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NONFORMAL EDUCATION IN RURAL ECUADOR

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by

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The views and interpretations expressed in this report are those of the author and should not be attributed to the Agency for International Development.

EXECUTIVE SUMMARY

The Nonformal Education Project (Ecuador 1972-76) was designed and administered by the Center for International Education, University of Massachusetts, Amherst. Impacts from the project were made not only among the rural poor in Ecuador, but in and through CIE and on the broader field of nonformal education methodologies and programs in developing countries.

In Ecuador, the project tested various nonformal education techniques and delivery systems over a period of three years and then strove to consolidate results in a national nonformal education system under the Ministry of Education. During the experimental phase, project activity concentrated in four provinces in rural communities with high levels of illiteracy. Peasant facilitators, trained in participatory literacy and consciousness-raising techniques and assisted by specially designed educational games and other learning aids, were instrumental in establishing community education programs, organizing numerous development projects and even in training other peasants as facilitators. The educational games were used enthusiastically and with positive literacy and numeracy as well as motivational and organizational outcomes. However, even though they were designed to be reproducible by local communities, such reproduction occurred only occasionally. Large scale production by the Ministry of Education was begun, but not continued.

Various innovative uses of rural radio proved successful in markedly increasing peasant participation in community educational and development activities, including production of radio entertainment and learning programs. A series of photonovels with peasant themes and characters, and a mobile unit equipped with photonovels, educational games, puppets, resources for live theater and musical instruments were other means used to reach into rural areas with an "appropriate educational technology."

Attempts were also made to introduce national development entities to the most successful methods and techniques. However, impacts made in these formal institutions, with the exception of some individual cases, were negligible compared with the successes achieved among the rural populations themselves. For a brief period after the end of the project, a Nonformal Education Unit continued to operate under the aegis of the Ministry of Education's Extrascholastic Education Program, but the only instance of strong institutional continuity has been through the Education for Development Unit which continues to function in the province of Chimborazo. There is some suggestion that project influence has been maintained "nonformally" and may be re-emerging with the government's renewed emphasis on literacy and adult education in rural areas.

Impacts derived from this relatively low cost project were greatest among the rural poor and may be largely attributed to the unusual dedication of

project personnel (themselves mostly rural Ecuadoreans) and the care taken to design and manage the project and to utilize methods and techniques appropriate to the needs and practices of beneficiary populations.

At the Center for International Education, involvement in the Ecuador Project was instrumental in establishing a participatory "lifestyle" and in enabling the center to win an institutional development grant from AID to continue and strengthen its work in nonformal education in developing countries. Consequently, the Ecuador Project became a prototype used in the formation of numerous students from both the U.S. and developing countries and in the design of other projects in nonformal education carried out in Latin America, Africa and Asia. In another round of diffusion of impacts, CIE graduates are bringing their knowledge and orientation into other institutions where they are employed, frequently in activities which relate to education in developing countries.

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PREFACE

This review of impacts has been formulated on the basis of information obtained in available documentation and complemented through interviews with individuals in Washington, D.C. and at the Center for International Education in Amherst, Massachusetts in a three day visit there. Most of the published documentation on the project refers to the first two years of activity and very little is available on the last year of activity. However, Jim Hoxeng (DS/ED) was most helpful in providing both additional documents from his personal files and clarifications and details which would have otherwise simply remained unknown. He also contributed by correcting and commenting on earlier drafts. CIE also opened its archives which contained far more information than could possibly be synthesized here and CIE people were most interested in discussing a project which they unanimously regarded as thoroughly intertwined with the center's own development and orientation.

Reducing the volume of material available to the length required has proved rather time-consuming. More important, as in all assessments of impacts, but particularly one done in "desk" style, it is virtually impossible to know to what extent impacts are attributable to the project rather than to other causes. Reliance on key informants (both personal and documentary) has been necessarily heavy, although care has been taken to cross-check them against each other and against the larger body of information available.

My sincere thanks to those interviewed for their cooperation and time spent in sometimes lengthy conversations. Even though most of what was shared simply cannot find room in these short pages, it nevertheless contributed to my own sense of the project and helped to increase the reliability with which impacts could be assessed.

ECUADOR

COUNTRY DATA SHEET

Size 106,000 sq. mi.
(Third smallest in South America)¹

Population 1972 - 6.4 million¹
1978 - 7.8 million²

American Indian 40-45%
Mestizo 40-45%
White 10-15%
Black 5-10%

Density 24 per km²
200 per km² of arable land³

Income Distribution (1970)³

% of national income, lowest quintile 2.7
% of national income, highest quintile 73.2

Distribution of Land Ownership (1968)³

% owned by top 10% of owners 65
% owned by smallest 27% of owners 1

Cumulative Annual Growth Rates (%)²

	Population	GDP	Per Capita GDP
1950-60	3.0	4.8	1.8
1960-70	3.2	5.5	2.2
1970-78	3.4	9.2	5.5

Adult Literacy Rate³

1960	68%	1972 ⁴	71% (population 15+)
1975	74%		61% rural
			86% urban

Number of Cities Over 500,000³

1960	0
1975	2

Urbanization³

1960	34%
1975	42%

¹Area Handbook for Ecuador

²Luzuriaga and Zuvekas 1980

³World Bank Development Indicators

⁴Ministry of Education, Ecuador

PROJECT DATA SHEET

Title: Community Education/Nonformal Education

Initial Contract: January 1, 1972

Closing Date: June 30, 1976

Grant Number: 518-11-690-075.2 (until June 30, 1974)
518-11-690-075.4 (July 1974 through June 1976)

Contracting Parties: Center for International Education
University of Massachusetts, Amherst

USAID/Ecuador

Grant Amount:

Through June 30, 1973	\$417,000
Through FY 1973	\$736,000
Life of project	\$1,143,000

Goals and Targets:

Goal A: Increase educational opportunities for those who at present do not have adequate access to the formal system of schooling.

Output Teachers and local leaders prepared and motivated to provide
Target 1: basic education to community members in such areas as agriculture, health, nutrition, literacy, home arts and other related fields.

Output Individuals who are motivated to learn through self-initiated
Target 2: study after a period of training is completed.

Goal B: More effective methods and materials for aiding individuals outside the regular school system.

Output Develop and implement technical and experimental education demon-
Target 1: strations with the assistance of teachers and other community groups

Output Test and evaluate the technical and educational materials and
Target 2: methods developed under Target 1.

Output Make available to the Ministry of Education and other institutions
Target 3: full information on the most efficient and effective systems developed and evaluated under this project.

Output
Target 4: Dissemination of the more successful systems

LIST OF ACRONYMS

AID	Agency for International Development
CA	Creative Associates
CEMA	Ecuadorean Center for Motivation and Assistance
CIDA	Interamerican Committee for Agricultural Development
CIE UMass/CIE	Center for International Education, University of Massachusetts at Amherst
CSE	Center for the Study of Evaluation, University of California at Los Angeles
DS/ED	Development Support Bureau, Office of Education, Agency for International Development
PEA	People's Education Association, Ghana
SENARED	National Educational Resources Service, Ecuador
SEV	Ecuadorean Volunteer Service
UNASAC	Union of Agricultural Associations of Columbe, Chimborazo Province
UNESCO-OREALC	United Nations Educational and Social Council-Regional Education Office for Latin America and the Caribbean

PROJECT SETTING

As the Community Education/Nonformal Education Project passed through different stages of implementation, there were also changes in project setting. Originally written as a one-year experiment to test various nonformal education techniques and delivery systems, the project continued for over four years (1972-76) and emphasis on institutionalization gradually replaced early emphasis on experimentation.

During the first year (1972-73), the project consisted of four loosely related programs held together by a central staff and by the goal of finding teaching-learning techniques which would effectively improve literacy, numeracy, communication and negotiation skills among rural Ecuadorians. All of the programs were designed for people "without access to the formal system of schooling," in other words, for the rural poor. Of the four programs and other spin-off activities, the most important (in terms of size and intensity) was the facilitator program, initially carried out in conjunction with CEMA, the Ecuadorian Center for Motivation and Assistance. Initially, the facilitator program was concentrated in the mountain provinces of Chimborazo and Tungurahua; later it expanded into Cotopaxi (mountains) and Manabi (coast). Simultaneously, a pilot project with Ministry of Education Adult Education Centers was carried out in Los Rios province; a small experiment was tried with the Ecuadorian Volunteer Service (SEV) in a secondary school for peasants in the Cuenca region of Azuay province; cassette tape recorders were introduced into the Tabacundo Radio School program which broadcast into rural communities in Pichincha province. A review of some of the characteristics of rural Ecuador will help place the project in perspective.

In 1960, 32 percent of Ecuador's population was rural; in some mountain provinces, like Chimborazo, more than 50 percent were Quechua speakers. Between 1964-66, some steps towards agrarian reform were taken, but precious little was accomplished and the sector continued under the domination of large landowners to whom a large part of the rural population stood in a relationship of quasi-servitude. Small farmers, indigenous communities and the rural landless remained without any significant political power in spite of some attempts at organization (AID 1970). According to various sources, about half the rural population of Ecuador lived (and still does) in absolute poverty, unable to satisfy minimum basic needs (See Luzuriaga and Zuvekas 1980: 23-31). A "Comprehensive Level-of-Living Index for Rural Areas" developed by those same authors using eight variables (see Table 1) enables a comparison of project provinces with the 20 provinces of Ecuador as a whole. On that index, Cotopaxi ranked twentieth; Chimborazo, nineteenth; Azuay, eighteenth; Tungurahua, fifteenth; Los Rios, thirteenth; Manabi, tenth; Pichincha, second. With the exception of the latter, it is clear that project provinces were among the poorest in Ecuador. Moreover, communities which actually participated in the project were generally "poorer" than their surrounding provinces (see Tables 2 A/B which give some characteristics for some of those communities).

In 1972, the Junta Nacional de Planificaci6n estimated that adult illiterates numbered about one million, some 29 percent of the total



Figure 1. Map of Ecuador Showing Provincial Boundaries

national population (6.6 million). Of this one million, four-fifths lived in rural areas (39% of rural population) and one-fifth lived in urban areas (14% of urban population). For the indigenous population of 929,700, the Junta estimated that the illiteracy rate was 80 percent. According to calculations made by Luzuriaga and Zuvekas, on an illiteracy scale with scores ranging from one (highest) to ten, Chimborazo (52.8%) scored one; Cotopaxi (40.3%), two; Los Rios (32.8%), four; Tungurahua (30.2%) and Manabi (34.1%), five; Azuay (31.1%), six; and Pichincha (29.7%), seven (see Table 3). As with previous rankings, illiteracy rates in project communities were higher than in the province as a whole.

According to a CIDA (1965) study on land tenure and socioeconomic development

Ecuadoreans regard Chimborazo as the poorest, most backward part of the highlands; a region which combines all the obstacles which make it difficult to exploit the available resources, inferior as they are to those of other regions . . . ; and finally, it is regarded as the region where living conditions so anachronistic as to be unbelievable continue to be maintained (p. 275).

Enrique Tasiguano, Ecuadorean field coordinator for the Nonformal Education Project, provides additional insights into the feudal lifestyle which prevailed in the province of Chimborazo, where he estimated that ten percent of the population owned the vast majority of cultivatable lands:

Household and field responsibilities are placed in the hands of the women and younger children because from an early age the men must join the patron's work force, earning from six to 25 sucres a day in the best of cases. When children reach the age of eight or nine, they become yanaperos [peons' helpers] in the haciendas. The little girls are given over to serve in the hacienda residences or in tending small livestock. If they stay at home, they assume family duties of caring for siblings and household animals.

All of this works against any kind of preparation, instruction or education because school age children must join the working conglomerate at such a young age. Adults finish the day tired and worn from work and cold and lack of primary services undermine any interest in getting ready [to study]. Moreover, the patrons go to great lengths to avoid the presence of development agents and the formation of educational nuclei and when that is no longer possible, they set up schools on the hacienda itself so that they can control the education of their "items of property." (p. 8-9; author's translation).

Notes in the CIDA volume indicated that Cotopaxi shared many of the characteristics of Chimborazo, though to a lesser extreme. In contrast Tungurahua, with its specialization in fruit crops was judged "one of the few examples in the mountains where small properties have evolved towards an open technification and intensification of tasks." Los Rios

is mentioned as an area of small farmers, with little additional information given. Manabi, a coastal province, was reportedly occupied by independent small farmers, most often on arid lands and in conditions described as "precarious."

About 1970, personnel in the AID mission in Quito began to utilize organizational development techniques and bottom-up planning and management in mission operations. The desire to extend those techniques outside the mission led to the creation of CEMA, an AID-funded independent group of trainers available to work with development programs (Richard Greene; personal communication). When the University of Massachusetts' Center for International Education (UMass/CIE) personnel arrived in Ecuador in 1971 for an exploratory visit, they found a highly compatible orientation and practice in the mission and in particular with CEMA personnel who had already submitted a proposal to AID/Ecuador to "train facilitators in group work, dialog, literacy, problem-solving, critical analysis, information-gathering and achievement motivation with the expectation that changes would be effected in local rural communities." After an initial collaborative experience in the training of the first facilitators in October 1971 (see below), UMass signed a formal contract with the mission in January 1972. From then until June 1974 the Nonformal Education Project experimented with a number of teaching-learning techniques, often in close collaboration with CEMA personnel, in order to determine their effectiveness in assisting Ecuadorean peasants and development agents. After October 1974, the project entered a consolidation phase in which efforts were joined with the Ministry of Education to establish a system of nonformal education throughout the country.

PROJECT IMPACTS

FINDINGS: EXPERIMENTAL PHASE (1972-74)

The Facilitator Program

In October 1972, CEMA trainers, with contributions from a UMass/CIE representative, trained 24 peasant facilitators in an intensive five-week program to work in what CEMA called "community education." In December, the facilitators began their own courses in seven communities with 164 participants.¹ The facilitator centers operated with a dual purpose and methodology. Not only were individual skills to be developed, but community organization and participation in development were equally project goals. Resources included the facilitators themselves trained in participatory styles, the Ashton-Warner literacy method and a series of educational games, all designed to strengthen word fluency and number fluency simultaneously with expressive and cooperative abilities. The final step of the Ashton-Warner method (outlined in Table 4), reflection on the relationship between learning content and daily life, was of particular importance in leading individuals and community towards practical action. The same dimension was built into the games, some of which were actually simulations of life situations, developed in the local context with input and adaptations by participants (see list of games in Appendix).

Despite the loose experimental nature of the program, its general success and the direction of its impacts are easily discernible in docu-

ments reviewed. In the earliest evaluation report available, CEMA member Piedad Figueroa (December 1972) concluded that the project's strongest impacts were on community organization and community development. At the time, Figueroa counted 25 community development projects initiated by the seven communities--11 had been completed successfully, two had been unsuccessful and 10 were still in execution. Hoxeng (1973) summarized the nature of those and a few additional projects (see Table 5). Though data were sparse, Figueroa also found gains in literacy and numeracy skills. Test scores for 44 individuals who had been tested at the beginning and at the conclusion (11 months later) of the initial program showed improvement in writing ($t = p .05$) and in math ($t = p .01$). Anecdotal data from Hoxeng (1973) depict the behavioral application of both technical and interpersonal skills in decision making, negotiation and organization and implementation of plans.

A few months later, Swanson (AID contractor; May 1973) found that participation in facilitator centers was superior to that typical of the Ministry of Education's Adult Education Centers. He also observed that the facilitator centers were providing a means of access to education in rural areas which were served only partially at best by the ministry's program. Moreover, Swanson noted that in comparison with the latter, facilitator center participants 1) received instruction that was more relevant to their immediate needs; 2) were more likely to change attitudes and behaviors; 3) were more effective community members; 4) were able to create learning environments within rural areas.

The most impressive evidence of impact from the "first generation" facilitator program was its spontaneous spread, at the request of new communities and through the initiatives of the peasant facilitators themselves. For example, after the contract with CEMA expired (September 1972), facilitators from Tutupala recruited 16 new trainees from their own and four neighboring communities and designed and implemented a 10-day training program which they convinced UMass to support. They later provided new facilitators with follow up visits. Likewise, Punachisac facilitators joined with their counterparts from El Rosario to train 19 young women from seven communities and recruited another group of trainees from 10 new communities. In Guasaco, the facilitator sought assistance from two counterparts in Punachisac and eight new candidates from four communities were trained in a course like that designed by the Tutupalans. When Swanson gathered his data in early 1973, he found that the number of facilitators had grown to 46 in the two provinces of Chimborazo and Tungurahua; 29 of them were active in 12 centers with some 269 participants. In short, within a year of its beginning, the project had virtually duplicated itself.

In April 1973, two AID/W education officers visited the project for their own examination and reported that

One of the most exciting realizations of the Ecuador Non-formal Education Project is the successful use of rural people to help their neighbors learn. 'Facilitators,' usually with sixth grade education, facilitate learning for neighbors and for new facilitators; participants are fully involved in the

whole process The objective is as much to improve community life as it is to learn reading and writing, words ordinarily grow out of particular problems

Progress in the short time the project has been active is indeed impressive; the devices work, both as learning tools and as stimuli to self-awareness (Newbry and Applegate, 4/9/73).

A Note About Educational Games

In the same letter Newbry and Applegate wrote:

The short term evaluator employed by the Mission has conformed informal observations, namely, that gaming is highly popular, that learning is taking place, that neighbors do work very hard to help their community learn, that gaming and fotonovelas [see below] have encouraged community action, and that interest remains high over extended periods. (Par. added).

The short term evaluator to which the above authors referred was Swanson, whose observations provide some insights into the usage and value of the games tested by the project. He noted that the games were "not the focal point of facilitator sessions," that they were used for about 20 percent of total class time, and "usually introduced in the second half of a session after drills in math, spelling, literacy, etc., have taken place, and are primarily used to supplement lessons." Even though the same games were used over and over, Swanson reported that participants became as involved as if the games were new. While some games were intended as simulations, others emphasized skill acquisition. The former were more popular and when participants felt games lacked real life qualities, they often improvised to make them more realistic.

The most significant indicators of whether or not the games were good nonformal education techniques would seem to lie in such phenomena as the intensity with which they were used and spontaneous diffusion as well as the occurrence of learning.² Anecdotal expressions like those already presented indicated that the games were used enthusiastically, although it was also observed that effective use of games was largely related to the facilitators' interest and use of them. Swanson claimed that some 80 percent of the facilitators also used the games outside class, e.g., in a community members' home or in the local community center. He also observed that the most utilized game was Hacienda, a game patterned after monopoly, but which simulated local rural conditions and relationships. Many of the community leaders interviewed by Swanson, although not participants in facilitator classes, were thoroughly familiar with Hacienda. The game had had what Swanson termed second and third generation spread effects, and he noted without being specific that the same was occurring with other materials, i.e., that they were spreading "from one village to another without direct participation by the project staff or facilitators." At the same time, Swanson observed that such diffusion was positively correlated with local leaders' acceptance of the program and was stymied in places where local authorities regarded facilitators as intruders.

Hoxeng (1973) reported that games were used by facilitators at their own initiative as a means of making contact and recruiting new communities to nonformal learning activities. A general picture of the spread of games in the project's first year was reported in the table reproduced in Table 7.

Los Rios Project

The Los Rios experiment was the initial point of collaboration with the Ministry of Education during the early phase of the project when UMass generally and deliberately kept its distance from that institution. The pilot project consisted in introducing the Ashton-Warner and gaming techniques into a formal setting—five Adult Education Centers in the province of Los Rios. Forty teachers were given a 10-day short course and received materials for classroom use, but only five centers were chosen to form the pilot project and continue in follow up sessions and ongoing relationships with project staff.

In his evaluation, Swanson found that relationships between the project and the Ministry of Education were cordial and the program was regarded as satisfactory. In general, he reported only weak outcomes from the project and at times, his statements appear contradictory. Dropout rates were the same (66 percent) in pilot centers and adult education centers throughout the province. Teachers continued to use traditional methods and relegated use of games to afterclass situations or when students were tired; when teachers used games more enthusiastically, they were also used more effectively. In spite of teacher differences, Swanson found that 80 percent of the participants felt that games were helpful for practical living and heightened learning as well. On the one hand, Swanson maintained that there were no major outreach difference when pilot centers were compared to other centers; on the other, he reported that "spread effects for the use of games is notable" and "games are used outside the classroom in the community, adding to this spread effect." In an end-of-year session with 16 of the 40 teachers originally trained and supplied with games, Hoxeng found general satisfaction with and desire to continue using them.

Newbry and Applegate characterized the Los Rios experiment as unsuccessful, but felt that this was probably due to poor design and implementation (they did not elaborate) and should not be generalized as indicative of the future of collaborative programs anticipated with the Ministry of Education. Indeed, UMass reported that "on the basis of the Los Rios experiment," a multi-purpose training program and materials development effort was being planned for 1973-74.

The Ecuadorean Volunteer Service

Another experiment at introducing nonformal education techniques into a formal institutional setting was carried out with SEV, an AID-funded, VISTA-type organization designed to bring university students into work with peasants. Twenty-two SEV volunteers working at a secondary school for peasants formed the basis of the experimental team. The volunteers were already accustomed to a methodology which stressed consciousness-raising through conceptualization; but they did so within the traditional secondary curriculum. Rather than attempting to change that curriculum, UMass decided to experiment with the use of educational games during

the school's informal activities. Volunteers also agreed to produce and distribute copies of the most popular games for students to take back to their home communities and volunteers working in 10 local communities were instructed in the use of games.

In spite of the scope of initial agreements, UMass reported that use of materials by SEV was extremely limited. Swanson found that SEV volunteers were using games in eight communities in instructional contexts with "positive" results and that they were also being used "informally" in other communities. Unfortunately, neither Swanson nor the authors of any other documents reviewed offered any insights into what the impacts realized through the SEV program might have been.

Tabacundo Radio School

In the fourth major component of the project, 38 cassette recorders were introduced among the 52 highland communities and 1000 participants of the Tabacundo Radio School, located one and a half hours north of Quito. The experiment was designed to test whether the introduction of mechanisms for two-way communication would help improve the quality of participation and learning among the population. Hoxeng found that in the short period of four months (November 1972-February 1973), the taped messages prepared by various communities matured into imaginative productions which were received, edited and broadcast by the station in a regular program called Mensaje Campesino. In addition, feedback provided through the cassettes was used in the development of three radio school texts which proved to be both popular and useful--"Let's Grow Vegetables," "Community Life" and "Good Quality Milk;" music groups were formed in several of the radio school communities which suddenly had an opportunity to perform and listen to indigenous music and a few communities even produced their own sociodramas for broadcast.

Data collected by project staff showed that the recorders were indeed being used widely, but attempts to compare changes in listener attitudes and behavior with data gathered a year before the introduction of the cassettes are of little significance. More impressive are the reported collaboration of peasants with professionals to produce programs in agriculture, the continuous supply of programs spontaneously produced by the communities, and the fact that these had come to require no editing. Likewise, the radio school director attributed the formation of 28 new community associations to the "inter-community communication made possible by the recorders." This was a sharp contrast with the December 1971 observation of AID researcher Hayes Keeler that the Tabacundo program (pre-cassettes) was effective as an instrument for literacy education, but had little effect in spurring community organization and community development programs.

The Fotonovela

First-year activities also included testing the fotonovela as a medium for nonformal education. Traditionally a soap opera in comic book style (with photos instead of drawings), fotonovelas are a form of popular literature, widely accepted by rural as well as urban populations in Latin America. As with other techniques, there were three basic educational

objectives which guided the use of photonovels: 1) increase the self-confidence of peasant readers; 2) reinforce the notions of community and community action and 3) help foster concepts of organization, decision making, communication and strategy-planning.

A photonovel hero, Manuel Santi, was created after an indigenous leader with a reputation for confronting abusive authorities and landowners, the traditional exploiters of Ecuadorean peasants. In late 1972, 12,000 copies of the first production were run and distributed through commercial houses, transportation (railroad and bus) ticket sellers, village grocery stores and adult education centers. Seventy-five readers surveyed said unanimously that they like the photonovel and its heroes. Responses to other questions indicated that readers identified with the protagonists and their situations and that the production was readable and attractive. A second photonovel was also printed in 12,000 copies and was also well-received. A new method of distribution, market-to-market traveling salesmen, proved to be an effective means for selling "thousands of copies all over the country to exactly the people for whom the fotonovelas were intended." Interestingly enough, AID/W wondered whether the magazines carried messages that were potentially inciteful. Inquiries prompted assurances from the mission that officials throughout the Ministry of Education had seen and approved them and in fact, MOE officials were so favorable that they contracted for the production of four more fotonovelas during the second year of the contract.

Second Year Activities and Impacts

During 1973-74, project activity consisted almost entirely of expanding the facilitator program and in establishing large-scale collaborative relationships with the Ministry of Education Adult Education Department, thus combining two of the four original programs which operated in the first year.

In October 1973, some two years after the first facilitator training had taken place, Hoxeng made a follow up report on the seven original communities. In two, he found that disagreements between facilitators and communities had arisen and that activities had ceased altogether. In another, the only facilitator-led activity involved preparing a community soccer field. In the remaining four communities, classes had stopped (since September 1972, facilitators no longer received stipends or back-stopping from the project), but other community activities (cooperatives and infrastructure improvement) continued and there were ideas for new projects. Facilitators from two communities had utilized their educational and organizational skills in other communities, although in a limited, sporadic fashion. Hoxeng concluded that facilitators who remained active were still working to get the largest share of the community involved, but that the rapid development which had characterized the first year of activities had "slowed to a walk." Nevertheless, he felt that essential processes remained intact.

In a second phase of experimentation, the facilitator program moved into peasant communities in the mountain province of Cotopaxi and into completely new settings on the coast, as well as continuing to work in Chimborazo and Tungurahua. The Colonche area of Guayas province was

chosen as a pilot coastal site. In contrast to the intensive 10-day workshop which had become the standard training mode for new facilitators, the program in Colonche was held during weekends in October and November 1973. In March 1974, Alcocer found that 30 of the 34 trainees were active in their communities in spite of early feelings that "the people were not very interested" in working with facilitators. To help compensate for lacks in facilitator-community cohesiveness, an organizational innovation was tried on the coast. In a monthly rotation plan, all nine facilitators worked for a period in one community, a scheme which Bill Smith (project administrator for over three years; personal communication) observed not only provided an effective support system for individual facilitators, but demonstrated to community members that they were part of something larger than their own communities.

In preparation for an expanded program in nonformal education, the ministry consolidated its various materials production units into one independent department known as SENARED (National Educational Resources Service). In 1973, SENARED's chief operation became the production of educational games (see Table 8) and three regional centers were established-- in Ibarra, Riobamba and Latacunga--to assist in training and distribution of materials. With that regional support system in place, plans were laid by ministry and project staff to train personnel for 331 adult education centers in eight mountain provinces. Originally, peasants were to be 60 percent of those trained (and later employed by the ministry). However, when the number of trainees was increased from 360 to 550 at the pressure of unemployed school teachers, peasants were outnumbered five to one. Documents do not give a clear picture of what happened, but it appears that positions available were awarded to "teachers" rather than "peasants," and various references indicated that the short workshops had little effect on the traditional styles of many teachers. Some, already oriented towards greater participation and innovative methods, were given concrete ideas and general reinforcement. However, one severe drawback was the several months' delay by SENARED in providing the games and other materials designed to help implement what had been offered in the training sessions.

A glimpse of post-training occurrences for peasant facilitators in the Quechua-speaking Columbe region of Chimborazo province may or may not be generalizable. Nine months after the training program, project staff member Diego Andrade found that of the trainees, only nine were still active, 14 were semi-active and six were totally inactive. Of seven community groups which had been formed, one was described as failed. Three communities held regular meetings and in two of them, farmers' associations had been formed and an umbrella organization (UNASAC--Union of Agricultural Associations of Columbe) was headed by three facilitators and included four communities. One community had expanded its governing body (cabildo) and in three other communities, peasant facilitators had formed adult education centers. In two of these, they were replaced by "teachers," although in one case, the facilitator was kept on in charge of first-cycle students.⁴

In second year activities with SEV, training was provided for normal school graduates (unemployed teachers) supported by funds from West Germany to work as rural change agents. According to another report by Diego

Andrade, these community workers, selected from among 20 trainees and assigned to four communities, managed to organize adult learning centers, to promote the building of four schools and the improvement of medical dispensaries and to activate groups for other public works as well. Andrade also noted that their use of educational games had been "well-received." In one community, there was even some local reproduction of games, something which although it had been the intention of the project, was not recorded in any other sites.⁵ Andrade's general conclusion was that the program was more successful in these communities than it had been at the peasant high school because those who attempted to use nonformal techniques did not really have the support of colegio authorities. In other observations, Andrade stated that in communities where facilitators were active, communications styles and patterns were becoming more inclusive, members were exhibiting a more active role in shaping their life settings, and individual skills in literacy, numeracy, communications and negotiations were stronger.⁶

Formal relationships with Radio Tabacundo ceased in April 1973. In his October visit, Hoxeng observed that the peasant-produced radio program had become the "most listened to" on the station. The radio school itself was continuing to use the recorders and undertook to replenish supplies of cassettes. As late as 1978, there was evidence that recorders were still being used (though in the interim many had broken down and had to be repaired). The commitment to community participation continued.

New initiatives in use of radio included production of seven entertainment programs which promoted attitudinal changes to large audiences and five direct participation programs which aimed at behavioral change for relatively small audiences. A third type of program, the sociodrama, was a series of broadcasts designed around rural themes and specific learning goals and with potential to provoke attitudinal change for rather large audiences. All the programs were produced and recorded a) in a professional studio; b) with voices of rural people; c) who read and interpreted scripts written by professionals in their own way; d) using music and sound effects recorded in the country, markets, etc., to increase the credibility of the production. Follow up research carried out in several communities verified the usefulness of the programs and pointed out some of the limitations, both technical and substantive, for correction in the future. With only minor problems, the programs were well-received and successful in producing the effects desired.

In a subsequent development called radiovision, programs were recorded onto cassettes and accompanied by visual materials. Both types of materials were charged to a monitor who met with community members to play the cassette tapes and use the visual aids to strengthen presentations and ensuing discussions. Radiovision also incorporated elements of the Tabacundo experiment by encouraging communities to prepare their own productions. Overall, the experiment demonstrated that the monitor-cassette-visual aid combination was an effective methodology for rural communities. Interviews with several local radio stations showed that owners were attracted to the idea of broadcasting such materials. Project staff concluded that dozens of local radio stations might become the basis of an extensive instructional reach.

FINDINGS: THE CONSOLIDATION PHASE1974-76

Project influence on the ministry could already be observed in 1973 in the inclusion of a track of "nonformal education" as part of its organization. In 1974, the budget for adult education was increased to 41 million sucres, from only 11 million the previous year. A section of the National Education Plan drafted in 1975 and entitled "The Institutionalization of Nonformal Education," depicted project influence quite explicitly (see Appendices for translation of that section). It concluded by recommending that nonformal education be promoted and institutionalized at all levels of activity, both in and out of school. An AID Project Appraisal Report covering the period from April 1974 through September 1975 lists the following completed actions, indicating both the expanded nature of the project and some progress towards institutionalization:

- 310 educators from four coastal provinces instructed in the use of nonformal education methodologies and processes adapted for use in coastal environments;

- technical assistance to the Adult Education Department in the development and production of two phonovoxes;

- adaptation of the Hacienda game for use in coastal environments;

- technical assistance to the Ministry of Education in planning future nonformal education programs; program design included regional support centers, with the intention that these would become the basis of a more intensive and decentralized system;

- two facilitators each trained for 10 communities in the use of tape recorders and flip charts as part of the radiovision program; visits made to communities to discover the distribution of listener audiences and responses to the programs;

- 40 radio dramatizations (25 for coastal and 15 for mountain audiences) developed on themes familiar to listeners and which would provide them with the opportunity to reflect on their life situations;

- continuation of follow up visits to facilitators in both mountain and coastal areas;

- 3 seminars designed to provide peasant facilitators with the opportunity to analyze and evaluate the facilitator program; first seminar for 15 facilitators who in turn planned the second seminar for 35 others; in the third, 15 peasant leaders were brought together with 15 facilitators to compare and reflect on leadership styles.

In the final months of the project, Valerie Ickis wrote a report on the achievements and problems in the institutionalization process up to that point (March 1976) which claimed to reflect the assessment of the project staff. On the positive side, nonformal education methodologies were gaining prestige among ministry personnel; a cohesive working team of ministry and project staff had been formed at the national level; effective provincial teams were emerging from concrete experiences in working together; 90 new communities had solicited the service of the nonformal education program (10 in Cotopaxi, 40 in Chimborazo, and 40 in Manabi).

On the negative side, Ickis identified several problems: 1) tendency to place unemployed teachers in facilitator positions with the results that communities were less responsive to these "outsiders" and turnover was high

as teachers moved on to other, more desired employment; 2) the nonformal education program was placed in competition with the extrascholastic program for resources and this fanned existing resentments between the two groups of personnel--the former opposed the displacement of community commitment because of depersonalized bureaucratic arrangements and the latter did not appreciate nonformal educational methods and techniques; 3) provincial directors appointed nonformal education personnel with the result that facilitator security was completely dependent upon the director and "three years of careful experimentation with facilitator selection was wasted" and uncommitted people were often chosen to work in nonformal education; 4) support teams were too small and ill-equipped to provide adequate follow up for community workers; 5) teachers and supervisors often found the horizontal relationships valued in nonformal education threatening to their traditional status and manner of relating; 6) materials production was lacking or there was little effective distribution of materials which did exist to facilitators, leaving them, in either case, without needed materials; 7) decisions were made unilaterally by ministry officials in complete contradiction with the two-way communication which had been established in earlier phases of the project.

A final and important note by Ickis about the institutionalization process was that discussions on the nationwide implementation of nonformal education had been abandoned because of a changeover in national government. Consequently, after UMass withdrew, the nonformal education unit, by then incorporated into the department of extrascholastic education, continued to operate its program only in the provinces where it had worked most intensely during the project--Chimborazo, Cotopaxi, Manabi and Tungurahua.

1977 and After

Enrique Tasiguano, who continued on with the nonformal education program under the ministry, wrote a report on the situation about a year and a half after UMass participation had ended. Tasiguano's report opens:

Since the month of June 1976, the presence and application of the Nonformal Education Project has undergone changes, but these have been more within the administration at the official level than in its very essence in the rural communities of Ecuador.

Tasiguano echoed some of Ickis' criticisms and suggested his own personal disappointment that incorporation into the ministry had made the program more "bureaucratic" and "school-like." He also reported that both the extrascholastic and the nonformal education programs were being absorbed into an overall strategy of nuclearization (an educational model becoming rather widely followed in Andean countries in recent educational reforms). In Tasiguano's appraisal, however, nonformal education was not being displaced but was contributing both its philosophy and its techniques as well as its human and materials resources to the nuclearization program.

Tasiguano's report and other, more recent information, indicate that under whatever title, nonformal education activities have continued most

strongly in the mountain province of Chimborazo. In late 1977, Tasiguano reported 60 facilitators working in the province, 49 of them indigenous. He also identified a number of community development activities (including the establishment of artisan and clothesmaking centers, purchase of land and light machinery, construction of roads, school and meeting centers and storage facilities). The educational fair (mobile unit) continued to function as did the use of puppet theater and radio broadcasts. Strong ties continued with the provincial education office, "the one office where the peasant enters freely and without hindrance to express his concerns and desires or with stories and events from the communities."

Tasiguano reported problems as well, noting in particular that games and other learning aids were in short supply and were not being replenished, except for a special literacy text (Tambien Yo Puedo) which was available in Spanish and being prepared in Quechua. The one available vehicle was breaking down with the result that follow up visits were lagging and in one month, facilitator stipends were withheld to provide resources to hold a follow up seminar.

In 1978, Carlos Moreno, who had become head of an Education for Development Unit, reiterated the problem of lack of materials, but added that they were "performing miracles" to produce copies of Hacienda and Letter Dice and a few other games, in spite of no support from the ministry. Moreno also noted that a Bilingual School had been created in Colta Monjas (northern Chimborazo) to train peasant leaders as facilitators and bilingual professors for grades one and two. With that, the number of facilitators had risen to 180. Moreno's own unit included four school supervisors, four agronomists, three community workers, one nutritionist, one anthropologist, one psychologist, one specialist in rural education and two secretaries. That unit and its work, were the subject of a 1978 UNESCO-OREALC case study on "Decentralization of Educational Administration in Latin America and the Caribbean." The volume makes only slight reference to the UMass/AID project in nonformal education, but the history and activities described are clearly those of the project and the picture portrayed is one of vigorous continuing activity.

In September 1979, the Interamerican Foundation awarded the the Chimborazo Unit a three-year, \$218,000 grant (complemented by \$94,850 from the Ministry of Education, mostly in staff salaries) to bolster its activities. Funds covered the purchase of two badly needed vehicles; renovation of equipment for the Educational Fair and resources to increase the number of presentations from 15 to 50 per year (each presentation lasting 1-2 days and reaching 3-6 communities); expansion of the Bilingual Training Center established at Colta Monjas; creation of an "educational community" at Gastazo Hospital where practical training would be offered in agriculture, forestry, livestock-raising and small industries); establishment of handicraft centers in 15 communities and of breadmaking centers in 10 other communities. Profits derived from the breadmaking centers were to be returned fifty percent to the community for a development fund and the remaining fifty percent used to create a scholarship fund for indigenous students.

In Manabi, Tasiguano reported that a three-year program was being carried out cooperatively by the Provincial Education Office, the Nonformal

Education Unit and the Sanitary Works Institute. He found some 100 facilitator centers functioning with approximately 3800 participants and noted that literacy in the province had risen from 35 percent in 1974 to 80 percent in 1976. In Tasiguano's opinion, the Manabi program was particularly effective at combining education and development activities, thanks to the collaboration of both types of agencies in planning and implementing activities. Facilitators were chosen from both inside and outside the communities, trained in techniques for studying and analyzing the communities and the dynamics of the region, and given strong follow up support.

Activities reported by Tasiguano for the province included literacy education, surveying, agricultural improvements, mobile movies, sociodramas, singing, poetry, dancing, folklore, artisanry, and radio programs using community productions; 27 lots donated for community centers, materials procured for 32 community centers and one educational center; local roads repaired, nine health centers established and one artisan center set up with more than 180,000 sucres worth of goods; 60 water pumps and 270 latrines installed; 60 kerosene lamps, four sewing machines and 332 classroom benches procured.

In 1979, Ecuador again returned to a civilian government and literacy again became a national development priority. In an April 1980 visit to Manabi, Jim Hoxeng (DS/ED) noted that there "the machinery was still in place," i.e., methods and techniques dating from the UMass Project have been retained and can be used in the new campaign against illiteracy. Even more recently, two representatives from Creative Associates observed that the provincial education office in Manabi was using the basic techniques of facilitator training to prepare promotores for community literacy work. They also reported some use of educational games.

In Cotopaxi and Tungurahua, the only information available on the post-project situation is from Tasiguano's 1977 report. Cotopaxi had 37 facilitator centers with 874 participants. However, only three of the facilitators were local to the area and the rest had transferred into nonformal education from the defunct Unesco literacy program. A high drop out rate among these personnel had prompted a decision to recruit more local facilitators, but remaining workers who feared their jobs would be threatened pressured against the move. Tasiguano's observation was that in Cotopaxi, literacy training had reverted to a vertical operation with little evidence of community involvement or community development repercussions. The only materials available were a few games left over from the UMass project and virtually no follow up was being given from provincial administration to the facilitators. In Tungurahua, 15 facilitators were receiving 1000 sucres stipends monthly. There, as in other provinces, Tasiguano observed that local facilitators showed greater interest and were more successful at gaining support for community development activities. The regional education office was supplying some mimeographed educational materials and holding biweekly meetings for facilitators. Fifty new facilitators were scheduled to be trained in November.

Changes noted above in Ecuador's national government and policies interrupted the continuity and spread of project impacts. A change which coincided roughly with the end of the project resulted in a general hiatus in literacy and adult education programs, especially in rural areas. The current government has again authorized a national program and called for 48,400 persons

(17,000 volunteers) to work in 15,000 communities (11,000 rural and 4000 urban) to produce 760,000 new adult literates in five years. Review of literacy campaign documents shows that that linkages in literacy, consciousness-raising and community development are recognized as fundamental. There is a clear call for participatory research, goal-setting and implementation. Campaign strategies advocated are described as "simple so that they can be developed by front line workers, without being unscientific." A key source of continuity is Carlos Poveda, who headed the Adult Education Department during the years of the project and is currently in the directorate of the national literacy program. In an interview with the Creative Associates team, Poveda remarked that the Non-formal Education Project had helped introduce some philosophy and techniques that are now part of a more mature system and program. CA observers emphasized that for them, the greatest evidence of impacts made earlier lay precisely in Poveda and others like him who showed a spirit of experimentation and a commitment to participatory processes. In visits to a few provinces to survey literacy campaign activities, CA members found instances of local reproduction of literacy materials (visual aids, including some in the style of the photonovels) and workers who had been trained like facilitators.

BEYOND ECUADOR: IMPACTS ON THE CENTER FOR INTERNATIONAL EDUCATION AT THE UNIVERSITY OF MASSACHUSETTS AND ON THE FIELD OF NONFORMAL EDUCATION

When CIE entered into the "Ecuador Project" in 1971-72, it was a young center (founded in 1968) with talented individuals and ideas, but little experience in nonformal education in developing countries. The project provided CIE with the opportunity for field experimentation which in turn impacted heavily on the center's own development. That impact was strongly reinforced through a five-year, \$750,000 institutional development grant received from AID in 1974. In a summary of progress under that grant, CIE director David Evans wrote in 1978 that "Many of the substantive elements of the Ecuador Project have been studied, revised, transformed, enhanced and transmitted through the capacities created and sustained by the 211(d) grant" CIE professor David Kinsey said that impacts from the Ecuador project can be traced in all the major areas of CIE life—other field projects; faculty, students and graduates; courses; dissertations, scholarly papers and publications; conferences and network relationships; only some of the highlights are summarized here.

Projects. Since Ecuador, nonformal education projects have been or are being carried out in Ghana, Guatemala, Thailand, Swaziland and Indonesia. The Ghana project was begun with 211(d) monies and applied many of the lessons and techniques from Ecuador to the literacy education program of the People's Education Association in eastern Ghana. Since the conclusion of CIE's 211(d), AID has funded the PEA with accelerated impact monies to extend its program into other parts of Ghana. Both the Guatemala and Thailand projects were supported by an additional \$240,000 AID grant to CIE while it held the 211(d). In Guatemala, rural health nurses, technicians and promoters under the umbrella of the Ministry of Health were trained in the use of nonformal education methodologies. In Thailand, a nonformal education program was established in the Adult Education Division of the Ministry of Education.

In subsequent project, the governments of Swaziland and Indonesia have contracted CIE directly, a testimony to the reputation which the center has built internationally. In the case of Indonesia, CIE was chosen over its

competitors by the Indonesian government (which maintains one of the largest nonformal education programs in the developing world) to provide the technical assistance to the Division of Community Education during a four-year, 30 million dollar project supported by a World Bank loan and government of Indonesia resources.

Personnel. The philosophy and practices of the Ecuador Project influenced CIE personnel and organization profoundly. Out of a commitment to participatory processes, faculty and students share in problem definition and solving in all the activities of the center. Special efforts are made to receive students from project countries for short or long-term training at CIE and to incorporate their understanding of their own populations' needs into CIE programs. Developing countries which have sent students to CIE include Chile, Mexico, Venezuela, Ghana, Kenya, Lesotho, Indonesia, Thailand and India as well as Ecuador. Several returned graduates hold key positions in education and/or rural development institutions in their own countries. In the U.S., CIE graduates are employed by agencies which work in educational development, e.g., the Overseas Education Fund, New Transcentury, the U.S. Department of Education, the National Institute of Education, the State Department, Creative Associates, the Government Affairs Institute and AID itself, and in several universities.

Individuals linked specifically to the Ecuador project have been particularly instrumental in furthering its impacts. Ecuadorean field administrator Patricio Barriga and Ecuadorean staff member Alberto Ochoa both came to CIE for doctoral work. Barriga has subsequently worked in a rural education program in Guatemala and with a Unesco rural adult education program in Colombia. James Hoxeng and William Smith, two CIE graduate students who served as project administrators, are currently employed in the AID/DSB Office of Education and at the Academy for Educational Development, respectively. Through Hoxeng, the Ecuador experience has been carried into DS/ED's own program in nonformal education in developing countries, including Colombia, Chile, Nicaragua, Panama, Kenya, Cameroon, Ivory Coast, Lesotho and the Philippines.

Dissertations, Scholarly Papers and Publications. Three CIE dissertations (Hoxeng, Smith, Etling) have written directly about some aspect of the Ecuador project and several others have used it as case material. A series of 15 Technical Notes describing and analyzing aspects of the Ecuador project has been published and circulated widely to institutions and projects throughout the world. Distribution manager Will Shaw, noting that the project Technical Notes are by far the most frequently requested publications, provided the following figures for overall sales: 1977--2806 copies; 1978--1679 copies; 1979--4843 copies. Shaw also said that most copies went to practitioners in Third World countries and explained that publications were reproduced as economically as possible, precisely so they would be within the means of such practitioners.

The CIE Network. CIE network members reach around the world. A 1979 CIE publication listed 23 members from ten African countries (Ethiopia, Ghana, Kenya, Lesotho, Niger, Nigeria, Senegal, Tanzania, Zambia and Zimbabwe); 3 from eight Asian countries (Bangladesh, India, Indonesia, Japan, Nepal, Philippines, South Korea and Thailand); ten from seven Latin American countries (Colombia, Chile, Guatemala, Mexico, Nicaragua, Peru and Venezuela); one each from Iran, Iraq and Israel; 80 from the U.S., Canada, England, Belgium, France and Sweden. Through its publications exchange, CIE participates in a network of 80 institutions located around the world.

LESSONS LEARNED

Issues raised in the scope of work prepared for this review of impacts offer a convenient way to look at some lessons learned from the Nonformal Education Project. Specifically, what can be concluded about the relationship between impacts and administrative/managerial effectiveness, use of uncertified personnel, appropriateness, access and participation, replication and institutionalization? What must be said first about each of these dimensions, as well as about the quality and extent of impacts, is that they were different in different phases of the project. Put simply, the project was apparently more effective at meeting its goals and impacting the lives of beneficiaries during the experimental phase when "nonformality" prevailed. Methods and techniques tested--educational games, phonovels, cassette recordings, radio programs, sociodrama, theater (puppet and live) and facilitators--all proved effective at improving the level of basic education and community development among the rural poor. A type of nonformal institutionalization even began to emerge--peasants took the initiative at training other peasants as facilitators, produced educational radio programs and created or revived community and intercommunity organizations. Impacts declined when institutionalization, interpreted as incorporation into the formal system of education, became the overriding goal.

Administrative/Managerial Effectiveness. In contrast to others, this project placed strong emphasis on Ecuadorean staffing and participation by beneficiaries; the field staff was headed by an Ecuadorean and included no more than one North American at any time. Moreover, the Ecuadoreans chosen as staff members were themselves "the products of the communities" in which the project worked. According to one UMass document (July 1975),

Bringing the perspective and experience of a group of socially committed Ecuadoreans directly into the core of the Project was perhaps the singlemost important factor in producing the results which followed.

As the foregoing indicates, project organization and management was thoroughly decentralized and approximated bottom-up planning and implementation as completely as possible, at least when it was independent of ministry constraints. Later, when attempts at institutionalization placed nonformal education under ministry control, organization and activities were forced to adapt to extraneous conditions such as the authority of provincial directors, the demands of certified teachers, and the lack of commitment by outsiders. Especially disconcerting and contrary to the original thrust of the project was the preference given to "certified" teachers, many of whom used nonformal education techniques poorly or rejected them even though they had proven effective and popular when used by others. Likewise, impacts on community organization and development were diminished due to lack of commitment and rapid turnover of certified personnel.

One problem which was not solved by either the education establishment or the project and its beneficiaries was the inadequate supply of educational materials. It does not follow, however, that the problem is necessarily unsolvable. The probability is high that failure to produce and/or distribute materials by the ministry was due as much to poor organization or lack of will as to insufficient resources or technical capability. On the other hand, reproduction by participants might have been able to occur on a more adequate

scale if it had not been left entirely to spontaneity. For example, the team which continued to function in Chimborazo was able to perform the "miracles" necessary to produce some materials, albeit in small quantities; cooperative artisan production centers were among the organizations established by project communities. Might it have been feasible to establish a cooperative system of educational materials production by indigenous artisans? Had this been accomplished, it seems that a nonformal education system might have been able to institutionalize itself autonomously rather than rely on the ministry for institutional support which was not in fact delivered.

Appropriateness. In lieu of criteria which emanated from the formal system of education, the touchstone for project design and implementation was fundamentally cultural appropriateness--patterns of interaction and organization and methods and techniques which were either familiar or compatible with indigenous ways and means. The impacts and spontaneous spread which occurred during the earlier phase of the project were clearly related to this basic appropriateness. That same appropriateness was likewise the basis of the project's marked accessibility and participation by the rural poor and early reports affirmed that both access and participation were superior than in the formal ministry program. However, the picture again changed during the latter part of the project. While new facilitators were trained and community programs established, energies and resources were increasingly devoted to training "certified personnel" in the use of nonformal education techniques, but with much less result. In short, as the nonformal but culturally appropriate project became more involved with the formal system of education, appropriateness obviously diminished and, while few statistics are reported, it seems that the level of access and participation by the rural poor was significantly curtailed. It follows that fewer impacts were made among those beneficiaries. Impacts on certified teachers were generally reported as minimal.

Legitimacy and Institutionalization. Once again, it was the confusion of legitimacy and institutionalization with formal educational arrangements, and the implicit or sometimes blatant regard of nonformal and/or indigenous arrangements as illegitimate, that resulted in a substantially altered project, in the name of institutionalization. That alteration makes it impossible to conclude that the project, or even the approach to nonformal education which it represented, was actually institutionalized. At best, separate elements were picked up by the formal system and influenced individual personalities and practices, but, with the exception of Chimborazo province, there is no real evidence of an institutionalized nonformal education system structured to respond to the needs of the rural poor and in their own cultural terms. Interestingly enough, the program in Chimborazo has apparently succeeded in simultaneously maintaining positive, productive relationships with formal institutions, both educational and outside the educational establishment. Similar, but much less complete activities were also reported for the province of Manabi. Those experiences argue that while there is an inherent tension between formal and nonformal approaches, collaboration is possible. As the Chimborazo case suggests, that collaboration depends on the strength and autonomy of the nonformal system, something which transcends a mere adaptation of the formal system.

One hypothesis which emerges from this project case is that as a result of the project's cultural appropriateness and decentralization, some aspects of it may have been maintained in rural areas even when official promotion diminished. Similarly, as rural development again receives priority in govern-

ment programs, there may well be a positive correlation between communities which have participated in nonformal education programs and receptivity to and participation in current programs. If so, the argument for culturally appropriate projects and decentralized management emerges as a long-term development strategy in the face of the instability common in formal institutions and programs in developing countries.

Finally, project impacts were greatly multiplied through linkages with the Center for International Education and coordination with that entity's institutional development. Not only did that connection endow the project with an unusual unity of research, practice and teaching, but CIE mechanisms have extended project impacts into the field of nonformal education itself, both in the U.S. and in other developing areas.

NOTES

1. Swanson (1973) reported that the 164 participants included 93 men and 71 women; 70% were agricultural workers, 15% housewives, 7% artisans and 8% held other occupations. The great majority of the participants were from 11 to 21 years old; 15% were more than 40. Some 64% did not have children; 10% had four to six children. Swanson depicted the "composite participant" as

an agricultural worker who toils all day cultivating potatoes, corn, wheat, beans and other agricultural crops. Life is not easy since most work is done as peon labor for petty wages. Death is a constant factor in his community and fatalism exists all around him. He lives in an adobe house, just like the facilitators, and has little outside money for buying amenities. His wife and children work the farms nearby and help with household chores. He has not attended school because he had to work, or the school was too far away from his home.

Swanson also gathered data on 46 facilitators: 37 were men, 9 women; 29 were active, 17 inactive; 37 were agricultural workers, 5 artisans, 5 from other occupations; average age was 25 and ages ranged from 20 to 40 years old.

2. The Center for the Study of Evaluation (UCLA 1975) carried out a rather elaborate evaluation of four of the games as learning devices. In this author's opinion, an evaluation of the games themselves was an artificial manipulation of the project methodology which emphasized several complementary approaches to learning and considered the games as supplementary. Briefly, the study concluded that the games were somewhat effective in improving both word and number fluency, although specific games produced different results in learners depending on such things as the role and the personality of the facilitators, the nature of the group, the frequency of play, and the individual's existing level of skills. All four of the games evaluated (Hacienda, Syllable Dice, Syllable cards, Number Bingo) were about the same in the interest they aroused, but "Hacienda" proved most successful in maintaining interest because of its close approximation to rural reality. Hacienda was the game most linked to subsequent impacts, both according to the CSE report and the observations of other sources consulted. With regard to that game, CSE noted that

Its depth of content allowed peasants a variety of learning experiences; this appeared to motivate peasants to make practical applications of what they learned to daily situations.

It was through the use of Hacienda that rural groups became most motivated to continue their own education, and to apply that to actual situations (e.g., the marketplace, dealing with authorities) . . . Further, only Hacienda contained elements that motivated a group to a sense of local pride and group identity.

CSE also examined whether learning effects varied according to different game sequences. No truly significant finding emerged. As might have been expected, increased frequency of play yielded higher scores, though the degree of difference varied with sex and level of education.

3. There was no definition of the population interviewed and no interpretation of results. The reader (see Technical Note #10) is merely given a few flat facts, such as

In 1972, 31 percent of those questioned thought a cooperative was an organization to help members and 40 percent thought it was a union; while in 1973, 53 percent thought it was an organization to help members, (four other answers pulled less than ten percent each and 21 percent did not respond) (parenthesis added).

4. According to William Smith (Academy for Educational Development; personal communication) peasants were frequently employed by the ministry and in some cases where they were temporarily displaced by teachers, later returned to function as adult educators.
5. Smith also said that there was more widespread reproduction of games in local communities than was indicated in project documents.
6. In other observations, Andrade noted that in some communities there were clear changes in leadership style from autocratic to more democratic and that even though women were still excluded from participation in community associations, they were present and active in the education centers. In contrast to previous practice, Catholics and Evangelists were included in the same organizations (e.g., the farmers' association). Some 19 communities formed the UNASAC network and communication with outside officials and development agents was reported as "ably handled by facilitators and other community members." In communities with educational centers, Andrade reported marked improvements in both literacy and survival skills. Attitudes of self-esteem and cooperation were evident in community projects (such as opening new lands for cultivation, experimentation with new crops and market systems, insistence on respect from transport operators) and in interactions with mestizos as well as in making and acting on community decisions.

Sylvia Forman of the Anthropology department at UMass examined the results of the project in the Columbe region and concluded that the progressiveness among peasants there (an area with which she was familiar from previous field work) was not due to project inputs, but to processes generated by broader economic development due largely to the evangelistic movement in the area which promoted discipline and dedication to economic and social improvement and provided peasants with an organizational umbrella and support system.

7. Creative Associates is a D.C.-based minority firm involved in the Ecuadorean literacy drive through a DS/ED contract.

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INDIVIDUALS INTERVIEWED

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Carl Schwartz	Inter-American Foundation
Olga Navia David Kahler Charito Kruvant	Creative Associates
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APPENDICES

Table 1. An Illustrative, Comprehensive Level-of-Living Index for Rural Areas, By Province, 1974

	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	Unweighted	Unweighted	Rank
	Income	Mini- fundia	General Mor- tality	Infant Mor- tality	House- hold Water	House- hold Elec- tricity	Illi- teracy	School Non- Atten- danza	Aggregate Scale Points	Average Rank	Order of Prov- inces
Sierra											
Carchi	2	9	7	4	7	7	9	6	51	6.4	5
Imbabura	3	7	2	2	10	6	2	3	35	4.4	16
Pichincha	3	5	8	6	10	10	7	5	54	6.8	2
Cotopaxi	4	6	1	1	5	3	2	3	25	3.1	20
Tungurahua	7	1	4	3	6	9	5	5	40	5.0	15
Bolívar	5	8	5	4	3	2	3	3	33	4.1	17
Chimborazo	8	3	2	1	7	3	1	1	26	3.2	19
Cañar	7	5	6	7	3	3	5	5	41	5.1	14
Azuay	1	3	5	5	2	3	6	4	29	3.6	18
Loja	1	7	9	10	4	2	6	6	45	5.6	9
Coast											
Esmeraldas	7	10	9	8	1	3	3	3	44	5.5	10
Manabí	7	8	10	10	1	2	5	1	44	5.5	10
Los Ríos	8	5.5	9	8	1	3	4	4	42.5	5.3	13
Guayas	10	8	8	5	4	9	5	5	54	6.8	2
El Oro	7	9	10	10	8	7	9	7	67	8.4	1
Oriente											
Napo	4	10	10	10	1	3	6	4	48	6.0	7
Pastaza	6	10	9	8	3	7	5	2	50	6.2	6
Morona Santiago	5	9	8	9	1	1	6	4	43	5.4	12
Zamora Chinchipe	5	10	7	6	4	2	8	5	47	5.9	8
Galápagos	n.a.	n.a.	8	10	6	5	1	10	n.a.	6.7 ^a	4

Sources: As indicated in the text.

^aAverage of 6 indicators only.

n.a. Not available.

Source: Reproduced from Luzuriaga and Zuvekas, June 1980
Table V. 15

Table 2. Characteristics of Project CommunitiesA. Characteristics of Original Seven Facilitator Communities,
Highlands 1972

	School	Electricity	Potable Water	Public Plaza	Access Road	Size of Population
Punachisac	yes	no	no	yes	yes	800
El Rosario	no	no	no	yes	yes	500
Sigualo	yes	no	no	yes	yes	690
Tutupala	yes	no	no	no	no	350
Balzayan	yes	no	no	no	yes	500
Guasaso	yes	no	no	no	path	500
Ulpan	no	no	no	no	dry weather	500

^aCriteria for selection: 1. population not primarily indigenous 2. 500-3000 inhabitants 3. Spanish-speaking 4. relatively easy physical access 5. not previously part of institutional program 6. similar in ecological resources, primary occupation of residents, per capita income, infrastructure, size, proportion illiterate and ethnic features 7. choose to participate in program

Source: Figueroa (1972)

B. Characteristics of Original Nine Facilitator Communities,
Coast 1973

	School	Elec- tricity	Potable Water	Access Road	Size of Population
Colonche	yes	yes	no	yes	1000
Bambil Desecho	yes	no	no	yes	300
Bambil Callao	yes	no	no	yes	1000
Cinchal	yes	no	no	yes	2000
Manantial de Colonche	yes	no	no	yes	1000
Salanguillo	yes	no	no	yes (dry)	1100
Manantial de Huangala	yes	no	no	yes	1700
San Pedro	yes	no	no	yes	2500
Valdivia	yes	no	no	yes	2000

Source: Alcocer (1974)

Table 3. Rural Level-of-Living Indicators for Project Provinces
By Canton, 1974

Province and Canton	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)
Azuay								
Cuenca	3,584	56.3	15.0	101.1	92.5	36.4	32.3	29.5
Girón	3,529	32.2	12.3	35.6	84.7	93.6	32.1	31.7
Gualaquío	1,316	32.6	19.6	32.8	87.1	85.7	32.4	33.8
Paute	4,633	41.4	12.1	56.1	85.5	92.2	33.2	31.0
Sanca Isabel	3,923	19.1	10.4	88.2	85.1	92.0	20.3	34.1
Sisig	2,179	40.4	19.6	92.0	88.0	92.0	37.2	37.3
Chimborazo								
Riobamba	12,571	37.0	23.8	123.0	60.3	90.4	55.4	38.3
Alausí	19,463	21.7	15.0	71.9	70.2	93.1	45.0	37.0
Colta	3,567	20.9	18.3	94.0	87.6	92.8	67.7	57.1
Chunchi	1,342	26.3	12.1	90.1	65.9	85.9	42.1	31.6
Guano	2,653	17.4	22.3	156.8	88.4	92.3	74.4	65.0
Guano	2,702	29.8	15.3	104.9	66.8	86.2	32.2	21.9
Cocopaxi								
Latacunga	6,566	42.0	17.7	115.8	66.0	73.5	34.9	28.2
Lungua	5,798	5.4	10.7	35.2	85.6	93.4	28.6	25.2
Pujilí	4,169	23.1	22.4	131.3	76.3	89.1	53.1	44.2
Salcedo	2,541	42.4	24.5	134.4	79.2	83.2	38.7	30.9
Squisilí	1,720	33.7	31.9	145.6	76.4	84.6	46.1	41.6
Guayas								
Guaynquil	8,024	37.2	10.3	91.6	57.0	49.0	20.7	25.3
Balsas	9,969	18.7	8.6	86.6	83.9	84.8	43.2	45.1
Daura	4,601	34.1	7.9	73.5	97.8	84.9	41.1	41.8
Milagro	5,672	12.3	12.0	66.3	77.6	32.9	24.9	23.6
Marañón	12,473	8.7	7.9	55.7	75.7	75.5	26.0	34.2
Marañón	17,222	9.7	13.2	55.3	38.6	63.1	23.9	24.2
Salinas	2,270	94.1	10.6	130.4	91.8	29.1	12.6	18.0
Sanborondón	5,533	20.2	3.6	96.7	98.1	81.3	31.8	39.5
Sanca Elena	5,665	25.2	9.8	73.9	92.9	66.5	13.6	19.6
Urbina Jado	6,350	28.0	8.6	58.0	98.6	91.4	38.5	43.3
Yaguachi	17,177	11.0	7.2	69.7	79.2	77.8	27.0	29.5
El Estero	5,641	13.2	6.2	59.2	97.3	90.9	35.0	43.0
Los Ríos								
Babahoyo	11,045	17.7	8.7	59.9	66.5	71.9	23.8	24.0
Baba	4,671	34.6	7.4	54.3	92.6	92.3	42.7	43.6
Pueblo Viejo	3,071	26.9	10.1	61.6	74.8	85.5	36.0	35.0
Quevedo	7,077	15.8	8.1	55.8	77.7	76.5	27.6	27.7
Urdaneta	7,452	18.1	5.4	57.9	76.5	84.4	26.6	27.1
Venas	5,553	12.8	4.6	33.1	83.9	89.8	30.4	26.2
Venas	3,251	7.0	7.7	56.4	79.8	84.3	40.4	39.2
Manabí								
Portoviejo	6,059	26.3	8.0	42.6	93.6	95.4	29.9	30.4
Bolívar	7,292	11.1	5.6	32.4	87.5	89.5	25.1	49.8
Chone	13,370	14.1	4.9	19.9	83.8	86.9	25.1	49.8
El Carmen	5,888	4.0	5.6	12.7	96.2	83.0	30.0	43.0
Jipijapa	2,953	18.0	10.1	72.9	95.8	84.3	32.0	31.0
Junín	5,474	21.3	7.5	55.3	86.0	91.5	30.4	28.6
Manta	2,006	44.1	4.7	21.5	72.7	95.2	40.4	26.9
Montecristi	4,122	35.5	9.6	79.9	71.9	81.4	30.8	30.2
Paján	6,190	15.8	9.6	53.1	98.7	74.2	45.9	45.6
Rocafuerte	2,988	22.7	7.7	40.8	83.2	89.7	26.5	32.2
Sanca Ana	3,785	17.0	6.2	27.1	90.2	93.3	44.5	51.6
Sucre	5,807	18.0	5.4	26.0	80.3	81.4	36.9	46.3
24 de Mayo	3,507	16.0	7.2	44.8	99.0	94.4	46.0	50.3
Pichincha								
Quito	4,671	37.3	10.6	98.2	57.1	72.7	28.6	29.3
Cayambe	1,688	34.9	19.4	116.7	65.3	79.0	45.3	42.6
Majía	3,474	47.2	10.4	93.8	67.1	37.0	22.1	21.2
Pedro Moncayo	1,087	24.0	15.3	95.1	39.5	83.6	41.6	35.5
Rumiñahui	3,017	61.3	9.5	70.9	37.7	29.7	18.4	19.0
Santo Domingo	6,059	31.5	8.1	72.4	76.4	66.1	22.4	27.7
Tungurahua								
Ambato	3,885	57.5	14.7	121.1	88.1	72.7	35.7	27.0
Baños	2,956	28.6	14.7	96.5	34.2	48.5	17.2	16.7
Patate	24,670	33.6	17.7	63.3	67.2	81.3	32.7	20.2
Pedernales	3,178	59.2	15.8	72.9	55.5	75.5	29.7	23.5
Píllaro	17,205	55.8	26.0	127.0	66.1	83.0	33.0	24.3
Quero	13,078	53.8	10.1	91.6	84.1	90.6	32.8	25.2

KEY TO INDICATORS

- (1) Annual Cash Income Per Capita (sucres)
- (2) Farm Units with Less than 1 Hectare (percent)
- (3) General Mortality Rate (deaths per 1,000 population)
- (4) Infant Mortality Rate (deaths per 1,000 live births)
- (5) Housing Units without Piped Water (percent)
- (6) Housing Units without Electricity (percent)
- (7) Illiteracy, Persons 10 Years of Age and Over (percent)
- (8) Persons 6-12 Years of Age Not Attending School (percent)

Table 4. Description of Six Step Ashton Warner Literacy Method (As Summarized by James Hoxeng)

1. Create a climate of confidence. (This basically means "compañerismo" instead of the normal authoritarian teacher-student relationship, and emphasizing that no one person has all the answers.)
2. Solicit from each participant his word (or phrase) for the day - what idea, problem, or worry is most important to him at that time. The word is then written on a card or in the participant's notebook.
3. Practice in writing the word or phrase in the notebook, with aid from the facilitators.
4. Writing at the blackboard for sharing with the other participants.
5. Story writing - beginning with "stories" of only 2 or 3 words, the participants write what they want to say, again with the facilitator's assistance.
6. Reflection - sharing stories and discussing what bearing they have on the lives of the participants, seeing what problems emerge and thinking about possible solutions.

Source: Letter to Stanley Applegate,
1972

CENA PAYMENT SCHEDULE NO PAYMENT 300 BUL. MONTH 240 BUL. MONTH STOP PAYMENT 500 BUL. RETROACTIVE PAY
Sen. Vacat.

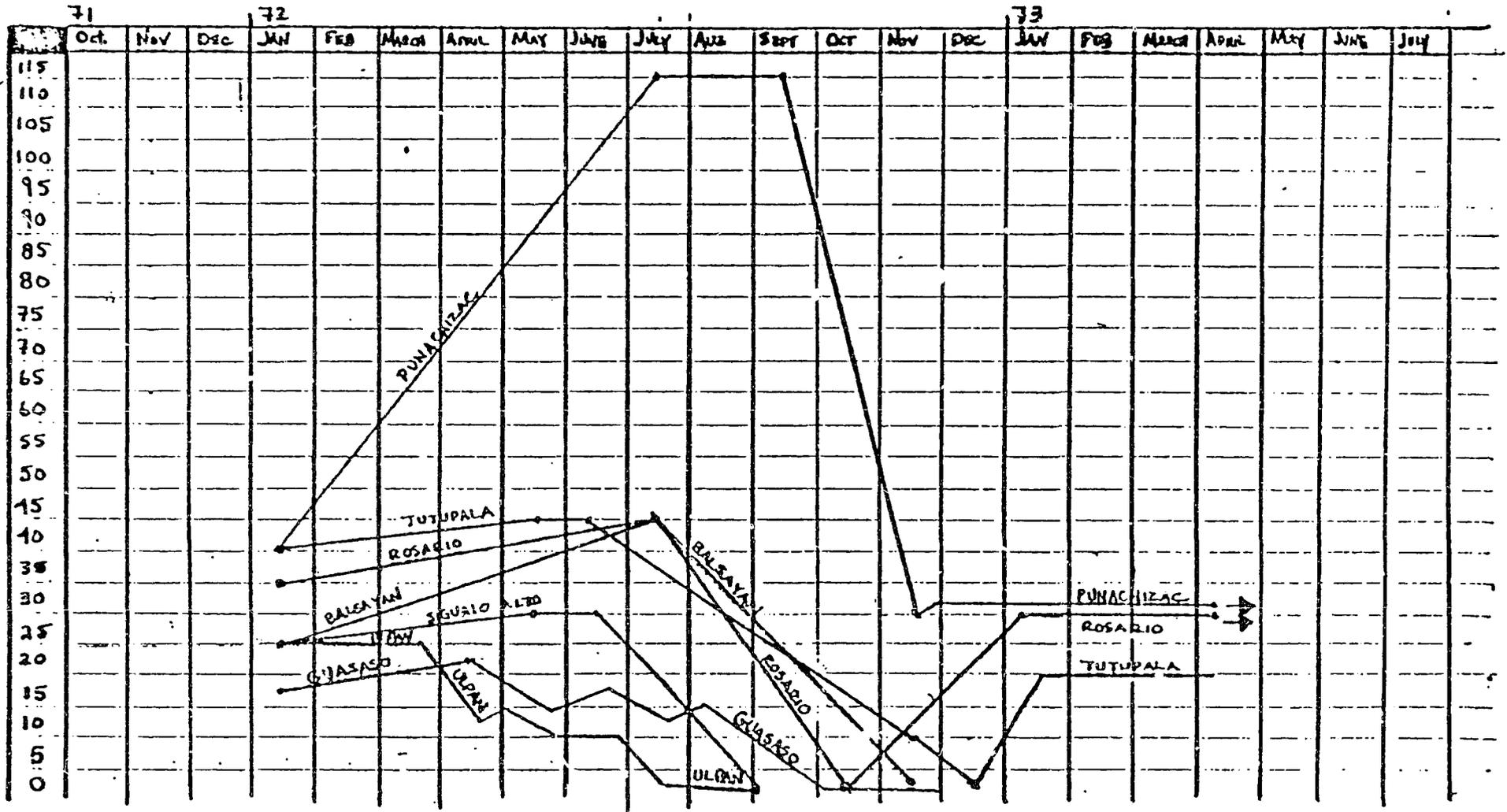


Figure 2. Participation Patterns in Original Seven Highlands Communities, January 1972-April 1973

Source: William Smith, Project Administrator

Table 5. Actions Undertaken By Original Facilitator Communities

<u>Community</u>	<u>Activities</u>
El Rosario	Community center established; permission to farm nearby state lands
Punachisac	Running water; electricity; community center repaired; road improvement; creation of town council
Sigualo	Community drainage system; bridge renovation
Balsayan	Concrete block factory (unsuccessful); electricity (unsuccessful)
Guasaso	Negotiated bridge site to more favorable location; road improvement; running water; forestation cooperative
Tutupala	Running water; rifle for night guards; road improvement; forestation cooperative; community store; community center
Ulpan	Electricity

Source: Hoxeng, 1973

Table 6. Master List of Games Used in the Nonformal Education Project (Spanish/English Translation)

1.	Hacienda (two types) ^a	Game of Life
2.	Cooperativa	Cooperative
3.	El Robo	Theft
4.	Concentración	Concentration
5.	Naipes de Letras	Letter Rummy
6.	Naipes de Sílabas	Syllable Rummy
7.	Dados de Letras	Letter Dice
8.	Dados de Números	Number Dice
	a) Suma	Addition
	b) Multiplicación	Multiplication
	c) División	Division
	d) Resta	Subtraction
9.	Quínua	Math Bingo
	a) Suma	Addition
	b) Multiplicación	Multiplication
10.	Pin Ball	Pin Ball (Math)
11.	Ruleta	Roulette
12.	Argollas	Ring Toss
13.	Tres en Calle	Math Tic Tac Toe
14.	Domino	Domino (Math)
15.	El Burro	The Donkey (Multiplication)
16.	El Chulo	(Reading and Math Board Game)
17.	El Mercado	Market
18.	Feria	Fair
19.	Barrio	Ghetto
20.	La Comida	Food
21.	Juego de la Educación	Education Game
22.	Juego de la Comunidad y Planificación	Community Planning Game
23.	40 de Letras	40 of Letters
24.	Veintiuna	Twenty-one
25.	Cartas de Nutrición	Nutrition Card Game
26.	Fútbol Soccer de Matemáticas	Math Soccer
27.	Parquet	Parquet
28.	Palabras Revueltas	Word Scramble
29.	Quínua de Palabras	Word Bingo
30.	Lotería	Lottery
31.	Flip	Flip
32.	Ocho's	Eight's
33.	Juego de Frases	Phrase Game
34.	Terrenos	Land

^aOne made of card board and the other of wood. In addition, the game has been adapted to the Sierra and the Coastal regions of Ecuador.

Source: Ochoa, 1974

Table 7. Spread Characteristics of Educational Games and Other Nonformal Education Techniques Used in the Project, 1972-73

Institution	Which Techniques	Numbers of People Involved	Estimates of Intensity of Use	UNass Effort Required
Colegio Kennedy	Market, Letter Dice, Rummy	10 (?) teachers 300 (?) students	2 nights/week during school year	Conversation one man-day
Los Rios Primary School Teachers	Rummy, Market, Chulo, Bingo, Ring Toss	10 + teachers 300 (?) students	During school year 2 times a week	None; introduced by other teachers
Instituto Linguistico de Verano	Letter Dice, Rummy, Market	35 teachers 700 (?) students	?	"show and tell" training: 3 man-days
Centro Juvenil Brethren	Dice (letter & number), Dominoes, Bingo	200 youths	every afternoon for 6 months	Game-making one man-day
Army	Roulette, Pinball, Rummy	50 (?) officers (?) soldiers	used in rec. rooms during off hours	None; trained by Marco Jacome under separate contract
COLAC (Cooperative Federation of Latin America)	Coop, Feria	26 representatives from 13 L.A. countries		Conversation: two man-days
Puyo Area Communities	Hacienda	Two or three communities	1 group: once a week	Game introduction one man-day
Brigadas Estudiantiles	Letter Dice, Rummy	35 students 8 campesino villages	every day for 6 weeks	Show and Tell 2 man-days
Normalistas	Letter Dice, Hacienda, Rummy	54 new teachers	once a week, four weeks	None; trained by SEV
Centro Ecuatoriano de Educacion Familiar	Potonovelas, Number Dice, Rummy, Market, Hacienda	25 "institutional change agents"	unknown	Show and Tell one man-day
Number of new organizations using our techniques:	Number of techniques adopted or adapted:	Number of Participants:	Average Intensity of Use:	Average UNass investment:
<u>10</u>	<u>14</u>	<u>About 1700</u>	<u>1 or 2 times per week</u>	<u>1.1 man-day per group</u>

Source: Hoxeng, 1973

Table 8. Use and Reproduction of GamesA. Games Rated Most Highly in Evaluation
Devised by Ochoa

Hacienda
 Concentración
 Naipes de Sílabas
 Naipes de Letras
 Dados de Letras
 Dados de Números
 El Burro
 El Robo
 Tres en Calle
 Quínua

B. Reproduction by SENARED (Ministry of Education)

	1973	1974
Hacienda	200	500
Syllable Cards	500	1000
Letter Cards	500	1000
Letter Dice	5000	1000
Market	500	1000
Math Bingo	500	1000

Source: Ochoa, 1974

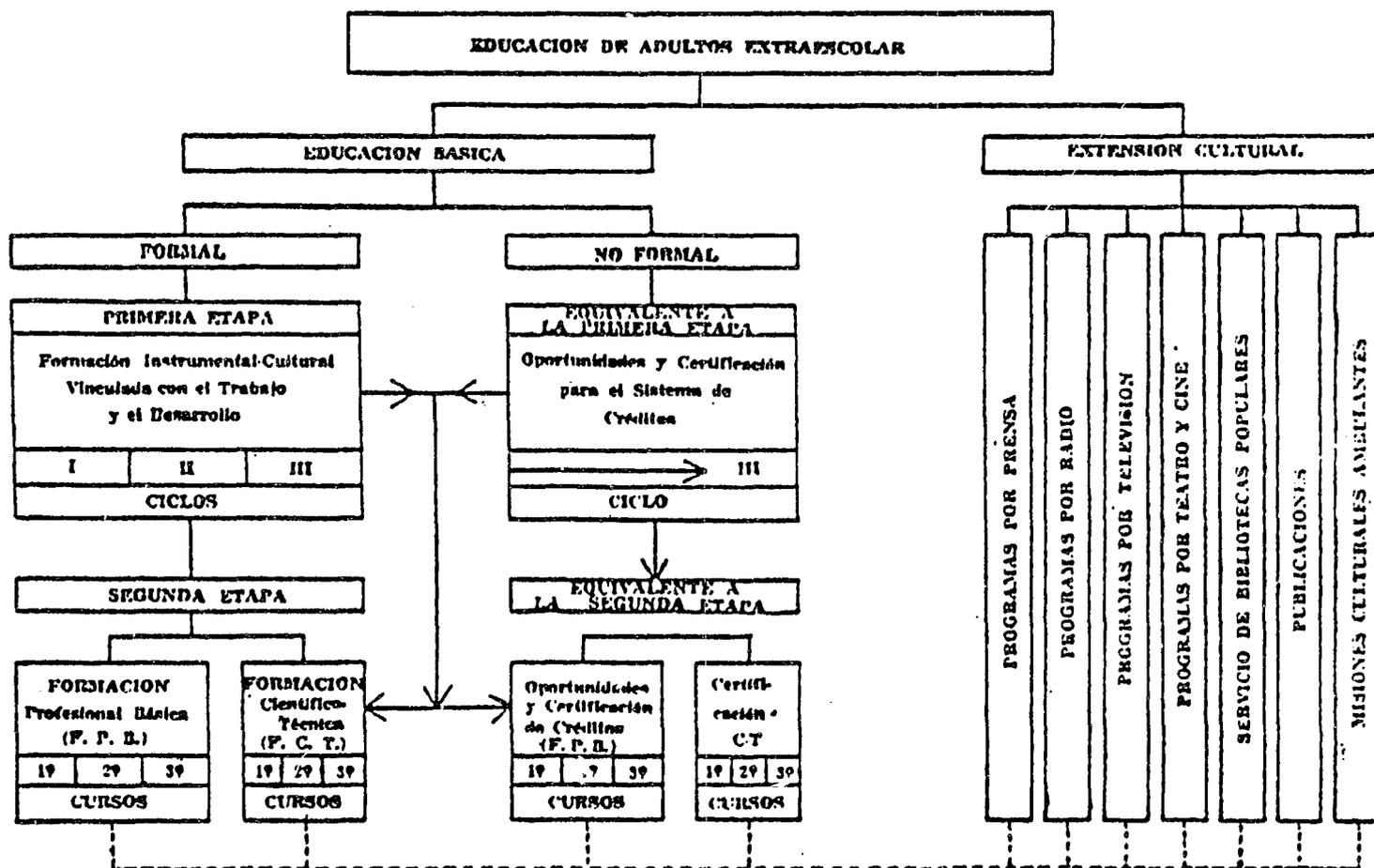


Figure 3. Organization Chart, Out-of-School Adult Education Division of Ecuador Ministry of Education Showing Early Influence of Nonformal Education Project

* Previously the term nonformal was not commonly used in Ecuador nor conceptualized as an alternative approach to education.

Source: Department of Adult Education, Ministry of Education, Ecuador

Table 9. Three-Year Summary of Activities of the Facilitator Program in Four Provinces, Quantitative and Qualitative Results

A. Quantitative Results					
	Manabi	Cotopaxi	Chimborazo	Tungurahua	Total
Teachers and Community Leaders Trained	100	40	97	30	267
Communities Involved	84	35	97	30	246
Participants in Community Centers	2400	1050	2900	860	6210
Peasants Related With the Project	8400	3800	30,700	5200	48,100

B. Qualitative Results

1. Community mobilization for solving its own problems.
2. Organization and solidarity among peasants.
3. Interchange and mutual support of activities across rural communities.
4. Increase in self-confidence among peasants.
5. Acquisition of knowledge relevant to solving vital individual and community problems.
6. Acquisition of skills in reading, writing, mathematics and basic science.
7. Openness to social development in the peasant communities.

Source: Ministry of Education, 1976

Translation of Section of Ministry of Education
Program Document for 1976

Institutionalization of Nonformal Education

An experimental program to work out educational methodologies known as "nonformal" has been operating for the last three years under the University of Massachusetts and financed under bilateral agreements between Ecuador and the U.S.

In particular, the grant program has developed innovative educational materials for use among marginal rural communities.

Personnel from the University of Massachusetts worked in conjunction with the then Department of Adult Education and the Department of Educational Technology in several provinces throughout the country and achieved positive results in many respects, especially in promoting a critical awareness and desire for participation among the communities.

The experience should be utilized in function of the following purposes:

- a) Mobilizing marginal communities towards the solution of their problems;
- b) Interchange and mutual support of activities among peasant communities;
- c) Development of self-confidence among peasants;
- d) Accomplishment of basic skills in reading, writing, mathematics and basic applied science with out-of-school resources;
- e) Openness towards social development;
- f) Participation in national decision making.

As a general conclusion, nonformal education should be promoted and institutionalized at all levels of action, in school and out-of-school.

Source: Ministry of Education, ca. 1975
(Author's translation; emphasis added)

MANUEL SANTI:

De quién es nuestra Tierra?

No lejos de Malchimpamba, el dueño de una enorme hacienda ha decidido entregar los huasipungos a los indios huasipungueros, porque así lo manda la ley de Reforma Agraria. Pero...

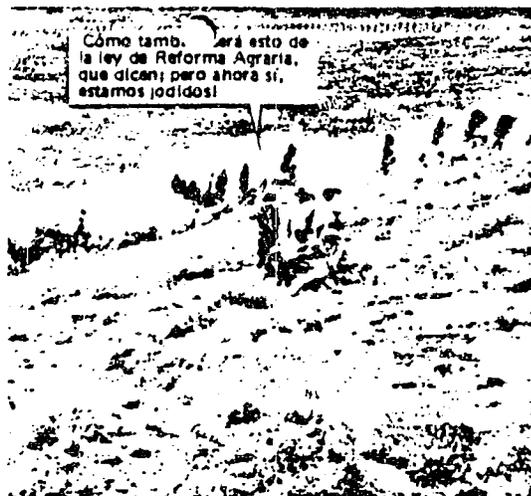
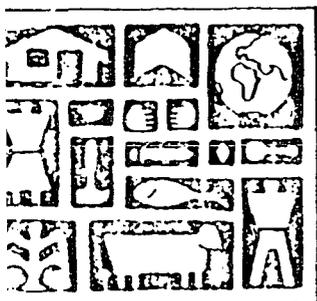


Figure 4. Reproduction of Page from Second Photonovel Produced by the Project. Entitled Manuel Santi: To Whom Does Our Land Belong?

Partial Reproduction of CIE Flyer Summarizing Activities

Center for International Education



University of Massachusetts Amherst

Use South
University of Massachusetts
Amherst, MA 01003 U.S.A.

515 0165
OXKIF/Amherst, Mass

Background

The Center for International Education is one of several programs in the Division of Educational Policy, Research and Administration at the University of Massachusetts' School of Education. Drawing on its own faculty and graduate students, as well as on outside resources, the Center offers graduate level professional training, research and service opportunities in the areas of Development Education, Nonformal Education, Internationalizing American Education and Multicultural Education. An undergraduate international teacher education program is also conducted under Center auspices.

The Center's program is based on the belief that the best professional training occurs when a person can move freely between periods of field work and periods of reflection, study and consolidation of field experiences. Much training therefore takes place in the context of educational projects both in the United States and abroad, many of these designed and implemented by Center Fellows. Since the vitality and substance of this type of training depends heavily on the mutual commitment and contribution of all participants, the Center seeks to maintain a diversity of members who bring with them considerable field experience as well as a commitment to international education.

Dialogue concerning individual programs of study and group projects takes place continually within the Center. By this means, the Center attempts to maintain common awareness of the implications of its activities for social justice and the ability of people to control their own destinies.

School of Education

The School of Education has emerged as a leader among North American institutions in the area of educational innovation. It has become the gathering place for many educators and graduate students who are concerned with the future of education and its role in society. Thus, the Center for International Education finds itself located in a stimulating environment, constantly challenged by new and exciting problems from many areas of education. Through individualized programs of graduate study, students at the Center draw upon resources throughout the School to develop professional competencies.

Program of Study

The academic offerings of the Center are currently concentrated in four areas:

1. **Internationalizing American Education**
Pre-service and in-service teacher training, in-service workshops for teachers, and the development and testing of curriculum materials for teaching about specific peoples and cultures are the principal focuses of academic and experiential offerings in this area. Students typically integrate teaching experience with academic work in curriculum development, comparative education, and an area specialty. A limited number of practice teaching opportunities in overseas settings is available to undergraduate students in the pre-service program.

2. **Development Education in Asia, Africa and Latin America**

Offerings in this area elucidate the role of education in national development and explore relationships and conflicts between education and local and national development. Structures and techniques for educational administration, planning, training and evaluation are considered in light of their implications for social, economic, political and individual human development. Working in collaboration with educators in the third world, students learn to apply their skills to solutions of practical educational problems while remaining sensitive to local priorities and constraints. Issues of both formal and nonformal education are explored in this context.

3. **Nonformal Education**

Nonformal or "out of school" education is a special focus of the Center. Courses in planning, evaluation, training and materials development for nonformal education are offered, and students are encouraged to supplement their academic study with field work at sites in the United States and in the third world. Nonformal education projects in Ecuador, Ghana, Thailand, Guatemala and Indonesia have afforded opportunities for Center members to enhance their skills and make a contribution to this field. Applications of nonformal education to problems of rural development and to promotion of the role of women in development are emphases of particular interest and concern.

4. **Multicultural Education**

This field of study contributes to alleviating the problems of racism, sexism and elitism in education through promotion of cultural pluralism in all facets and at all levels of schooling. Graduate students concentrating in this area take a core of courses in

multicultural education and develop a multicultural approach in an area of subspecialization. In-service training in multicultural education leading to an M.Ed. or Certificate of Advanced Graduate Study is offered in conjunction with the Education for a Changing World In-Service Cooperative.

Expectations and Requirements

On admission, a doctoral student with faculty guidance formulates a program of study which balances academic work with relevant field experiences. One or two years of course work and independent study (at least one year in residence) follow as the student prepares for the comprehensive examination. The form and content of this examination grow out of the program of study and are established by the student in concert with a faculty committee. Students typically remain on campus until they have completed this examination, after which they are required to prepare a dissertation proposal and dissertation. An oral examination follows completion of the dissertation.

While at the Center, members are expected to act as both students and teaching resources. Since the experiential component of many students' programs is derived from work on field projects developed by the Center, members on and off campus are encouraged to participate in development and support of these projects. An atmosphere of voluntarism and a willingness to contribute are necessary to maintain these activities.

Courses

Courses in the Center are designed to meet changing student needs and interests. Students are encouraged to supplement their coursework in the Center with courses offered elsewhere in the School and University and with independent study. The following is a representative list of courses offered at the Center over the past several years:

Research Methodology in International Education
Techniques of Educational Planning for Developing Countries
Special Problems in International Education
Education in Africa
Education in Asia
Education in Latin America
Education in Rural Development
Basic Skills in Nonformal Education
Educational Games/Simulations for Nonformal Education

Technology and Educational Development
Educational Designs for Women Worldwide
Women in Development
Cross-cultural Childrearing and Education
Planning and Evaluation of Nonformal Education
Curricular Issues, Methods and Materials in Multicultural Education
Education for a Changing World
Introduction to Multicultural Education
Graduate Seminar in Multicultural Education
Teaching the Asian Experience
Racism, Oppression and Identity: The Education of Third World People
Cross-cultural Perspectives in Education: The Asian Experience in the U.S.
Curriculum Development in International Education
Curriculum Design for Internationalizing American Education
Practicum in International Education
Final Year Seminar

Projects/Activities/Publications

Center members are and have been involved in a wide variety of projects and activities in the United States and overseas including:

PH/IMAS/CIE Nonformal Education in Indonesia Project
Ghana Nonformal Education Program
Nonformal Education Two site Program (Thailand and Guatemala)
Iranian Guidance Counselor Training
Nonformal Education Project in Ecuador
UNESCO Evaluation Project
Cross-cultural Workshops
The Fun Bus: Nonformal Education through the Air
Radio Education
Exchange Programs with Southlands College and Rolfe College in England, and Academia Cotopaxi in Ecuador

Qualities and findings of these and other activities are described and analyzed in a wide variety of Center publications. A descriptive listing of these publications is available upon request.

Career Opportunities

Increasing emphasis on the need for experts in international education has created many opportunities for professional careers. Graduates of the Center have been placed in teaching positions at all levels,

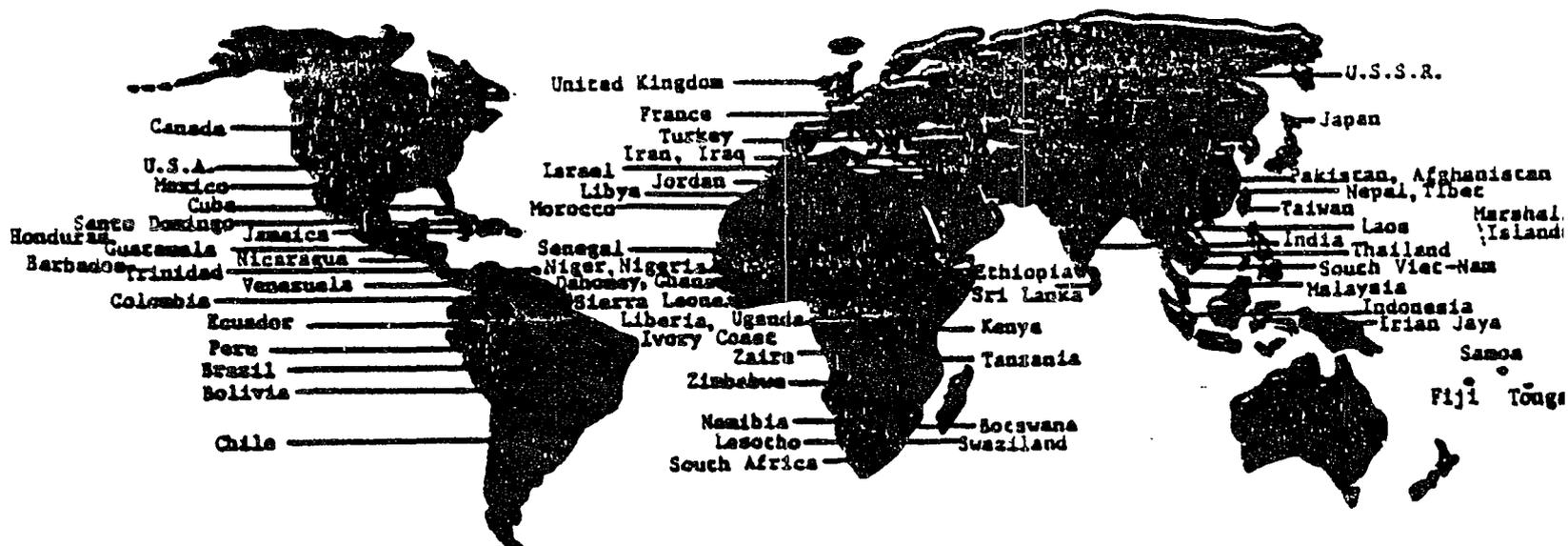


Figure 5. Map Showing Countries Where
CIE Personnel Have Worked

Source: CIE

Reproduction of CIE Publications List

*****TECHNICAL NOTES*****

- #1 THE ECUADOR PROJECT
- #2 CONSCIENTIZACAO AND SIMULATION GAMES
- #3 HACIENDA
- #4 MERCADO
- #5 ASHTON-WARNER LITERACY METHOD
- #6 LETTER DICE
- #7 BINGO
- #8 MATH FLUENCY GAMES
- #9 LETTER FLUENCY GAMES
- #10 TABACUNDO
- #11 FACILITATOR MODEL
- #12 THEATER AND PUPPETS
- #13 FOTONOVELA
- #14 THE EDUCATION GAME (English only)
- #15 THE FUN BUS (English only)

CHARACTERISTICS OF FACILITATORS: THE ECUADOR
PROJECT AND BEYOND

NONFORMAL EDUCATION IN ECUADOR

LET JORGE DO IT: AN APPROACH TO RURAL NONFORMAL
EDUCATION

VISUAL AIDS FOR NONFORMAL EDUCATION

EFFECTIVE EDUCATIONAL RADIO: AN APPROACH TO
ANALYZING PROGRAMS

THE PARTICIPATORY PROCESS: PRODUCING PHOTO-LITERATURE

UNDERSTANDING PICTURES

THE WAYSIDE MECHANIC

WOMEN CENTERED TRAINING

LEARNING TO LISTEN

THE DEMYSTIFICATION OF NONFORMAL EDUCATION

TECHNOLOGY IN NONFORMAL EDUCATION

EVALUATION IN NONFORMAL EDUCATION

COLLABORATIVE PROGRAMMING IN NONFORMAL EDUCATION

LEARNER-CENTERED TRAINING FOR LEARNER-CENTERED PROGRAMS

COLLABORATION FOR MATERIALS DEVELOPMENT

AFRICAN STUDIES HANDBOOK FOR TEACHERS

WEST AFRICA: AN AMERICAN HERITAGE

TEACHING NON-WESTERN STUDIES

NONFORMAL EDUCATION AS AN EMPOWERING PROCESS

NONFORMAL EDUCATION IN GHANA

ANIMATION RURALE: EDUCATION FOR RURAL DEVELOPMENT

BEYOND THE NONFORMAL FASHION: TOWARDS EDUCATIONAL
REVOLUTION IN TANZANIA

THE MEANING OF CONSCIENTIZACAO: THE GOAL OF
PAULO FREIRE'S PEDAGOGY

NFE-TV: TELEVISION FOR NONFORMAL EDUCATION

THE CHRISTIAN SCIENCE MONITOR

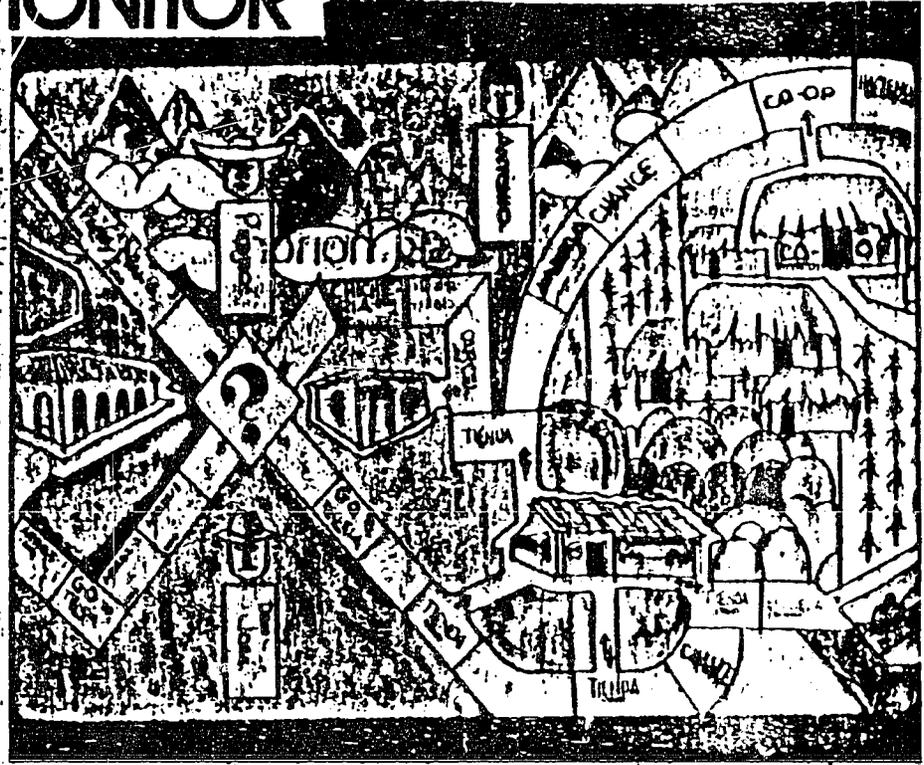
February 13, 1974

For children **WHAT'S HAPPENING...**

in ECUADOR



Field workers in Ecuador play 'Hacienda' to learn about property



'Hacienda' gameboard teaches sharecroppers to be landowners

Special to
The Christian Science Monitor

The game is called "Hacienda," and the "hombres" that move around the board are well known to the players. They represent poor "campesinos" (field workers), the rich landowner, the mayor, the agricultural extension agent — all of the people who are part of life in an Ecuadorian village in the high Andes. "Four man's monopoly?"

Not quite. But the idea behind "Hacienda" or "Ranch" is much the same: helping people to become property owners.

Designed by specialists from the University of Massachusetts, and brought to Ecuador through the U.S. foreign aid program, the game is proving more educational than the written — or spoken — word. Many villagers cannot read or write. By playing the game, they are learning how to organize cooperatives and acquire their own land.

Assistance asked

The government of Ecuador asked the United States for technical assistance when other methods to bring information to rural villages had

failed. The U.S. Agency for International Development (AID) recruited the "gaming" experts to work with educators from the Ecuadorian Ministry of Education to encourage the people to change their ways.

Can games succeed where other forms of persuasion have failed? Only time will tell. But "Hacienda" has become so popular among the sharecroppers of the Ecuadorian Andes that the poor "campesinos" now refer to it as the "Game of Life."

That is exactly the point of the game.

How would you feel if in a game of

"Monopoly" you drew a card that said: "Go to jail — do not pass Go!" You'd probably feel like the players of "Hacienda" feel when they end up in a square with a bad crop and no way to get to market. In real life, that is the "game" they play every day.

Food for survival

As owners of the food crops on the big haciendas, they receive only enough food for their own survival. When the family needs clothing, shoes, salt, sugar, or candles, the sharecropper must take some of his food ration to market and sell it. This

means the family has even less to eat. There is usually no money to spare for schooling. The children labor in the fields with their parents, and the cycle of illiteracy and poverty goes on.

Other roles played

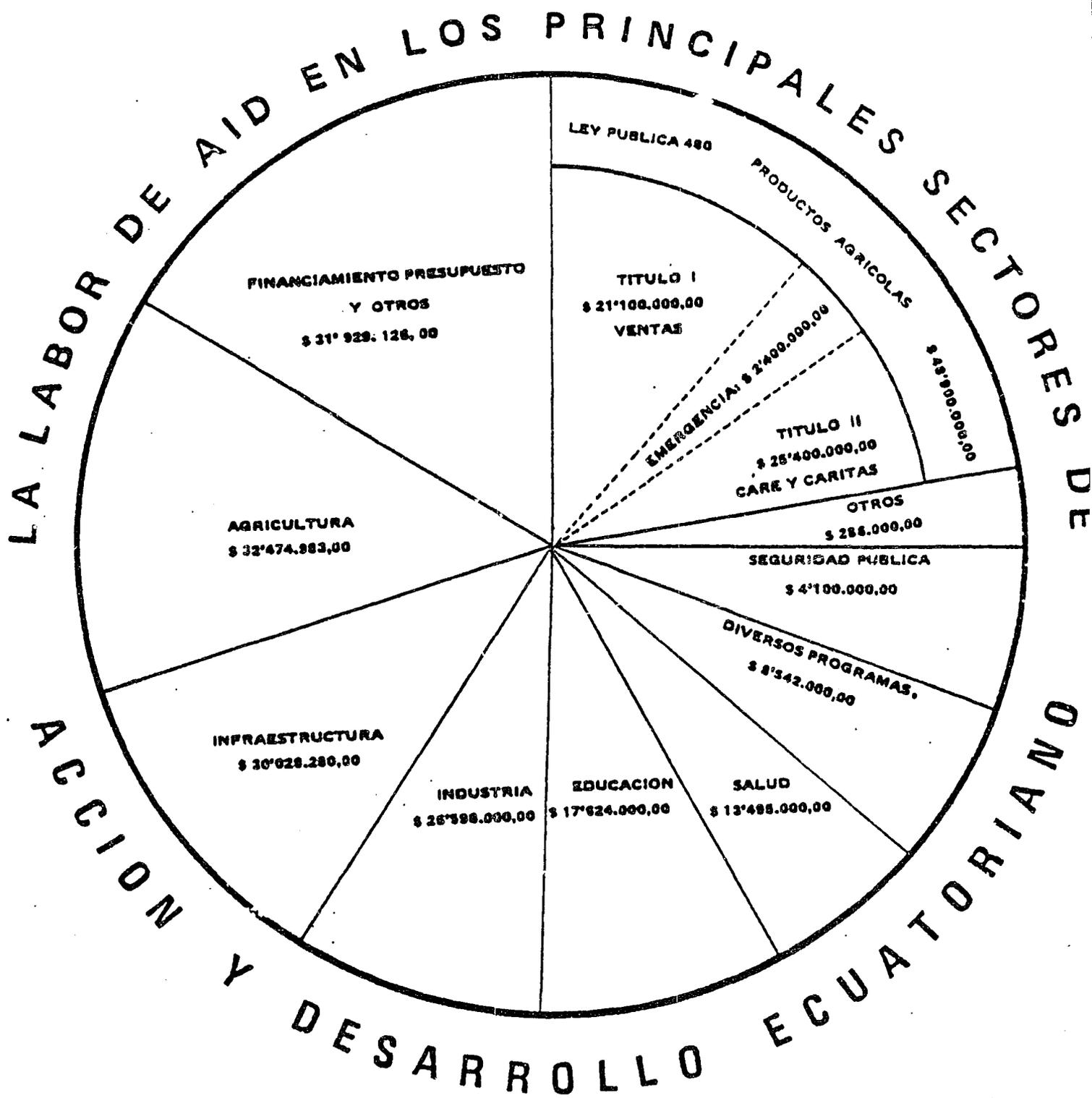
In "Hacienda," or the "Game of Life," most of the players begin the game as they begin life: as poor sharecroppers. For every 10 chips given to the player who represents the hacienda owner, each campesino receives only one.

The campesinos soon realize their

only hope for winning the game is to pool their resources and buy their own land. By playing other roles — hacienda owner, lawyer, or local official — they get some insights into how property owners think. They are acting out patterns of behavior they were afraid to try in real life.

Another game is called "Co-op," a simplified version of the annual cycle of buying and selling by a cooperative "Bolsa" (the fair) helps the campesino understand the way the market works and why prices change. There is even a game called "El Robo" — or "What happened to the money in the co-op treasury?"

Best Available Document



Préstamos	US\$	101'591.389,00
Cooperación Técnica		63'200.000,00
Valor de los Productos Agrícolas PL 480		48'900.000,00
TOTAL	US\$	213'691.389,00

Figure 6. Summary of AID Development Assistance to Ecuador, 1942-1972