teaching fifty teenage students each, supported by relevant GON ministries (Education, Agriculture) and by the communities which they serve, providing proof on a pilot basis of the advantages of an alternative education sytem for certain areas of Nicaragua.

II. Project Background

Based on a concept originating among French small farmers, the CFER "movement" has spread to Africa and Latin America as a successful program, whose main distinguishing feature is its system of student alternating attendance: one week interned in a school and one week working on the home farm, applying technologies learned at the school. The Centers function with two monitors- an agronomist and a teacher. The first program in Central America began in Nicaragua in Februrary 1973, after three years of discussion and preparation involving FUNDE, Ministry of Education (MEP), Ministry of Agriculture (MAG), IAN, INCEI (basic grains board), the National Bank, and a French rural development mission. The first two centers were La Paz del Oriente (Carazo) and Nueva Guinea (Zelaya), the latter an agricultural colonization project. A third Center was opened in 1973, attached to the Estelí Agricultural School for farm children from Condega (Estelí).

The CFER program policy-process is administered by a national Committee, also organized in 1973, which includes representatives from MEP, MAG, IAN and FUNDE.

In 1974, the Committee decided to transfer the Nueva Guinea Center to another nearby IAN colony, Yolaina. This decision was based in part on the bet that the school operated inside the IAN headquarters buildings in Nueva Guinea, without sleep-in facilities, resulting in difficulties with daily transport and reducing considerably the parents' sense of easy access to and participation in the centers activities. Both factors caused drop-outs among students.

A forth center was opened in another IAN Colony in the Pacific Zone, Ticuantepe (Masaya). All four of these centers taught males exclusively. The Ministry of Education assumed the cost of Center

monitors for three centers, and IAN paid the salary for the agronomist at the new fourth center. FUNDE maintained the Director's salary and administrative costs. In 1975, the Ministry of Education, impressed by the potential effectiveness of CFER-type training, budgeted salaries for six center monitors, to include two new centers. These centers were organized in Santa Isabel (Leon), another IAN colony, as the first all-girl CFER, and in San Antonio (IAN, Zelaya), near the Yolaina Center. In addition, a seventh school was opened in Tasba Raya (northern part of Zelaya), an area inhabited bh the Miskito Indian population.

Two other changes in original centers were made in 1975, based on experience of the first two years. The La Paz de Oriente Center was converted to become the first mixed (male/female) student body, due to high desertion rates among boys, who were recruited by the military, or attracted to the nearby cities, or from families with insufficient land to guarantee their sons a future in agriculture. Girls in the area, on the other hand, were more inclined to remain with their families and could apply education on domestic animals, garden plots, home economics and other skills, even if their parents had only small plots of land. The Condega Center was closed, since the Estelí Agricultural School authorities, while providing needed facilities, also intervened in the policy and operations of the center to the extent that parents could not closely identify with the center as a communal effort within which they played an important role. Also, once again, the influence of city environment and of non-center students served as a disincentive to boys to remain in agriculture.

The Condega Center was thus transferred to Jalapa (Nueva Segovia), in a completely rural area with little access to formal educational facilities and few land tenure problems. It has flourished there this year with close and enthusiastic cooperation from campesino parents.

At the end of 1975 then, three CFER centers are operating both first and second years, and four are offering first year classes. Five of these seven are all-boys, one is mixed and one is all-girls. 170 students in total are enrolled. In 1976, the Ministry of Education will be covering costs of seven agronomists and eight teachers and IAN will provide two advisors. The Ticuantepe center will be converted to a mixed male-female center, for reasons similar to those for La Paz de Oriente.

III. Project Analysis

A. Economic Benefits.

The long run benefits of a CFER education would be in increased production of small farms cultivated by CFER graduates. While

it would be difficult to attribute all increases in production to the two year CFER program, most of the Centers are located in areas with no secondary schools and currently limited agricultural extension service. Thus, the alternatives for these rural youth would be to continue in traditional subsistence agriculture, or go to the city. With a CFER Center, the youth not only learns some modern technology but is also trained to be more receptive to future public agricultural extension such as that programmed by the new Campesino Development Institute.

The average small farmer in Nicaragua's Central Interior region has 14.5 manzanas of land, 5.7 of which he uses for annual crops. Using calculations of residual returns to labor under modern technology[a/], weighted by proportions planted in corn, beans, and sorghum, the small farmer could increase his own income by C$6.55 per man-day. With 221 man-days required for these three crops, the annual return is C$1,447.55, or US$207 above his expected income with traditional methods. This does not count returns to land, that is, in rent, to the landowner. If we add rent, total benefits to the economy would be even higher than $207.

The cost of operating the nine CFER schools with 450 students, not counting construction, equipment, or food (most of which is the communities' contribution) is $404 per student year, or $808 per graduate (assuming no desertion). Thus, the small farmer CFER graduate could, in four years, have more than covered the cost of his education through increased production:

CFER 404/yr. x 2 yrs.	=	$808
Increased income to farmer 207/yr. x 4	=	$828

a/ See p. 146 of USAID Rural Development Sector loan CAP

III.B Technology and Methodology

The CFER program seeks to adapt relevant rural development oriented training to the socio-economic needs of each community served. In broad terms, this means adopting a school-year corresponding to the agricultural year. The formal Nicaraguan education system for instance ends its school year about one month after major harvesting of coffee and cotten begins. This means that children of migrant farm workers are pulled out of school before examinations, and do not qualify for promotion.

FUNDE statistics indicate that of 100 rural youth entering first grade 38 reach second frade, 23 third, 11 fourth, 6 fifth, and 3 sixth grades. This means the CFER program must also relay information to teenage youth who have not learned to read or write. The "alternating" system (one week in school, one-week on farm) permits these students to learn by demonstration and immediate application, while also providing needed labor on the family farm. A dormitory arrangement also allows attendance of rural individuals who would normally have faced a several hours daily trek on foot or horseback to reach a school. Parents contribute food to the center for students during their week in school. Garden plots and IAN grain stores will complement this food.

Specific methodolgy used in opening and operating a CFER school begins with orientation of two monitors, one an agronomist, another a trained teacher. The orientation emphasizes the importance of community (especially parent) support of the center, as well as the theory behind the alternating system. Monitors then are sent to study the potential of the area selected as a CFER site, which was chosen on the basis of demonstrated interest within the community, and certain other criteria. These criteria currently include a) sufficient land (held by parents or otherwise available) to guarantee future availability of land to trained youth when they are ready to farm on their own, and b) limited availability of other education facilities in area.

Once the community is organized to either rent or build center facilities, and provide food consumed by their children while at the Center, classes begin. During the in-school week, students elaborate an "observation guide" on one or more aspects of agriculture, often related to crops produced by families. These questions are taken home by the student during his or her on-farm week, and answered through observation or discussions with their families, assisted usually by the visiting monitor. On return to the Center, these observations are reflected on, exchanged with others, expanded, discussed with monitors, and common con-

clusions reached by the group. Conclusions about improved methods or inputs are then applied at home on the next visit. This cycle of "analyzed experience" is repeated 12 to 14 times per year, with improved agricultural practices applied to some extent on the farms throughout this period.

With regard to the availability of the all-important Monitors, FUNDE expects to interest recent graduates of Secondary Agricultural and Normal Schools who are willing to work in and knowledgeable about Nicaragua's rural areas and who have a facility for team work with campesinos. An extensive interviewing and selection process results in careful choice of appropriate personnel, and in addition to initial training, these monitors are given constant (every two months) refresher sessions. The present program staff includes 15 monitors, a French advisor, and the Program Director and his secretary. Four have had special training in France.

II C. Socio-cultural factors

As mentioned above, the CFER program adapts to existing customs through pre-project community-specific studies and through constant dialogue with parents and students to determine their concerns. Even so, experience has provided information on negative as well as positive factors: Centers near or in very urbanized areas draw students away from agricultural careers (Estelí, Ticuantepe); sons of non-landowners or owners of very small plots in populous areas may only be frustrated by agricultural training they can never apply (center in La Paz del Oriente); center facilities which parents do not feel are "theirs" result in loss of essential parental support for the program (Nueva Guinea and Estelí Centers). The use of IAN buildings in Nueva Guinea and of the Agricultural School in Estelí inhibited parental communication and control of programs. The IAN offices also did not provide dormitory space. These centers, after they were moved to Yolaina and Jalapa, respectively, functioned much more successfully, with fewer drop-outs and better provision of food and other parental supported supplies.

An ideal site for this type of rural education has thus been tentatively identified, and through this project, would be tested in two new areas. The site should: a) be completely rural, where young people identify their future as agricultural, b) have few land tenure problems, thus assuring availability of additional land for those trained at the centers, c) have dormitory facilities for students, who sometimes live three and four hours by foot from the center, d) provide ease of access, both in

physical and social sense for campesino parents, e) be in an area with very limited or no other educational facilities so that it not only fills a current vacuum but also potentially can be financed in part by Ministry of Education, and f) have demonstrated community interest in CFER. The two new sites selected, San Juan del Rio Coco and Bocaycito, now meet all criteria except c) above, and have the community potential to build or rent facilities required to meet c) also. Bocaycito (Matagalpa) has only improved dirt roads and San Juan (Madriz) is reached by vehicles (in summer only) by fording a river. The first has no school, the second seven primary classrooms for a school age population of 2,000. Both are in areas where basic grains (corn, beans) are grown for food, and coffee for cash; land is available, though mountainous. Neither is regularly visited by government agronomists. Both have active community members who are anxious to have CFER programs begun.

Impact on women and girls

To start mixed (boy-girl) CFER programs immediately has proven to be somewhat against social customs, largely because of the week-in-school where dormitories are used. More success has resulted from starting with all students of one sex and then, as families gain confidence in the project and in their control of it, after several years, to switch to a mixed set-up. FUNDE proposes to switch Ticuantepe to a mixed center and to start both new centers as all-boy schools, until they can be changed. The total would then be six all-male, two mixed and one all female.

In the mixed and female schools, girls and their parents usually ask to have cooking and sewing taught. To this curriculum FUNDE adds care of domestic animals and cultivation of home gardens, as well as general literacy, civics, cooperativism, health, child care, sex education and nutrition, gradually introducing the subjects as the students realize their relevance.

While the direct impact on girls for the immediate future is less than for boys, later extensions will include them in all centers where the community wants to convert to mixed education and can provide the facilities. The indirect impact, through improvements in family crops and visits by the agronomist-monitor, is equal on all family members.

III.D Directness of Impact and Potential for Wide-Scale Application

The students who atttnd the CFER schools are all from very poor rural families with slight chance for any other technical education. The presence of ministries of Education and Agriculture as well as IAN on the CFER National Committee affirms their interest in utilizing this experimental approach more widely,

and in fact in the reorganization for 1976 of public agricultural education, some CFER methods are expected to be adopted in five Pacific Zone schools. Thus, while schools identical to CFER Centers may not be repeated on a nation-wide basis, positive aspects of their methodology could be gradually integrated into public agricultural education. Such aspects include alternation (week-in, week-out) as a solution to distances, and as an applied learning experience; community participation, through dialogues with parents to assure responsiveness to their concerns and to help reduce drop-outs, and Curriculum adaptation, so that each Center responds to the problems of crops in its area.

E. Institutionalization

The CFER program is already institutionalized through its national committee and through financial support from the public and private sector. A separate project to set up a CFER monitor training center in Nicaragua for Central America and Mexico, while not yet funded, would institutionalize it even further. Local staff are now trained to direct the program and, after AID input ceases, their salaries would be assumed by the private sector (FUNDE). The public sector (Ministry of Education) would assume costs of teachers and agronomists. The French agricultural education advisor is expected to be in-country during both years of AID inputs, as is a French Volunteer.

AID assistance at this moment permits consolidation of a relatively successful on-going private experiment at a time when the Nicaraguan Government is becoming most interested in educational innovation. No other funding exists at this time for the two new centers, whose function is to combine all the positive aspects learned up to this point, nor for the strengthening of numerous Centers that are now without certain equipment, monitor transport (mules), and electricity. The reinforcement of these existing Centers is essential to provide a complete system of pilot Centers, with good geographical distribution, variations in integration of girls and boys, and varieties of crop and land tenure patterns. Once all the CFER schools are underway with the same basic minimum equipment, diverse results can be attributed to differences in areas or other factors rather than differences in the Centers' capacities. To begin, by February or March 1976, the new school cycle with all nine centers functioning could provide an early and influential experience for rural education planners.

IV. Implementation

A. (See Calendar of Activities).

The programming of the project is illustrated on the following page. Provisions for technical assistance will be largely financed by AID (FUNDE project directors' salary) and the French Government.

B. Evaluation

As a short (two year) project, the main measurements will be, for the first year, nine centers functioning with 25 students per year taught, and for the second year, all nine centers teaching two years simultaneously, with at least 20 of the 25 first year students going on to complete the second year.

C. Logical Framework - See p. 12.

V. Financial Plan - See pp. 13 and 14.

VI. Conditions

The following items are included in Annex A:

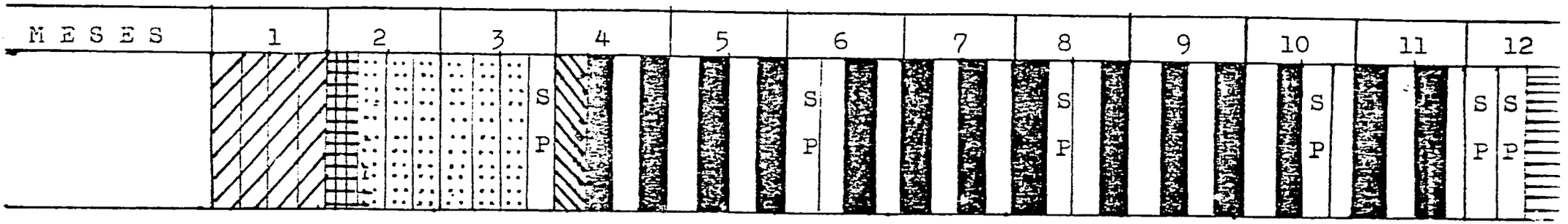
1. Nicaraguan Ministry of Education Budget pages showing 1975 support to CFER Centers.

2. Agreement signed in 1975 by Ministries of Education and Agriculture, IAN and FUNDE, showing government support.

3. Letter from Ministry of Education. (Will follow separately).

IV. WORK PLAN

A. Calendar of Activities



- Recruiting and hiring of new personnel
- Orientation and training of new personnel (1 week)
- Socioeconomic study of two new communities, promotion of concepts, and organization of parents (6 weeks)
- "Pedagogy" sessions with all CFER personnel for evaluation, programming and additional training.
- CFERs commence functioning: student enrollment
- Week-at-school for students
- Week-at-home on family farm with visits by CFER teacher/monitors, meetings with parents (with adult education activities at the school).
- Promotion of new enrollees for second year.

NICARAGUA: RURAL FAMILY EDUCATION CENTERS

LOGICAL FRAMEWORK

		ASSUMPTIONS
GOAL To Make Nicaragua's educational system more effective and responsive to development needs.		
PURPOSE: Extend and strengthen experimental rural education program as prototype for innovations in public agric. educ.	**EOPS:** -9 Centers functioning with 25 enrolled in each year (50 per Center) -MEP assumes teacher salaries for all nine centers -MEP/MAG consider concepts of alternation and community participation for public agric. educ. programs -Desertion reduced below 20% in Centers	Increases in MEP budgets permit assumption of Center Salaries
OUTPUTS: -2 new Centers organized -7 Centers strengthened -325 students and families receive on-farm agronomist assistance first year, 400 second year	**OUTPUT INDICATORS** -4 new agronomists and 2 new teachers hired and trained -3 Centers facilities rented or built (school & dormit.) -3 Centers provided electricity -4 Centers' monitors provided transport (mules) -6 Centers provided desks -All Centers additional tools, sports equip., teaching material and food	Crop year reasonably productive so as to permit parents to contribute to food and construction
INPUTS Personnel salaries: -Direction & Supervision -Agronomist, teacher & cook for each of nine centers Operation costs -Food -Materials -Travel Equipment -to complete 9 centers (7 of which are nearly complete)	**INDICATORS** See budget on p._____	Available personnel for new teachers and agronomists

INPUTS (Budget)

Equipment (# in Par. = # Centers affected)	Year One	Year Two
Three electric generators (3)	$ 1,710	$ -
Recreation equipment (9)	1,300	-
8 Mules w/saddles (4)	3,000	-
Dormitory equipment (cots, etc.)	7,800	-
Office equipment		-
Typewriter	1,000	
3 desks	500	
File cabinet	200	
Bookshelf	90	
210 student desks (6)	1,500	
Agric. tools (5)	1,500	
	27,600	-
Construction - two new centers (est) (Community-financed)	30,000	-
Other Costs		
Personnel:		
Director	6,860	6,860
Assistant/Secretary	3,100	3,100
Social Security (6.2%) *	1,800	800
Two supervisors	8,600	8,600
Five agronomists ea. 3,430/yr.	17,150	17,150
Four Agronomists ea. 3,085/yr.	12,340	12,340
Eight teachers ea. 2,570/yr.	20,560	20,560
Two teachers ea. 2,230	4,460	4,460
Nine housekeepers ea. 690/yr.	6,210	6,210
	81,080	81,080
Operation Costs		
Travel - per diem	3,430	3,430
Gas/Maint.	1,715	1,715
Office rent	2,570	2,570
Office supplies/misc.	3,085	3,085
Training of personnel	6.430	1,000
Teaching materials	3,200	1,700
Miscellaneous support	3,500	3,500
	23,930	17,000
Totals	162,610	98,080

* Employers Social Security for Director, Secretary, Supervisors, two teachers and two agronomists.

Of subtotals on previous page USAID will contribute:

	Year One	Year Two
Equipment	$ 24,000	$ -
Personnel	42,700	37,700
Other Costs	6,000	4,500
Total	$ 72,700	$ 42,200

and other Contributors:

FUNDE - $26,620 (equipment, operation expenses, training)

MINISTRY OF EDUCATION - $86,000 (teacher salaries and materials)

MINISTRY OF AGRICULTURE - $1,500 (tools)

IAN - $1,600 (plus $26,000 in grains for food and $22,000 for Center building in Yolaina)

Parents and Communities - $31,700 plus food for students