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NON FORMAL EDUCATION IN EL SALVADOR
RURAL LIVING SKILLS PROJECT

July 1979



Academy for Educational Development, Inc.

NON FORMAL EDUCATION IN EL SALVADOR
RURAL LIVING SKILLS PROJECT

July 1979

by

William Feild

Rodrigo Cabrera

This report has been completed under Contract No. AID/519-193
between the Academy for Educational Development and USAID/El Salvador.

FINAL REPORT

I N T R O D U C T I O N

This final report is submitted in accordance with Contract AID-519-193 entered into and signed between the Agency for International Development (AID) of El Salvador and the Academy for Educational Development, Inc. on April 20, 1979. The principal objective of this contract was to assist the Ministry of Education of El Salvador and USAID in the development of a Rural Living Skills Project.

The study was executed by Rodrigo Cabrera, Study Director, and William Feild, Facilities Specialist, April 23-June 11, 1979.

The report includes six (6) documents prepared according to contract specifications and develops their relevant aspects.

In the implementation of this study many documents were consulted as detailed in the Bibliography included and many interviews were held with GOES officials.

The Academy for Educational Development, Inc., wishes to express its appreciation to the Office of Education and Human Resources of USAID without whose guidance and collaboration this study could not have been successfully accomplished.

1. Scope of Work

- 1.1 Prepare a study based on available information which provides a brief history of Non-Formal Education in El Salvador, and includes current programs both government and private. This study will be based on Ministry of Education and Government of El Salvador documents, other studies, the FY 1980 El Salvador Annual Budget Submission, the Project's Identification Document, and USAID reports and prior studies, and interviews with GOES and USAID officials.
- 1.2 Submit recommendations regarding whether Ministry of Education should consider the purchase and use of mobile training units. This study should include a summary of information and findings on which recommendations were based.
- 1.3 In conjunction with MOE officials develop a time-phased training plan for both in-service and participant training. Precise areas of study, length of courses, and possible sources of training. Utilizing current USAID/El Salvador budgetary, estimations approximate costs should be included.
- 1.4 Based on past community needs surveys conducted in the Occupational Skills Training Project and upon the number of Adult Education Division personnel available, submit a detailed implementation plan for conducting 50 community needs surveys. The plan should include instrument selection, sampling procedures recommended, personnel assignment and utilization, data processing and interpretation procedures, and a suggested reporting format.

- 1.5 Identify specific technical assistance which will be required by the project and develop a time-phased, detailed, technical assistance plan with necessary background information and findings on which the plan was based.
- 1.6 Develop a plan for the possible construction and equipping of 80 classrooms and/or workshops. The plan will include a study of how Occupational Skills Training Project facilities can be integrated into this project; general criteria for site selection; recommended general type or types of facilities needed; based on current information available a tentative list of sites or locations for centers with the needs of each place shown; and other findings found during this period.
- 1.7 Submit a final report which summarizes items 1-6 above; gives appropriate recommendations and/or conclusions; and, suggests any further studies or investigations needed for future project development.

II. Compliance with the Scope of Work

2.1 Diagnosis of Professional Training Program in El Salvador

From the time San Jose University made a study under USAID contract (AID/519/117) in 1975 to date there have been very few changes of structure in the Salvadorean educational sector and within private institutions which develop educational urban and rural programs.

San Jose's study of non-formal education programs, although superficial, showed irrelevancy and limited impact of non-formal education programs existing within the private sector. In most cases these are merely systematic adult education programs whose basic objectives are the equivalence of other MOE academic programs. Programs classified as non-formal within MOE continue to function with few structural variations and are administered by the Department of Adult and Permanent Education (DAPE).

After 1976, following a grant made for the development of a "Manpower Skills Training Project" under the responsibility of the DAPE, the USAID/EHRD and MOE apparently decided on a strategy for the development of non-formal education in the country, thus placing it in a definite category which might be defined as training in basic vocational guidance.

The Manpower Skills Training Project functioned during 1976-1978 with relative success and country-wide coverage.

The greatest success that can be attributed to this project is the structuring of a program office within the MOE capable of developing a basic professional training curriculum including instruments, materials, a schoolroom teaching system, guidance and delivery. All this is innovative in El Salvador and will benefit a segment of the population which heretofore was not included in educational programs but which enters and is part of the non-skilled employment market.

The indications above regarding the priority in which MOE and USAID/ERHD place this category of non-formal programs (which will result in a loan and later grant for continuation and extension of same) place the investigator in a very definite context if he wishes to gather historical data regarding non-formal educational programs. This context corresponds to the category of: Professional Training.

Scope of Work was based on programs developed by the following sectors: EDUCATION- LABOR-AGRICULTURE- AND ECONOMICS and are clearly defined as Training, and Manpower Professional Skills programs.

2.1.1 Organizational Considerations

There is evidence that the four official sectors above, upon which the study was based, have been carrying out training programs during the last two decades. Each of these programs has had its own sectoral objective. However, its target populations have all been the same population with slight variations, and contents and methods of action have been similar.

The technological development of the country and the pressures of the employment market, added to the International Missions' recommendations (OIT-AID) have created favorable conditions for the organization of a professional training network which coordinates and complements the activities of the different agencies which have programs of education and professional training, and which signify the development of consistent policy. All these factors led to the creation of a National Council of Professional Training and its technical office called "Comité". The National Council is responsible for the establishment of policies and the Comité is the executive mechanism in charge of inter-sectoral coordination. AED's report points out that while the creation of the National Council has brought order with regard to the implementation of plans and programs of Professional Training in the country, there is still much to be done to arrive at a policy which will truly satisfy all the needs of potential users as well as the requirements of national development.

The above is understandable if we consider that the Council and the Comité have functioned less than a year and that at present they are still working on their final organization. The organizational problem has been considered from the perspectives of both MOE/DEAP and the national system. We believe that the efficient development of the sector under the responsibility of MOE will not only permit

compliance with obligations incurred under USAID's loan/grant, but will greatly benefit the system. The educational sector should coordinate the development of its program with that of the other sectors which are part of the system but should not depend on them for its own development.

2.1.2 Agricultural Industrial Training Program

The National System of Education and Professional Training is based on two foreign-financed projects: Inter-sectorial Training, MOE/USAID, and Agricultural Industrial Training, MOL/MQA/MOE/BIRF. AED's report analyzes objectives, coverage and characteristics of the program in its future projections, since at the present time it is undergoing an operational reorganization phase, thus preventing the implementation of critical and/or evaluation projections.

2.1.3 Conclusions

2.1.3.1 The National System is apparently well-structured with regard to categories of programs and sectors involved.

2.1.3.2 The MOE is able to develop its own programs independently, and the benefits obtained will help amplify the system.

2.1.3.3. It is recommended that greater resources be oriented toward the establishment of a policy which will include patterns and equivalencies in the Professional Education and Training Programs.

- 2.1.3.4 The lack of rural programs in and for rural sectors which adjust to and satisfy the expectations of the users is clearly evident.
- 2.1.3.5 The professional education and/or training provided as part of the National System should seek not only to qualify users but to assist in their development in a concrete manner. One possible method would be connecting terminal programs with supervised credit plans or programs permitting the establishment of small businesses, cooperatives, etc. Otherwise, only employment expectations will be created which the system is not sure or able to satisfy.
- 2.1.3.6. It would seem that the National System is based on the potential response to the needs of private enterprise in most of its programs. In other words, employees are being qualified to work in small and large private enterprise without any type of input on its part, nor any assurance of utilization of facilities and/or future employment.
- 2.1.3.7. MOE's program should associate the general contents of basic education with the improvement of individual, family and community life rather than concentrating only on technological aspects.

- 2.1.3.8 Instructional contents of programs should not only be responsive to obvious needs imposed by development, but should also respond to results of investigations of the needs of final users and to community and/or local micro-development.
- 2.1.3.9 The lack of communication media in the development of education and training programs is evident. Since there is a technological infrastructure available (ETV) it is recommended that this media be utilized in the system's programs.

2.2 Structure and Functions of MOE's Training System

The original Scope of Work specified that AED should point out the feasibility and basic characteristics regarding utilization of Mobile Training Units. This has been treated as a part of the Facilities Chapter. The lack of sophisticated equipment and programs in the rural centers simply calls for non-sophisticated supporting mobile units. These units have been included here at a use-level consistent with priorities and expressed philosophies concerning the target population.

We have identified a vulnerable aspect of the urban project training system which can be solved successfully and could be useful and easily utilized by the responsible parties in MOE.

In our opinion, the Training Program in the urban project has been developed in a conventional and loosely structured manner, as we have not observed a systematic order in the development of plans, tasks, evaluation, delivery, etc., assigned to its operational units.

The projections we would offer for possible organization of this program cover the needs of present development, indicating a possible need for extension of the project as regards operation, structure, dependency and coordination.

2.3 The Training Program/Proposed Rural Project

The training program is directed toward the national, regional and local persons responsible for the rural project.

The contents of the training should be equivalent and as much as possible equal to that given in the centers.

The difference will only be the emphasis on specific contents, while instructors will be trained in all subjects or curricular areas, the final users of the program will only study or develop selective content areas according to their interests and/or needs.

The program has been designed considering two basic areas: a), Skills and information needed by the individual to improve the level or quality of his/her life (basic education), and b) Skills and technological basic instruction which would permit the instructor to teach and the user to learn trades which will qualify him to continue his training and/or work productively in a more advantageous manner not only to him but to society.

The principal instructional method is the use of learning packages, complemented with traditional learning methods. The number of students to be trained would be between 347 and 353 depending on the model chosen (See Facilities).

The ratio of direct assistance recommended is 1:30 teacher/user. The training will be for two years with different groups, reaching 192 participants the first year and 155 the second year with Model 2 and 208-145 participants respectively if Model #1 is used.

Finally, the program will be directed by experts under contract as International Technical Assistance to the project.

2.4 Investigation of Basic Needs

Document No. 4 outlines the basic theories for a model system of investigation-evaluation. The model is oriented toward the search of contents and methodologies of teaching which can be implemented by the project, and the necessary phases for its development.

The structuring of a system of investigation-evaluation to be incorporated as a basic condition in the curricular and methodological design is considered essential. This should permit the evaluation of processes and yield an acceptance of the program on the part of users.

Investigations are considered part of the teaching-learning process in which both communities and directors of the program participate.

2.5 Identification of Technical Assistance

Document No. 5 refers to the characteristics and amount of Technical Assistance required by the project.

Training program (No. 3) indicates the counter-parts of the Technical Assistance group to be between 347 and 353 nationals who must be trained in techniques, methodologies and different subject matter by a group of ten (10) foreign specialists of the program. It is considered convenient that Technical Assistance be obligated to train responsible locals in the design, handling and development of the program and that as part of the training learning packages be designed and developed in the rural centers.

The document lists possible vocational areas to be covered by Technical Assistance.

2.6 Facilities

The determination of facilities needs rests on the requirements of program, the number of people to serve, and the level of quality support - budget. General program has been specified above. The Rural Skills project has been designed to run four fiscal years (1980-1983) and to provide direct services to at least 50,000 rural poor during its lifetime. The capacities of the satellite centers, then, should provide "nearly" this amount, given assumptions regarding the rate of construction of these centers. We say "nearly" 50,000 because beyond the direct recipients of instruction there would be a number of teachers and administrators trained who will also be direct recipients. Also, the allocation of instructional space to occupants during instruction and production time is considerably higher in ratio than would be the same space used for large group attendance at lectures, movies or television. If these satellites become community involvement centers (and in many cases they may be the only such available edifices in the vicinity), the number of beneficiaries which could be served could climb considerably higher than 50,000. The mobile units are assigned a capacity of 30 per unit. Obviously, additional teachers per unit would increase this capacity in arithmetic multiples, and if the units move from place to place in a given area an additional multiplication factor is involved. Thus with two teachers and three moves the five units would reach a yield of 900 clients contrasted with the more conservative figure of 150 which we use.

Finally, the provision of outside recreation grounds with some lighting would contribute in the same way, though such provisions would not increase the instructional capacity of the buildings in any way. The satellite centers are to extend and complement the efforts of the students wishing to move up the skills ladder to higher levels.

Not all rural centers are provided satellite extensions under this project. As explained elsewhere, seven of the twenty-seven are deleted, since they will be resident in the northern part of the country being serviced under the comprehensive national development plan by way of IDB and OAS loans and efforts. Also, as explained earlier, seven urban areas will contain two centers. Each of these pairs will be considered as one "Mother" center, resulting in a final total of 13 "Mother" centers. Given the budgetary and other types of constraints listed above and upon consideration of the rural population densities and the road networks within and among these (as well as between them and the Mother centers), it is recommended that an average of between 3 and 4 satellites (and/or Mobile Units) per center would service the numbers of rural poor recommended for this project and would also contribute a number easily supervised from the Mother centers or otherwise locally. It is assumed that the first year of the project will be consumed in the design and construction of the satellite centers and purchase of mobile units and acquisition of sites, and that by the second year one half of these will be in service. By the third year all will be

in service. Capacities then relate to zero the first year, half the second year and full service the third and fourth years of the project.

Three alternative models were developed which would provide d the recommended capacities for the recommended programs and services, in conjunction with five mobile units recommended along with each alternative model.

Model #1 contains 454 M² of construction, which really represents 479 M² of usable space, since 50 M² is in covered, outside work areas, which space is estimated at one-half the cost of inside, finished space. The planned instructional program capacity of this Model is 185* clients per session. The cost per center is \$45,400. Thirty five centers would cost \$1,589,000, and the capacity gives the following summation of direct delivery to the client or target population:

<u>Year</u>	<u>Delivery Rate by Number of People Served</u>
FY 1980	0
FY 1981	9936
FY 1982	19875
FY 1983	<u>19875</u>
Total	<u>49686</u>

* Capacity is based on 2.5 M²/student in shops and patio areas and 20 students per classroom.

Model #2 contains 394 M² of construction, which really represents 444 M² of usable space, since 100 M² is in covered, outside work areas, which space is estimated at one-half the cost of inside, finished space. The planned instructional capacity of this Model is 160 clients per session. The cost per center is \$39,400. Forty centers would cost \$1,576,000, resulting in the following summation of direct delivery to the target population:

<u>Year</u>	<u>Delivery Rate by Number of People Served</u>
FY 1980	0
FY 1981	9750
FY 1982	19500
FY 1983	<u>19500</u>
Total	48750

Model #3 contains 391 M² of construction, which really represents 466 M² of usable space since 150 M² is in covered, outside work areas. The planned instructional capacity of this Model is 155 clients per session. The cost per center is \$391,000. Forty centers would cost \$1,564,000, resulting in the following summation of direct delivery to the target population:

<u>Year</u>	<u>Delivery Rate by Number of People Served</u>
FY 1980	0
FY 1981	9525
FY 1982	19050
FY 1983	<u>19050</u>
Total	47625

Facilities List Synopsis

Model #1 (cap. 185)

<u>Space</u>	<u>Area in M²</u>	<u>Costs</u>
1. Const.-Ag. etc.	160	
2. H.Ec.-Health-Arts-etc.	200	$454 \text{ M}^2 \times \$100/\text{M}^2 =$
3. Primary. Ed.-Counsel.	40	$\$45,400/\text{center}$
4. Covered patio	25 (50 x 5)	$\times 35 \text{ C} = \$1,589,000$
5. Special Storage	15	
6. Admin.	10	
7. Restroom	4	
Total	<u>454</u> (479)	

Model #2 (Cap. 160)

1. Construction-Ag.etc.	145	$394 \text{ M}^2 \times 100/\text{M}^2 =$
2. Home Ec.-Health-Arts-etc.	165	$\$39400/\text{center}$
3. Covered Patio	50 (100 x 5)	$\times 40 \text{ C} = \$1,576,000$
4. Storage	20	
5. Administration	10	
6. Restroom	4	
Total	<u>394</u> (444)	

Model #3 (Cap.155)

1. Unitary Shop	204	$391 \text{ M}^2 \times \$100/\text{M}^2 =$
2. Covered Patio	75	$\$39100/\text{center}$
3. Primary Ed. & Counsel	40	$\times 40 \text{ C} = \$1,564,000$
4. Storage	58	
5. Administration	10	
6. Restroom	4	
Total	<u>391</u> (466)	

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- 3.5 D.E. No. 33 (Establishment of the National Vocational Training
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- 3.6 Programa Nacional de Formación Profesional. Comité Técnico (1978)
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- 3.11 Informe Misión CINTERPOR-OIT (1977)
- 3.12 Us de Capacidad en Programas de Formación Profesional
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- 3.13 Draft. Project Identification Document Facsheet
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HISTORY OF THE PROFESSIONAL FORMATION
PROGRAMS OF THE
NATIONAL SYSTEM

San Salvador, May 1979

I N D E X

INTRODUCTION

- I. Ministry of Labor
- II. Ministry of Education
- III. Ministry of Agriculture
- IV. Ministry of Economy
- V. National Professional Formation System

INTRODUCTION

The problem faced by a country with limited resources to meet huge educational needs, such as is El Salvador, does not consist in deciding on a single method of teaching and learning, be it called formal, non-formal or scholastic, but rather lies in the formulation of strategies conducive to an integration of all available alternatives within a consistent interchange and plan of collaboration. This requires a permanent organization which will facilitate learning for all members of society and very particularly for those who do not have any alternative access to knowledge. The exclusive use of one approach to instruction, of organization in a single context, aside from being impossible from a practical point of view, entails the risk of wasting large quantities of resources.

In educational practice, formal and non-formal education does not appear to constitute two different and independent processes nor two systems, nor two methodologies, nor two types of accurately distinguishable content. Some projects categorized as non-formal have initiated the use of different technologies whose range extends from simple control processes to the use of system analysis, and from "modest", simple means, such as educational games, to the installation of TV channels. Available data on the effectiveness of proposed innovations, are not conclusive.

El Salvador has been developing an educational strategy which combines formal and non-formal education, and combines official responsibility with the encouragement of private participation in national

education. All this is designed to meet the growing problem of "qualification" or instruction of the people.

CHART O. PERCENTAGE DISTRIBUTION OF POPULATION AGE 6 OR MORE, BY SEX AND AREA, ACCORDING TO EDUCATIONAL LEVEL: 1971 CENSUS

Educational level	Both sexes %			Male %			Female %		
	Total	Urban	Rural	Total	Urban	Rural	Total	Urban	Rural
TOTAL	100.0	41.2	58.8	100.0	38.9	61.1	100.0	34.4	56.6
With instruction	100.0	57.6	42.4	100.0	55.3	44.7	100.0	59.9	40.1
Without instruction	100.0	23.7	76.3	100.0	20.3	79.7	100.0	26.9	73.1

Of the total male population, 1,398,566 inhabitants over 6 years of age, 544,086 (38.9%) live in the urban area and the rest, 854,480 (61.1%) in the rural area. 409,999 (55.3%) are registered with instruction in the urban area and 331,258 (44.7%) in the rural area. Without instruction, 132,633 (20.3%) are registered in the urban area and 520,996 (79.7%) in the rural area.

Female population is distributed 622,005 (43.4%) for the urban area and 810,465 (56.6%) in the rural area. 429,034 (59.9%) appear with instruction in the urban area and 286,822 (40.1%) in the rural area. On the other hand, female population without instruction in the rural area goes up to 522,726 (73.1%) and urban population remains at 191,896 (26.9%)

Female population with instruction in the urban area, 429,034 (59.9%) exceeds male population with instruction in the same area, 409,999 (55.3%). On the other hand, in the rural area, male population with instruction 331,258 (44.7%) exceeds female population, 286,822 (40.1%)

The unimpressive impact of official and private plans and programs directed toward the "qualification" of adults and illiterate persons has resulted in the conduct of a number of surveys, most of which are merely inventory diagnoses, which do not provide the authorities possibilities for introducing correctives for their goals and/or contents.

The development strategy established by the national Government for the period between the years 1978-1982 ascribes a high priority to the "qualification" of human resources. This qualification will have to come about in the levels of formal or non-formal schooling. The qualification of human resources through informal programs has been called "Professional Formation", and important national and international resources have been committed to their development.

Up to the end of 1977 a series of non-formal Qualification Programs were carried out under the responsibility of government agencies, these programs of limited impact, which in most cases were not adequately followed-up, were developed without any articulation and were oriented to the same user populations, in most cases with similar programs.

With the purpose of articulating a National Professional Formation System that would reorient and coordinate resources, policies, plans and programs, the Government enacted Executive Decree N° 33 on December 15, 1977 whereby the National Professional Formation Council was created. All the agencies developing professional formation programs pertaining to the public sector were represented on this Council.

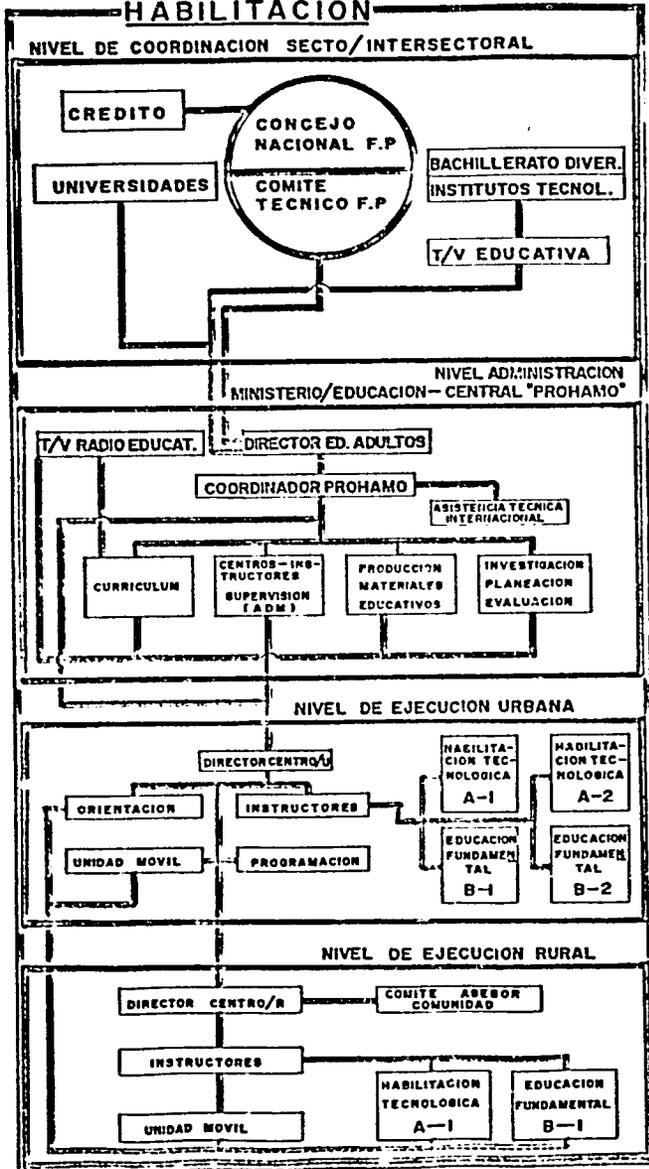
The agencies belonging to the Council and forming part of the Ministries of Education, Economy, Labor and Agriculture were to be definitely responsible for all Professional Formation programs and were

to coordinate their programs and resources to that end. For this reason we shall concentrate our diagnosis only on the programs of the above mentioned agencies.

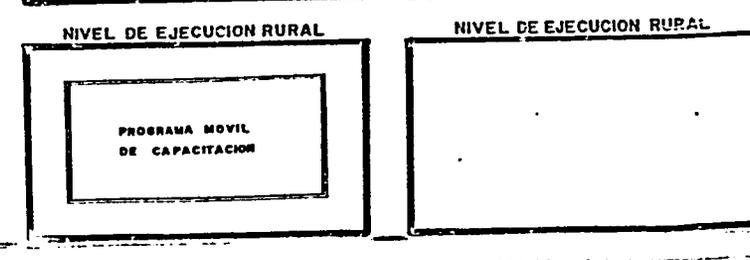
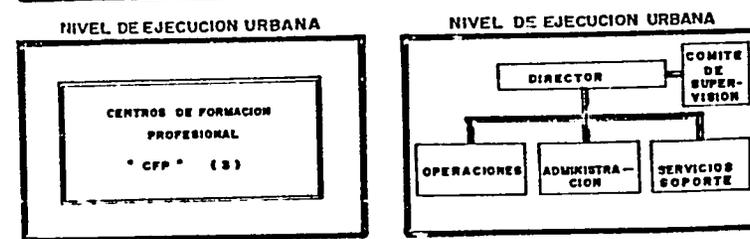
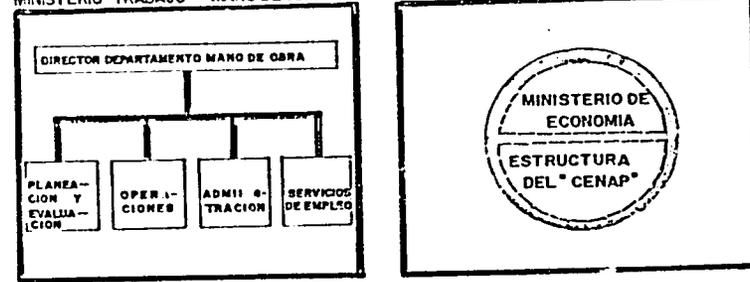
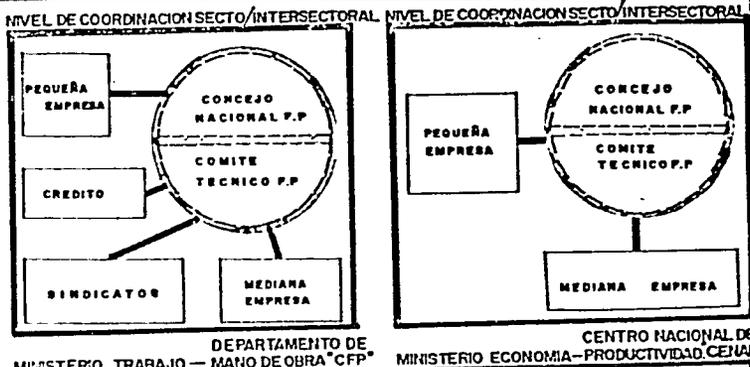
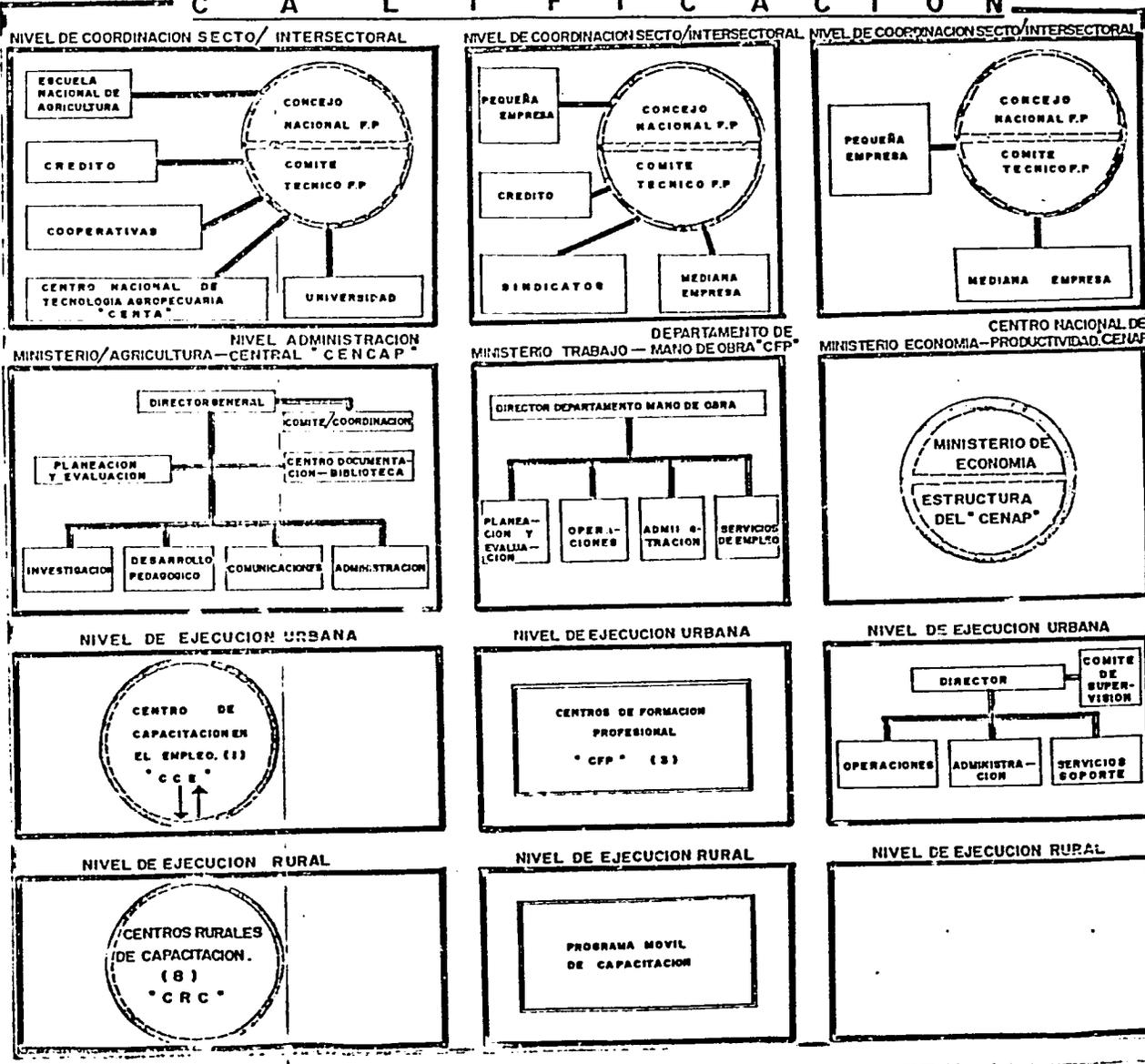
The performance of the diagnosis has been limited by the deficient information available, which has had to be systematized from among various work documents and preliminary studies of different official agencies.

The impact, organization and content of the programs have been set forth here as they were both before and after the creation of the National Profession Formation Council. The present situation of the programs might be described as a stage of organization and formulation of policies and identification of resources.

HABILITACION



C A L I F I C A C I O N



I. MINISTRY OF LABOR

1.1 Description of the Program

Professional Development programs are located at the National Labor Bureau, which acts as an executing unit.

Programs are oriented toward the secondary and tertiary sectors and very little to the primary sector.

The target population of those programs is among semiqualfified workers.

1.2 Facilities

The Ministry has a Permanent Center in San Salvador, with capacity for 191 places representing 1.8% of the national total.

To take care of needs outside the city the Ministry organizes mobile courses in coordination with other agencies.

1.3 Human Resources

The technical personnel responsible for the program include 16 persons representing 2.4% of the national total of instructors in the official sector.

1.4 Characteristics of the Program

The courses offer preferentially: Dressmaking, Carpentry, Cosmetology, Masonry, Structural Mechanics and Refrigeration Technique.

It would seem that the quality of instruction is poor, as the utilization of places does not exceed 36.1% per annum, which is an average of six (6) students per instructor in each course. This might also be the cause of poor promotion of opportunities. There is no information available in this regard.

II. MINISTRY OF EDUCATION

2.1 76-78 Labor Qualification Project

The project was conceived after two types of consideration had been made: consideration of the socioeconomic conditions emphasized by the unemployment and underemployment problem prevailing within the Salvadorean population, and considerations of the apparent shortage of significant labor training programs.

Consequently, the project was designed to help the central, regional and local administrators of the Bureau of Adult and Permanent Education of the Ministry of Education in planning, implementing and evaluating a system of qualification courses that would contribute effectively to meeting the quantitative and qualitative training demands of poor, unqualified Salvadoreans.

The activities of these projects centered around the identification of training needs, in order to develop relevant courses consequently, and to train instruction and supervision personnel, and to develop an occupational orientation system with funding for teaching and demonstration equipment.

2.1.1 Performance and Scope of Indicators

A. Level Set

Trained administrators (10), Supervisors (3), Instructors (48). Trained semiqualfified program users (1,000). Advisory counsels on occupations created (10). Courses designed (30). Investigations (4).

B. Level Attained

Trained administrators (10), Supervisors (3), Instructors (58). Trained semiqualfified program users (1,712). Advisory counsels on occupations created (8). Courses designed (36) Investigations (3).

It may be pointed out that the project's greatest benefit has been the development of a national ability within MOE for the design, development and follow-up of professional formation programs.

The quality of instruction, the contents and methodology used are still deficient; however, there are indications that this is being corrected. These two mentioned factors have led USAID to assure the program's development through the "Basic and Occupational Skills Training" Program.

2.2 Rural Skills Project

By virtue of a BIRF/MOE agreement, a loan (1974) is being implemented for Integral Education Development, of which the Rural Skills Project is part.

The subproject is part of the Integrated Development Project for the Eastern Zone of the country in the Departments of San Miguel and Morazán, and constitutes the educational component of Integrated Rural Development Projects.

Rural Skills was defined as a program for Rural Development, carried out by means of courses conceived in accordance with the needs of the users, to qualify in new occupations that would raise the general standard of living and improve agricultural and cattle raising

techniques and skills.

2.2.1 Coverage

<u>Area Atended in</u> <u>Kilimeters²</u>	<u>1976</u>	<u>1977</u>	<u>1978</u>
Morazán	-	2,000 Km	3,000 Km
San Miguel	-	1,500 Km	3,500 Km
La Unión	-	-	1,500 Km
TOTAL	Integrated Project	3,500 Km	8,000 Km

<u>Communities</u> <u>Attended</u>	<u>1976</u>	<u>1977</u>	<u>1978</u>
Municipalities/Year	21		
Cantons/Year	127		
New Municipalities		6	8
New Cantons		24	32

2.2.2 Relative Impact of the Project

AREAS OF ACTION	YEARS: 1975		1976		1977		1978		TOTAL	
	Course	Benef	Course	Benef	Course	Benef	Course	Benef	Course	Benef
Agriculture	7	235	11	250	97	2,062	37	700	152	3,247
Cattle raising	15	440	18	415	99	2,248	11	175	143	3,278
Renewable Nat.Res.	-	-	3	78	12	247	-	-	15	325
Rural Construction & Mechanization	178	3,546	105	1,823	30	531	31	629	344	6,529
Rural Economy	31	1,289	79	2,064	73	1,860	19	417	202	5,630
Handicrafts	23	540	51	1,060	123	3,614	24	595	221	5,809
Home development	41	1,024	66	1,755	27	618	15	331	149	3,748
Recreation and others	295	7,	-	-	4	93	5	136	9	229
TOTAL	295	7,074	333	7,445	465	11,273	142	3,003	1,235	28,795

At October 30, 1978

2.2.3 Human Resources for Administration and Development

Chief Supervisor (1), Rural Supervisors (3), Technical Collaborators (1), Promotor (1), Statistics and Records Supervisor (1), Total (7). Instructors by agricultural and cattle areas (16), Rural Economy (4) Home Development (8), Handicrafts (9), Rural Construction and Mechanics (6) Total (43)

2.3 Unskilled Labor Project

Late in 1978, and with the technical and financial assistance of USAID (US\$4,000 loan and non-reimbursable donation of US\$500,000), this project was started with the purpose of developing and expanding a workable, unskilled labor qualification system, under the orientation of the MOE Adult Education Bureau.

The project is to be developed starting from the administrative, curricular and facilities organization created under the Labor Qualification Project; however, an enlargement and improvement of the system is contemplated to achieve a wider coverage, better curricular content and increased relevance to users. It is also contemplated to provide the Ministry with logistics support (buildings, equipment and materials) which will make it possible to institutionalize the Program at the level of urban communities and to facilitate the construction of a professional development curriculum.

The AID/MOE project is part of the National Professional Formation System and has been assigned, as the target population, all those potential users who are not qualified workers (and who are employed at productive tasks) who wish to be "qualified" both to join the development system and to continue to improve their productive and personal skills and abilities. It may be pointed out that potential users are also such unqualified human resources as join the active population annually.

The Project is in a stage of initial adjustment, priority actions being at present: administrative organization, technical assist-

ance and identification and acquisition of equipment and materials, including here the building of urban skill centers.

The adjustment processes mentioned above take place simultaneously with the carrying out of courses, which in great part are developed according to the alignments set forth in the Labor Qualification Project.

2.4 Educational Television C8/10

From its origins, and in response to its basic objectives, TVE has fulfilled a task of orientation for and support to systematic (formal) education and the up-dating of teachers connected with the schools. Occasionally in a complementary fashion (and independently since a few years ago) TVE has introduced a program of Permanent Education whose basic objectives are:

- a) To provide opportunities for those persons who are unable to attend an Educational or Qualification and Learning Center to receive adequate instruction which will permit them to become productive, contributing benefits both to themselves and to the community.
- b) To provide orientation to people seeking solutions to the conflicting situations which (due to lack of adequate treatment) become real problems in their lives.
- c) To offer resources to the television audience for using their spare time constructively.

2.4.1 Permanent Education Programs

The above activities are not integrated under clear objectives since they do not correspond to the outcomes of actual programs. It

would seem that these programs, directed toward uneducated sectors, are merely supplements to school and/or recreational programs.

There are programs in the 1979 schedules such as: Family, Domestic budget, decoration, cooking, etc. gathered in five (5) subareas: Nutritional Education, Housing Improvement, Family Health, Home Economics, the family as social nucleus.

The impact of permanent education programs seems to be limited, since their utilization affects an open audience, difficult to quantify and evaluate with respect to the innovations introduced.

These programs should be of great future usefulness as reinforcement for the programs conducted in the qualification centers. These centers will provide an important target group with follow-up possibilities.

2.5 Professional Formation Inside the MOE

Of the total of Professional Formation programs carried out in the country, 70.7% are implemented under the MOE's responsibility, the places where these programs are provided number 5,868 located in nearly all departments.

For the development of professional formation programs, MOE has permanently contracted 283 qualified instructors and/or teachers.

Qualification programs are directed toward satisfying the requirements of the third sector, with 57.6% of the programs devoted to dressmaking, cooking and cosmetology courses.

The diversified bachelorship should be mentioned among the professional formation programs, offering instruction in areas of: Health,

Hotel management and tourism, fishing and navigation, industry, Trade and Administration, Vocational Arts, Agriculture and Education.

MOE estimations show that 20% of the graduates continue in higher studies and 80% go to work. Terminal graduates must join the work force disadvantageously inasmuch as the curriculum does not qualify them adequately to meet the requirements of qualified occupational or technological levels of functioning.

III. MINISTRY OF AGRICULTURE

In 1976, the Ministry created the Centro Nacional de Capacitación Agropecuaria (CENCAP) for the purpose of qualifying peasant workers; this organization is run by a General Director and relies on the Departments of Communications, Planning and Research, a Formal Education Division, a Division in charge of peasants' qualification, with eight (8) Regional Centers. The Formal Education Division gives orientation to an Agricultural Institute at the high school level.

The Division in charge of peasants' qualification functions in eight (8) regional centers and with mobile courses conducted directly for agricultural workers, small and medium producers and peasants' associations.

The Division for Qualification of Professional Technicians is responsible for the operation of programs for the improvement of officers of the Ministry.

The Ministry provides 555 scholarships for development annually. This is equivalent to 5.4% of the national scholarship total. The positions are filled by 89 technicians, representing 17.6% of the national total of technicians.

IV. MINISTRY OF ECONOMY

For the implementation of programs for the development and improvement of human resources, the Ministry relies on the Productivity Center (CENAP). This Institution is organized with a Director and the following departments: Administration, Technical Assistance, and Information and Technological Transference Center.

CENAP attends to the development of small and medium-sized enterprises, creating through courses conditions for adequate organization and administration, as well as for development of human resources.

The Department of Information and Technological Transference Services was organized in 1975 with OEA Technical Assistance, and its purpose is to contribute to the development of small and medium-sized enterprises by means of providing information and technology related to the support of production lines.

The Qualification Department's purpose is to provide opportunities for direct qualification. The courses cover administrative activities fundamentally and have an average coverage of 500 participants per year.

CENAP commands 22 officers enrolled in 60 course opportunities per year. The officers represent 4.3% of the total of national instructors.

V. NATIONAL PROFESSIONAL FORMATION SYSTEM

5.1 Background

With the purposes of integrating plans and programs for Professional Formation and of determining policy to be followed for their development, the Salvadorean Government created the National Professional Formation Council (E.D. N° 33/15 XII/77) and an Advisory Technical Committee.

Council membership is integrated by representatives of the Ministries of Labor, Education, Economy, Agriculture and Justice, and by employer and union representatives.

5.2 The Technical Committee

The Committee is the System's coordinating unit, with the following functions:

- 5.2.1 Implement the Professional Formation policy established by the Council;
- 5.2.2 Study and analyze the present status and conditions of P.F. for purposes of organizing a system that will respond to the country's economic and social reality;
- 5.2.3 Propose to the Council the structure and functioning of the National P.F. System;
- 5.2.4 Analyze the legislation in effect on the subject of professional formation in order to present to the Council proposed laws and regulations for the organization and functioning of the national Professional Formation System;

- 5.2.5 Design the National Professional Formation Systems' plans, programs and procedures;
- 5.2.6 Make studies and propose recommendations to the Council for the establishment of a system in which Formal Education and Professional Formation complement each other;
- 5.2.7 Present to the Council the results of investigations and studies carried out in this field; and propose any steps deemed advisable to promote, expand or improve Professional Formation;
- 5.2.8 Prepare the draft of regulations that will govern P.F. functioning and submit it for the Council's approval; and
- 5.2.9 Issue opinions on any matters which, in its judgment, are important or related to or incidental to the professional formation plans or programs, in order that the Council might adopt appropriate decisions or actions.

Any other tasks or functions conferred upon them by the National Professional Formation Council.

5.3 Target Population According to Sectors

For the purpose of coordinating program activities, the Technical Committee has divided the target population and levels of attention, according to the mode of professional formation, and according to the productive sectors and levels of qualification of the occupational pyra-

mid. This division is as follows:

DISTRIBUTION AMONG SUB-PROGRAMS
OF THE TARGET POPULATION

(For Non-formal Education)

LEVEL OF FORMATION	S E C T O R		
	AGRICULTURE	INDUSTRY	TRADE
Promotion/Specialization	Agri/CENCAP	Econ/CENAP	Econ/CENAP
Apprenticeship/Qualification Improvement	Agri/CENCAP	M/Labor	M/Labor
Qualification	Educ/DEAP	Educ/DEAP	Educ/DEAP

The promotion and specialization of intermediate level personnel shall be attended to by CENAP in the Industrial, Trade and Services sectors, and by CENCAP in the agricultural sector.

Promotion and specialization is located especially at the fourth pyramid level, representing highly qualified labor. This labor, in turn, corresponds to the level of teachers, foremen, supervisors and team heads. These workers organize, lead and control other workers, have a full knowledge of the occupation and the necessary administrative knowledge for their positions.

Apprenticeship, improvement, accelerated professional formation and retraining will be managed by the Labor Department of the Ministry of Labor, in the sectors of Industry and Trade, and by CENCAP in the Agricultural and Cattle Raising Sector.

These modes of formation are located for the most part at the

third level of the occupational pyramid, corresponding to the level of qualification of workers possessing the knowledge required to perform an occupation efficiently, carry out complex operations and to use their own initiative in certain aspects.

Qualification and rehabilitation shall be undertaken by the Department of Adult and Permanent Education in the Agricultural, Industrial and Commercial Sectors.

Both modes of professional formation correspond to an initial formation, whether of adolescents or adults, who join the field of work for the first time or perform without an adequate preparation. Qualification, as the more widely applied mode, corresponds to the second level of occupation of the occupational pyramid, semi-qualified workers. "Qualification" is referred to as the level of 2nd and 3rd class workers and includes workers performing a limited number of qualified tasks but without the knowledge or expertise required for an occupation.

5.4 Industrial and Agricultural Skills Project (BIRF-GOES)

5.4.1 Objective

The project represents a contribution to the GOES' plans to establish a non-formal agricultural and industrial skills infrastructure, nationwide, to meet qualified labor requirements and improve productivity and the income of small and medium-sized farmers, agricultural workers, qualified and semi-qualified workers and their corresponding supervisors.

5.4.2 Goals of the Project

	<u>N° of Institutions Replacements</u>	<u>New</u>	<u>N° of Jobs</u>
a) <u>Agricultural Skills</u>		<u>9</u>	<u>360</u>
i) Rural Qualification Centers (CRC)		8	320
ii) On the Job Qualification Center (CCE)		1	40
b) <u>Industrial Skills</u>	<u>1</u>	<u>12</u>	<u>1140</u>
i) S.S. Central Administration Center	1		560
ii) San Miguel Center		1	240
iii) Santa Ana Center		1	220
iv) Qualification Mobile Units		10	120
c) <u>Administ. & Superv. Qualification</u> National Productivity Center		<u>1</u>	<u>160</u>
TOTAL	<u>1</u>	<u>22</u>	<u>1660</u>

5.4.3 Agricultural Skills

Program development includes the construction, outfitting and endowment of installations for the National Qualification Center (CEN-CAP), including the On-the-Job Qualification Center (CCE) and eight (8) rural, region wide qualification centers.

5.4.3.1 On-the-Job Qualification Center

Offers annually initial improvement and orientation courses for a total of 250 professionals and technicians connected with the agricultural sector. This estimate is based on projections for qualified personnel requirements on the part of the sector's public and autonomous

entities between 79/82.

5.4.3.2 Rural Qualification Centers (CRC)

Each center will be provided with facilities to be able to qualify 20 students simultaneously in disciplines such as: carpentry, electricity, metal work and home economics.

In total, the eight (8) centers will train annually an average of 10,000 persons.

5.4.4 Industrial Skills

The program development includes the construction, outfitting and provision of installations for three (3) fixed Qualification Centers, ten mobile units and one central Administration unit.

5.4.4.1 Professional Formation Centers (PFC)

These centers, including mobile units, propose to take care of 16,800 persons over the next three years, among which are 5,400 industrial workers who have recently joined the labor force and about 11,400 apprentices and employed workers, at the qualified and semi-qualified level, in 33 occupations of the construction, mechanical, electrical and textile industries.

A deficit of qualified labor of 15,000 workers is estimated. It is expected that human resources not taken care of by the PFC may be absorbed by the MOE's regular programs, such as the Diversified secondary school Bachelorship.

5.4.5 Qualification of Supervisors and Small Scale Businessme

By virtue of the project, four class rooms will be built, out-

fitted and endowed, each with a capacity for 20 persons, and one multiple purpose lecture hall with capacity for 80 persons, which will be used by the National Productivity Center (CENAP) to train private sector, intermediate level, administrative personnel and supervisory personnel, and for an integrated qualification and consulting program for small businessmen.

CENAP will operate under the guidance of the Ministry of Economy, but will be located at the same place as the San Salvador Professional Formation Center.

5.5 Qualification Program

The project summarily described under part II is part of the National System, and it is intended to take care of the areas not taken care of by other programs and has been called "qualification".

The qualification program will take care of unqualified human resources in order to bring them to semi-qualified levels. This will permit the creation of human resources capable of self-employment, or semi-qualified abilities which will allow them to continue within the system of qualification.

ORGANIZATION AND OPERATION OF THE URBAN
AND RURAL SKILLS SUBSYSTEM
(GOES/AID PROJECT)

San Salvador, May 1979

I. GENERAL BACKGROUND

As pointed out in part I of this report, GOES intends to coordinate all the Professional formation that occurs in the official sector, by means of creating a network/system for the utilization of resources and the development of training for employment policies.

There are evidences that indicate the existence of a National System, however, in order that the system may operate as such, it will be necessary to endow each of the subsystems with functions, attributes, plans and realistic programs in accordance with the general lineaments of a Professional Formation policy.

It will be the job of the National Professional Formation Council to determine the forms of and to redevelop a policy which now appears to be too general. Although the Council coordinates the tasks of the various Ministries which in turn form the system, these are autonomous entities as regards the Council itself, that is, they are capable of setting sectorial policies, appropriations and budgetary disbursements, such as the development or elimination of programs within their sector of influence.

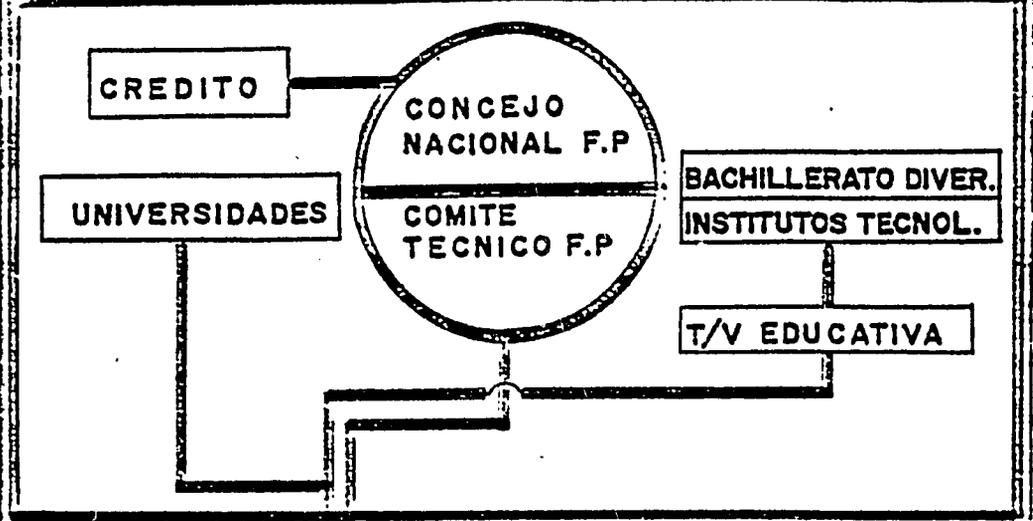
To conceive each subsystem as an independent entity susceptible of being "coordinated", locates the technical committee in its true dimension, that is, as a mechanism of orientation and coordination and in no way a normative body endowed with lineal authority with regard to its components. This means that no rules will be dictated to assure that the system remains subordinate to any of the Ministries forming the National Council.

The PROHAMO program being developed with USAID's technical and financial assistance should be constituted so that it joins the Professional Formation system. This constitutes the first level of development and the conditions must allow for the terminal behavior of the users of the program under its orientation such that they are qualified to continue the development cycle foreseen by the system.

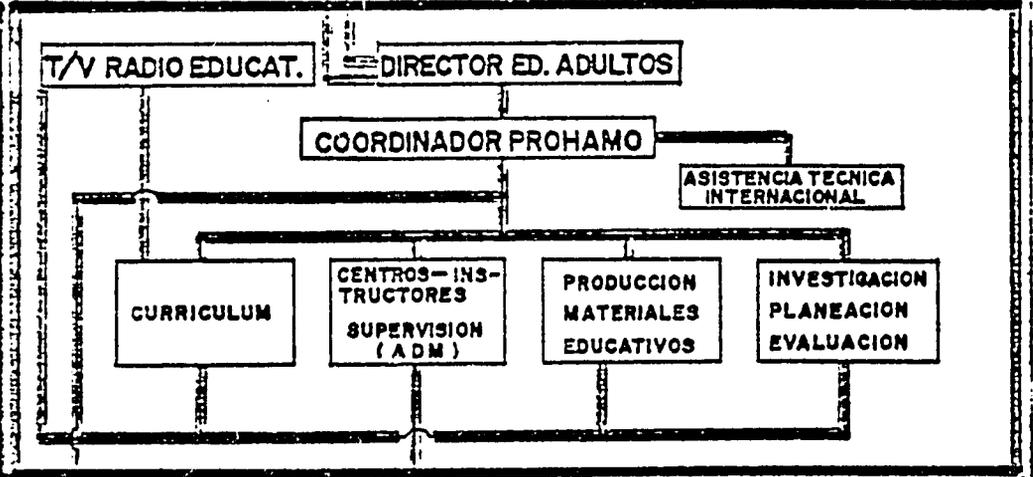
This proposal will center on PROHAMO as it is at present and will project its structure, functions, plans and programs towards the rural sector. The analysis of its present operation here is conventional and takes up the functions assigned and not necessarily the operating structure and/or services.

HABILITACION

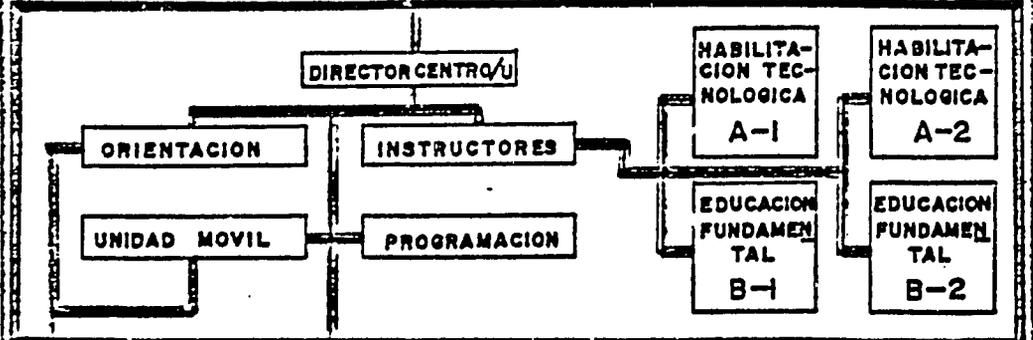
NIVEL DE COORDINACION SECTO/INTERSECTORAL



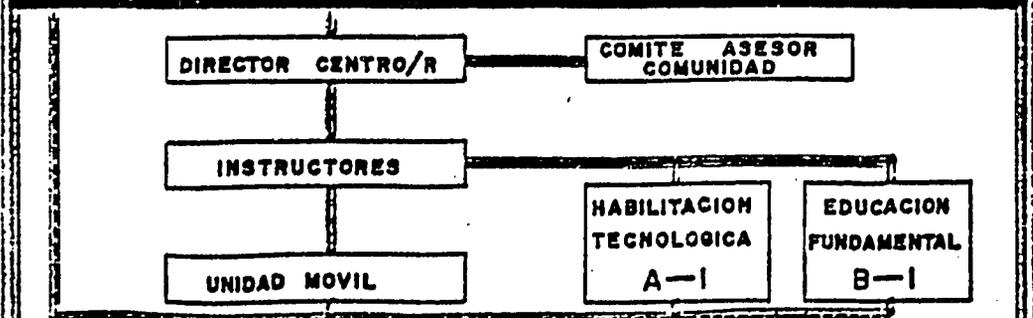
NIVEL ADMINISTRACION MINISTERIO/EDUCACION-CENTRAL "PROHAMO"



NIVEL DE EJECUCION URBANA



NIVEL DE EJECUCION RURAL



II. STRUCTURE OF PROHAMO

2.1 INTERSECTORIAL LEVEL

It is at this level where coordination and integration between the subsystem forming the National System occurs.

Intersectorial action will take place both at the superstructure and at implementation levels.

2.1.1 Superstructural Intersectorial Action

PROHAMO represents the educational sector of the Technical Committee, and that is where the coordination of programs and resources to be reconciled at implementation level shall be standardized.

2.1.2 Intersectorial Action Performance Level

PROHAMO will command two levels of direct implementation, namely, urban and rural. It must be inclined toward effective coordination between instructors and programs of the agriculture and cattle and/or labor sectors, as the case may be.

The programs of sectors associated with PROHAMO will provide the latter with potential clients for qualification. The same will happen with the group of PROHAMO users who upon completing an instruction cycle should wish to continue within the professional development system.

2.1.3 Connection with Institution/Programs Outside the System

Intersectorial actions should not only take place among the sectors committed to the development of the National Professional Formation System, but should tie in with plans and programs that may directly benefit PROHAMO users.

One of the basic assumptions of qualification is that it should provide primary technological skills and abilities which will allow the individual to continue his development and be the agent of his own source of employment. The integration of PROHAMO with programs such as credit agencies could benefit graduates enormously, as well as provide the agencies with potential users of their loans. This mode could be projected for the benefit of other programs with qualified beneficiaries/users capable of taking advantage of opportunities in a more scientific manner and with fewer risks of failure.

2.2 CENTRAL ADMINISTRATION LEVEL

PROHAMO's organization for planning, administration and control is located at this level, including thereunder a production line both of TV/Radio and materials. The control level shall be maintained both by the Director of the Department of Adult Education (DEAP) and/or the Director of Educational TV, depending upon the action to be carried out.

2.2.1 Educational Radio/TV

A TV/Radio program has been included at this level, since it constitutes an important possibility for utilization of one of the sector's resources, and will benefit the development of the qualification model at the implementation level.

At the present time TVE/MOE commands a programming band (6PM/8PM) capable of supporting qualification programs (Fundamental Education Model), except that it lacks necessary production capacity independent from that already existing in TVE.

Radio might constitute another alternative of support to the promotion and development of qualification programs, however, it would be necessary to endow TVE with the necessary equipment and facilities for its operation, which would cost approximately US\$400,000..

The specification of minimum requirements to install a radio station would include considerations of costs of purchase, installation and initial operation of Radio services, at approximately Q1,835,250.00. Considering the dimensions of the project, it is estimated that a Radio-Television station in El Salvador would need service enlargement in the following terms:

A) BUILDING

One recording studio 11 x 16 mts. (176)	
One control cabin 4 x 6 mts. (24)	
One auxiliary recording cabin 3 x 5 mts.	
One shop 3 x 5 mts. (15)	
One audio library 6 x 6 mts. (36)	
Administrative offices 10 x 10 mts. (100)	Q 150,000.00
Acoustic treatment of the studio	15,000.00
Transmitter booths 7 x 7 mts.	<u>75,000.00</u>
	Q 240,000.00

B) EQUIPMENT

Transmitter Equipment

1 - 25 KW transmitter	ø	250,000.00
2 - 10 KW transmitters	ø	400,000.00
3 complete tower antenna	ø	262,500.00
3 ground systems	ø	60,000.00
Associated equipment	ø	32,500.00
Link system (FM)	ø	30,500.00

Studio Equipment

Tape recorder (1)	ø	15,500.00
Rep. cartridge recorders (1)	ø	12,750.00
8 channel console (1)	ø	37,500.00
Equalizers (2)	ø	6,250.00
Turntables (2)	ø	10,000.00
Microphones (12)	ø	5,500.00
Racks	ø	36,750.00
Associated equipment	ø	15,500.00
Installation, materials, and labor	ø	<u>150,500.00</u>
	ø	1,407,750.00

C) OFFICE MATERIAL

Chairs, desks, work tables, stands, partitions, typewriters, calculating machines, tables (all uses), etc. etc.	ø	100,000.00
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D) TECHNICAL ASSISTANCE

One audio recording expert (locution, sound effects, etc. etc.) for 3 months	₱	37,500.00
One radio station maintenance expert for 3 months	₱	<u>50,500.00</u>
	₱	87,500.00

E) OPERATING AND ADMINISTRATIVE PERSONNEL

1 General Manager	₱	1,500.00
1 Traffic Chief	₱	1,000.00
1 Head of Recording	₱	800.00
1 Head of Programming	₱	750.00
2 Transmission Operators	₱	1,200.00
1 Recording Operator	₱	500.00
4 Assistants	₱	1,400.00
3 Transmitter Operators	₱	1,500.00
3 Operator Assistants	₱	1,200.00
3 Night Watchmen	₱	1,050.00
1 Audio librarian	₱	400.00
3 Secretaries	₱	1,050.00
2 Messengers	₱	600.00
1 Driver	₱	<u>370.00</u>
	MONTHLY	₱ 13,320.00
	YEARLY	₱ 159,840.00

F) SUMMARY OF TOTALS

1. Building	¢ 240,000.00
2. Equipment	¢1,407,750.00
3. Office material	¢ 100,000.00
4. Technical assistance	¢ 87,500.00
5. Operations and administrative personnel (yearly)	¢ 159,840.00

At the moment, the creation of a radio system is a future hypothesis; therefore, PROHAMO must make the maximum use of TVE's present capacity. TV programmers should be included who will produce supporting broadcasts to the radio announced programs, within both curricular production and materials units.

2.2.2 Curriculum Unit

As set forth in the chapter referring to investigation, the curriculum to be developed in qualification centers and mobile units must constitute an opportunity for solving problems felt by individuals and/or communities and contain possibilities for job advancement. This may be accomplished by coordinating curricular production with the development of constant investigation and feedback processes.

The curriculum shall be an effective developmental tool as it is conceived and should provide practical orientation to the instructor and answers necessary for the users. It should be conceived in a flexible and broad context which will allow for the achievement

of abilities and skills at several levels, and not simply produce terminal, momentary results, as is the case with most of the formal curricula.

2.2.3 Research, Planning and Evaluation Unit

System development planning will be located here, and its task will be the programming and follow-up of activities according to available financial, material, and human resources. Preferably research should be oriented toward curricular development, and evaluation should contribute data regarding the impact, utilization and relevance of the model, which will provide useful elements for organizational development and development of the qualification curriculum.

2.2.4 Materials Production Unit

This unit shall develop materials for the curriculum and provide basic orientation for the programming of the TV broadcast band which will support the qualification system.

The unit's major responsibility shall be furnishing curricular support models to be developed in the qualification courses occurring at the implementation level.

2.2.5 Centers/Instructors and Supervision Units

This unit is of an administrative/educational nature and will have to do with the operation of local programs and outfitting and maintenance of facilities.

The relationship between instructors and supervisors shall be preferably of an administrative nature, however, it would be advisable that curricular and research information which will affect these persons be channeled through the unit.

2.2.6 International Technical Assistance

During the first three years of its operation, PROHAMO will rely on a considerable sized group of foreign technicians which will support its development. It is recommended that assistance be oriented toward creating national capability to solve the problems involved in the implementation of the system. Assistance should not be oriented toward the "production" of momentary solutions independent of the capacity and levels of ability of national counterparts (i.e., training model).

2.3 URBAN IMPLEMENTATION LEVEL

This level will refer fundamentally to the organizational structure of plans and programs to be implemented for the benefit of PROHAMO's direct users.

Upon GOES' decision, PROHAMO shall be implemented through centers and mobile units, and in intermediate cities endowed with administrative and services infrastructure.

2.3.1 Organization of Urban Centers

The centers will have a minimum administrative and programs structure, supported by the instructors' corps (see graph).

2.3.1.1 Technological Experiences Modules

As pointed out under item 2.2.2, the project should have a curriculum adapted to the qualification program. Thus conceived the program should have several terminal levels or gradations of instruction. The technological experiences module would provide qualification opportunities in several disciplines according to the sector involved; thus carpentry qualifies people for: handling of tools, minor jobs, carving, repairs and/or basic cabinetmaking.

The module may contain one or more experience objectives, depending upon the users' needs, and its development shall be directed by one or more instructors.

2.3.1.2 Fundamental Education Module

The centers will provide instructional opportunities both to qualify their users for work and to raise the standards of civil, family and individual living. For this reason programs should be coordinated to provide opportunities such as, literacy, nutrition, cooperative orientation, etc. For this reason an educational module would be developed which would be complementary to or independent in its development, depending upon the program user's interest.

2.3.1.3 Orientation

Traditionally orientation in professional formation is the information process regarding job market requirements that will allow the qualified individual to obtain a job. Orientation in this program should include new components (without prejudice to maintaining the

initial concept of job information) such as identifying possible supervised credit lines which would allow system graduates to develop business or cooperative experiences of their own.

2.3.1.4 Mobile Units

The mobile units should be considered as adjunct elements for dissemination and promotion for the system.

The distances between communities and the general condition of the highways and access roads give good accessibility to towns throughout the country. The units then should contain instructors and basic equipment and supplies to adequately support whatever programs of PROHAMO they carry among the urban and/or rural communities.

Depending upon available resources it might be possible to provide the urban centers with jeeps equipped with audio visual (sound-projection) system. This vehicle would have educational, promotional or administrative functions as the case may be. The scheduling and driving of the unit would be the responsibility of the instructors.

2.4 RURAL IMPLEMENTATION LEVEL

We have pointed out above that PROHAMO would be fundamentally directed towards users in intermediate cities. The implementation of the system in rural areas might constitute an independent and complementary financial and technical assistance project within the system of qualification.

2.4.1 Organization

The organization would be similar to that of the urban centers with variations only in the intensity of the curricular level or of the technological and educational modules. Modules A₁ and B₁ must be developed at the first level of rural training and modules A₂ and B₂ are the second or urban levels.

2.4.2 Human Resources

Each center would operate with five (5) instructors, two (2) advisors and one (1) full time director. The difficulty of full-time involvement of the entire team of instructors might make it advisable to rotate them hourly in such a way that the center remain open all day, or otherwise provide contracts for full-time employment.

2.4.3 Administrative and Program Connection

The rural center shall be regarded as an extension of PROHAMO/V and the flow of curricular information should go through the PROHAMO/V, depending finally on the central unit of instructors, centers and supervision. A minimum administration group located at the central level has been considered.

LEVEL IMPLEMENTATION

The chapter on Facilities and that for the training module contain the strategies for the implementation and technical assistance system at the rural center level.

TRAINING PROGRAM

THE TRAINING PLAN

Introduction

The training process constitutes a sub-system in what is a broader organic system. During the following description one should bear in mind that there are dependencies existing between the schedules and activities of the training sub-plan and the plans for construction, purchase of vehicles, utilization of technical assistance and the initiation of functioning centers in phases. Because these dependencies between training and other activities may be obscure, we have affixed at the end a PERT or critical path diagram which will help clarify and maintain this perspective.

The plan consists of: (1) pre-requisite actions and decisions; (2) the content, pragmatic objective, as opposed to the traditional/subjective/academic; (3) its methods, based on objectives contained in the form of training Modules, designed such that the participant performs what he is learning and what he will teach subsequently; (4) its administrative processes, coordination, and its transition to a functioning level in the centers; (5) and finally its required resources and financing.

The distinctions among the traditional, formal processes of schooling and the non-formal, pragmatic processes of the present plan are too great to permit us to understate them. This plan will constitute the first effort in the country to implement a program of instruction which is open and unforced in scope and sequence. The philosophy, the psychology, the processes and resources will be new concepts to the participants and their present administrators.

I. Pre-Requisites

- A. Selection of participants - the plan provides for the re-training of teachers, counselors, directors, graphic artists, script writer, photographer, supervisors and administrators. The teachers, counselors and directors constitute the personnel of the satellite centers, excepting the 13 directors who will be from the Urban Mother Centers. The script writer, graphic artist and photographer will be employed (possibly) with E.T.V. to maintain the training packets of the rural program and to extend the Modular system upon demand. The supervisors could be connected to the urban centers (which is preferable) or they might be part of a group located at the national level. The administrators will be Ministry of Education employees functioning at the national level.

Although it would not be possible to establish a checklist of weighted characteristics for purposes of scientific selection of participants, there are desirable characteristics which we can apply with some expectations of success. The teachers should have training in pedagogy. Their length of experience as teachers is not particularly important, because they will have to unlearn many habits acquired during traditional teaching. A mixture of those with experience and youths with energy and new ideas would be the ideal. Most desirable would be those who have training in two or more

of the larger instructional program areas for the satellites - that is (for example); agriculture linked with manual or industrial arts; or public health (or nursing) with food preparation and preservation and the rest of Home Economics arts and skills; or plastic arts with secretarial skills; etc. Candidates should show willingness to receive instruction in other areas than those for which they would be qualified to instruct or assist with instruction. Those who have had background or professional experiences in rural areas or who have had training in rural psychology or in group dynamics or community planning may be quite valuable people. If they have had training in non-formal education, or in objective-based instruction, that is desirable. Attitudes of candidates are as important as (if not more so than) abilities. Above all we seek people who are open and secure in themselves, people who are communicative rather than authoritarian - people who can work with and in groups rather as guides and helpers than as chief controllers, and who do not prefer to work alone 'with their group' - people who do not mind assisting others in instructional areas which are not their specialties - such that they might be teachers one minute and assistants the next. They should be willing to live and work in the rural area. They should be willing to work "full-time" in the center. They should be willing to expand their areas of specialization. They should accept the possibility that it might be necessary to transfer them from one center to another when changes in teaching requirements occur.

The counselors should be trained and qualified in the area of guidance and should preferably have some experience, but if they possess the attitudes and qualifications outlined above - especially the openness and non-directiveness - it would be acceptable for them to complete their counseling and guidance qualifications as part of the training program provided for all participants.

The requirements for directors are not essentially different from those given for teachers and counselors. Some successful experience as a director or administrator would be valuable, but we should realize that there is point in time of "diminishing returns" associated with administrative experience in autocratic environments such as one finds everywhere traditionally.

The habit patterns of this type of administrator are very difficult to eradicate or to substitute for without changing the basic value system and character of the administrator who maintains them.

The autocratic administrator who is capable and sincere will find his efforts working contrary to the objectives of the center.

Eventually this will become the cause of alienation and failure of the center. The selection and training of directors in the "Mother Centers" of the Urban program should take these considerations into account, since they may eventually have administrative or supervisory powers over the satellites, and if they do not understand or appreciate the philosophy, objectives, or processes of these centers they will hurt them more than they will help them.

Supervision of the rural centers might come from the directors of the urban centers, from supervisors based in the urban centers, or in the Ministry of Education at the national level. Regardless of which alternative is selected, the supervisors should be recruited on the same basis as would be directors of centers. Their required attitudes, knowledge, skills are not different from the former - with the possible exception that they should have well-developed capacities for investigation and education. Neither is there any change in the desired characteristics for national level administrators of the project. We strongly advise that these should be appointed at the same time (or before) the other participants and that they receive the same training as the others, with the others. We can not overestimate the danger of having administrators at the national level who do not appreciate or understand the philosophy, processes or needs of the rural centers. The by-ways of education in North and South America are cluttered with dead programs which suffered this defect. The script-writer, graphic artist, and photographer are project assistants, hired to maintain and create packages for the centers. They will need to work with the teachers in the centers and with the E.T.V technicians (or at some other center of production?). Beyond their specialized skills and abilities these three must understand completely the theory and practice of developing and using learning packages. They should be exposed to the same

didactic experiences as the other participants.

The selection of participants and beginning of the training program for all of the administrators, supervisors, the script-writer, the graphic artist, photographer, and half of the teachers and counselors and all of the directors should occur at the beginning of the first month of the project - or before if such is possible (and it is certainly advisable). The rest of the participants will be selected during the first year for training during the second year, in order to coincide with the termination of construction of the centers. Any delay in the construction may affect the selection and training of participants.

- B. Contracting and employment of participants - contracts and terms of employment must of necessity be different from what is now standard practice. Some changes may simply require Ministerial agreement; others may require changes in the law. The most important of these are the following:
- (1) Contracts of participants should provide for full-time employment the first year, during which time they are in training and preparing to begin work in the centers.
 - (2) Frequently the results of training personnel for these projects is that at the completion of training participants go to work for other employers. The cost of their training and the time required to train them and their replacements are lost to the project. The costs of this can be enormous and the effects disastrous.

Because of this we recommend that the contract for employment of the participants contain a clause which guarantees that the participant, at the conclusion of his training, will work 3 years (or 5 years) with the centers or other designated offices of the project, and that if one does not he will repay the Ministry a proportional percentage of the cost of his training.

- (3) Contracts following the training period should contain the provision that those employed as instructions, counselors or directors will work three sessions (turnos) daily in the centers and that if the demand is sufficient the schedule may be adjusted to include a night session among the three.
- (4) The contract should contain provisions for transfer of personnel among centers when staffing needs change. Employees would agree to accept such necessary transfers beforehand or to terminate their employment voluntarily if they failed to accept transfer later.

And -

If program components change in the centers such that new teaching knowledge is required or a surplus of teachers of some specialty occurs, the contract should provide that teachers involved agree to be re-trained in the required areas of full-time employment during training.

- (5) Before the initiation of the project there should be a pre-condition involving an official statement from the Ministry that they will support the non-formal program proposed for the centers and that they will implement and enforce the four points above.

B. Selection of Technical Assistance

Technical assistance instructors employed for the development of this project should be multi-disciplinarian so that among them there is ability to do the following:

- (1) Conduct or assist with the selection of participants.
- (2) Produce the teaching materials necessary before and during the period of training and to leave a complete series of learning packages and materials - sufficient to retrain others after the departure of the T.A. group, and without any need to employ the further services of any external personnel.
- (3) Provide sufficient training to participants that they can maintain, change and carry out the plan of training after the departure of the T.A.
- (4) Conduct the training program and assist with it during the second year.
- (5) Certify that all the necessary steps between selection of personnel, training, assignment to the centers and initiation of the programs have been concluded successfully.

The abilities and attitudes of these T.A. will be complementary to those which we wish to encounter and/or engender in the participants, such as those characteristics described previously.

Furthermore, and specifically, we require the following:

- (1) Multidisciplinary experience with the instructional fields indicated in the section Program of the facilities chapter (which see).

- (2) Experience with non-formal programs and objective-based, and/or Modular programs. Experience with rural programs in Latin America.
- (3) Experience in the production of learning packages and with the system of control, evaluation, diagnosis and reconstruction of the package and the system.
- (4) Experience with the selection and design of Multiple, diversified activities to provide guaranteed access to objectives in a continuum of objectives.
- (5) Skill and experience with the production of materials corresponding to the activities referred to in number (4) above, and ability to train others to produce them. We include in this the ability to produce basic guides, programmed guides for reproduction in various media (movies, slides, foto-stories, overhead projection, games, group dynamics, etc.)
- (6) Ability to plan and conduct a community needs survey and to train others so that they will be able to do it again later and will be able to reduce the results to curricular requirements for instruction in the centers.
- (7) Ability to foresee humanistic and logistic problems which might or will occur when the program is underway in the centers, and to be able to teach directors, supervisors and administrators alternative processes for the resolution of these problems, teaching them also how to develop policy adequate to a normal functioning in the centers.

D. Employment of Technical Assistance

The success of such programs as the present one depends heavily upon the ability and capacity of responsible nationals to execute, maintain and expand them self-sufficiently, without the constant need to search extra-national assistance. An object of the proposed program is that its participants will be able at the end to do exactly this. Thus, each expert employee must agree to be "Squeezed dry" before he/she leaves. In less violent terms, each speech given by the expert will be recorded and coded according to its content and its position in the project. The technical assistant will then provide drawings, diagrams, examples, essays, bibliographies, etc., of the information which he has or recommends use of during his work here. His contract should be written in such a way that this result is guaranteed and providing that final remuneration should depend upon the adequate conclusion of this point (!). The services of the script-writer, graphic artist and photographer would be utilized to this end.

E. Production and/or Acquisition of Learning Materials

The content of the program will be written definitively and will include its corresponding objectives. Before the beginning of the training program it will be necessary to collect books, photos, slides, cassettes, etc., related to the objectives. Although the supporting learning packages will not have been produced (and they should serve as vehicles for much of the teaching), the production of the packages will begin

with the project, and the technical assistance personnel and the participants will have produced enough to introduce them into the training process within the first month. This process of package production will continue, of course, throughout the entire training period. If it is possible or feasible technical assistance people should be notified sufficiently before actual employment that they can assemble books, journals, and other materials. Hopefully the material prepared for prospective T.A. personnel and the contracts themselves will have included a detailed analysis of all the foregoing; however, a request for multiple materials collection should be suggested with the early notification of employment. Further, the Salvadorean counterparts, and others with the capacity, can begin the acquisition and storage of such materials before that time.

The theory, description of content and production of learning packages, as well as their use, will be delineated in this chapter under section II.

F. Coordination among all those involved and/or responsible

During negotiations with the Ministry of Education for the purpose of final determination of the form and conditions of this project, representatives of USAID and MOE should conclude a detailed communication setting out the responsibilities of both parties, including offices and persons responsible for what. Further, they should produce a list of other entities or institutions which would be involved, interested or concerned - other Ministries, "Mother Centers", local Mayors (or

other leadership), public and private cultural institutions, etc., so that they may receive informative materials concerning the project. This is important because, through the community assessment process and others, we will make direct contact with all levels of public and social power and influence and we will require their understanding, their good-will, their suggestions, their assistance. With respect to all of this, a primary concern is to avoid the problem (well-known to all) of beginning the project while some involved are not aware of the nature of the project or of their own roles or obligations. Thus, the objectives, processes, schedules, etc., should be clearly communicated and distributed to all.

G. Organizing to begin the program

Following are the primary tasks to be concluded between now and the initiation of the program:

- A. Complete the development of the project and secure the approval and agreements necessary between USAID and the GOES - including mutual responsibilities, necessary policy changes, required changes in the employment laws (if necessary) in order to employ the participants under the conditions outlined previously.
- B. Assign the responsibilities of the MOE and of USAID to initiate the project.
- C. Precise refinement of the curriculum and its content.
- D. Drawing up of contracts for nationals and extra-nationals.

- E. Employment of extra-nationals (Technical Assistance)
- F. Begin the production and/or accumulation and storage of instructional materials.
- G. Designation of temporary facilities for the training program.
- H. Selection of participants.
- I. Employment of participants.
- J. Orientation of participants.
- K. Initiation of the training program.

H. Schedule (long and short range) -

A massive training program will take place during the first two years of the project, and will continue thereafter at a much reduced level, in accordance with the needs of the program maintenance, ingress of new personnel, and continuing in-service training. The period of intense training for each participant will be one year. The first year of the program will be devoted to training administrative and supervisory personnel at the national level, all of the directors of the "Mother" and satellite centers, and half of the remaining rural center personnel. At the end of the first year, when the construction of half the centers is completed, the staffs will occupy the buildings and open their programs. The directors of the remaining centers (having undergone training the first year) will act as trainers for their own future staffs and will conduct their training in the centers and mobile units and in the field, as well as in the original facilities. At the end of two years all participants will be trained and functioning in their centers.

The daily schedule will cover nine hours, divided among formal and informal instruction, production of learning packages, field trips for work and study, etc. Training will be scheduled five days a week.

II. Content - Methodology

A. Content

In reality the content of the training program for participants should be the same as that encountered by the rural poor in the satellite centers. The difference will be the emphasis and the fact that the participants will each study all possible areas, whereas the rural clients will study the areas of interest and/or urgency to themselves. Thus, two content areas will dominate the program:

1. Skills and information necessary in order that the rural individual can capitalize, to the maximum of his/her potential capacity, upon the potential capacity of his/her environment, and so that he/she can raise themselves to the level of a better environment if they have the capacity to do so.
2. Skills and information required in order for the instructor and the rural adult student to be able to teach and learn the objectives which are inherent in the conditions cited above.

The broad areas of instruction are detailed in the program section of the Facilities Chapter (which see). These areas were derived as logical products of a general description of rural characteristics. They are general and extensive. Their requirements, the priority positions which will eventually evolve, and the final, detailed curriculum will come as a result of the community assessments, manpower studies and actual encounters in the centers once they have begun to function. The broad categories and their traditional content are sufficient for initiation of the training program. The new content involved in the

organization, production and use of Modules, objectives and learning packages will be presented immediately following this discussion. Suffice it to say that the production of packages by instructors and participants during the time they are studying the very objectives of these packages is consummately good pedagogy and will bear good fruit.

B. Methodology

The predominant vehicle of instruction in the training program and in the centers themselves will be the learning package. This will not in any way stifle traditional teaching methods, but will rather encourage them, since multiple, rather than single alternatives are prescribed to reach each objective. Further, the continuum of objectives will not prevent the instructor from suspending package use at any time in order to capitalize on an immediate available experience or on group needs which transcend the set objectives at any given time. A complete description of the theory and structure of the package is given in Annex 1 at the end of this chapter. The package is only part of the complete Modular System.

The criteria for this system is as follows:

- (1) The system should include the content of whatever curriculum is desirable for the education.
- (2) The system will be able to respond to the differences in content and/or form demanded by the necessities of the users.
- (3) The system will be flexible enough to be adaptable to whatever region of the country - Urban or Rural - or whatever level of education it might be necessary to incorporate

- (4) The system will be constructed so that instruction may be teacher-assisted or may be auto-didactic. The presence of the teacher on a permanent basis need not be necessary for the system to function as long as she can concentrate on the non-readers and supervise the rest, giving technical assistance and evaluation. Only thus can the multitude of individual studies envisioned here take place.
- (5) The system will contain self-evaluation instruments which can diagnose problems and suggest solutions at the student's level during the daily learning process.

There are many modular systems; however, one which meets the above criteria and has had the most extensive use, and the best record of success to date is the Unipac system (international name - this system is in the public domain and is not a commercial product) - developed under the financing and administration of IDEA of the Kettering Foundation in Dayton, Ohio, U.S.A. The development of this system required years, the involvement of dozens of the best-known educators in the country and thousands of teachers at all levels of education (see Annex I, end this Chapter).

As discussed previously, content areas will fall across a multitude of traditional course designations. These designations constitute the educational needs and interests of the rural client. The various blocks of knowledge will be organized by scope and sequence - and probably exist in that form in the country today to a large degree.

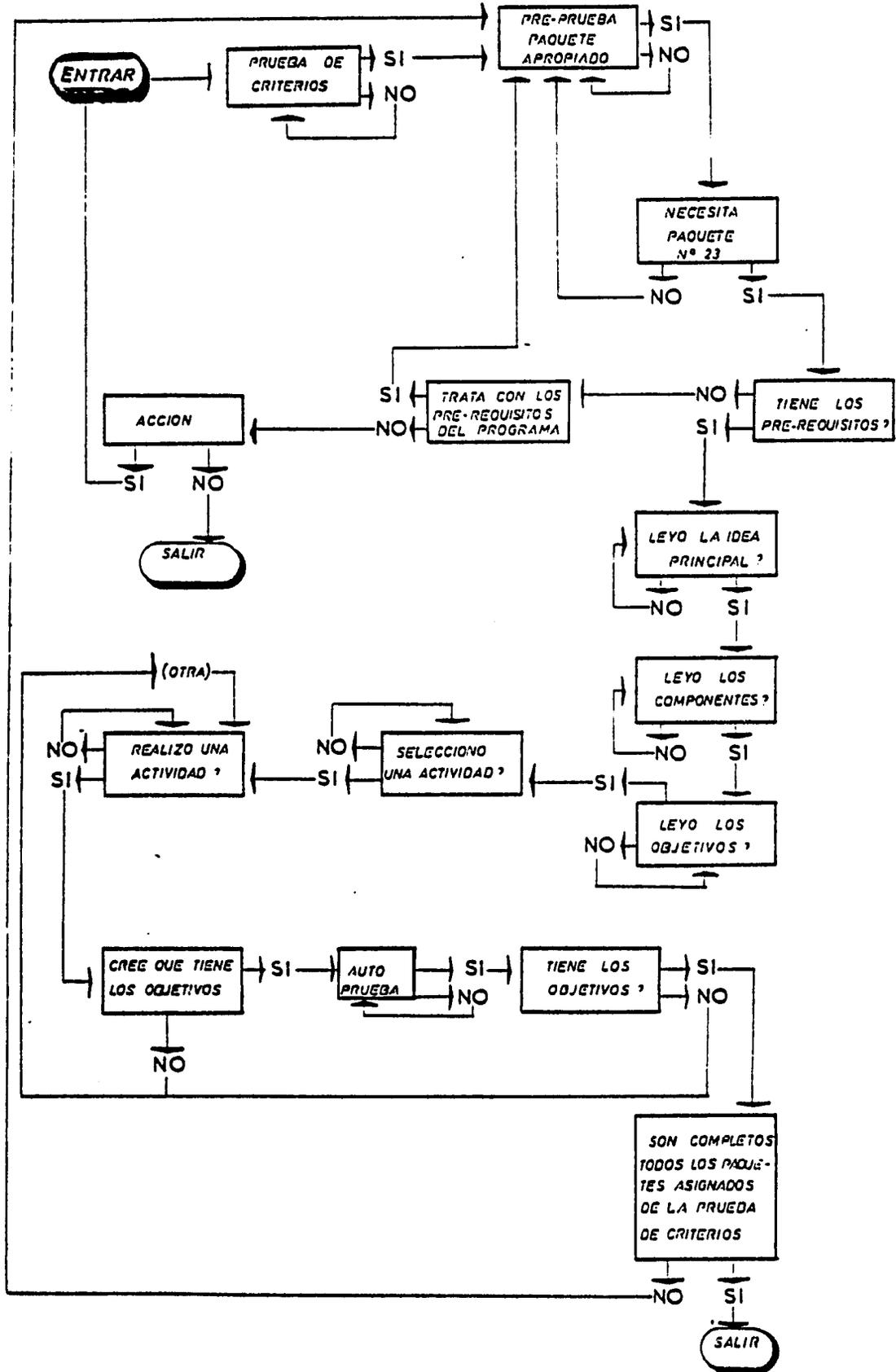
For purposes of organizing the Modules and learning packages, this scope and sequence will be organized into units. The units will have various numbers of packages each, each package limited to less than a week to complete its objectives. Each package will be complete, with its instructions and associated items, Materials and media, in boxes numbered in sequence under its proper nomenclature and color. The items are: the principal idea to be learned, components of the idea, objectives related to the components, instructions for the selection of activities, diversified learning activities, Quest, pre-test, self-test, post-test. The diversified activities will be numbered and the materials associated with them will be numbered with codification and color. Example: a program of slides (diapositivas) and cassettes will be in its box identified as Course-Agriculture, Unit-soil preparation, package number 5, activity number 6 (all in blue color like the other activities in package number 5). See Sinoptico No. 1, next page.

The packages with their activities in their boxes will be stored in the original like a library at a place designated by the national administrator - the most logical place is with the script-writer, graphic artist and photographer who will be working with them when they require revision. Multiplications of the packages will be in the rural centers to serve as the main vehicles of instruction.

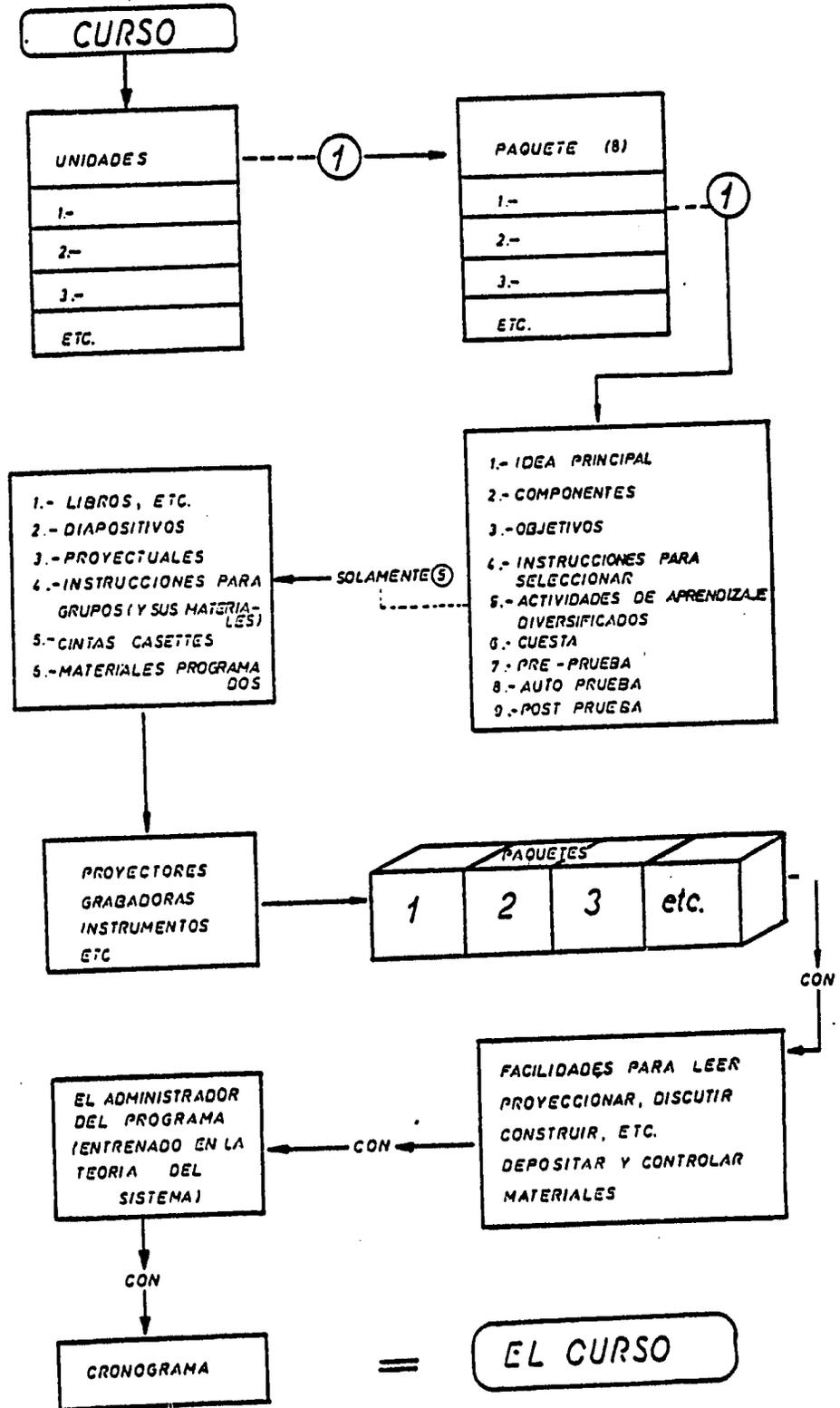
Sinoptico number II shows the auto-didactic process of instruction in binary form. The interested student solicits instruction. If

CUADRO SINOPTICO N° II

HUELLA BINARIA DE ENTRENAMIENTO



ANALISIS DEL CURSO



the instruction is to follow a long sequence or course the criterion reference test is administered. This is diagnostic and informs the instructor where the student stands among the flow of objectives for the total course or sequence. That is to say, which of the objectives does he already possess and which does he need to study. From this is written a prescription of the packages which the student needs to complete - a program of study. This is written in two copies, one for the student, one for the instructor. When the instruction is to be of short sequence as is likely to be the case here, most frequently, the criterion reference test is not of much value. The instructor then simply selects the package or packages relevant to the student's need.

The first appropriate package of the unit is then selected and the student takes the pre-test. The instructor must evaluate the results. If the student achieves success this indicates that he does not need the package. He then takes the post-test and proceeds to the next appropriate package. Generally the student seeking instruction in a specific area will fail the pre-test, thus indicating his need for the package, but only if he possesses the pre-requisites as indicated in the pre-test. If he does not possess these the instructor must provide the pre-requisite instruction in another package (or otherwise) or he may have to make the decision that the training requested by this student, at this time is inappropriate.

The student takes the package, reads the main idea, the components and the objectives in order to organize and orient himself. The instructions tell him how to select activities to perform. He is directed to choose only those which he needs in order to reach the objectives. Thus, he can perform the activities which correspond to his best mode of learning. By means of the self-test he knows when he has achieved the objectives and when he can successfully pass the post-test. Until he performs well on the self-test he may return to the activities which he has not performed. The teacher must evaluate the post-test and make the decision to advise the student to continue with the package or to terminate it.

This process is repeated with each package until the original prescription of packages is complete.

If the teacher does not need to work closely with the student because of reading difficulties or other of a number of legitimate reasons, her participation in the process involves mainly the following:

1. Administer and evaluate the criterion reference test (for long sequence) and prepare a program prescription for the student. Or (for short sequence) merely select the appropriate package, packages or other instruction for the student.
2. Evaluate each pre-test and decide whether the student should enter the package or not.
3. Evaluate the post-test and determine whether or not the student is prepared to exit the package.

4. Evaluate the effectiveness of the packages and the materials.
5. Administer and control the materials and decide when new packages and/or materials are needed, and inform the director.

Thus, teacher-contact with students may be limited to professional decisions and monitoring or may be distributed among students as the teacher feels is necessary.

Following Model #1 or:

Year one - 208 participants

Year two - 145 participants

One half the teachers and counselors and one-half the supervisors will be trained the second year in each case.

The first year of the project will involve all participants (except urban directors and 2 national level administrators) all year. The second year nearly one-half the participants will be in training, and the other half on the job with direct contact with the client population. The third and fourth years will involve all participants on the job with direct contact. They will contact 50,000 people, less their own number. Thus, the average daily contact with the target population for all participants is 144. Real contact for working center-personnel will average 154. Obviously contact will be much higher after the second year than before.

A N E X O - 1

El siguiente capítulo, reimpreso de la revista profesional Educational Technology, da una explicación corta y clara de la teoría del paquete sistema UNIPAC: escrito por el Dr. William Feild.

EL UNIPAC: "Una forma y un proceso para individualizar".

Además de las habilidades básicas de leer, escribir y sumar, hay poco acuerdo entre los educadores referente a lo que debe constituir el currículum en las escuelas. Si hubiera habido acuerdo alguna vez, es dudoso que exista en el futuro. Simplemente es que el conocimiento que cruza el horizonte en forma debida o siguiendo las prioridades, sino que viene como "insumo" en grandes masas continuas e indiferentes, que según dice A.N. Whitehead, "se conservan como pescado fresco".

Hay un acuerdo mayor sobre lo que el estudiante debe hacer, que sobre lo que debe saber.

Las autoridades y parientes de los estudiantes por igual, están llegando al punto de que además de la posesión del estudiante de varios hechos alécticos y procesos básicos comparados con los del estudiante promedio en su ambiente, tiene que poseer ciertas habilidades y características que son más importantes que el "conocimiento" definido tradicionalmente. Las habilidades y características que el estudiante debe tener son las siguientes:

1. Habilidad para llevar a cabo investigaciones significativas y aceleradas,
2. saber cómo (y ser capaz de) manejar el ambiente de aprendizaje,
3. ser capaz de "re-especializarse" en campos extraños en corto plazo y sin angustia ni inseguridad.

El control de los estudiantes por los profesores y por el sistema cambia en

un programa individualizado. El rol del estudiante se hace más fuerte, más responsable y menos dependiente; el rol del profesor se hace más suave, más objetivo y más profesional (diagnóstico-Prescriptivo); el rol del sistema se hace orientado al servicio más que al autoritarismo, de tal forma que los obstáculos de organización, tiempo, espacio, procedimientos y materiales, se retiran antes que los sistemas planificados por estudiantes y profesores para efectuar el aprendizaje.

Cualquier organización que sostenga en forma efectiva esta clase de experiencia educativa tiene que establecer primero y sin dudarlo, que el estudiante individual es una entidad conocida, que sus objetivos le son pertinentes, y que él sabe y conoce cuales son sus objetivos propios. Segundo, la organización tiene que proveer objetivos significativos al estudiante y garantizarle el acceso a estos objetivos por medio de los esfuerzos del estudiante mismo. Tercero, la organización tiene que proveer al estudiante procesos legítimos para ejercitar estas intenciones y para saber cuándo ha alcanzado sus objetivos. Finalmente, la organización tiene que permitirle moverse y progresar a su propio ritmo. Conforme a estas proposiciones (y ciertamente inherentes en ellos) son las responsabilidades legales de los profesores, la adquisición de auto-conocimiento por el estudiante y la plena asunción de Bloom de que el 90 % de los estudiantes podrían alcanzar "A" en cualquier materia, sin consideración del criterio para "A", si fueran dados tiempo, proceso correcto, y la predisposición de la dirección hacia una instrucción individualizada.

En el pasado hemos evaluado la eficacia de los programas escolares por medio de la comparación de los puntos recibidos por estudiantes en pruebas de ejecución o progreso con cientos y miles de puntos a través de los cuales tales pruebas son estandarizadas. Sería más significativo, sin embargo, si pudiéramos evaluar el proceso mediante la medición del número de objetivos alcanzados por el poder de la escuela de evitar el abandono de los estudiantes, por el nivel de cambio del sistema educativo en todos sus aspectos, por

la satisfacción de sus beneficiados, o por alguna medida de disminución de crímenes, menos familias deshechas, o menos recipientes de donaciones para vivir, o por el aumento del aprecio por la vida de la generación venidera.

ESTRUCTURA DEL UNIPAC

El UNIPAC, fue desarrollado para satisfacer los objetivos y condiciones, perfiladas anteriormente. Como paquete, un plan de instrucción, un proceso sistemático, o material para individualizar la instrucción, el UNIPAC no es distinguido rápidamente por su forma de otras clases de paquetes. Contiene los elementos clásicos de paquetes y su poder yace en su utilización.

La forma del paquete es la siguiente:

1. Pre-prueba - diseñada para determinar habilidad, pre-requisitos y necesidad de lección por el estudiante.
2. Idea Principal - escrita en una frase completa, descriptiva y relacionada con un elemento de tiempo para ser discutido a continuación.
3. Elementos componentes - (elementos para ser aprendidos) - escritos en palabras cortas (frases incompletas) para limitar lo que de otra manera sería frase declaratoria con rango ilimitado.
4. Objetivos "de Conducta" - escritos referentes a la conducta esperada a la conclusión de la enseñanza, con mayor énfasis en niveles de perfeccionamiento. Relacionado directamente con la ejecución final deseada referente a cada componente.
5. Instrucciones para la selección de actividades - el primer elemento de una estrategia de reciclaje para ser discutido más tarde.
6. Las actividades diversificadas - tres o más por cada objetivo, diversificado para entrada y acceso más que para refuerzo (aunque

si puede reforzarse).

7. La auto-prueba - punto de decisión para el estudiante y protección contra el fracaso público.
8. Prueba posterior - identificar con los objetivos, la parte del profesor del contrato mutuo (entre profesor y estudiante).
9. Encuesta:- la oportunidad de ir más allá de los objetivos aprendidos, bajo cualquier condición que será aprovechada por el estudiante.
10. Prueba del Grupo - una aplicación del paquete para determinar su éxito y su utilidad.

Varias características claves que distinguen al UNIPAC de otros paquetes de aprendizaje pueden ser observadas aquí:

1. La idea principal es un concepto singular, una idea manejable, extraída de entre todas las "partes componentes" posibles. La selección es una selección del profesor y contiene la tendencia de limitar la cantidad de tiempo requerido para completar el paquete de diez días con estudiantes de secundaria y a tres días con estudiantes de primaria. Aunque este tiempo variaría por supuesto, estos límites representan los puntos en los que la ansiedad y la necesidad para terminar resultados provocan una súbita baja en la actividad estudiantil y un incremento de las reacciones de fastidio. Es una indicación para la intervención profesional. para buscar nuevamente la falta de pre-requisitos o debilidades del paquete. La idea principal, componentes y objetivos no son instructivas; eso es que ellos estén presentados en términos básicos para ayudar el enfoque del estudiante y organizar la tarea antes que él. Si los componentes son divergentes o los objetivos son numerosos, el paquete se divide en varias lecciones, cada una con su auto-prueba para ayudar a obtener las conclusiones.

2. La estrategia para el reciclaje se lleva a la lección con las instrucciones para la lección de actividades didácticas. El profesor ha controlado el proceso y objetivos hasta ahora y en tonces entrega la responsabilidad al estudiante, quien puede es coger de entre las actividades solamente las que necesita para pasar la auto-prueba. La selección de actividades son diversifi ca das más que simplemente multiplicadas. Esto está hecho así pa ra que a pesar de las debilidades del estudiante o de sus espe - cialidades de aprendizaje, se requiere que el estudiante alcan - ce los objetivos con la intervención mínima del profesor. Esta diversificación varía la forma de presentación o implicación - (del estudiante) así como el modo de aprendizaje, hasta que el mismo material pueda ser presentado en varias formas. Modelos de reforzamiento puede desplegarse también. El estudiante hace elecciones en su mejor modo de aprender o más agradable, cesa - de escoger y ejecutar actividades cuando ha llegado con éxito a su objetivo (que conoce a través de los datos de la auto-prue - ba). Si fracasa en la auto-prueba tiene nuevas actividades entre las que puede escoger. Esta selección no sólo permite que acepte y ejercite su responsabilidad sino que también le ayuda a saber cuál es su mejor manera o modo de aprender una posesión personal invaluable. Con otros tipos de paquetes, en los que - el estudiante no participa en la selección, su fracaso en la - auto-prueba solamente requiere que vuelva a realizar las mismas actividades que no aprendió antes.
3. El elemento de encuesta permite al estudiante un movimiento lateral para establecer sus propios objetivos, exhibir sus habili - dades de investigación y demostrar su habilidad de controlar su propio tiempo. Esto permite al profesor capitalizar una motiva - ción positiva del estudiante.

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New Jersey U.S.A. 97632

C. 1972.-

**PROJECTIONS FOR DESIGN AND DEVELOPMENT
OF A SOCIO-ECONOMIC INVESTIGATION
OF THE TARGET POPULATION OF
THE RURAL/PROHAMO**

San Salvador, May 1979

Introduction

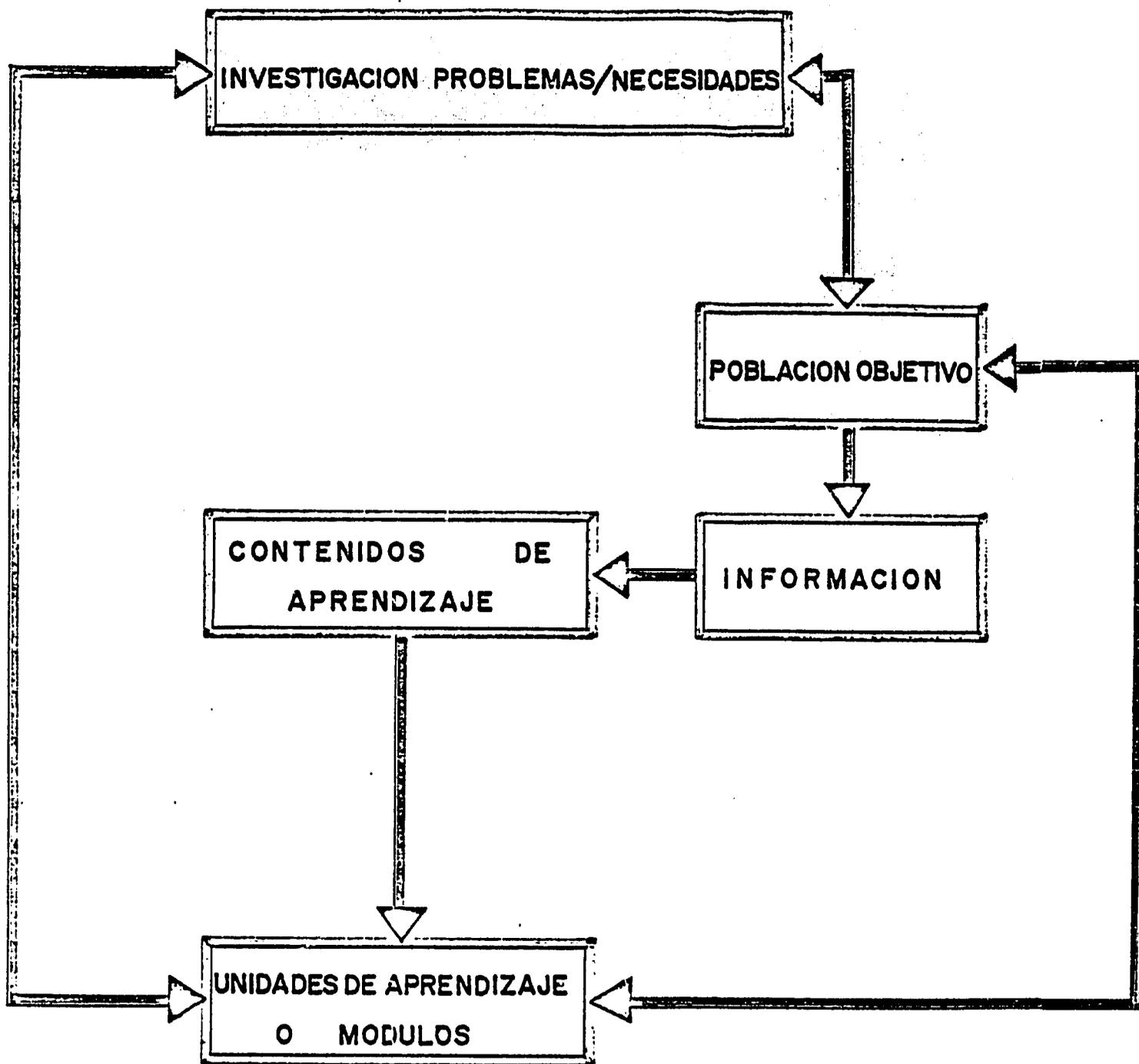
The basic principle of the Rural/Prohamo must be that the contents of the programs will be based on the needs, interests and real situation of the population using its services. This premise differs in action from the traditional educational plan in that the participants will not be mere recipients of information but active collaborators in the entire educational process from its initiation.

The educational process directed by the Rural/Prohamo must coordinate with the investigation results of community problems and needs, and this will provide the basis for the preparation of contents to satisfy the identified needs. The process will continue with the application of educational units in learning groups (satellite centers) with self-evaluation. This cycle of steps will be repeated constantly and will permit interaction through constant feedback.

Figure 1. Educational Process of the Rural/Prohamo

1. Problem/Need Investigation.
2. Target Population.
3. Information.
4. Teaching Contents.
5. Teaching Units or Modules - with auto-evaluation.

The plan or approach presented is eminently one of participation, with regard to its application, and must constitute the crucial point around which the educational processes oriented by Rural/Prohamo will revolve.



PROCESO DE INVESTIGACION/EVALUACION
DEL PROHAMO-RURAL

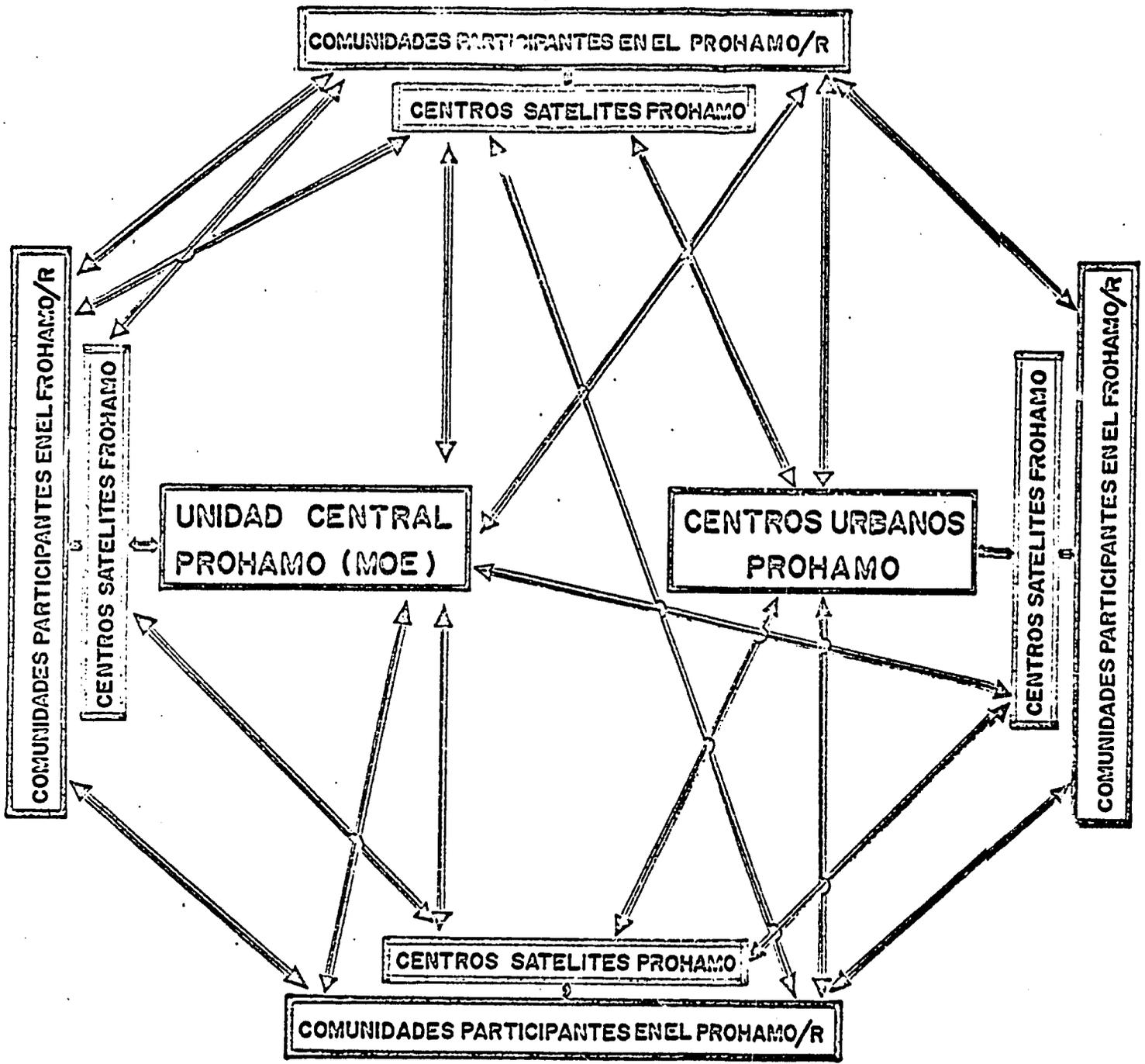
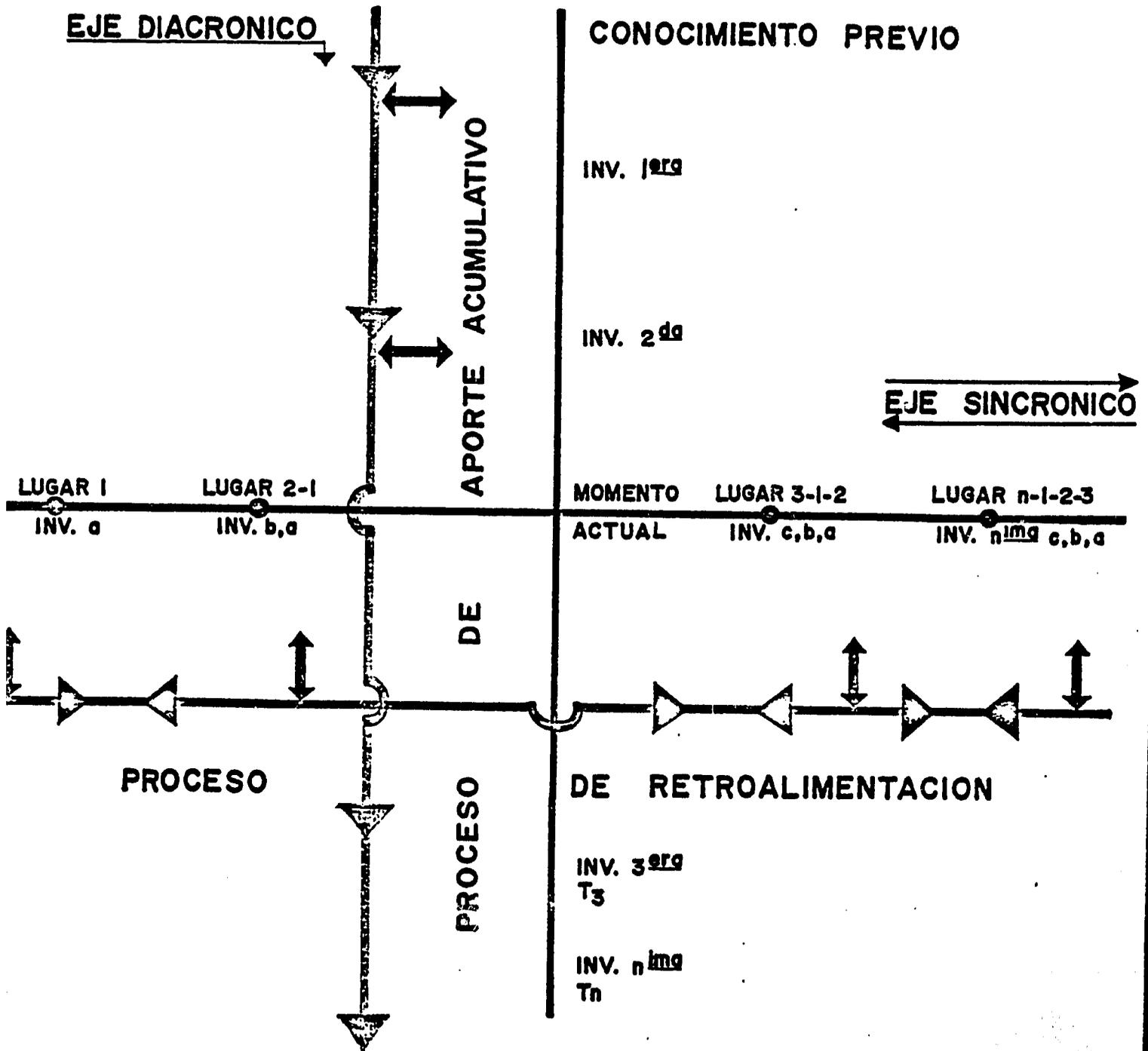


GRAFICO MUESTRA DEL FLUJO BI Y MULTIDIRECCIONAL DEL PROCESO DE RETROALIMENTACION A NIVEL GENERAL DEL PROHAMO ESTABLECIDO ENTRE SUS DIFERENTES UNIDADES.

ENFOQUE DIACRONICO — SINCRONICO
DEL PROCESO DE INVESTIGACION DEL
"PROHAMO"



PARTICIPACION DE DOS SECTORES PROHAMA Y BASE PROCESO DE RETROALIMENTACION.

PRIMERA INVESTIGACION

- PREDEFINICION DE PROBLEMÁTICA.
- PREDEFINICION DE OBJETIVOS.
- PLANTEAMIENTO DE HIPOTESIS DE TRABAJO.
- DISEÑO DE INSTRUMENTOS. DEFINICION DE ENFOQUE METODOLÓGICO. DEFINICION DE TECNICAS A EMPLEARSE.
- ← INVESTIGACION EN EL CAMPO.
- ← ANALISIS DE DATOS.
- ← RESULTADOS.
- ← INFORME FINAL.

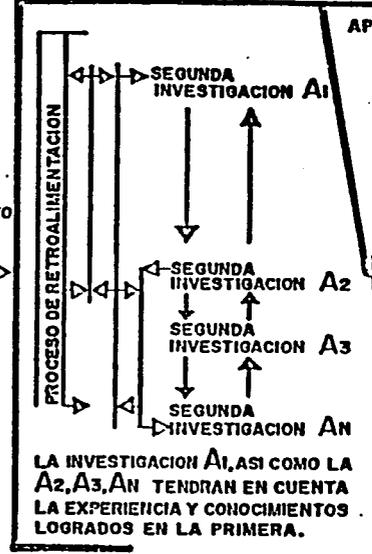
RETRO-ALIMENTACION

- REDEFINICION DE PROBLEMÁTICA O CONFIRMACION DE ELLA.
- REDEFINICION DE OBJETIVOS O CONFIRMACION DE ELLOS.
- REPLANTEAMIENTO, PRECONFIRMACION O PRENEGACION DEL CUERPO DE HIPOTESIS.
- REVISION DE INSTRUMENTOS DE INVESTIGACION.
- INVESTIGACION EN EL CAMPO (CON UNA REVISION CRITICA DE LA METODOLOGIA Y TECNICAS UTILIZADAS.)
- ANALISIS DE DATOS.
- RESULTADOS.
- INFORME FINAL.

ESQUEMA FINAL DE INVESTIGACION.

ESQUEMA TENTATIVO DEL PRIMER PROCESO DE INVESTIGACION O PRECONCEPCION DEL PROCESO DE INVESTIGACION.

CONJUNTO DE SEGUNDAS INVESTIGACIONES TERCERA INVESTIGACION



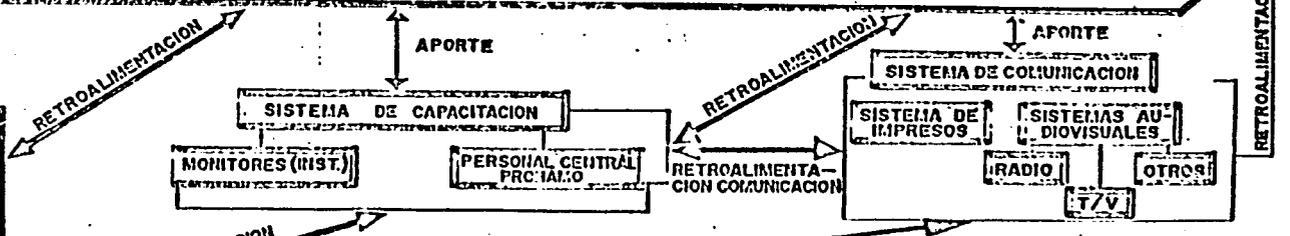
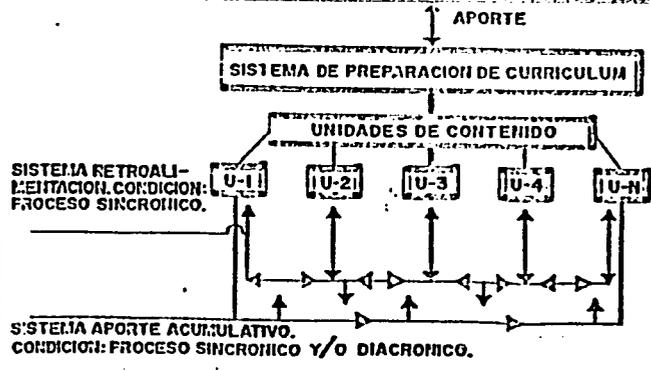
APORTE ACUMULATIVO

TERCERA INVESTIGACION ESTA INVESTIGACION TENDRA EN CUENTA LA EXPERIENCIA Y LOS CONOCIMIENTOS LOGRADOS EN LAS INVESTIGACIONES QUE LA ANTECEDIERON. ESTE CICLO DE APORTE ACUMULATIVO SE REPETIRA CONSTANTEMENTE EN LAS FUTURAS INVESTIGACIONES, DE MANERA QUE SE FORME ASI UN PROCESO DE APORTE ACUMULATIVO DE EXPERIENCIAS Y CONOCIMIENTOS.

N ESIMA INVESTIGACION

APORTE ACUMULATIVO

INVESTIGACION



ESQUEMA GENERAL DE UN SISTEMA DE INVESTIGACION CON SUS CARACTERISTICAS DE RETROALIMENTACION Y APORTE ACUMULATIVO.

This will permit the establishment of the program in target communities and will provide contents, plans and programs according to participant's expectations as well as to regional and local realities.

It would have been desirable if the complete Prohamo program (Rural-Urban) could have been supported by an investigation similar to the proposed one, however, administrative decisions at the national level have prevented coordination during the first phase of the urban project. Nevertheless, we believe that further on it will be possible to verify the hypothesis supporting existing contents and programs, which will permit the adapting of the program to a more scientific and reliable status.

PART II. THEORETICAL CONCEPTUAL FRAMEWORK

Investigations to be carried out in the regions where Rural Prohamo could function will be part of a process of research/evaluation which will be developed continuously and systematically through the implementation of the program. Each target zone will be the subject of various studies which will conform to a work pattern which will be the framework for a diachronic plan of research/evaluation.

2.1 Participation: Basic Principle

One of the principles of the investigations to be carried out is the personal, basic and generic nature of Rural/Prohamo: it must be a participation process, if not totally at the beginning, at least it must be inspired by that concept, and as the implementation process develops this will become a total and definite concept not only as it

concerns the investigation plan but in all the different processes and plans which will be carried out: research, curricular design, training system, communication system, delivery and/or others. Plans should be made for participation since this program ultimately envisions its members as participants in an educational process with rights and responsibilities, and constituting a corporate body within which the decision-making process will be one of constant and active participation. The ideal plan would be that the users of Rural/Prohamo consider this program as their own, and therefore, that its success or failure would depend on them and not on foreign agents, even though these agents may contribute either positively or negatively. (Figure 2).

It should be planned that Rural/Prohamo be a participating program also from the point of view that all actions undertaken and phases thereof should be known, studied, criticized, modified, implemented or accepted by the participating population. This idea of participation is reaffirmed by the fact that Rural/Prohamo will try to cut through the classical, vertical pattern of planning, implementation and feedback from the administrative and technical superstructure; allowing or planning to have the participating population reach a point at which it may possibly direct the design of training programs, with the necessary technical assistance instructors to implement its different phases. In that case, the role of the technician and of administrative personnel will be to support and advise the participants on technical-scientific detail. Thus, considering the power structure of society and

the framework within which the decision-making process takes place, the intent should be to have the professional and administrative personnel serve, as those who translate the participants' plans into technical "language". These people will be sharing their commitments with the participants as well as with the institution they are serving (Ministry of Education).

Participation should be understood not as a static situation but rather as a dynamic process, always in action, adapting to new situations and desires, and growing as required. Thus, it should be the users or participants who would orient, measure and adjust said participation in the Rural/Prohamo and not its technicians and administrators. If this principle is accepted we concur that the user of Rural/Prohamo is the target of the action and the ultimate beneficiary of plans and programs.

Participation should begin at the time that community problems are defined (identification of basic needs), when participants are asked to supply the possible solutions they believe will solve such problems, and do so when they are asked; whether according to what they know of Prohamo, they wish or do not wish to be beneficiaries of its programs, etc. It is also believed that when new investigations are planned wherein both instructors and users, after being properly trained, carry out their own investigations, detect and identify their own problems and search for solutions with guidance from Prohamo, as mentioned before, that the process of participation does not happen automatically nor immediately; it must

go through several stages and phases, some of which have probably occurred already among the various investigations carried out or being carried out; an understanding of what Prohamo is, clarification of objectives and principles, knowledge of technically and administratively connected human resources; establishment of rapport - that is confidence and understanding between Prohamo's personnel and the members of the community. As the program is developed, this ideal participation is expected to grow and enlarge.

2.2 Approach to Oriented Socio-cultural Change

Even though the approach desired for this program is one of directed socio-cultural-economic change, it must be borne in mind that those who define priorities and direction and expect results from actions must be the base population itself, that is to say - the communities. This will not be an experiment with a certain population. On the contrary, a purpose of this project will be to demonstrate that the changes, objectives and the philosophy of Rural/Prohamo are held in agreement, by all sectors involved.

Rural/Prohamo is the combination of programs, resources, and users. This directed change is being conceptualized, defined and carried out by members of the community. However, first we must set and understand our priorities, and this will be achieved mainly through investigation and research.

2.3 Dynamic and Continuous Process

Rural/Prohamo is a dynamic and continuous process in which investigation does not end after the data is collected, or when a report on the zone and categories investigated is presented. Such information will be the basis

for continuing processes and for new investigations. In time, recurrent revision of results of the investigation and its up-dating must be made. This information should be used for meetings with base personnel (directors, instructors), with community groups (cooperatives, etc.) and finally with the whole community. These sectors should discuss results with Rural/Prohamo personnel responsible for the investigation, and these personnel should provide information and/or explanations, establishing a system of feedback.

Thus, the users of Rural/Prohamo have access to the information provided by themselves, shortening in this manner the distance for communicating existing in many investigations where data and information collected are handled by a small group of persons, and the communities do not have the opportunity of obtaining information to improve their situation, or even to gain a global vision of the reality they are living.

2.4 Feedback

Within the theoretical framework, feedback is fundamental, especially is it continuous and permanent. As said before, investigation does not end when results are presented but rather these results and their implications will form the basis for new investigations, to obtain new data or to confirm those already obtained, as well as to confirm aspects related to methodologies, techniques and training contents. A continuous critical analysis of instruments utilized should be maintained to determine which is best.

PART III. POSSIBLE OBJECTIVES AND GOALS OF THE INVESTIGATION

3.1 General Objectives

3.1.1. Data Collecting

One general objective of the investigation will be the collection of basic data on the target population of R/Prohamo, to aid in the definition of organization and content of the instructional program.

3.1.2 Initiation of Participation Processes

Another general objective will be the establishment of a participation process in the development of the Program, understood in the following three senses:

- First, the population will participate in the determination of the problems to be considered by Rural/Prohamo's program Fundamental Education and Technological Experiences.
- Second, and of fundamental importance for the Program, technical personnel will participate in and with the communities during the process of investigation.
- Finally, participation will involve three levels: Prohamo's central coordination unit, urban centers and the participating population.

3.1.3 Establishment of a Permanent Process of Investigation

It is intended to establish a permanent investigation process for the Program. The first investigation will endeavor to establish a system with the following characteristics:

- 1.- That it be technically and scientifically accurate, utilizing the best available procedures and producing reliable and valid data.
- 2.- That said procedures can be handled by/and be within the scope of ability of the participants.
- 3.- That the methodology used obtain the participation of the communities without managing or directing them.

3.2 Operational Objectives

3.2.1 Collection of Useful Data for the Curriculum

It should be determined in what areas information will be sought to define contents, methodologies and systems of adequate delivery. These could be: health or agricultural training, etc.

3.2.2 Identification of Users

The development of knowledge of the organizational context of each community should be sought to facilitate the process of identification of groups of users.

3.2.3 Initiation of Feedback

Attempts should be made to start the process of feedback through meetings with members of the community where the objectives and scope of Rural/Prohamo will be discussed to make pertinent modifications and arrangements.

3.2.4 Training Participants in Praxis

One of the objectives is the training (through action) by which members of Prohamo and of the community will initiate and continue their training while participating in the investigation process.

3.2.5 Confirmation of a Process to establish an equilibrium between opened and closed methods of investigation

A process utilizing scientific methods, should be sought and confirmed.

- First, an anthropological method, which will have the advantage of allowing a more open reply from the members of the community without influencing or guiding them. It will only have the disadvantage of being difficult to analyze by a high number of persons.
- Second, a proper sociological method which will have the advantage of facilitating the analysis of great amounts of information, without taking too much time. This will have the disadvantage of giving a certain pre-determined frame for answers.

3.2.6 Establishment of Initial Contact with Communities

The investigation process will initiate daily contact between Prohamo and the communities. In this way a dual process will be developed in which information is provided to members of the community so that they begin to understand what the Prohamo is and can determine convenient types of participation for themselves.

3.2.7 Determination of Degree of Acceptance of the Program

At the same time, determination will be sought in a preliminary form, of the degree of acceptance of the Prohamo program by the correspondants.

3.3 GOALS

3.3.1 Coverage of Areas Selected in the Feasibility Study of the Project

Communities that represent an average coverage of 60% of the total population should be selected.

PART IV METHODOLOGICAL APPROACH

The investigation should establish contact between Prohamo and its users and their organizations, providing data concerning interests and eventual needs.

This investigation will be carried out in a manner which will gather evidence on the anxieties, needs and perceptions of the participating communities.

It is tentatively planned to use a combination of methods and techniques from Anthropology and Rural Sociology in the conduct of the investigation. At the same time, in an effort to obtain a most complete picture of the subjects to be studied, the following techniques will be used simultaneously: SURVEY, DIRECT OBSERVATION, SEMI-STRUCTURED INDIVIDUAL INTERVIEW WITH KEY INFORMANTS, and/or GROUP MEETINGS.

4.1 Community Selection

- 1.- Rural communities of less than 1000 population.
- 2.- Communities far enough removed from intermediate or large cities that they are not dominated by the economy or services of such larger communities.
- 3.- Communities which are within three kilometer radios of at least two other communities of from 800-1000 population or....
- 4.- Otherwise highly isolated communities which have, however, good road access to above communities.
5. Communities which are representative of 60% or more of such communities in the region (or Department).

4.2 Plan of Operations

The technical personnel of Prohamo's central unit will organize the operations plan (in the zone in which it will be carried out) in a joint action among the community-Prohamo-and other organizations - It could be structured as follows:

- 1.- Discussion and approval of the scope of the investigation; discussion and elaboration of instruments.
Responsibility: Prohamo's Central Unit
Schedule: 15 days
- 2.- Discussion of instruments; training of participants in the handling, distribution of groups in sub-regions.
Responsibility: Prohamo's Central Unit
Schedule: 7 days

3.- Development of investigation

Responsibility: All

Schedule: 10 days

4.- Preliminary tabulation of investigation

Responsibility: PROHAMO's Central Unit

Schedule: Variable

5.- Preliminary Analysis of information

Responsibility: PROHAMO's Central Unit

Schedule: Variable

6.- Feedback

Responsibility: All

Schedule: Variable

7.- Preparation and final analysis

Responsibility: PROHAMO's Central Unit

Schedule: Variable

4.3 Elaboration of Instruments

Technical personnel of the Program will be responsible for the elaboration of instruments used in the investigation. 4 instruments may be applied:

1.- SURVEY

2.- GUIDELINES FOR THE SEMI-STRUCTURED INTERVIEW

3.- GUIDELINES FOR GENERAL INTERVIEW

4.- GUIDELINES FOR DIRECT OBSERVATION

Four groups will be organized to elaborate the four instruments.

Each group will determine what aspects can be included in each instrument. An effort will be made to have each as complete as possible and to cover subjects such as: economy, politics, health, education, attitudes, training and communication. Contents of instruments will complement each other, in order to yield a broad view of the target community of the investigation. The most complete and systematic of all instruments will be the interview where the subjects of training and agriculture will be dealt with more intensely (the principal activity of the 'campesino' is agriculture).

Given the importance of the investigation, it is considered that it would be advisable to use four different instruments to insure extraction of maximum information. The questionnaire is a formal instrument, direct and systematic, in which the information requested is strictly written down, generally ignoring additional information supplied by the person interviewed which has not been requested in the survey, and which can be obtained during the semi-structured interview where more personal aspects will be approached and where the interviewer will have the opportunity of writing down his opinions and perceptions.

4.3.1. The Survey

Efforts should be made during the survey to obtain a schematic composition of the different categories of variables in which Prohamo is interested - easily analyzed and useful immediately for feedback to the different sections of the Program. Considering the above

care should be taken to avoid open or semi-open questions, as these take too much time to codify. This technique seeks to obtain information that the interviewer wants and to satisfy his desires, and should not allow the interviewed person to give more explanations than the interviewer wants.

4.3.2 Anthropological Methods

The technique of the survey, used mainly in socio-statistical type studies depends upon a specific group of concepts that the investigator necessarily possesses, and questions he poses which are presented in such a manner as to supply him with the material initially needed. Finally, it is the investigator who defines the quality and quantity of information obtained. The interviewed is limited to answering only what the investigator defines as necessary and relevant. The vision of the community obtained by the use of this technique is defined by the investigator; the perception obtained is that which the investigator has defined according to the questions he asked. His apriori conception of the problem to be studied, his background and interests will define the material collected. The sociological technique used satisfies the requirements of the investigator: however, as it reflects the situation of the Project target community, it must constitute a first effort only. In this case, anthropological-type techniques should be used, such as: semi-structured group interview, semi-structured individual interview, use of key informants and direct observation.

The anthropological approach is different from the sociological-statistical, but at the same time it complements the other, since it endeavors to obtain an internal view of processes, mechanisms and groups of relationships existing within the community. The anthropologist will make an effort to become part of the existing groups and will internalize what is happening.

This is a more direct approach and permits greater participation by the community with regard to the definition of their own problems.

Instruments and techniques utilized should obtain a perception of reality rather than confirm the hypothesis that the investigator possesses.

4.3.3 Direct Observation

During direct observation geographical, ecological and infrastructural data, which complement each other and enrich the investigation, are noted. Throughout this observational approach, it will be necessary to establish good rapport with the communities and to maintain this rapport on a continuous basis with planned, frequent visits.

INVESTIGACION DE COMUNIDADES A INCORPORARSE EN EL PROHAMO / R.

GUIA PARA ENTREVISTAS INDIVIDUALES SEMIESTRUCTURADAS.-

1. OBJETIVOS.

- 1.1. Profundizar la investigación de necesidades básicas.
- 1.2. Recopilar información sobre proyectos existentes.
- 1.3. Recopilar datos referentes a recursos existentes, humanos y materiales, que sirvan de base para el programa.

2. M E T O D O.-

- 2.1. Selección de sujetos; hacer un muestreo en base a criterios de liderazgo, de sexo y edad.
- 2.2. Conducta de la entrevista.
 - 2.2.1. Establecer "Rapport" y mantener contacto personal.
 - 2.2.2. Hacer preguntas generales y neutrales sin dirigir la respuesta.
 - 2.2.3. Tomar notas generales con lápiz o grabadora.
- 2.2. Seguimiento de la entrevista.
 - 2.3.1. Hacer notas extensas en el cuaderno de campo y escuchar la grabación.
 - 2.3.2. Analizar preliminarmente los puntos principales para enfocar me jo r la próxima entrevista.

3. T E M A R I O.

- 3.1. Datos generales.
 - 3.1.1. Lugar, fecha y escenario de la entrevista: casa, etc.
 - 3.1.2. Nombre del entrevistado y entrevistador:

- 3.2. Datos Sociales:
 - 3.2.1. Recursos humanos existentes: líderes, técnicos y otros.
 - 3.2.2. Recursos institucionales (organizaciones existentes).
 - 3.2.3. Proyectos comunales, que son quienes participan, qué opinión - tiene el entrevistado.
 - 3.2.4. Tiempo disponible para participar en tareas educativas.
 - 3.2.5. Problemas sociales (delincuencia, vicios, prostitución).
 - 3.3. Datos Económicos:
 - 3.3.1. Fuentes de trabajo y actividades de producción dentro de la comunidad.
 - 3.3.2. Unidades de producción: como es la unidad: la familia, trabajo colectivo, asentamientos, si el trabajo es asalariado.
 - 3.3.3. Medidas más usadas (lineales, capacidad, peso).
 - 3.3.4. Problemas económicos sentidos en la comunidad, si ellos sienten problemas por su modo de producir y creen que sea una solución el funcionamiento de una cooperativa.-
 - 3.3.5. Distribución de los medios de producción: capital, tierra, trabajo.
 - 3.4. Datos de Salud:
 - 3.4.1. Enfermedades más comunes: (parasitísimo, infecciosas, respiratorias, otras).
 - 3.5. Datos de Recreación:
 - 3.5.1. Festividades comunes: religiosas, cívicas, sociales.
 - 3.5.2. Juegos típicos: elevación de globos, cerdo encebado, palo encebado, carrera de encostalados, el huevo encucharado, carrera de cintas, etc.
 - 3.5.3. Conjuntos Artísticos: musicales y de danzas.
 - 3.6. Datos sobre tradiciones culturales.-
-

- 3.6.1. Valores frente a la vida, al trabajo, a lo espiritual (Anotar lo que la gente quiere contar).
- 3.5.2. Creencias, leyendas, cuentos y supersticiones.
- 3.7. Datos sobre influencias culturales.
 - 3.7.1. Influencia de programas radiales extranjeros.
 - 3.7.2. Influencia extranjera de costumbres e ideas.
- 3.8. Datos sobre Educación:
 - 3.8.1. Participación actual en actividades educativas, indirectamente se averiguará si participa en programas radiofónicos, Alfalit, Sociedad de Padres de Familia.
 - 3.8.2. Necesidades educativas básicas, se averiguará que tipo de programa educativo le gustaría.
 - 3.8.2.1. Relaciones con actividades productivas.
 - 3.8.2.2. Relaciones con actividades domésticas.
 - 3.8.2.3. Relaciones con actividades salud y nutrición.
 - 3.8.2.4. Relaciones con actividades cívico culturales.
 - 3.8.3. Época del año en que podría o le gustaría recibir educación. ¿Qué le gustaría aprender?

AGROPECUARIA.

- 3.9. Datos sobre labores de cultivos.
 - 3.9.1. Formas de limpiar el terreno para la siembra.
 - 3.9.2. Manera como preparar el terreno, que instrumentos se emplean.
 - 3.9.3. Labores de terreno con pendiente, manera como hace los surcos.

PROGRAMA NACIONAL DE HABILITACION.-

UNIDAD DE INVESTIGACION Y EVALUACION.

ESTRATEGIA PARA LA ENTREVISTA INDIVIDUAL SEMI-ESTRUCTURADA.-

1. Explicar en forma clara el objetivo del trabajo.-
2. Trate a través de la conversación y su actuación de crear un ambiente de comprensión recíproca.-
3. Explique la pregunta, pero no sugiera la respuesta.-
4. No hacer uso de opiniones de personas o grupos ya entrevistados.
5. Hacer uso de un vocabulario claro, preciso y de fácil comprensión.
6. Evitar el riguroso formalismo.
7. No escriba delante del entrevistado.-Use la retención y posteriormente haga las anotaciones.
8. No use procedimientos inquisitivos: que la opinión fluya libremente.-
9. Procure ser agradable y respetuosa.-Recuerde que el éxito de la entrevista depende de su habilidad.-
10. Mientras más personas se logren entrevistar, más valioso será el logro del propósito.
11. Si la persona acapara la palabra, procure que vuelva al diálogo - previsto.-

PROGRAMA NACIONAL DE HABILITACION PROHANO.

GUIA PARA LA ENTREVISTA GRUPAL.

Lugar y Fecha : _____

Nombre de los Entrevistadores: _____

Escenario de la Entrevista: _____

I. ASPECTO GENERAL.

1. Objetivos:

- 1.1. Presentar el Programa a las Comunidades.-
- 1.2. Explicar el proceso de investigación para lograr la participación de la comunidad.
- 1.3. Iniciar el diálogo con la comunidad sobre el Programa y las necesidades básicas.-

2. Presentación Global del Programa. Puntos a Tocar:

- 2.1. El Gobierno decidió crear un Programa Nacional de Habilitación, especialmente a la población rural como un apoyo a las actividades de las instituciones que ya trabajan con ustedes.-

Si ustedes lo desean, el PROHANO puede empezar sus actividades en esta comunidad.-

Es importante señalar que el PROHANO:

- 2.3.1. No ofrece la solución de sus problemas, no pretende construir casas, puentes, luz, agua, sino ayudarles a solucionar sus problemas.-
- 2.3.2. Es un Programa que nosotros los encargados de implementarlos no podemos realizarlo solos, necesitamos su colaboración; sin ustedes ese Programa no se puede realizar.-
- 2.4. Es un Programa de Educación para los jóvenes y adultos, hombres y mujeres de 10 años en adelante, que no frecuentan la escuela o que nunca la frecuentaron.
 - 2.4.1. No tenemos un Programa prefabricado que quizás no le serviría de nada.-Es decir, quiere responder a sus necesidades concretas para desprender algo útil e utilizable; por eso se necesita su colaboración, por eso estamos aquí para conocer su situación, sus inquietudes, sus aspiraciones.

2.4.2. Es educación entre ustedes mismos, nosotros podemos ayudarles, pero no hacer el trabajo de educación en su lugar.

Ustedes tienen que decidir lo que van a aprender, cómo - lo van a aprender, dónde lo van a aprender y quiénes entre ustedes pueden ayudarles a aprender.

Nosotros podemos ayudarles: habilidades, ilustraciones, textos, medios audiovisuales, formación de sus monitores.

3. Presentación del Proceso de Investigación:

3.1. Principios Fundamentales.

- 3.1.1. Participación.
- 3.1.2. Diálogo.
- 3.1.3. Análisis conjunto.
- 3.1.4. Funcionalidad y relación con la educación extraescolar.

3.2. M é t o d o s.

- 3.2.1. Entrevistas individuales.
- 3.2.2. Encuestas (éstas serán elaboradas conjuntamente por los monitores y unidad de investigación).
- 3.2.3. Entrevistas grupales.
- 3.2.4. Observación Directa.

II. ASPECTO SOCIAL.

1. ¿Qué proyectos se han hecho en la comunidad?.-
2. ¿DE quién partió la iniciativa?.
3. ¿Éxito o fracaso del proyecto?.- ¿Por qué?.
4. ¿Cuáles son los proyectos que se están realizando en la comunidad?.
5. ¿Instituciones y organizaciones comunales participantes en los Proyectos?.
6. ¿Aportes ofrecidos por la comunidad.
7. -Aporte de las instituciones participantes.
8. -Instituciones existentes en la comunidad.
9. -Recursos de la comunidad.
 - 9.1. Recursos Humanos.
 - 9.2. Recursos Materiales.

PROGRAMA NACIONAL DE HABILITACION PROHMO.-

INVESTIGACION DE COMUNIDADES A INCORPORARSE EN EL PROHMO.-

OBSERVACION DIRECTA.-

Nombre de la Comunidad: _____

Fecha: _____

1. VIAS DE ACCESO.

1.1. Tipo de vías: carretera, herradura, veredas.-

1.2. Calidad de las vías de acceso; si los caminos son transitables todo el tiempo, se observa si: es buena, regular o mala.

2. HABITAT FISICO POBLACIONAL.

2.1. Nucleado completo (si las viviendas están juntas)

2.2. Semidisperso (si las viviendas están aproximadamente de 100 a 250 Mts.)

2.3. Disperso (si las viviendas están a 250 ó más.)

3. HABITAT SOCIAL.-

3.1. Solaridad (identificación con los problemas de sus vecinos).

3.2. Hegemonía (Unión en la solución de los problemas de tipo comunal).

3.3. Personas que se destacan (los nombres)

3.4. Estas personas pueden llamarse líderes.-Si es así: ¿Qué tipo de líderes?.-

3.4.1. Naturales.

3.4.2. Por actividad en una institución.

3.4.3. Líder político.

3.4.4. Líder religioso.

3.5. Comunidad pobre, mediana, rica.

4. SERVICIOS PUBLICOS.-

4.1. Número de farmacias.

4.2. Número de almacenes.

4.3. Si es núcleo comercial en relación con otras comunidades.

4.4. Telégrafo.

4.5. Teléfono.

4.6. Casas de prostitución.

4.7. Restaurantes.

4.8. Hoteles.

4.9. Comedores. Cantinas.

4.10. Escuelas.

4.10.1. Privadas.

4.10.2. Públicas.

4.10.3. Otras.

4.11. Centros de Salud.

4.12 Bancos - Servicio Eléctrico.

4.13 Servicio de Agua.

4.14. Billares.

4.15 Bibliotecas.

4.16 Canchas deportivas.

5. SISTEMA DE COMUNICACION.-

5.1. Formas o posibilidades de acceso: carro, pies, caballos, mula.

5.2. Cantidad relativa de carros.-

5.3. Sistema de comunicación dentro de la comunidad respecto a información como se mueve la noticia de que las personas del Programa lleguen a esa aldea.

5.3.1. Oral.

5.3.2. Por noticias murales.

5.3.3. Otros.

6. RECURSOS NATURALES.

Estructura geográfica de la zona:

6.1. Accidentada.

6.2. Planicie.

6.3. Vega.

6.4. Irrigación.

6.4.1. Natural.

6.4.2. *Artificial.*

6.5. *Calidad de la tierra.*

6.5.1. *Arida.*

6.5.2. *Rocosa.*

6.5.3. *Arenosa.*

6.5.4. *Fértil.*

6.6. *Minas.*

6.7. *Vegetación.*

6.7.1. *Natural.*

6.7.1. *Pastos natural y artificial.*

6.7.3. *Arboles.*

6.7.4. *Arbustos.*

6.7.5. *Reforestación.*

7. VIVIENDA.-

7.1. *Tipo de piso: tierra, ladrillo, cemento, madera.*

7.2. *Paredes: adobe, piedra, bahareque, madera.*

7.3. *Techo: paja, madera, zinc, asbesto, teja.*

7.4. *Número de piezas.*

7.5. *Tipo de fogón.*

8. SALUD.-

8.1. *Problema de Saneamiento ambiental.*

8.1.1. *Recolección y control de basura.*

8.1.2. *Letrinización.*

8.1.3. *Estancamiento de agua.*

8.1.4. *Alcantarillado.*

8.2. *Nutrición.*

8.2.1. *Huertos familiares, comunales, escolares.*

8.2.2. *Deformación abdominal de los niños.*

8.2.3. *Conejeras, apiarios.*

8.2.4. *Merienda escolar.*

8.2.5. *Vaso de leche.*

ENCUESTA GENERAL CATEGORIA AGROPECUARIA.

PROGRAMA DE HABILITACION
PROHAMO.

Fecha :	No. de Tarjeta		No. de Casas.	
	1	2	3	4
ALDEA :			5	6
ENTREVISTADOR:			7	8
DURACION DE LA ENTREVISTA:				
Empezó: _____ horas.		Terminó: _____ Horas.		9.
10. ACTITUD Y COOPERACION DEL ENTREVISTADO.			10.	
1. Mala 2. Regular 3. Buena.			a _____	
11. CULTIVA LA TIERRA ?.			11.	
0. No contesta 1. No 2. Sí.			_____	
12. SI NO ES AGRICULTOR, A QUE SE DEDICA?.			12.	
(Codificación Posterior).			_____	
13. CON QUIEN TRABAJA USTED LA TIERRA?.			13.	
0. No contesta. 1. Yo solo 2. Yo y mi familia 3. Grupo independiente 4. Otros.			_____	

Tarjeta 1
Columnas.

ES USTED QUIEN TOMA LAS DECISIONES SOBRE LA SIEMBRA.

14

ABONAMIENTO, CULTIVO Y COSECHA DE SUS SIEMBRAS:

- 0. No contesta.
- 1. No.
- 2. Sí, con otros.
- 3. Sí, yo solo.

CUAL ES SU CULTIVO MAS IMPORTANTE?.

15

- 0. No contesta.
- 1. Maíz.
- 2. Frijol.
- 3. Arroz.
- 4. Papa.
- 5. Cebolla.
- 6. Otro.

0 DE DONDE CONSIGUIO SU SEMILLA ESTE AÑO PARA LOS CULTIVOS DE :

- 0. No contesta.
- 1. No sembró.
- 2. De la propia cosecha.
- 3. Comprada a otro Agricult.
- 4. Semilla mejorada.

Cebolla	Papas	Maíz.	Frijol	Arroz.
.
.
.
.
16.	17.	18.	19.	20.

CREE USTED QUE HAY ALGUN PELIGRO SEMBRANDO SEMILLA MEJORADA?.

21.

- 0. No contesta.
- 1. No sabe.
- 2. Sí, puede bajar la producción.
- 3. Sí, no se da aquí.
- 4. No hay peligro.
- 5. Si hay peligro para la persona.
- 6. Otro.

Tarjeta 1
Columnas

22-39 CUANTAS MANZANAS SEMBRO Y CUANTOS QUINTALES SACO EN TOTAL EL AÑO PASADO DE:

	Maíz	Frijol	Maicillo	Arroz	Cebolla	Papa	O t r o.
SIEMBRA DE PRIMERA							
MANZANAS SEMBRADAS	22.	23.	24.	25.	26.	27.	28.
(CALCULOS)							
qq/Mz.	29.	30	31.	32.	33.	34.	35.

	Maíz	Frijol
SIEMBRA DE POSTRERA.		
MANZANAS SEMBRADAS	36.	37.
(CALCULOS)		
qq/Mz.	38.	39.

40-45 DE CUANTO FUE LA MEJOR COSECHA QUE USTED HA TENIDO DE:

	Arroz	Maicillo	P a p a	M a ï z	Frijol	O t r o.
CALCULOS.						
qq/Mz.	40.	41.	42.	43!	44.	45.

46-51. DE CUANTO FUE LA PEOR COSECHA QUE USTED HA TENIDO DE:

	Arroz	Maicillo.	P a p a	Maíz	Frijol.	O t r o.
CALCULOS.						
qq/mz.	46.	47.	48.	49.	50.	51.

Tarjeta
Columnas.

SIEMBRAS INTERCALADAS.

52. CUALES SON LOS CULTIVOS QUE USTED SIEMBRA EN FORMA INTER-
CALADA?.

52!

- | | |
|------------------------------------|---|
| 0. No contesta. | 5. Frijol con maicillo. |
| 1. No siembra intercalada. | 6. Maíz con maicillo/ maíz con frijol. |
| 2. Maíz, frijol y maicillo juntos. | 7. Maíz con maicillo/maicillo con frijol. |
| 3. Maíz con maicillo. | 8. Otro |
| 4. Maíz con frijol. | |

(Escriba la respuesta).

53. HIZO USTED SIEMBRA DE POSTRERA EL AÑO PASADO?

53.

- | | |
|---------------------------|-------------------------|
| 0. No contesta. | 5. Maíz, frijol, arroz. |
| 1. No sembró de postrera. | 6. Maíz y frijol. |
| 2. Sólo maíz | 7. Maíz y maicillo |
| 3.- Sólo frijol | 8. Maicillo y frijol. |
| 4. Sólo arroz. | |

INSECTOS - INSECTICIDAS.

54. TIENE USTED PROBLEMAS CON LOS INSECTOS EN SUS CULTIVOS?

54.

- | | |
|-----------------------------------|---------------------------------|
| 0. No contesta. | 3. Este año no tiene problemas. |
| 1.- Siempre tiene problemas. | 4. Nunca tiene problemas. |
| 2. Sólo este año tiene problemas. | |

55. CUALES SON LOS INSECTOS QUE LE CAUSAN PROBLEMAS?

55.

(Escriba los nombres que dice el entrevistado).

(Sumar los que escribió arriba).

- | | | |
|-----------------|------------------|----------------|
| 0. No contesta. | 3. Dos insectos. | 6. Cinco. |
| 1. Ninguno. | 4. Tres. | 7. Seis. |
| 2. Sólo uno. | 5. Cuatro. | 8. Siete. |
| | | 9. Ocho o más. |

Tarjeta 1.
Columnas.

56. CUALES INSECTICIDAS (VENENOS) USO PARA CONTROLAR LOS
INSECTOS? 56.

(Escriba los nombres que dice el entrevistado)

(Sumar los que escribió arriba).

- | | |
|--------------------|-----------------|
| 0. No contesta. | 4. Dos. |
| 1. No sabe que son | 5. Tres |
| 2. Ninguno. | 6. Cuatro. |
| 3. Sólo uno. | 7. Cinco o más. |

57. CUANTOS INSECTICIDAS (VENENOS) CONOCE USTED? 57.

(Escriba los nombres que dice el entrevistado)

(Sumar los que escribió arriba).

- | | |
|---------------------|-----------|
| 0. No contesta. | 4. Dos |
| 1. No sabe que son. | 5. Tres |
| 2. Ninguno. | 6. Cuatro |
| 3. Uno. | 7. Cinco |

58. CREE USTED QUE HAY PELIGRO PARA SUS CULTIVOS USANDO
INSECTICIDAS (VENENOS)? 58.

- | | |
|---|----------------------------------|
| 0. No contesta. | 3. Es malo para los cultivos. |
| 1. No sabe. | 4. Es malo para la tierra. |
| 2. Hay que prestar dinero y se puede perder la cosecha. | 5. No pasa nada, no hay peligro. |

FERTILIZANTES.

59. Si echó abono, que tipo de abono uso? 59.

- | | |
|--|----------------------------------|
| 0. No contesta. | 4. Orgánico. |
| 1. No echó al sembrar. | 5. Nitrogenado/fósforo (20-20-0) |
| 2. No sabe que abono usó. | 6. Completo (Fórmula). |
| 3. Nitrogenado - (UREA).
(Sulfato de Amonio). | |

Tarjeta
Columnas.

60. CUALES SON LOS ABONOS QUIMICOS QUE USTED CONOCE?.

60.

(Escriba los nombres que dice el agricultor).

(Sumar los que escribió arriba)

- | | |
|-----------------|----------------|
| 0. No contesta. | 4. Tres. |
| 1. Ninguno. | 5. Cuatro. |
| 2. Uno | 6. Cinco. |
| 3. Dos. | 7. Seis o más. |

61. COMO ECHA USTED EL ABONO A SUS PLANTAS?.

61.

- | | |
|-----------------|----------------------------|
| 0. No contesta. | 3. Al voleo |
| 1. No sabe | 4. En bandas (por chorro). |
| 2. No abonó. | 5. Mateado (en puño). |
| | 6. Otros. |

62. QUE CANTIDAD DE ABONO USA PARA SU MAIZ?.

62.

- | | |
|----------------------|-------------------|
| 0. No contesta. | 5. 3 - 4 qq/Mz. |
| 1. No sabe | 6. 5 - 6 qq/Mz. |
| 2. No usa | 7. 7 - más qq/Mz. |
| 3. Menos de 1 qq/mz. | |
| 4. 1 - 2 qq./Mz. | |

qq/ Cada -
Mza.

CALCULO

NOTA: Suma del total de abono, incluyendo aplicación inicial y final.

63. CREE USTED QUE HAY PELIGRO EN EL USO DE ABONOS?.

63.

- | | |
|---------------------|--------------------|
| 0. No contesta. | 3. Daña la tierra. |
| 1. No sabe. | 4. No hay peligro. |
| 2. Daña la siembra. | |

64. HA OIDO ALGO ULTIMAMENTE SOBRE LOS ABONOS E INSECTICIDAS (VENENOS)?.

64.

- | | |
|-----------------------------|---------------------|
| 0. No contesta. | 2. Sí ha oído algo. |
| 1. No oyó nada últimamente. | |

(Escriba la respuesta).

Tarjeta 1

Columnas.

65. DE DONDE VINO ESTA IDEA?.

65.

- | | |
|-----------------------|------------------------|
| 0. No contesta | 5. Lo ví en otra parte |
| 1. Nada nuevo. | 6. Vendedor. |
| 2. Amigos y vecinos | 7. Radio |
| 3. Agrónomo | 8. Monitor de radio |
| 4. Más de una fuente. | 9. Otro _____ |

CATEGORIA CONTROL DE MALEZAS.

66. APORCO SU MAIZ?

66.

- | | |
|-----------------|--------------------------|
| 0. No contesta. | 3. No aporcó |
| 1. No sembró | 4. Sí aporcó con bueyes. |
| 2. No sabe | 5. Aporcó con azadón |
| | 6. Otro _____ |

67. ES EL MONTE (MALEZA, MALA HIERBA) UN PROBLEMA PARA SUS CULTIVOS?.

67.

- | | |
|----------------------|-----------------------------------|
| 0. No contesta. | 3. Algunas veces tiene problemas. |
| 1. No hay problemas. | 4. Rara vez tiene problemas. |
| 2. No sabe. | 5. Sí, siempre tiene problemas. |

68. CUALES SON LOS MONTES O MALEZAS QUE LE CAUSAN PROBLEMAS?.

68.

(Escriba los nombres que dice el entrevistado)

_____	_____
_____	_____
_____	_____

(Sumar los que escribió arriba)

- | | |
|-----------------|--------------------|
| 0. No contesta. | 4. Tres malezas. |
| 1. Ninguno. | 5. Cuatro malezas. |
| 2. Una maleza. | 6. Cinco malezas. |
| 3. Dos malezas. | 7. Seis o más. |

69. DE QUE MANERA ELIMINA EL MONTE (MALEZA, MALA HIERBA)?.

69.

- | | |
|---------------------------------------|--------------------------|
| 0. No contesta. | 3. Con machete o azadón. |
| 1. No sabe como eliminarla | 4. Otros. |
| 2. Usando herbicidas (Mata - montes). | |

Tarjeta 1
Columnas.

70. CUALES SON LAS ENFERMEDADES QUE ATACAN SUS CULTIVOS?.

70.

(Escriba los nombres que dice el entrevistado)

(Sumar los que escribió arriba).

- | | |
|----------------------|------------------------|
| 0. No contesta. | 4. Tres enfermedades |
| 1. Ninguno. | 5. Cuatro enfermedades |
| 2. Solo uno. | 6. Cinco enfermedades. |
| 3. Dos enfermedades. | 7. seis enfermedades. |
| | 8. Siete enfermedades. |

71. USO FUNGICIDAS PARA CONTROLAR LAS ENFERMEDADES (HONGOS) ?.
EN SUS CULTIVOS?.

71.

- | | |
|------------------------|----------------------------------|
| 0. No contesta. | 3. Tiene problemas, pero no usó. |
| 1. No sabe que son. | 4. Sí, uso. |
| 2. No tiene problemas. | |

72. CUALES FUNGICIDAS CONOCE PARA CONTROLAR LAS ENFERMEDADES?
(HONGOS).

72.

(Escriba los nombres que dice el entrevistado)

(Sumar los que escribió arriba)

- | | |
|---------------------|---------------------|
| 0. No contesta. | 3. Sólo uno |
| 1. No sabe que son. | 4. Dos fungicidas. |
| 2. Ninguno. | 5. Tres fungicidas. |

73. CREE USTED QUE HAY PELIGRO EN EL USO DE FUNGICIDAS EN
SUS CULTIVOS?.

73.

- | | |
|------------------------------|----------------------------------|
| 0. No contesta. | 3. Es malo para la tierra. |
| 1. No sabe. | 2. No pasa nada, no hay peligro. |
| 2. Es malo para las plantas. | |

Tarjeta 1.
Columnas.

CATEGORIA, CONSERVACION Y SANITIZACION DE LA TIERRA.

74. DESTRUYE USTED LOS RASTROJOS DESPUES DE LA ULTIMA COSECHA DEL AÑO?.

74.

- | | |
|---|------------------------------|
| 0. No contesta. | 3. Quema los rastrojos. |
| 1. No limpia. | 4. Entierra los rastrojos. |
| 2. Si limpia, pero no destruye los rastrojos. | 5. Los usa para hacer abono. |

75. CUANDO EN INVIERNO EL AGUA VA ABRIENDO ZANJAS EN SU TERRENO, QUE HACE USTED?.

75.

- | | |
|--------------------------------|--|
| 0. No contesta. | 5. Le pone ramas, basura o rastrojos. |
| 1. No le abre zanjias el agua. | 6. Siembra zacate. |
| 2. No hace nada. | 7. Hace canales, desagues o zanjias. |
| 3. No sabe que hacer | 8. Usa piedras para tapar o desviar el agua. |
| 4. Le pone estacas. | |

76. QUE HACE USTED PARA QUE NO SE LAVE SU TERRENO EN PENDIENTE?.

76.

- | | |
|--|---|
| 0. No contesta. | 4. Siembra en curvas de nivel, o en -- surcos atravesados. |
| 1. No tiene terreno en pendiente. | 5. Siembra en surcos atravesados y hace zanjias o barreras vivas. |
| 2. No hace nada. | |
| 3. Hace zanjias de ladera, o siembra barreras vivas. | |

77-80 COLUMNAS VACIAS.

TARJETA 2
COLUMNAS

NUMERO DE TARJETA Y NUMERO DE CASOS

1	2	3	4

CATEGORIA COSECHA / MERCADEO .

5-9 CUANTO VENDIO DE SU COSECHA EL AÑO PASADO ?

	Cebolla	Papa	Maíz	Frijol.	Arroz.
0. No contesta _____					
1. No sembró _____					
2. No sabe cuanto vendió _____					
3. Nada (no vendió) _____					
4. La décima parte _____					
5. La cuarta parte _____					
6. La mitad _____					
7. Más que la mitad _____					
8. Todo _____					
	5	6	7	8	9

10-14, SI VENDIO SU COSECHA, A QUIEN LA VENDIO ?.

	Cebolla	Papa	Maíz	Frijol	Arroz .
0. No contesta _____					
1. No sembró _____					
2. No vendió _____					
3. A un vecino _____					
4. A una tienda de la - comunidad _____					
5. A los camioneros _____					
6. En BANAFOM _____					
7. En el pueblo _____					
	10	11	12	13	14

TARJETA 2
 COLUMNAS.

15. SIO SU COSECHA, CUANDO LA VENDIO ?.

15

- 0. ontesta
- 1. s de la cosecha
- 2. ués de la cosecha.

16-22 CORDA SU COSECHA HASTA QUE ES VENDIDA O USADA POR USTED Y SU FA?.

	MAIZ.	FRIJOL	ARROZ	PAPA	MAICI LLO.	CEBO- LLA.	OTRO.
0. ontesta							
1. mbró							
2. guarda							
3. zorca o pe- entera							
4. cos							
5. de madera							
6. tas							
7. es							
8. ro							
9. s							
	16	17	18	19	20	21	22

Tarjeta 2
Columnas.

Si contesta que NO ALMACENA, pasar a la columna 24.

23. SI ALMACENA SU COSECHA, QUE METODO UTILIZA PARA CONSERVARLA?

23.

0. No contesta.
1. Usa insecticidas en polvo.
2. Usa insecticidas en pastilla.
3. Líquido.

24-26 COMPRO ALGO DE LOS GRANOS SIGUIENTES ANTES DE LA COSECHA ESTE AÑO ?.

0. No contesta _____
1. Sí, para semilla y comer _____
2. Sí, para comer _____
3. Sí, para semilla _____
4. No compró _____

MAIZ	FRIJOL	ARROZ.
24	25	26

27-28 COMO SE ENTERA USTED DE LOS PRECIOS CORRIENTES DE LOS GRANOS?.

27 28

- | | |
|----------------------|---|
| 00. No contesta. | 06. Por los vecinos y por radio. |
| 01. No se entera | 07. Por los vecinos, en el pueblo y por radio |
| 02. En el pueblo | 08. Por comerciantes y camioneros |
| 03. Por los vecin-os | 09. En BANAFOM |
| 04. Por radio | 10. Otro . |
| 05. Por periódicos | |

CATEGORIA PRESTAMOS.

29. CONSIGUIO DINERO PARA HACER SUS CULTIVOS ESTE AÑO?.

29

¿DÓNDE?.-

- | | |
|--------------------------------------|------------------------|
| 0. No contesta. | 5. En BANAFOM |
| 1. No consiguió | 6. En un Banco privado |
| 2. Con mi familia | 7. En mi Cooperativa |
| 3. Con un amigo | 8. |
| 4. Con un prestamista o contratista. | 9. Otro. |

30. ES DIFICIL PARA USTED CONSEGUIR DINERO PRESTADO ?.

30

- | | |
|-----------------|-------------------|
| 0. No contesta. | 3. Algo difícil |
| 1. No sabe. | 4. No muy difícil |
| 2. Muy difícil | 5. Fácil. |

QUE CONDICIONES PIDEN PARA CONSEGUIR DINERO PRESTADO ?.

(Escriba la respuesta)

31. CREE USTED QUE HAY ALGUN RIESGO EN PEDIR DINERO PRESTADO PARA LOS CULTIVOS?

31

- | | |
|-------------------------|----------------------|
| 0. No contesta. | 3. Sí, un poco |
| 1. No sabe. | 4. No, no hay riesgo |
| 2. Sí hay mucho riesgo. | |

TARJETA 2
COLUMNAS.

AYUDA TECNICA.-

32.	<u>EN LOS ULTIMOS ANOS HA CAMBIADO SU MANERA DE CULTIVAR?</u>	32
	0. No contesta 1. No 2. Sí Si contesta NO, pasar a la columna 34.	
33.	<u>QUIEN LE ACONSEJO HACER EL CAMBIO?.</u>	33
	0. No contesta 1. No hizo cambios 2. Amigos y vecinos 3. Agrónomo 4. Más de una fuente. 5. Lo ví en otra parte. 6. Vendedor 7. Radio 8. Monitor de radio 9. Otro	
34.	<u>VISITARON SU COMUNIDAD ALGUNOS TECNICOS AGRICOLAS (AGRONOMO, AGENTE EXTENSIONISTA, PROMOTOR) ULTIMAMENTE?.</u>	34.
	0. No contesta 1. No sabe 2. No. 3. Sí, pocas veces 4. Sí, varias veces 5. Sí, muchas veces	
35.	<u>HABLO PERSONALMENTE CON EL, ELLOS ?</u>	35
	0. No contesta. 1. No visitó 2. No. 3. Solamente oí hablar de una reunión 4. Sí, hablé con ellos.	
36.	<u>LE AYUDARON A USTED O A SUS VECINOS CON SUS PROBLEMAS AGRICOLAS ?.</u>	36
	0. No contesta 1. No visitó. 2. No sabe 3. No ayudaron 4. Sí, un poco 5. Sí, bastante	
37.	<u>PARA QUIEN TRABAJABA (N) ESTOS TECNICOS?.</u>	37
	0. No contesta. 1. No visitó. 2. No sabe. 3. Banco Privado. 4. Promotor Extensión Agrícola 5. Cooperativa 6. Otros	
38.	<u>EN QUE EPOCAS DEL AÑO DEBE VISITARLO EL TECNICO ?.</u>	38
	0. No contesta. 1. No sabe 2. Nunca 3. Antes de la siembra 4. Durante la siembra. 5. Durante el crecimiento 6. En la cosecha 7. Después de la cosecha 8. Periódicamente durante todo el proceso del cultivo.	

39. CUANDO USTED QUIERE DISCUTIR UN PROBLEMA RELACIONADO CON LA AGRICULTURA U OTRA COSA IMPORTANTE DE SU COMUNIDAD A QUIEN - BUSCA?.

39

(Escriba el nombre de la persona).

- | | |
|-----------------------|--|
| 0. No contesta | 2. Título categórico (Maestro, Agrónomo, etc.) |
| 1. A ninguna persona. | 3. Nombre específico de alguna persona. |

CATEGORIA TIERRA .

40. CUANTOS TERRENOS O PEDAZOS TIENE?

40

- | | |
|-----------------|----------------|
| 0. No contesta. | 4. Tres |
| 1. No tiene. | 5. Cuatro |
| 2. Uno | 6. Cinco o más |
| 3. Dos | |

(Si NO TIENE, pasar a la columna 42).

41. DE QUIEN ES LA TIERRA QUE USTED CULTIVA ?

41

- | | |
|-----------------|----------------------------|
| 0. No contesta. | 3. Alquilada |
| 1. No sabe | 4. Ejidal |
| 2. Propia | 5. De un grupo |
| | 6. Trabaja como jornalero. |

42-47 TIENE USTED UNOS DE LOS ANIMALES SIGUIENTES:?

	Cerdos	Caballos	Mulas	Vacas	Cabras	Bueyes
0. No contesta						
1. No						
2. Sí, uno						
3. Sí, dos						
4. Sí, tres						
5. Sí, cuatro o más						
	42	43	44	45	36	47

48. QUE PARTE DE SU TIEMPO DEDICA A OTROS TRABAJOS?.

48

- | | |
|---|------------------------------|
| 0. No contesta. | 4. Dos o más. |
| 1. No hace otros trabajos. | 5. Medio tiempo diario |
| 2. Algunas semanas en la <u>cosa</u> norte. | 6. La mayor parte del tiempo |
| 3. Un día semanal. | 7. Es variable. |

TARJETA 2
COLUMNAS.

49. ADEMÁS DE SUS CULTIVOS, ¿QUE OTRO TRABAJO HACE USTED?.

49

- | | |
|--|--------------------------|
| 0. No contesta. | 4. Chofer |
| 1. Sólo agricultor | 5. Vendedor, comerciante |
| 2. Otros trabajos (como: peón, carretero, ayudante en obras, etc). | 6. Maestro. |
| 3. Mecánico, albañil, carpintero, etc. | |

50. ¿CUAL ES EL PAGO DIARIO EN ESTE LUGAR, SIN COMIDA ?.

50

- | | |
|---------------------|--------------------|
| 0. No contesta | 4. 2 - 2.49/día |
| 1. No sabe | 5. 2.50 - 2.99/día |
| 2. 1 - 1.99/día | 6. 3. - 6 más. |
| 3. 1.50 - 1.99 /día | |

51. ¿CONSIDERA USTED IMPORTANTE EL TENER DINERO ?.

51

- | | |
|--------------------|------------------------|
| 0. No contesta. | 2. Es posible que sí |
| 1. No lo cree así. | 3. Sí, es importante.- |

52. PARA USTED, ¿QUE ES MÁS IMPORTANTE, LOS AMIGOS O EL DINERO?.

52

- | | |
|----------------|--------------|
| 0. No contesta | 3. Ambos |
| 1. Los amigos. | 4. El dinero |
| 2. No sabe. | |

53. ¿ES POSIBLE QUE UN JOVEN COMO TRABAJADOR DE LA TIERRA PUEDA -
SUPERARSE ?.

53

- | | |
|-----------------|-----------------|
| 0. No contesta. | 2. No sabe |
| 1. No se puede. | 3. Sí se puede. |

CATEGORIA COMUNICACION.

54. ¿ACOSTUMBRA MANDAR Y RECIBIR CARTAS?. ¿CON QUE FRECUENCIA?.

54

- | | |
|---------------------------------|-----------------|
| 0. No contesta | 3. Cada mes |
| 1. Nunca | 4. Cada semana. |
| 2. Algunas veces durante el año | |

55. ¿TIENE USTED LA COSTUMBRE DE ESCUCHAR EL RADIO?. ¿DE QUIEN ES?.

55

- | | |
|----------------------|-----------------------|
| 0. No contesta. | 4. Sí, de un familiar |
| 1. No escucha | 5. Sí, propio |
| 2. Sí, en la tienda. | 6. Del grupo |
| 3. Sí, de un amigo. | 7. Otros |

Si responde NO, pasar a la Columna 61.

tarjeta 2
Columnas.

56. CUANTAS HORAS DIARIAS OYE RADIO ?.

56

- | | |
|--------------------|-----------------------|
| 0. No contesta | 4. A ratos |
| 1. No escucha | 5. Dos horas |
| 2. Menos de 1 hora | 6. tres -cuatro horas |
| 3. Una hora. | 7. Todo el día. |

57-60 A QUE HORAS OYE RADIO ?.

	Temprano en la mañana	medio día	por la tarde	por la no- che.
0. No contesta				
1. No oye				
2. A veces oye				
3. Siempre oye				
	57	58	59	60

61. HAY MIEMBROS DE SU FAMILIA QUE OYEN RADIO ?.

61

0. No contesta
1. No sabe
2. Sí
3. No

Si responde NO, pasar a la pregunta 69

62. LE CUENTAN LOS MIEMBROS DE SU FAMILIA LO QUE ESCUCHAN ?.

62

0. No contesta
1. No
2. Sí.

Hacer esta pregunta solamente si a la pregunta anterior respondió afirmativamente o con Código 2.

63.-66. A QUE HORA ESCUCHA SU FAMILIA LA RADIO ?.

	Temprano en la mañana .	Medio día	Por la tarde.	Por la no- che.
0. No contesta				
1. No sabe				
2. No escucha				
3. A veces escucha				
4. Siempre escucha				
	63	64	65	66

TARJETA 2
COLUMNAS.

67. ¿QUE CLASE DE PROGRAMAS LE GUSTAN MAS ?.

67

- | | |
|------------------------|---|
| 0. No contesta | 4. Noticias |
| 1. No escucha | 5. Programas Educativos (Agrícolas, -
Salud, etc.) |
| 2. Música (qué clase?) | 6. Variado. |
| 3. Novelas | |

68. CUAL EMISORA DE RADIO ESCUCHA MAS?. (Escriba los nombres).

68

_____	_____
_____	_____
_____	_____

69-74 DONDE OBTIENE LOS MEJORES CONSEJOS PARA SU TRABAJO AGRICOLA?.

	RADIO	Periódico - Revista.	OTRO	Agrónomo.	TIENDA	AMIGOS y VECINOS
0. No contesta _____						
1. No sé _____						
2. No _____						
3. Sí _____						
	69	70	71	72	73	74

Hacer la pregunta siguiente solamente si respondió que a través de Periódicos.

75. COMO CONSIGUE USTED INFORMACION DEL PERIODICO ?.

75

- | | |
|---|------------------|
| 0. No contesta | 3. De mi familia |
| 1. No consigo información del periódico | 4. Lo leo yo. |
| 2. De un amigo. | |

-
76. COMO CONSIGUE USTED COMUNICARSE CON SUS VECINOS ?. 76
-
- | | |
|-----------------|--------------|
| 0. La plaza. | 4. Lavaderos |
| 1. El río | 5. Iglesia |
| 2. El pozo | 6. Pulpería |
| 3. La quebrada. | 7. Otros. |
-
77. PERTENECE USTED A ALGUN GRUPO ORGANIZADO (COMO COOPERATIVA, GRUPOS DE CAMPEÑINOS, ETC.?. ¿ CUAL ?. 77
-
- (Escriba el Nombre del grupo).
- | | |
|----------------|-----------------------|
| 0. No contesta | 2. Ahora no, antes sí |
| 1. No | 3. Sí, solo uno |
| | 4. Sí, más de uno. |
-
78. CREE USTED QUE ES IMPORTANTE HACER REUNIONES CON SU FAMILIA, AMIGOS Y VECINOS PARA TRATAR PROBLEMAS DE SU COMUNIDAD ?. 78
-
- | |
|------------------------------|
| 0. No contesta |
| 1. Es de poca importancia |
| 2. Tiene alguna importancia. |
| 3. Es muy importante. |
-
79. CONSIDERA USTED IMPORTANTE REUNIRSE CON PROMOTORES DE AFUE- RA PARA TRATAR PROBLEMAS DE SU COMUNIDAD ?. 79
-
- | | |
|----------------------------|-----------------------------|
| 0. No contesta | 2. Tiene alguna importancia |
| 1. Es de poca importancia. | 3. Es muy importante. |
-
80. HA PARTICIPADO USTED, EN LA REALIZACION DE PROYECTOS DIRIGI- DOS POR ALGUNA ORGANIZACION DE SU COMUNIDAD?. 80
-
- | |
|-------------------------|
| 0. No contesta |
| 1. No ha participado |
| 2. Sí, sólo una vez |
| 3. Sí, más de una vez.- |

TARJETA 3
COLUMNAS.

Si responde NO, pasar a la pregunta 6- Tarjeta 3

NUMERO DE TARJETA Y NUMERO DE CASOS

1	2	3	4

5. CUANTO TIEMPO DEDICA USTED A LA REALIZACION DE PROYECTOS DE LA COMUNIDAD?.

- 0. No contesta.
- 1. No participa
- 2. Una - 2 horas semanales.
- 3. 3 - 5 horas semanales.
- 4. 5 y más horas semanales.

5

6. CREE USTED QUE LAS ACTIVIDADES DE LAS ORGANIZACIONES AYUDAN A MANTENER MEJORES RELACIONES ENTRE LOS MIEMBROS DE LAS COMUNIDADES?.

- 0. No contesta
- 1. Sí
- 2. No.

6

SI USTED TUVIERA TIEMPO DISPONIBLE LO DEDICARIA A PROYECTOS - DE LA COMUNIDAD?.

- 0. No contesta
- 1. Sí
- 2. No.

7

En las dos siguientes preguntas se anota sobre la línea el lugar que se nombrará.

CON QUE FRECUENCIA VA USTED A (MUNICIPIO) PARA VISITAR O COMPRAR?.

- 0. No contesta
- 1. Nunca
- 2. Pocas veces.
- 3. Algunas veces al año.
- 4. Una vez al mes
- 5. Semanalmente.

8

CON QUE FRECUENCIA VA USTED A (CABECERA) PARA VISITAR O COMPRAR?.

- 0. No contesta.
- 1. Nunca.
- 2. Pocas veces.
- 3. Algunas veces al año
- 4. Una vez al mes
- 5. Semanalmente.

9

Tarjeta 3
Columnas.

10. CON QUE FRECUENCIA VA USTED A SAN SALVADOR PARA VISITAR O COMPRAR?.

10.

- | | |
|-----------------|-------------------------|
| 0. No contesta. | 3. Algunas veces al año |
| 1. Nunca | 4. Una vez al mes |
| 2. Pocas veces | 5. Semanalmente |

11. EN QUE EPOCAS DEL AÑO, SE MOVILIZA USTED PARA REALIZAR SUS TRABAJOS?.

11.

- | | |
|-------------------|----------------|
| 0. No contesta | 3. En verano |
| 1. No se moviliza | 4. Todo el año |
| 2. En invierno. | 5. Otros. |

12. CUÁL ES LA DISTANCIA QUE RECORREN USTEDS DIARIAMENTE PARA LLEGAR A SU TRABAJO?.

12.

0. No contesta
1. Ninguna
2. 1 - 5 kilómetros
3. 5 - 10 kilómetros
4. 10- más kilómetros.

13. CUANTO TIEMPO DEDICAN LOS MIEMBROS DE SU FAMILIA AL DESEMPEÑO DE SU TRABAJO.-

13.

0. No contesta
1. Ninguno
2. 5 - 6 horas diarias
3. 6 - 9 horas diarias

TARJETA 3
COLUMNAS

CATEGORIA SALUD.

14 - 15 CUALES SON LAS ENFERMEDADES MAS COMUNES EN SU COMUNIDAD?.

14 - 15

00. No contesta, no sabe
01. Diarreas
02. Paludismo
03. Sarampión
04. Tifoidea
05. Gripe
06. Tuberculosis
07. Calentura o fiebres
08. Enfermedades de la piel
09. Poliomielitis
10. Otros.

16. A QUIEN ACUDE EN CASOS DE ENFERMEDAD?.

16.

0. No contesta
1. Al Doctor
2. Enfermera
3. Curandero
4. Guardián de Salud
5. A nadie
6. Otros.

HIERVEN EL AGUA QUE USTEDES TOMAN?.

17.

0. No contesta
1. Algunas veces sí
2. Algunas veces no
3. siempre
4. Nunca.

QUE HACE USTED PARA CURAR LAS DIARREAS DE SUS HIJOS?.

18.

0. No contesta.
1. No hace nada.
2. Usa medicamentos caseros
3. Usa medicinas compradas.

TARJETA 3
COLUMNAS.

19 -24 ¿POR QUE MEDIOS OBTIENE USTED CONSEJOS PARA MEJORAR SU SALUD?.

	RADIO	PERIODICOS.	REVISTAS	PROMOTORES	GUARDIANES DE SALUD	AMIGOS Y VECINOS.
0.No contesta.						
1.No obtiene consejos.						
2.Si obtiene consejos.						

25-26 ¿QUE PREPARACION QUISIERA QUE TUVIERAN SUS HIJOS?.

25 26

- | | |
|----------|----------|
| 0. _____ | 3. _____ |
| 1. _____ | 4. _____ |
| 2. _____ | 5. _____ |

27-28 ¿ QUE CURSOS HA RECIBIDO USTED ?.

27 28

- | | |
|----------------------------|-----------------------------|
| 00. No contesta. | 04. Horticultura |
| 01. No ha recibido ninguno | 05. Nutrición |
| 02. Caficultura | 06. Manualidades |
| 03. Apicultura | 07. Corte y confección |
| | 08. Cursos de organización. |
| | 09. Otros. |

TARJETA 3
COLUMNAS.

29-30 ¿ QUE CURSOS CREE USTED, DE MAYOR IMPORTANCIA PARA LOS VECINOS DE ESTA COMUNIDAD?.

29 30

- | | |
|----------|-------------|
| 0. _____ | 6. _____ |
| 1. _____ | 7. _____ |
| 2. _____ | 8. _____ |
| 3. _____ | 9. _____ |
| 4. _____ | Otros _____ |

31 SI SE LE IMPARTIERA ALGUN CURSO ¿ A QUE HORAS LE GUSTARIA RECIBIRLO?.

31

- | | |
|-------------------|-------------------|
| 0. No contesta. | 2. Por la mañana. |
| 1. A ninguna hora | 3. Por la tarde. |

32 ¿ SABE USTED LEER Y ESCRIBIR?.

32

0. No contesta
1. Si lee y escribe
2. Sólo lee
3. No sabe leer ni escribir.

ACTITUDES.

33. COMO LE GUSTARIA TRABAJAR A USTED: SOLO O CON OTRAS PERSONAS?.

33

0. No sabe, no contesta
1. Solo
2. Con otras personas

34. ¿ QUE ES MAS IMPORTANTE PARA USTED: TENER DINERO O TENER EDUCACION?.

34

0. No sabe, no contesta.
1. Tener dinero
2. Tener educación

35. ¿ CREE USTED QUE LOS CAMPESINOS TIENEN LAS POSIBILIDADES DE -
SER PERSONAS IMPORTANTES EN LA VIDA?.

35

0. No sabe, no contesta
1. Sí, tiene posibilidades
2. No, no tiene posibilidades.

36. ¿ CREE USTED QUE LOS CAMPESINOS TIENEN LAS POSIBILIDADES DE -
MEJORAR SUS CONDICIONES DE VIDA?.

36

0. No sabe, no contesta
 1. Sí tiene posibilidades
 2. No tiene posibilidades.
- Si contesta NO, ¿Por qué?.

TARJETA 3
COLUMNAS.

37. PARA UQUE ES LO MAS IMPORTANTE PARA ALCANZAR
LO QUEQUIERE?.

37

0. No no contesta
1. Eljo
2. Lae
3. Loos
4. Lación
5. Elo.

De lo . voy a leer, me gustaría que usted me dijera si está
de acu en desacuerdo.

38

38. SI EL: SE EMPENA, PUEDE CAMBIAR SU PROPIO DESTINO?.

0. Ni no contesta
1. Dido
2. Euerdo

39. UNOS DIDO PARA MANDAR Y OTROS PARA OBEDECER ?.

39

0. Ni no contesta
1. Dido
2. Euerdo

40. CREE QUE ES MEJOR PLANIFICAR LOS TRABAJOS ANTES DE
HACER

40

0. N, no contesta
1. Dido
2. Euerdo.

TARJETA 3
COLUMNAS.

41. LA MEJOR MANERA DE LOGRAR CAMBIOS EN LA VIDA DEL CAMPESINO
ES POR MEDIO DE LAS ORGANIZACIONES DE BASE?

41

0. No sabe, no contesta
1. De acuerdo
2. En desacuerdo.

42. EL ESTAR AFILIADO A UNA ORGANIZACION NACIONAL DE NADA LE -
SIRVE AL GRUPO ?.

42

0. No sabe, no contesta
1. De acuerdo
2. En desacuerdo

43. ES DIFICIL PARA USTED APRENDER COSAS NUEVAS?.

43

0. No sabe, no contesta
1. De acuerdo
2. En desacuerdo.

44. SI UNO FRACASARA, NADIE SE PREOCUPARIA DE LO QUE LE OCURRE?.

44

0. No sabe, no contesta
1. De acuerdo
2. En desacuerdo.

45. CUANDO UNO TIENE UNA OPINION DISTINTA DE OTRA PERSONA, ES -
MEJOR CALLARSE, PORQUE HABLANDO NO SE CONSIGUE NADA Y SE PIER
DEN AMIGOS?.

45

0. No sabe, no contesta.
1. De acuerdo
2. En desacuerdo.

Ahora le vamos a poner algunos ejemplos de conversación entre varias personas, nos gustaría que usted después de escuchar estos ejemplos, nos indicara con quien está de acuerdo.

46. TRES CAMPESINOS ESTABAN PLATICANDO SOBRE CAMBIOS EN LA COMUNIDAD Y DECIAN:

- 1) Es un sueño pensar que gente como nosotros pueda cambiar la vida de - nuestra comunidad.
- 2) La gente como nosotros si puede cambiar la vida de nuestra comunidad, si cada uno hace su trabajo.
- 3) La gente como nosotros, si puede cambiar la vida de nuestra comunidad si trabajamos juntos.

CON CUAL DE LOS TRES ESTA USTED DE ACUERDO?

46

0. No sabe, no contesta
1. Con el primero
2. Con el segundo
3. Con el tercero
4. Con ninguno

47

47. Un grupo de familia consiguió 100 manzanas de tierra para trabajar, un grupo quiere trabajar junto sin dividir la tierra, pero hay otro grupo que quiere trabajar separado y que cada uno trabaje su propia parcela.- Con cual grupo está usted de acuerdo?.

0. No sab-e, no contesta
1. Con el primero
2. Con el segundo
3. Con ninguno.

48. TRES CAMPESINOS PLATICAN SOBRE LA REFORMA AGRARIA.

- 1) Yo creo que si este Gobierno no hace la Reforma Agraria, no - se va a hacer nunca.

TARJETA 3
COLUMNAS.

- 2) *No, yo creo que este Gobierno no tiene ganas de hacer la Reforma Agraria.*
- 3) *No hombre, los gobiernos nunca van a hacer la Reforma Agraria, nosotros tenemos que ser los que luchemos por ella.*
- 4) *Sí, el Gobierno tiene deseos de hacer la Reforma Agraria, pero hay fuerzas negativas que se lo impiden.*

48

CUAL CREE USTED QUE ES LA OPINION MAS ACERTADA?.

0. *No sabe, no contesta*
1. *La Primera*
2. *La segunda*
3. *La tercera*
4. *La cuarta*
5. *Ninguna.*

49 - 50 TRES CAMPESINOS ESTAN PLATICANDO SOBRE POLITICA.

1. *El primero, dice: si no hubiera política y políticos, el país estaría mejor.*
2. *El segundo campesino dice: no hombre, todos los actos de nosotros son políticos, lo que se necesita es que haya políticos que respeten los intereses de la mayoría.*
3. *El tercer campesino dice: la política es necesaria, pero es mejor no meterse en nada.*

49 50

¿ CUAL CREE USTED QUE ES LA OPINION MAS ACERTADA?.

0. *No sabe, no contesta*
1. *La primera*
2. *La segunda*
3. *La tercera*
4. *Ninguna.*

TARJETA 3
COLUMNAS.

CATEGORIA LIDERAZGO.

51 - 52	<u>SI USTED TUVIERA UN PROBLEMA EN SU COMUNIDAD, A QUIEN LE PEDIRIA AYUDA?.</u> 0. No sabe, no con-testa 1.. Nadie 2. Nombre <hr/> Codificación Posterior.	51	52
53 - 54	<u>SI USTED TUVIERA UN DESACUERDO CON OTRA PERSONA, A QUIEN LE PEDIRIA AYUDA?.</u> 0. No sabe, no con-testa 1. Nadie 2. Nombre <hr/> Codificación Posterior.	53	54
55 - 56	<u>SI SE TUVIERA QUE ELEGIR A UNA PERSONA PARA REPRESENTAR A LA COMUNIDAD HACIA AFUERA, A QUIEN NOMBRARIA?.</u> 0. No sabe, no contesta 1. Nadie 2. Nombre <hr/> Codificación Posterior.	55	56
57 - 58	<u>SI USTED TUVIERA QUE ELEGIR UN DIRIGENTE PARA DENTRO DE SU COMUNIDAD, A QUIEN NOMBRARIA ?</u> N o m b r e _____ Codificación posterior. 0. No sabe, no contesta 1. Nadie.	57	58

TARJETA 3
COLUMNS.

59. SI USTED TUVIERA QUE ELEGIR UNA PERSONA COMO DIRIGENTE DE ESTA COMUNIDAD, QUE EDAD LE GUSTARIA QUE TUVIERA?.

59

E d a d: _____
Codificación posterior
Escriba la edad directamente.

60. SI USTED TUVIERA QUE ELEGIR UN DIRIGENTE PREFERIRIA UNA PERSONA JOVEN CON EDUCACION O UNA PERSONA VIEJA CON EDUCACION.

60

- 0. No sabe, no contesta
- 1. Joven con educación
- 2. Vieja, con educación

61. SI USTED TUVIERA QUE ELEGIR UN DIRIGENTE, PREFERIRIA UNA PERSONA JOVEN SIN EDUCACION O UNA PERSONA VIEJA SIN EDUCACION.

61

- 0. No sabe, no contesta
- 1. Joven, sin educación
- 2. Vieja, sin educación

62. *Cuántos hijos le gustaría tener a usted?*

Codificación directa.

63. *Se ha puesto de acuerdo con su esposo (a) para fijar el número de hijos que quieren tener?.*

C O D I G O :

- 0. No sabe, no contesta
- 1. No
- 2. Sí

64. *Estado civil del entrevistado:*

64

- 0. No contesta
- 1. Casado
- 2. Soltero
- 3. Viudo
- 4. Divorciado
- 5. Unión libre.

65. *Son familiares todos los que viven en esta casa?.*

65

C O D I G O :

- 0. No sabe, no contesta
- 1. No
- 2. Sí.

66. *Quién es el Jefe de esta casa?*

66

C O D I G O :

- 0. No sabe, no contesta
- 1. El esposo
- 2. La esposa
- 3. El hijo mayor
- 4. Un pariente
- 5. Otro.

TECHNICAL ASSISTANCE

TECHNICAL ASSISTANCE

All technical assistance, regardless of area of specialization, excepting the coordinator, will function as members of the training team. With the possible exceptions of specialized training for the script writer, graphic artist and photographer, and some of the counseling training, all skills, abilities, attitudes taught are requirements for the total group of participants. Therefore, all specialist-experts should be people with good teaching experience and the ability to work together well among themselves in small groups. Following are our judgments regarding kinds and amounts of T.A, required by this project:

Title - Requirements	Term/Months	
	<u>1st Year</u>	<u>2nd Year</u>
1. Instructor - Agriculture, Industrial (Manual) Arts, general small construction, and small motor mechanics.	12	2
2. Instructor - Home Economics, Health, Nutrition, First Aid	12	2
3. Instructor - Community Planning (assessment), Non-formal education	12	0
4. Instructor - Music, Art, Crafts	12	0
5. Instructor - Learning Packages, small group dynamics, Administration	12	3
6. Instructor - Guidance, Counselling	6	6
8. Instructor - Small businesses, Business Practice, Management, Accounting	4	4
7. Instructor - Materials Prod. A.V.	9	0

Technical Assistance (Continued)

<u>Title/Requirements</u>		<u>Term/Months</u>	
<u>Local</u>		<u>1st Year</u>	<u>2nd Year</u>
9.	Instructor - Doctor or Nurse	3	3
10.	Instructor - Attorney	1	1
11.	Instructor - Recreation	2	2
Totals		85	23
Aggregate Total		108*	
Total Foreign		79	17
Aggregate Foreign		96	
Total local		6	6
Aggregate local		12	

Considering the use of local professionals in blocks of interspersed time, such that no two would be teaching at the same time, the average student load per instructor during the first year would be from 27.4 to 29.7, which is very acceptable. During the second year, there will be 23 man/months of instructional technical assistance, plus the services of some 17 directors, whose time will amount to a total of 209 Man/months.

Rotation of these directors, to allow them to observe and assist in the operating centers, perform field-work and recruitment services and prepare for their own opening will make it possible to create any teacher-load desired with the student population of between 145 and 150 the second year.

* Note addition of coordinator

The use of 8 foreign experts for a total of 96 Man/months during the two-year period will require coordination, logistics management, communications evaluation and general administration. A coordinator, chief-of-party, is recommended for 18 months (no other T.A. extends beyond the first six months of the second year). This recommendation, then, produces the following totals for T.A.:

<u>Source</u>	<u>No. Persons</u>	<u>Agg. Man/Months</u>
Foreign	9	126
Local	<u>3</u>	<u>12</u>
Totals	12	138

If a local administrative assistant is desired the following totals obtain:

<u>Source</u>	<u>No. Persons</u>	<u>Agg. Man/Months</u>
Foreign	9	126
Local	<u>4</u>	<u>30</u>
Totals	13	156

The only doubts entertained here derive from the possibility that the instructor for Agriculture-Industrial (Manual) Arts, general, small construction and small motors mechanics may not be available with all these specialties. It may be necessary to hire a specialist in small motors mechanics and appliance repair. If this person worked with the Ag. Ind. etc. Instructor he might very well be local. Whether or not he were a foreign or local, whether or not he would be required, it may be that budgeting for T.A. should contain the anticipated use of 14 more foreign Man/months than the above totals, producing a final possible estimation as follows:

<u>Source</u>	<u>No. Persons</u>	<u>Agg. Man/Months</u>
Foreign	10	140
Local	<u>4</u>	<u>30</u>
Totals	14	170

This would reduce the teacher-student load to between 24 and 26, which is eminently acceptable.

Costs for T.A. are, of course, covered under USAID formulas for costing of projects.

FACILITIES REPORT

F A C I L I T I E S R E P O R T

May 27, 1979

Introduction

The Facilities Report (item #6, Article I of Contract for Technical Services - Project No. 519-0168) calls for the following:

1. Develop a plan for the possible construction of 80 classrooms and/or workshops;
2. Study showing integration of Occupational Skills Training project facilities with this project;
3. General criteria for site selection;
4. Recommended general type or types of facilities needed;
5. Based on current information available - tentative list of sites or locations for centers with the needs of each plan shown;
6. Other findings found during this period.

This report has been developed in direct support of the Rural Living Skills project (No. 519-0211), currently at the PIP level, which is the logical counterpart and out-growth of the Urban Basic and Occupational Skills training project, number AID-DLC/P-2287 (Identified further as A.I.D. Loan Number 519-V-020 and Grant Agreement AID project number 519-0172), presently funded and in progress. Information and recommendations for the present report have been developed so as to provide an organic relationship with an uninterrupted transition from the Urban project to the Rural project.

A few words concerning the six points set out above are in order:

1. The number 80 is hypothetical - the preliminary draft and logical framework for the PP (for 519-0211) sets this number at 20. The

satellite concept developed under this contract (and relating to the 27 Rural centers) obviously lends support to considerably more than the 80 above. The final number of classrooms and/or shops recommended is a function of the finances, the capacity of AID-GOES to construct, staff and supervise "Centers" (see discussion item 5 below), and other natural constraints outlined in the various reports contained in this contract - as well as the reduction of construction requirements proceeding from the use of mobile units, T.V. and radio as vehicles of instruction.

2. Our judgment is that the integration required here is between the Urban Skills project underway and Rural Skills project No. 519-0211 in process of development. This integration is treated conceptually and functionally here and in allied reports under this contract.
3. General criteria for site selection is included in this report.
4. The general type (or types) of facilities needed is specified under the description of the model with enough flexibility to respond to the various needs of the recommended satellite centers.
5. Tentative selected sites are given with criteria for facilities, facilities specifications and listings of furniture, equipment, tools and implements, and supplies.

"Centers" called for in this item had become the satellite centers which are here recommended, with service and support spaces as well as the classrooms and shops called for in Item 1 above.
6. Numerous findings relating to this project (519-0211), the Urban project and other national and extra-national projects have served as criteria and rationale for decisions made throughout these reports. They are stated explicitly where they have substance and bearing upon the project.

The report is contained in the following sections:

Introduction

I. The Program

- A. Pre-considerations
- B. Program Recommendations

II. The Facilities

- A. Introduction-rationale, capacity, cost, phasing
- B. The Models
 - 1. 1. Space requirements in M² and capacity
 - 2. Space descriptions
 - 3. Space relationships
 - 4. The model diagrams
 - 5. Facilities list synopsis
 - 6. Model advantages, disadvantages, recommendations
- C. Equipment
 - 1. Furniture
 - 2. Power Machinery
 - 3. Hand tools and implements
 - 4. Supplies and expendables

III. Site Selection Criteria and Tentative Sites

IV. Mobile Units

I. The Program

A. Pre-considerations

The Urban Skills project initiated in August 1978, was developed based upon the pilot project "Proyecto de Capacitación Laboral" (AID funded) which began in 1976. Though the level of success of this pilot program may be questioned, certain benefits were received and information derived therefrom has important considerations for program definition here:

- (1) Adequate supply and demand studies or surveys of manpower were not performed, and, according to the very fine report by William Deutermann entitled, "Man Power Supply and Demand in El Salvador" (1977) no such adequate studies or surveys can be undertaken with feasibility, given the current status of basic information which GOES or others have ever gathered. Such studies are vital for establishing financial accountability of the ultimate economic relevance of technical or vocational courses of training. The values of specific job-entry programs are related to the job market. The regular occurrence in this pilot project (and other projects) of cosmetology, for instance, against a saturated market, is a simple example of the point.
- (2) The evaluation report of this project, published in 1978 by the MOE states that 78% of the participants were female. In view of the capacity/use study performed by the Comité Técnico de Formación Profesional, this may simply indicate that from a small response within a potentially much larger response framework, more females were contacted by the recruitment process - or that

the living skills programs were more appealing, convenient, etc. However, indications in other Latin American countries (i.e. Paraguay) where the general native population is involved in and has access to governmental and other institutions, the female population has need to and desires to overcome the results of educational neglect which have been historical throughout the continent. One well-researched aspect of this phenomenon is that the division of labor on a small farm particularly suits the female to planning, management, service functions which are generally lacking and which result in lower production, and poor use of the benefits of such production.

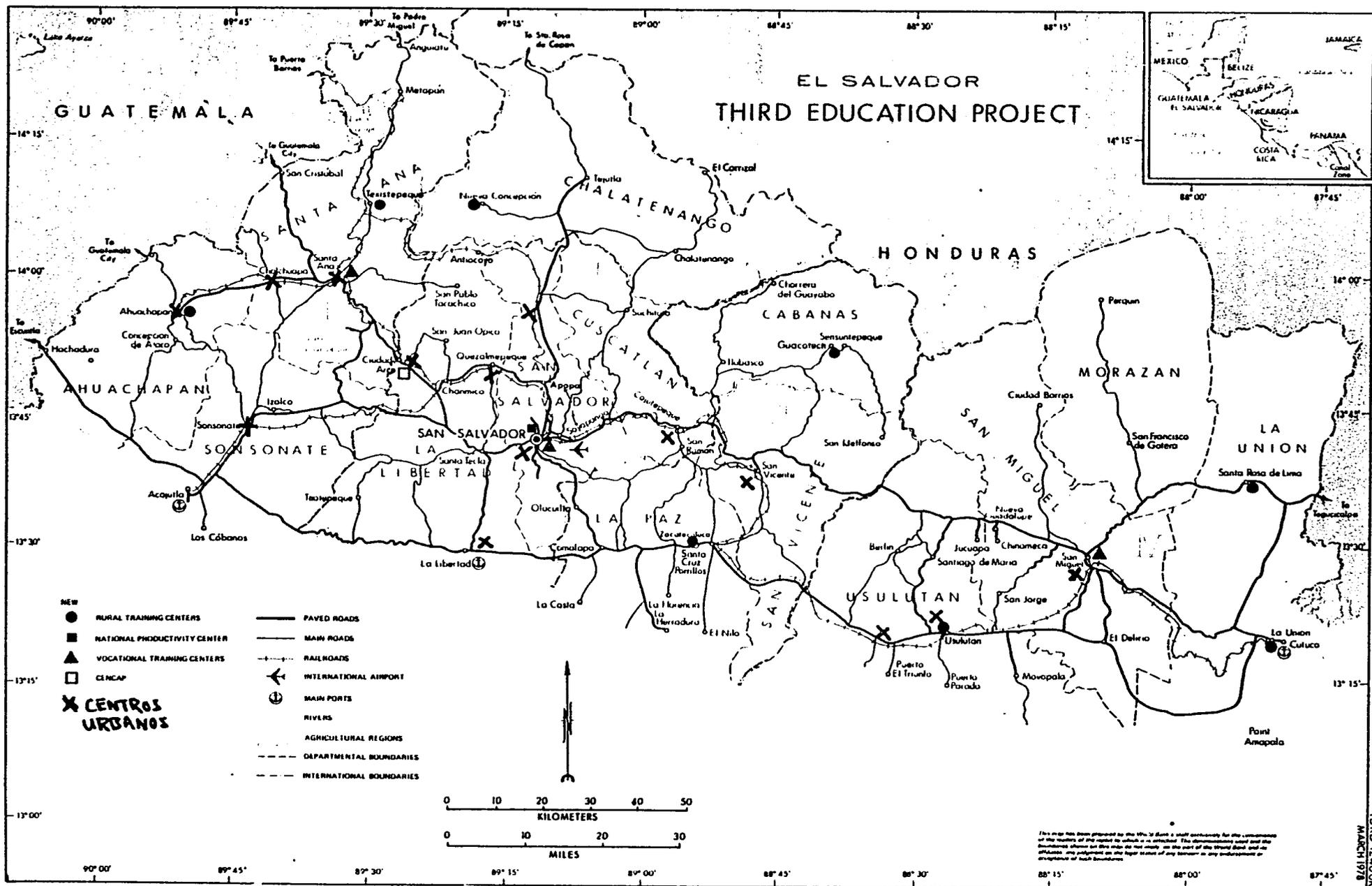
The expanded possibilities of potential female contribution to rural life patterns must be an important consideration in the program offerings for the rural project.

3. The titles and objectives of both the urban project (AID-DLC/p2287) and the project papers for No. 519-0211 refer to Basic and Occupational (or Living and Vocational) skills. The meaning of Basic or Living, is adequately defined in both sets of documents (i.e., see top page 16, project paper for AID-DLC/p-2287). However, in both sets of documents the Basic and Living skills are omitted from the goals and the means of verifying goals (i.e., see last line, p. 14, pp for AID/DLC/p2287 and p.1, Project Design Summary Logical Framework, Rural Living Skills (No. 519-0211)). What remains of both projects, thereafter, is simply vocational training at the entry and minimal semi-skilled levels - and this without adequate

manpower and market needs analysis or data. In short, both projects apparently respond to only half their stated area of concern and that half thoroughly unsupported by necessary antecedents. The current AED contract does call for a local needs assessment program and strategy; however nowhere in the Rural Living Skills project (519-0211) paper is there any mention of how such local needs assessments will be utilized. Obviously these data will provide both basic living skills needs and micro (or local) job market requirements. Although many local needs are obvious and almost universal, the needs assessment will provide priority classifications which currently may be more apparent than real.

4. Other reports under this contract outline the activities of the various organizations involved in "Formación Profesional". Suffice it here to say that the AID program is limited by agreement (see pp.10-14, P.P. AID-DLC/P-2287) to entry and semi-skilled vocational skills training in the occupational skills arena, and to adults (people not in school or without access to school) by its own assessment of needs. And, further, there would occur a duplication of effort if the current project were to plan facilities, skill development, etc. in the special zones in the north which are being treated under comprehensive improvement loan projects of IDB and BIRF. This does not preclude, however, the possibility of extending radio-T.V. services to this region in support of these programs.

The Map on page 7 shows the line south of which this project will function, providing satellite centers in rural areas for the



Mother Centers in the Urban cities which form an incomplete spine from east to west south of the northern zone.

5. The division of the country as outlined above, retains areas which contain farming or forestry or fishing or small production industry and service industry and/or various raw materials sources. These factors will require changes in program in various satellite centers among the various regions.

B. Program Recommendations

It is assumed that the "Mother Centers", established under AID-DLC p-2287 will provide training at the semi-skilled level for the occupational component and will provide consumer skills, health skills, artistic, cultural, social and recreational skills (as well as basic literacy and other primary school skills) for the Basic or Living component of that project.

The satellite centers, located in smaller, more rural communities, would provide basic tool and process skills which will allow the unskilled laborer to move on to the more advanced Mother Centers or simply to improve the production of his own land or home. Deutermann's Manpower report indicates that these programs are not likely to increase migration to urban centers (nor do we want them to).

Thus, the "occupational" aspect of these centers will improve the production and preservation and marketing at what is the current occupation of the client - i.e., a farm, an orchard, a fishing boat. Improved production and preservation and marketing both increases income by reducing the need to purchase and by providing barter goods as well as cash. Thus, house, shed, bridge, boat construction becomes a needed "marketable" skill to people in the rural areas, as does maintenance of their own bodies, health, first aid, nutrition, sanitation.

Even before community and market assessments are completed it is possible to plan for many areas of study and experience which would profit the rural poor, given the salient characteristics of the rural poor. Chart I suggests some of these "high probability" areas.

In advanced technology or vocational studies, facilities and equipment become highly specific and very costly. Basic skills, to the contrary, being highly unfocussed by nature, may include any possible action or activity, with or without tools, which results in new skills or appreciation or well-being.

CHART I

Characteristics of Rural Poor and
Suggestive Study or Experiences

<u>Characteristic</u>	<u>Possible areas of Study</u>
1. Large families	A. Family Management
2. Low Incomes	A. Improving land yield
	B. Improving Marketing Practices
	C. Preservation of produce
	D. Production of Income consuming commodities
	E. Developing salable skills
	F. Budgeting Management
	G. Consumerism.
3. Inadequate housing	A. Home improvement
	B. Water purification
	C. Electrification
	D. Construction
4. Poor Diets	A. Nutrition
	B. Production of more varied food sources
	C. Cooperative planning for local barter to encourage more diverse production of foodstuffs
5. Sparce clothing	A. Growing fiber plants
	B. Fabric production
	C. Sewing and tailoring
	D. Producing, using dies
6. Isolation	A. Road or trail building
	B. Small Bridge construction
	C. Small cooperative auto or bus transportat
	D. Community telephone emergency or message system
	E. Local radio message system
	F. Auto mechanics, motorcycle, bicycle

CHART I (Continued)

<u>Characteristic</u>	<u>Possible Areas of Study</u>
7. Limited Access to Health and Welfare Institutions	A. First aid B. Midwifery C. Nursing D. Limited Rural Clinic staffing operation E. Emergency facilities operation F. Nutrition G. Medicine procurement H. Law for the layman I. Counselling J. Psychology K. Communication L. Developing laundries, bakeries, etc.
8. Limited Access to Social, cultural, recreational institutions	A. Forming a Community Center B. Organizing a local or traveling library C. Music D. Dancing E. Art F. Crafts H. Chess I. Recreation and Physical Education
9. Low educational levels	A. Primary education - non formal B. Basic education
10. Non-employment - under employment	A. Small industries B. Basic occupational skills

Therefore, it is recommended that the program conceived for the satellite centers be one which allows for any type of learning which individual demand or local needs assessment indicate are desirable, using basic hand and power tools and local and available supplies and materials.

The facilities for such "alternatives" program should be multi-use in the very broadest sense, and should contain service, administrative and sanitary space.

Given the antecedent information, the recommendation of this study is that the satellite centers be designed to provide experiences for the great majority of rural poor who have practically no vocational skills and/or no primary level academic skills (as well as those who may be semi-skilled) to improve every aspect of their lives in some way, either personal or professional. Subject matter would thus include all of the areas included in Chart I at the levels of sophistication previously indicated. Thus elements of the following traditional "course" titles would be available:

Construction related

carpentry
plumbing
masonry
electricity
sheet metal
welding

Agriculture - Mechanics

Horticulture
Animal raising
General agriculture
Small motor repair
Appliance repair

Home Economics

Clothing
Nutrition
Food preparation and preservation
Water-food purification
First-aid Care of the sick
Care of infants -
Family planning
Personal Hygiene

Arts

Drawing
Drafting
Painting
Sculpting

Art Crafts

Basketry
Weaving
Embroidery
Ceramics
Wood carving

Music

Singing
Instruments
Dancing
Folklorics

Economics - Industry

Typing
Mimeography
Filing
Simple Law
Psychology (personal)
Group processes
Farm management
Home accounting
Budgeting
Marketing
Small Business
Community Organization

Primary Education

Reading
Writing
Arithmetic
History

This in addition to any short course, lecture, demonstration, etc. which is identified as a local or community need and which can be offered, would be offered.

II. The Facilities

A. Introduction - The determination of facilities needs rests on the requirements of program, the number of people to serve, and the level of quality support - budget. General program has been specified above. The Rural Skills project has been designed to run four fiscal years (1980-1983) and to provide direct services to at least 50,000 rural poor during its life time. The capacities of the satellite centers, then, should provide "nearly" this amount, given the assumption that buildings will operate on three daily sessions and given assumptions regarding the rate of construction of these centers. We say "nearly" 50,000 because beyond the direct recipients of instruction there would be a number of teachers and administrators trained who will also be direct recipients. Also, the allocation of instructional space to occupants during instruction and production time is considerably higher in ratio than would be the same space used for large group attendance at lectures, movies or television. If these satellites become community involvement centers (and in many cases they may be the only such available edifices in the vicinity), the number of beneficiaries which could be served could climb considerably higher than 50,000. The mobile units are assigned a capacity of 30 per unit. Obviously, additional teachers per unit would increase this capacity in arithmetic multiples, and if the units move from place to place in a given area an additional multiplication factor is involved. Thus with two teachers and three moves the five units would reach a yield of 900 clients contrasted with the more conservative figure of a 150 which we use. Finally, the provision of outside recreation grounds with some lighting would contribute in the same way, though such

provisions would not increase the instructional capacity of the buildings in any way.

With these considerations in mind as well as those space types required by the program, we have satisfied the capacity factor with a series of alternative models. Before we develop the expository material for the above, it would be well to include the effects of the budget constraints on construction and equipment. This will allow a cleaner, less complicated final run on numbers, sizes and types of satellites available under these constraints.

The budget figure for construction in the preliminary working draft of the P.P. for this project is \$1,395,000. The budget figures for commodities (furniture, equipment, vehicles, tools, supplies) sums to \$1,300,000. This provides a total of \$2,695,000 for construction, equipment and original supply of the centers and purchasing and outfitting of the mobile units. The equipment budget probably derives from concepts of more sophisticated shops than those considered in the present level of development. Therefore estimated equipment needs by program sections were developed, a reduction in equipment budget requirements amounting to \$177,140 was found and this amount was then added to the construction budget, raising the total construction funds available to \$1,572,140. The type of construction recommended for the urban project was analyzed, and our conclusions are that this type of space (rather of construction), is very reasonable in cost and is equally appropriate for the purposes of the present project. Cost for this type of construction is \$100/M². Given the reconstructed figures for construction above, we can construct for this program approximately 15,721 square meters of space.

The satellite centers are to extend and complement the efforts of the "Mother" centers provided in the Urban project, as well as to return support for them through the provision of semi-qualified (or semi-semi-qualified) students wishing to move up the skills ladder to higher levels. Not all rural centers are provided satellite extensions under this project. As explained elsewhere, seven of the twenty-seven are deleted, since they will be resident in the northern part of the country being serviced under the comprehensive national development plan by way of IDB and BIRF loans and efforts. Also, as explained earlier, seven urban areas will contain two centers. Each of these pairs will be considered as one "Mother" center, resulting in a final total of 13 "Mother" centers. Given the budgetary and other types of constraints listed above and upon consideration of the rural population densities and the road networks within and among these (as well as between them and the Mother centers) it is recommended that an average between 3 and 4 satellites (and/or Mobile Units) per center would service the numbers of rural poor recommended for this project and would also contribute a number easily supervised from the Mother centers or otherwise locally. It is assumed that the first year of the project will be consumed in the design and construction of the satellite centers and purchase of mobile units and acquisition of sites, and that by the second year one half of these will be in service. By the third year all will be in service. Capacities then relate to zero the first year, one-half the second year and full service the third and fourth years of the project.

Three alternative models were developed which would provide the recommended capacities for the recommended programs and services, in conjunction with five mobile units recommended along with each alternative model.

Model No.1 contains 454 M² of construction, which really represents 479 M² of usable space, since 50 M² is in covered, outside work areas, which space is estimated at one-half the cost of inside, finished space. The planned instructional program capacity of this Model is 185* clients per session. The cost per center is \$45,400. Thirty-five centers would cost \$1,589,000, which exceeds the budget by \$16,860, but which provides the best program solution of the three models. Advantages and disadvantages of each model will be treated under its respective descriptive section. The capacity of 185 per session times three sessions daily, times 35 centers, plus the capacity of five mobile units at thirty each, yields a composite figure at any one time of 19847 people. Extra consideration of the above mentioned construction and acquisition rate and the capacity gives the following summation of direct delivery to the client or target population:

<u>Year</u>	<u>Delivery rate by No. of People Served</u>
FY 1980	0
FY 1981	9936
FY 1982	19875
FY 1983	<u>19875</u>
Total	49686

* Capacity is based on 2.5 M²/student in shops and patio areas and 20 students per classroom.

Model #2 contains 394 M² of construction, which really represents 444 M² of usable space, since 100 M² is in covered, outside work areas, which space is estimated at one-half the cost of inside, finished space. The planned instructional capacity of this Model is 160 clients per session. The cost per center is \$39400. Forty centers would cost \$1,576,000, which exceeds the budget by \$3860. The capacity of 160 per session times three sessions daily, times 40 centers, plus the capacity of five Mobile units of thirty each, yields a composite figure at any one time of 19850 people. Given the construction and acquisition rate, this results in the following summation of direct delivery to the target population:

<u>Year</u>	<u>Delivery rate by number of People Served</u>
FY - 1980	0
FY - 1981	9750
FY - 1982	19500
FY - 1983	<u>19500</u>
Total	48750

In view of the preliminary statements regarding capacity and teacher-training program, this figure is not so far removed from 50,000 as to be significant.

Model #3 contains 391 M² of construction, which really represents 466 M² of usable space since 150 M² is in covered, outside work areas, which space is estimated at one-half the cost of finished, inside space. The planned construction capacity of this Model is 155 clients per session. The cost per center is \$391,000. Forty centers would cost \$1,564,000, which is less than the budget by \$1140. The capacity of 155 per session times three sessions daily, times forty centers, plus the capacity of five mobile units at thirty each, yields a composite figure at any one time

of 19050 people. Given the construction and acquisition rate, this results in the following summation of direct delivery to the target population:

<u>Year</u>	<u>Delivery rate by Number of People Served</u>
FY 1980	0
FY 1981	9525
FY 1982	19050
FY 1983	<u>19050</u>
Total	<u>47625</u>

This figure is 2375 people below the target figure. Whether the number of teachers and administrators trained, the increased contact by mobile units or the addition of a sixth unit with this model (\$3140 of which could come from saved construction funds) will bring the figure to 50,000 over four years - or how close the figure must actually be for AID's purposes - is beyond this writer's present knowledge. Estimating the number to be trained at 300, the maximum deviation from 50,000 should be about 4%. This should be close enough for decision-making purposes for those who select the model or models used.

Obviously, any combination of the above models would change the capacity and cost figures (and design time and costs), but the formulae are there, should this appear feasible. Any reduction of the number of centers in favor of increased numbers of mobile units would reduce the quality and number of courses and types of course experiences available as well as the carrying capacity of the program since the savings of one mobile unit over one center is not considerable, the sole advantage of these units is their ability to reach people who would otherwise be inaccessible and who stand in greatest need of the benefits of this project.

Following are the physical requirements of the three models.

B. The Models

Model No. 1

<u>Facility</u>	<u>Capacity</u>	<u>Area in M²</u>
1. Constr.-Ag.Shop	65	160
2. Home Ec.-Arts,etc.	80	200
3. Primary Classroom - Counselling	20	40
4. Work-Study patio	20	225 (50x.5)*
5. Storage		15
6. Administration		20
7. Rest rooms		4
Totals	185	454 (479)

Space Descriptions

Construction - Agriculture

The usual agricultural shop is an area designed for woodwork, metal-work, demonstration and (sometimes a concession to) horticulture. Unfortunately for our purposes the priority activity in such shops is tractor and truck repair. This is not a priority in rural El Salvador. Thus we will see little relation between this shop and ~~the~~ stereotype vocational agricultural facility.

* The given figure represents the construction cost for ~~the~~ inside, finished space. The first figure after the parenthesis is the ~~total~~ total space achieved outside at 50% of the inside cost of construction.

The main activities of Agriculture oriented facilities here will be:

Carpentry
Small motor repair - pumps, mowers,
motos, appliances
Horticulture
Demonstration

The construction facilities or components of this simple shop are complementary with respect to carpentry, domestic plumbing versus irrigational plumbing, masonry-concrete work, sheet metal work and welding, etc. Many of the activities can be conducted outside. Thus the patio area will be contingent with the shop entrance.

Most details of the shop are suggested by the attached diagram and the register of furniture and equipment: however, some details should be added concerning the main shop, the patio and the storage which may present serious problems if not properly designed:

1. Light levels should be high and should be designed for night use as well as day use.
2. Provision for double 110 watt outlets at about every 3 to 4 meters around as much of the perimeter as is feasible is important because large power equipment is substituted for by small, electrical hand units in this program. A covered floor outlet in the vicinity of #9 (see diagram - Model #1) would be helpful for projection during demonstrations. It may be that the electrical work bench (#3) can provide this more easily.
3. Sound levels will be high and space heavily utilized. Any damping of reverberation which can be effected by the use of accoustical ceiling and/or wall panels would be beneficial.

4. Spaces between work stations and circulation routes are shown at recommended minimums in the diagram.
5. The specifications for the cement floor should be for top grade and surface sealing processes (as opposed to simple painting) to avoid the caustic, unhealthy chalking off of cement dust which will otherwise occur.
6. Good air circulation is a general requirement. A specific requirement is for the provision of ducting for air exchange in the welding booth.
7. A large sink with 3 to 5 taps and a clay trap is specified for the shop as well as for the patio, if other sinks (several) can be provided, so much the better.
8. The covered patio should have several hose bibs and a good drain system. Refuse from cement and masonry work, mixed with water must be disposed off via this drain.
9. The patio should also be treated to prevent "dusting off" of the cement floor.
10. Lights should be provided for night work.
11. The openness at either end will probably require good fencing for security.
12. The roof may need to be somewhat above the level of the shops in order to provide air circulation and ventilation.
13. N-S orientation of the patio is desirable but not crucial.
14. The greenhouse is simply a concrete slab with structure to support plastic covering a series of low platform benches (with low rails) for placement of small plants in pots, jars or boxes. A hose bib is needed.

15. Storage and distribution of wood, pipe, metal and wood sheathing, tools, supplies, etc. must be adequately provided for. There are various types of storage needs:

Storage for wood and metal should open by door to the outside as well as to the inside. Wood storage will be about four meters deep with system of rolling pipes from 3 to 5 cm. in diameter to hold plywood sheets 1.5 M. by 2.6 M. The pavement outside the door should not permit water to stand or to pass inside. Metal storage should permit sections of pipe up to 4 meters in length so that they can be extracted from the side rather than by the ends. Metal sheets of the same size as the plywood sheets will also need to be stored.

Tool storage consisting of inclined panels, bins, closed cabinets will provide control of the many hand tools necessary to this program. Distribution will be by check out through 2 window-counter or dutch-door arrangement.

As much broad, unobstructed shelving as may be possible should be provided for projects in progress and storage of bulk items.

Home Economics, Health, Art, T.V., Large Group, Etc.

The open section of the shop will contain heavy work tables, chairs and a few sewing machines (pedal operated). Surrounding this occur the special function areas. (See diagram attached to this section).

A number of considerations are important:

1. High light levels for sewing, painting, etc. will be required for both day and night use. In the kitchen area power and/or gas must be provided for the refrigerator, oven and stove. There should also be a power outlet or two for hand appliances. Hot and cold water is needed for the sinks. Above the storage cabinet - work counters will run ceiling cabinets for day-to-day utensils.
2. The grooming area will require power for the sterilizer and hair dryer and hot and cold water for the shampoo sink, as well as a convenience outlet.
3. The ceramics area will require 110 and 220 volt outlets for ceramic kilns.
4. The fitting room left of the storage will be provided privacy by way of a curtain. Furnishings will include the clothes closet, full-length mirrors, and a small, raised, fitting-platform.
5. The stage will require a curtain system, power for two televisions at curtain-top level, projection screen and amplification system. This space will alternate as stage and as teaching station for child care, first-aid, care of the sick and the aged. Thus it will contain a bed, nightstand, screen, etc. a good part of the time, and the back wall should have several convenience outlets for lamps, etc. These items have been given provision for storage when the stage is in use for performance.
6. Directly to the left of the stage is a bathroom which is converted to the health-teaching functions of the area. It should have several

outlets to allow heating of water, etc. Aside from the w.c. and sink there should be storage for first-aid supplies.

7. The area to the right of the stage is for storage of the above-mentioned furniture as well as for the folding chairs which will be used for T.V. or large group activities.
8. The main room should have convenience outlets at least every 5 meters for irons, appliances, etc.
9. Good air circulation is important.
10. Hooks set at $1\frac{1}{2}$ to 2 meters up are indicated in the diagram.
11. Although noise levels will not be as high here as in the construction-agriculture shop, provision must be made for good sound projection and acoustics from the stage for large group presentations or T.V. programs.

The Classroom

This room will support about 20 students (mostly adults) at small tables in chairs. About $2\frac{1}{2}$ meters of chalkboard should be provided. The rest of the room, to the extent possible, should contain one foot deep book shelves up to 2 meters high for the library. Several outlets should be provided for projectors, tape recorders, radio, etc.

The Director's Office

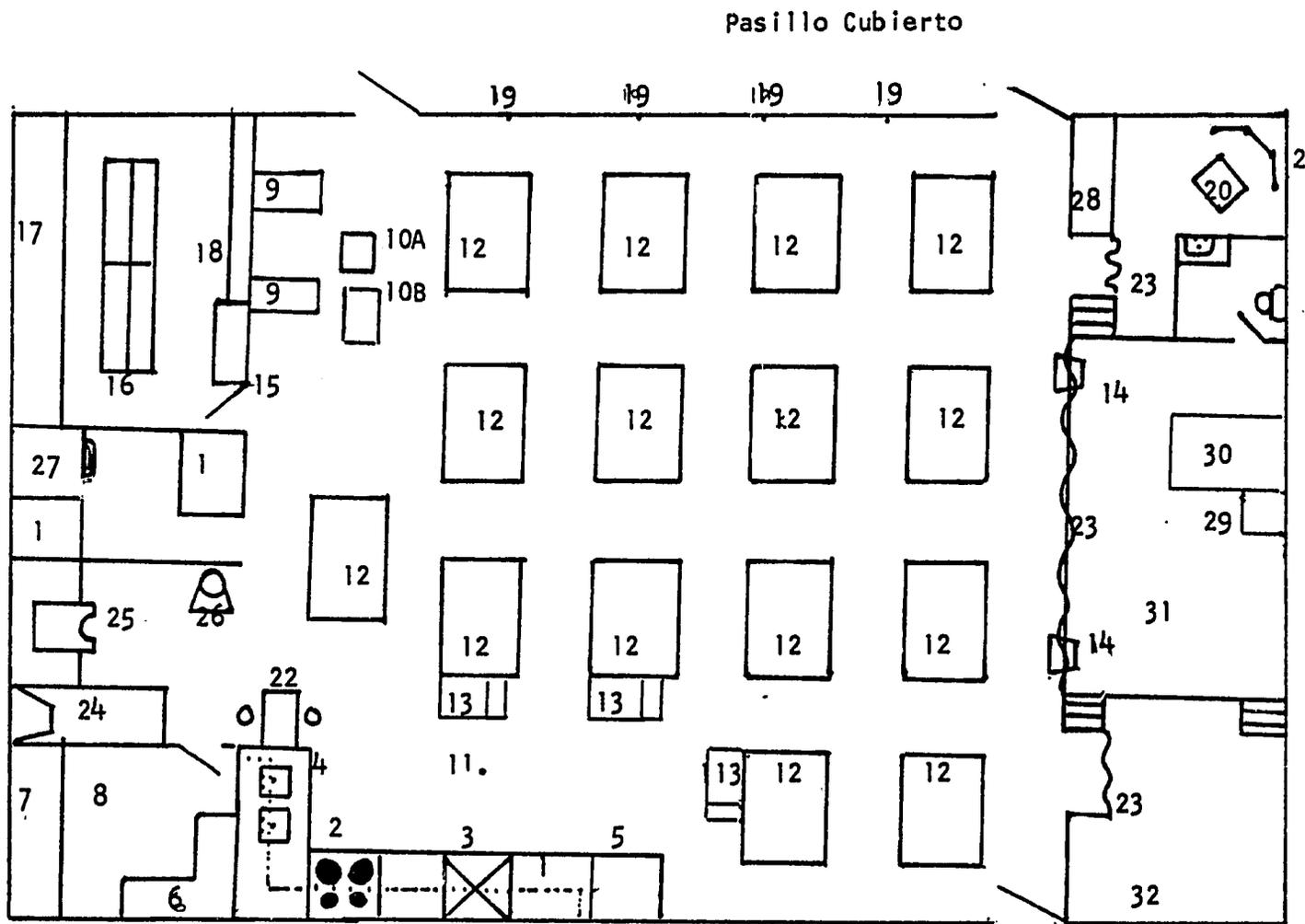
This office will contain a desk, files and several chairs.

Other

Provision should be made for entrance parking for at least six cars, and a service road should lead to the storage room for the construction shop.

Site preparation should provide for recreation areas, and lighting should be provided outside for evening recreation for the community.

Model #1.



Home Ec., Health, Art, T.V., Large Group, Etc.
Scale: About 1cm/Meter
(no cambiabile del todo)

Register of Furniture, Major Equipment and Important Details

Model #1 (Compare with Numbers in Diagram for Model #1)

Home Ec., Health, Art, T.V., Large group, etc.:

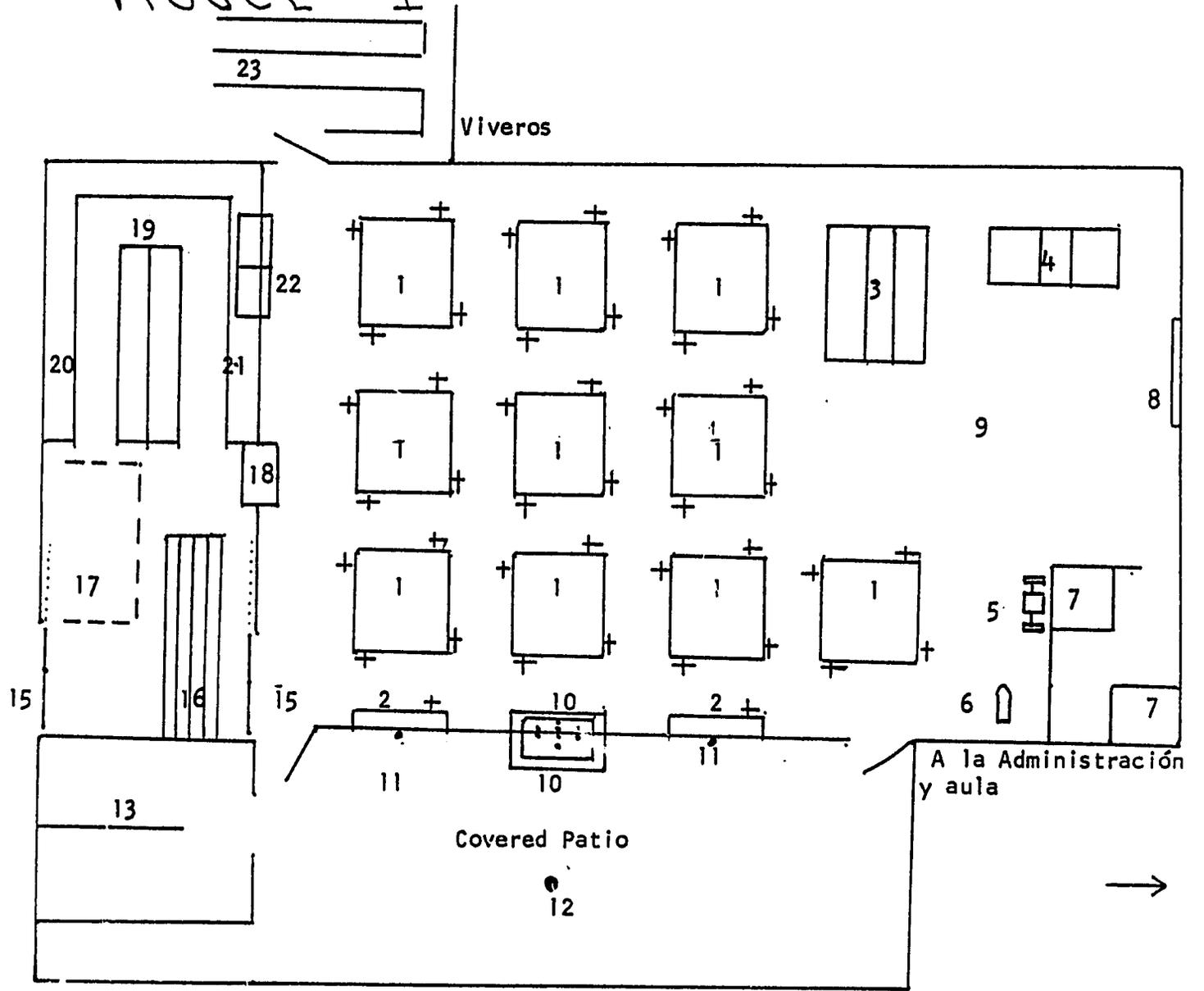
1. Work counter with cabinet storage beneath. Series of dots on counter (.....) refers to overhead cabinets above counter.
2. Gas stove
3. Oven
4. Sinks - with clay traps
5. Refrigerator
6. Closets for cleaning supplies, small kitchen items.
7. Storage for staples, dry foods.
8. Storage for typewriters, sewing machines, ironing boards, irons.
9. Typing tables
10. (a) Filing cabinet (B) Mimeo
11. Ironing area
12. Work Tables
13. Sewing machines
14. Television Monitors
15. Pass-out window(art/craft supplies/projects)
16. Project storage
17. Bulk storage
18. Small supplies, kits, daily-use materials
19. Hooks for weaving, basketry, macramé, etc.
20. Elevated fitting platform

21. Mirrors (full length)
22. Manicurist table
23. Curtains
24. Sterilizer
25. Shampoo sink center
26. Hair dryer
27. Ceramic kiln
28. Clothes closet for hanging garments
29. Bedside table
30. Single bed
31. Stage
32. Storage for 115 folding chairs, movie screen, Bed, bed table, etc.

Construction-Agriculture, etc. :

1. Heavy work tables, metal topped, with four vices each.
2. Work counters with vices.
3. Electrical workbench with multi-current, multi-phase current channel
in center section-tool storage below.
4. Double drafting table with drawers between, 2-goose-neck lights.
5. Stone and wire-brush grinder
6. Anvil
7. Welding benches/storage cabinets below.
8. Blackboard
9. Assembly area for projects or seating area for demonstrations at
blackboard (or projection screen) etc.

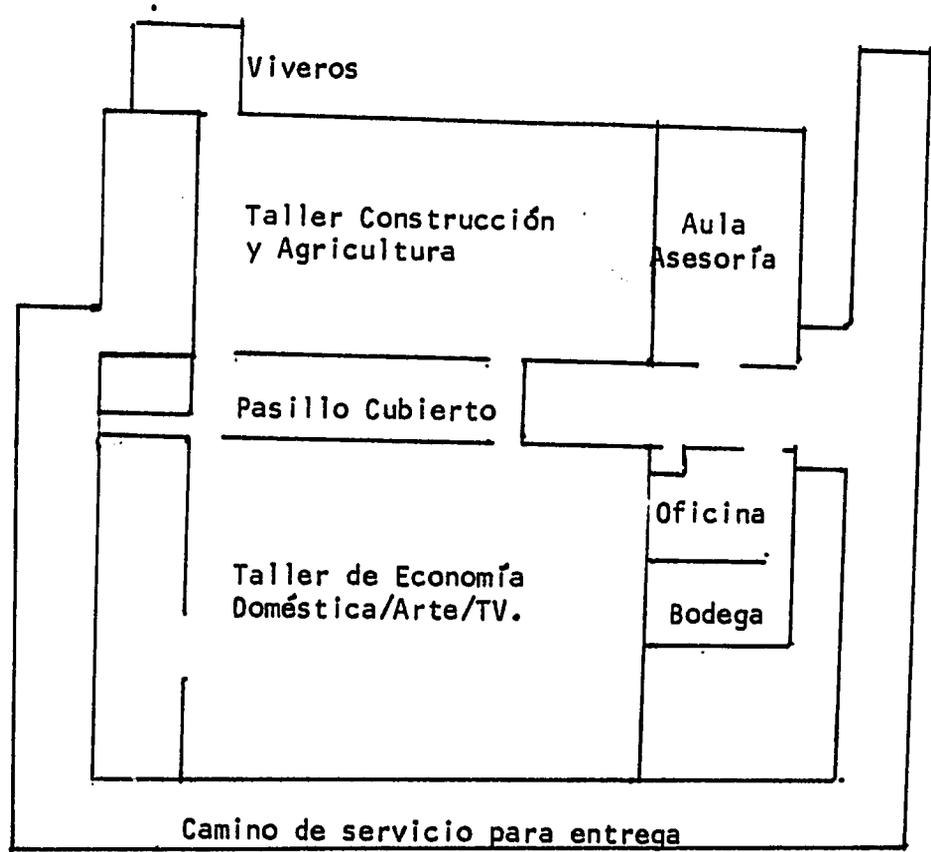
Model #1



Construction - Agriculture etc.
 Scale: About 1cm/Meter
 (no confiable del todo)

10. Large sinks with clay traps - at least 3 taps each
11. Outside hose bibs
12. Area drain
13. Storage - tile, brick, stone, etc.
14. Storage - cement, sand, pebbles, etc. (dry)
15. Overhead or lateral sliding doors
16. Pipe system for storing panelling, sheetmetal, piping, conduit, lumber, etc.
17. Possible open, overhead storage for projects in progress.
18. Pass out window for supplies, tools
19. Large item storage
20. Bulk material and/or tool storage (bins or shelves)
21. Small quantities of everyday-use items.
22. Refrigerators for plants, seeds, greenhouse adjunct
23. Greenhouse benches

Model #1
Composite
Compuesto



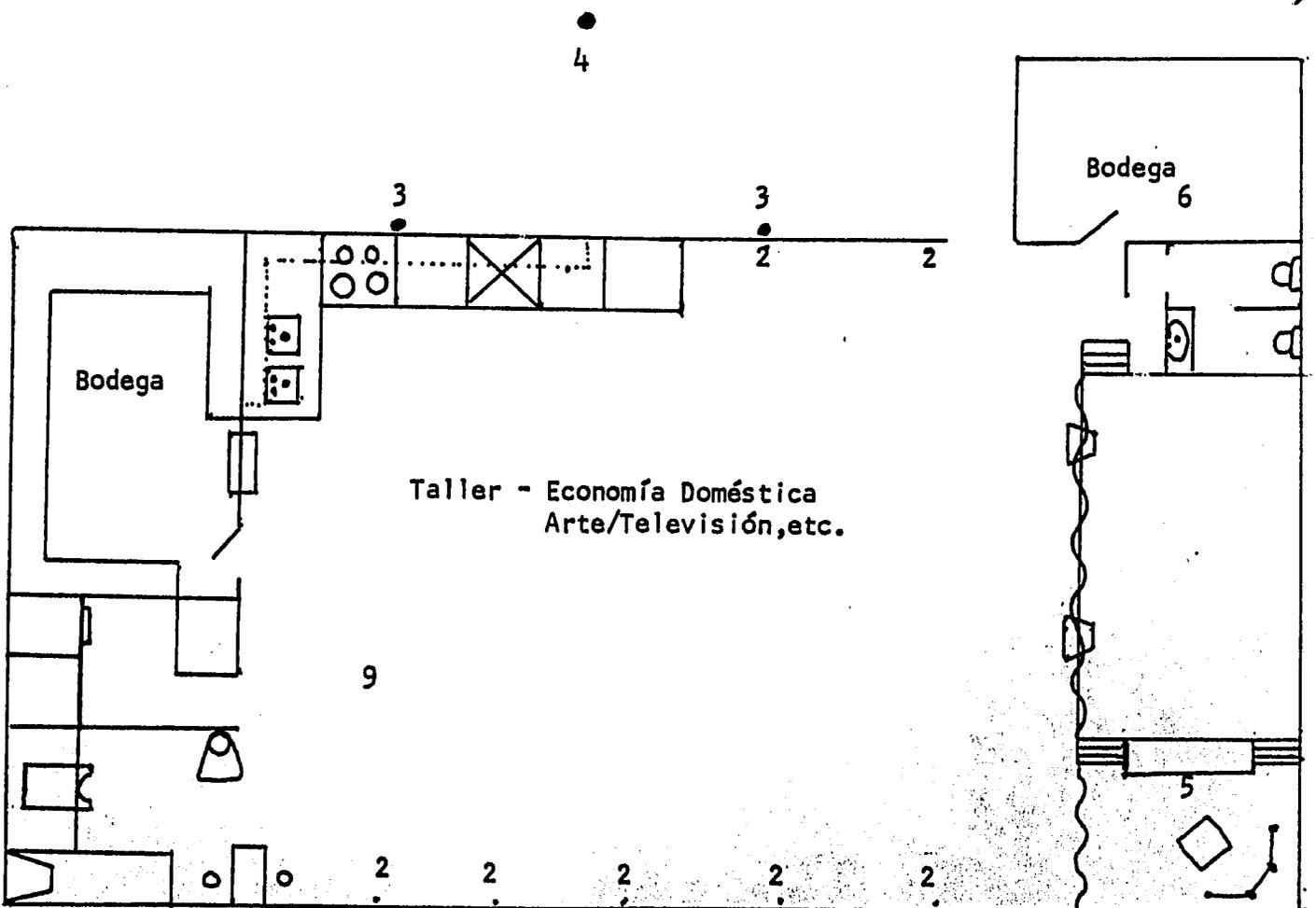
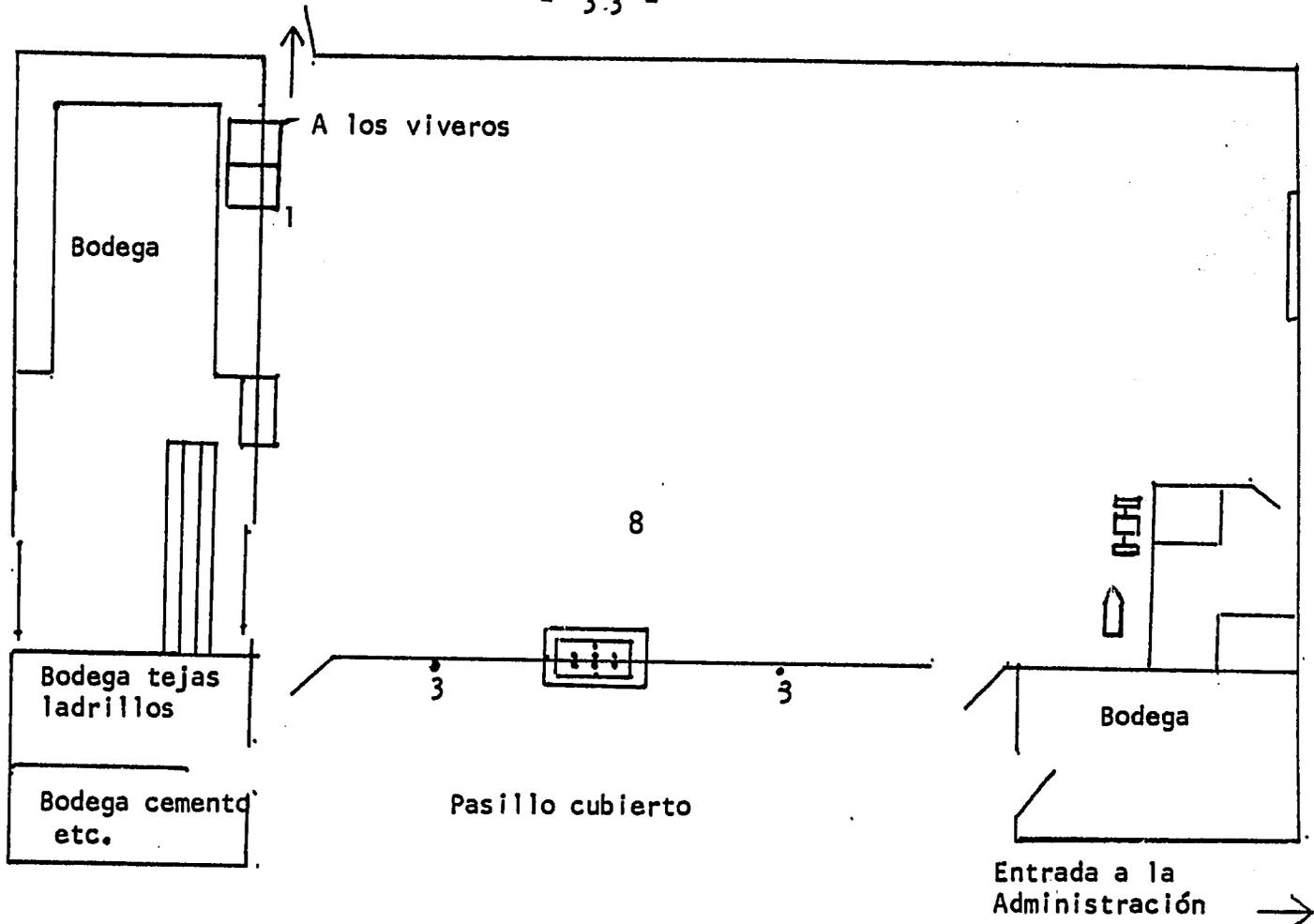
Space Relationships
Scale: About 2.5 cm/Meter
(no confiable del todo)

Register of Furniture, Major Equipment and Important Details

Model #2 (See diagram) Both Shops

Most items appearing in Model #1 will logically appear here, there being no change in program; however, there will be changes in size and a reduction of capacity. Some of these changes result in changes in numbers and kinds of items, changes in patterns of storage and shifting of specific work areas and their related items. Such as might otherwise result in confusion are noted here.

1. Refrigerators for plants, seeds, greenhouse adjunct.
2. Hooks for weaving, basketry, macrame.
3. Hose bibs
4. Drain
5. Clothes hanging rack or chifferobe.
6. During T.V. or large group activities, many large tables will be stored against the long wall. Folding chairs, stored in 6 will be brought out. This area will also serve as storage for the bed, night stand, etc. when the stage is being used for performances.
- 7-8 Four of the heavy duty work benches must be substituted for by smaller work tables, vices for these will have to be stored.
9. Some items, like the typing machines and tables, and the mimeograph must now be stored and retrieved rather than left in position. Reduction of space reduces the number of potential activities in the remaining space at any given time.



Model # 2 - Shops - Talleres - Scale: 1cm./1met (No confiable del todo)

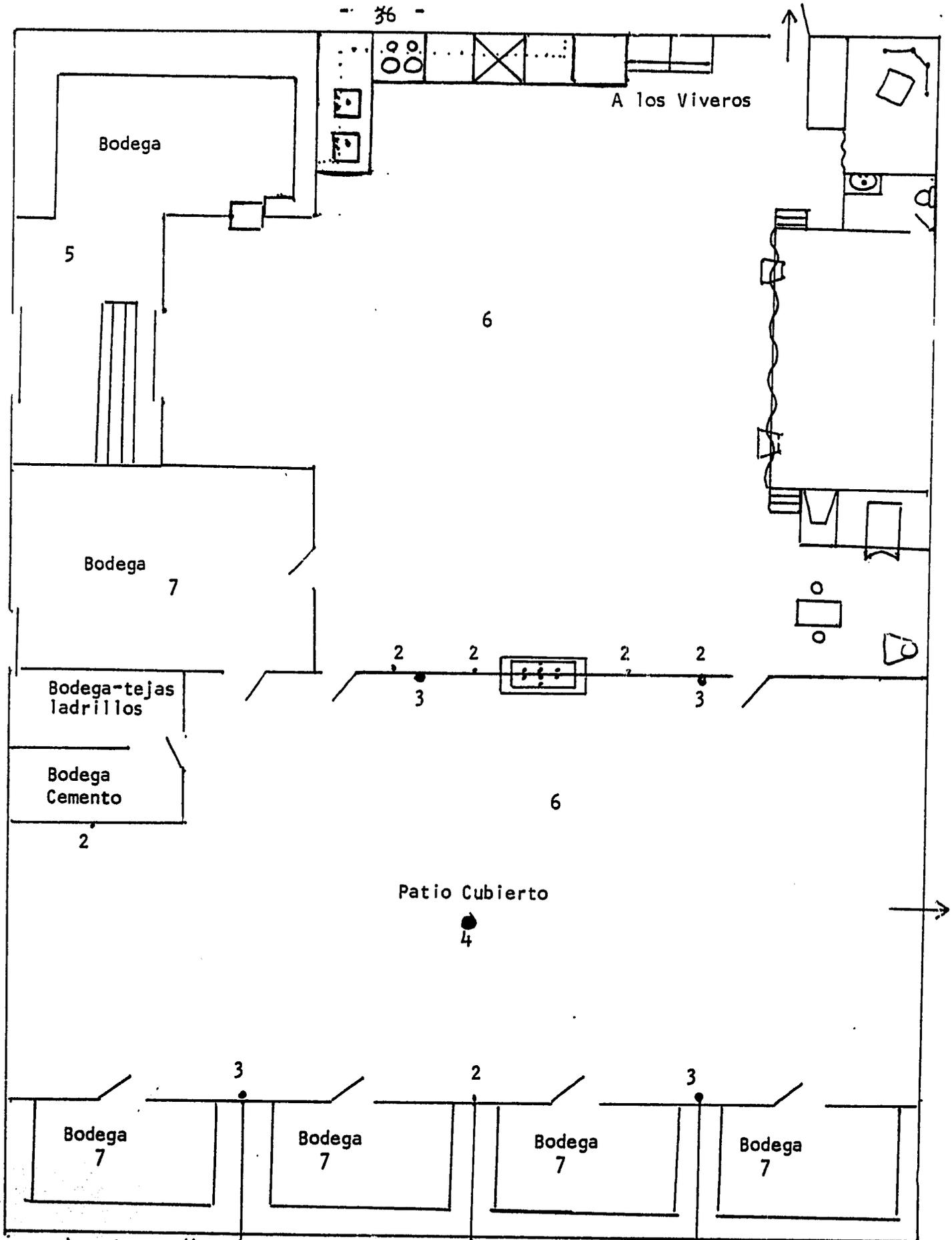
Register of Furniture, Major Equipment and Important Details

Model #3 - Unitary Shop (See diagram)

The same conditions prevail here as in Model #2, except in a more exaggerated form. The larger use of patio space demands more storage, since furniture and equipment cannot be left outside. Also the large multiplication of activities in the single shop, while requiring the same need of storage, also presents a greater need for exchanging and storing other kinds of furniture and for considerable change in size and number of work tables. Items are noted here which might otherwise cause confusion.

1. Refrigerators for plants, seeds, greenhouse adjunct.
2. Hooks for weaving, macramé, etc.
3. Hose bibs
4. Drain
5. Loss of the demonstration area, welding booths, etc. results in the need to store the portable chalkboard, grinder, anvil, welding supplies, ceramic kiln, typing tables and mimeograph (see Model #1)
6. All carpentry tables will be reduced to metal covered work tables, less than 1 meter wide and 1½ meter long. These and drafting tables and equipment will require storage periodically to allow for T.V. or large group functions. Such storage and/or exchange for chairs will also take place as the emphasis of the shop changes from mostly carpentry to mostly painting, weaving, (for instance).

Storage for these transfers of space usage will be effected by the storage rooms listed as #7 on the diagram. This change in basic furniture will require the storage of some 60 table vices. The removal of ceramics and welding from permanent location requires that power considerations be made (along with portable shielding) for them to be set-up when needed. Power will also be needed for the stored grinder, and mimeograph.



Modelo #3 - Shop - Taller - Scale: 1cm/1 Meter.
(no confiable del todo)

Advantages and Disadvantages of the Three Models and Recommendations

1. Model #1

Provides the largest amount of year-around usable space. The space contains provisions for maximum interchange of activities with minimum need to store and exchange equipment and furniture. The program will be easier to administer and provide fewer extraneous distractions and inconveniences for students and instructors. The space costs average \$245.40 per capacity occupant, which is the lowest of the three models.

The thirty-five centers required to reach the target population minimum exceed the proposed construction budget by \$16,860.

2. Model #2

Provides less inside space and more outside space than Model #1. It's space reduction requires the elimination of some specialized space and the provision for those activities by storing and retrieving as needed. More obstruction to program is required for storing and retrieving furniture, tools, supplies, than is required by Model #1. Model #2 does not have a classroom as the other two models do. The space costs average \$246.25 per capacity occupant, which is slightly more than Model #3.

Forty centers required to reach the target population minimum exceed proposed construction budget by \$3860.

3. Model #3

Contains less inside space and more outside space than either of the other models. It is the smallest model, with the smallest capacity. The reduction of secure, inside space requires a very high mix of activities and consequently a much more difficult program administration. Any change in program activities requires a storage of furniture and equipment of the previous activity and a retrieval and set-up of the new. Furniture reductions reduce the quality of the activities which the space would support.

The space costs average \$252.25 per capacity occupant, which is the highest of the three models.

The forty centers required to reach the target population minimum is less than the proposed construction budget by \$8140. It is the cheapest of the three models, \$300 less than Model #2 and \$6300 less than Model #1.

4. Recommendations

We recommend the three models in order of their presentation. Model #1 is significantly superior to Model #2 and #3. Model #2 is somewhat superior to Model #3.

If the contact population can be reduced and the budget cannot be increased we recommend the construction of 34 Model #1 centers. If the budget can be increased we heartily recommend 35 Model #1 centers. If neither can be accomplished, we recommend any combination of Models #1 and #2 (or #1, #2, #3), before the decision is made to construct Model #2 entirely. Though Model #3 may be the only ultimate possible choice given budget and target populations, it is a low third choice to us because of the difficulties of manipulating the logistics when the program begins to go full swing.

Facilities List Synopsis

Model #1 (cap. 185)

<u>Space</u>	<u>Area in M²</u>	<u>Costs</u>
1. Const.-Ag. etc.	160	
2. H.Ec.-Health-Arts-etc.	200	454 M ² x \$100/M ² =
3. Primary Ed.-counsel	40	\$45400/center
4. Covered patio	25 (50x.5)	X35 C = \$1589,000
5. Special storage	15	
6. Admin.	10	
7. Restroom	4	
	<u>454</u> (479)	
Total		

Model #2 (Cap. 160)

1. Const.-Ag.-etc.	145	
2. H. Ec.-Health-Arts-etc.	165	394 M ² x \$100/M ² =
3. Covered Patio	50 (100 x .5)	\$39400/center
4. Storage	20	X 40 C = \$1,576,000
5. Administration	10	
6. Restroom	4	
	<u>394</u> (444)	
Total		

Model #3 Cap. 155)

1. Unitary Shop	204	
2. Covered Patio	75 (150x.5)	391 M ² x \$100/M ² =
3. Primary Ed. & Counsel	40	\$39100/center
4. Storage	58	X40C = \$1,564,000
5. Administration	10	
6. Restroom	4	
	<u>391</u> (466)	
Total		

HOME ECONOMICS - Arts - Health - Business - etc.

<u>Item</u>	<u>Quantity</u>	<u>Unit Cost</u>	<u>Total Cost</u>
1. Sewing Machines, pedal	175	250	43,750
2. Sewing Accessories, sets	35	1,200	42,000
3. Commercial stoves, gas	35	250	8,750
4. Commercial ovens, gas	35	260	9,100
5. Refrigerators	35	250	8,750
6. Baking equipment, kits	70	600	42,000
7. Assorted tableware, linen	35	285	10,000
8. Cooking Utensils	35	343	12,000
9. Other Accessories, (grinders, slicers, cutters, blenders, dehydrators, etc.)	35	200	7,000
10. Hair dryer (cage and seat)	35	315	11,025
11. Sterilizers	35	30	1,050
12. Hair dryers (hand)	70	20	1,400
13. Accessories (manicure kits, brushes, combs, etc.)	35	75	2,625
14. Bed, sheets, pillows, lamp, curtain, etc.	35	50	1,750
15. First Aid, clinic supplies	35	300	10,500
16. Art supplies, tools, etc. including ceramic ovens	35	2800	98,000
17. Manual typewriters with tables and chairs	70	200	14,000
18. Three drawer files	35	100	3,500
19. Television Monitors	70	200	14,000
20. Adding Machines	35	75	2,625
21. Mimeograph	35	200	7,000
Sub-total			<u>\$ 350,825</u>

Audio Visual

<u>Item</u>	<u>Quantity</u>	<u>Unit Cost</u>	<u>Total Cost</u>
1. Overhead Projectors	35	200	7,000
2. Slide Projector	105	100	10,500
3. Cassette recorders	105	50	5,250
4. Projection Screen	35	60	2,100
5. Audio Visual Cabinets	35	200	7,000
6. Chalkboard, portable	35	40	1,400
7. Drafting kit	35	20	700
	Sub Total		<u>33,950</u>

Television - Radio

1. T.V. (see item 19, Home-Ec.-Arts- etc)			
2. Radios	105	20	2,100
	Sub total		<u>\$ 2,100</u>

Mobile Units

1. Vehicles	5	30,000	150,000
2. Vehicle parts			11,500
3. Teaching Materials, A.V. etc.	5	2,500	12,500
	Sub Total		<u>174,000</u>

Curricular Materials (for staff training and beginning center functioning)

150,000
150,000

Furniture

1. Electrical benches	35	200	7,000
2. Carpenter's benches	420	165	69,300
3. Drafting Tables	35	198	6,930
4. Home Ec. Work Tables	420	44	18,480
5. Desk and Chair	35	100	3,500
6. Folding chairs	10500	7	73,500
	Sub total		<u>178,710</u>

Net total \$1,251,485
Transportation ..
at 15% 187,723
Grand Total \$1,439,208

Note: The transfer of \$177,140 from the commodities and curriculum materials budget to the facilities budget was unfortunate. (See our figures on construction costs, Facilities Chapter) During our extrapolations with the Urban Centers we failed to note that the budget had no provisions for furniture. The result is that original equipment estimates were fairly accurate and we have had to add back \$166,848 of the reduction we effected earlier.

11. Models #2 and #3

There will be some differences among the three models cost-wise. Different lists will be developed because there are fewer clients per center, but more centers with Models 2 and 3. A major change will be a reduction of carpenter's benches and an increase in detachable vices and other such items. Since many items are at a minimum, i.e., typewriters, sanders, hair dryers, etc., and these are the essentially expensive items, it is our estimation that no more than 20% of the operating center equipment (that is, not including curriculum materials and vehicle-related items) can be saved by increasing the number of centers from 35 to forty and reducing the capacity as we have. Thus, the cost of furnishing and equipping 40 models #2 or #3 should total about \$127,952 more than the total given for the 35 Model #1 centers.

III. Site Selection Criteria and Tentative Sites

Site Selection Criteria

1. Size between 3500 - 5000 meters square, preferably rectangular with relation of width to depth not exceeding 3:5 to provide space for the following:
 - A. Building - around 500 M²
 - B. Entrance, parking for several vehicles and for Mobile Unit 500 M².
 - C. Small garden and space for animal stalls if desired - 500 M² plus or minus.
 - D. Playing fields for recreation - 2000 M².
2. Level land, good drainage.
3. Subsoil conditions sufficient to support edifice without special engineering.
4. Easy access to rural population groups or small towns on all weather roads and to more remote population by some sort of road or trail. Within half hour's traveling distance for at least 2100 people.
5. Possibility of acquiring water and electrical power and establishing sewers or septic tanks.
6. Preferably surrounded by land which could be acquired for expansion if necessary.
7. Preferably with trees and esthetic appearance.

TENTATIVE SELECTION OF SITES FOR THE SATELLITE CENTERS

The selection of sites for the distribution of the centers presents several problems. The intent of the project is to reach directly 50,000 of the most needy rural poor. These are, of course, the most isolated and the closer we get to these the further we get from adequate densities and access roads. Conversely, the closer we approach areas of adequate density, the closer we approach the urban areas (and their road networks) which are in least need of the services of this project. We are constrained then to avoid both the most isolated areas and to choose carefully from among the geographic areas of adequate population density.

Unfortunately little census data is available after the Alliance for Progress population studies of 1965 (based on 1961 data). We cannot in good conscience use the population density maps of 18 years past to determine present day distribution - and there are no later maps available. The Cuarto Censo Nacional de Población 1971 (the latest official population analysis), performed by the Ministerio de Economía - Dirección de Estadística y Censos, does not deal with densities, but does give us some information which is useful for indicating what areas to avoid and what areas might show promise. Cuadro 9, "Número de Municipios", page 9 of that document lists the number of communities per Department which fall within 12 categories of community size, ranging from less than 200 to more than 300,000. The map of El Salvador, prepared by the Instituto Geográfico Nacional of the Ministerio de Obras Públicas, November, 1978, contains a legend for Metropolitan areas, Municipios, cantones and caseríos

importantes. The number of caseríos is negligible. The number of Metropolitan areas and municipios corresponds to the number of "Municipios" found on page 9 of the Cuarto Censo.....which contain from 5000 to 300,000 plus inhabitants; thus, the cantones are the "Municipios" which contain from 500 to 2000 inhabitants. One third of these contain from 500-999 and two thirds contain 1000-1999. The 1978 Map shows the road system down to the level of the cantones. This being the lowest level of information available from any source, our distribution of centers must be keyed, population-wise to clusters of cantones.

Extrapolations of the data on number and sizes of cantones (see discussion above and page 9, Cuadro 9 of Cuarto Censo.....) yields an average size of 1240 inhabitants per canton. The capacity of Model #1 is 180 per session, which sums to 540 persons per day on a three-session, daily schedule. Our assumption here is that no center will attract at any one time more than one-fourth of its immediately available population of persons of above 14 years of age (to which its services here are directed). Thus, any center established should have at least 2160 persons older than 14 within a convenient radius for recruitment into the program. Censo.....indicates that nationwide populations are distributed with 35% falling within the category of 0-14 years of age and 65% within 15-85 and above. A random check among the nine departments scheduled for Urban Centers (and to which rural satellites would be affixed) shows agreement with this percentage within less than one point disparity. Thus, we can

assign a probable figure of 806 inhabitants per canton with ages of 15 and above. And, thus, finally, we can justify the placement of any given center if it occurs within a three kilometer radius of at least thr (2.58) cantones - on a population basis! There are, of course, other reasons than population sufficiency for such placement. Gradations of need within departmental populations and differences of opportunity within departmental boundaries, as well as differences among departments provide further basis for establishing priorities of placement.

As explained elsewhere in these reports, the activities of BIRF, BID, OAS, etc., in conjunction with the National Development Plan (Bienestar Para Todos) in the northern section of the country excludes the feasibility of extending this project into that region, lest we contribute to redundancy and possible duplication of services and facilities. The remaining departments with planned urban centers are listed below. We wish to note that Union department has no Urban Centers planned and the northern portion is presumably within the sphere of the area projects listed above; however, the central and southern areas of Union are far removed from the planned Urban Centers, and as we will indicate shortly, contain large populations with no educational level; thus, Union department is considered for centers (to be supervised from San Miguel). Following from east to west are the ten departments included in this project:

1. Ahuachapán
2. Sonsonate
3. Santa Ana
4. La Libertad
5. San Salvador
6. Cuscatlán
7. San Vicente
8. Usulután
9. San Miguel
10. La Unión

Certain sections of some departments will be avoided because of the location or planned location of World Bank and CENCAP centers for rural training, vocational training, national productivity, etc. All of these are in urban areas in any event. They include:

1. Rural Training Center, La Unión, La Unión
2. Vocational Training Center, San Miguel, San Miguel
3. Rural Training Center, Usulután, Usulután
4. National Productivity Center, and Vocational Training Center
San Salvador, San Salvador
5. CENCAP, Ciudad Arce, La Libertad
6. Vocational Training Center
Santa Ana, Santa Ana
7. Rural Training Center, Texistepeque, Santa Ana
8. Rural Training Center
Ahuachapán, Ahuachapán

These programs are all for higher levels of training than those for the present project. Thus, this project will ultimately provide the students for these programs.

An analysis of Cuadro 16, pp. 193-200, Cuarto Censoprovided the number of inhabitants 15 years of age and over and yielded a figure for those in this bracket who had no educational level. At this point departments could have been arranged for priority purposes (1) according to the number to be served, i.e. the facility of serving them, or (2) the percentage of educational lack and, i.e., the quality of service with respect to the need. Since the target population is 50,000 and this number can be reached in any event, the decision was made to rank the departments according to percentage of no education among inhabitants 15 years of age and older. Chart #1 following shows the priority order, No. 15 years and above, No. without educational level, percentage which this represents, and the number of centers assigned to each department on the basis of apparent need.

CHART #1

Priority Listing of Departments and Number of Centers Assigned

<u>Priority</u>	<u>Department</u>	<u>No. 15 Years or older</u>	<u>Without Educa- tional Level</u>	<u>%</u>	<u>Number of Centers</u>
1.	Sonsonate	74,938	59,206	79	5
2.	San Miguel	107,075	73,448	69	5
3.	Usulután	107,483	73,618	68	5
4.	La Unión	84,046	56,285	67	3
5.	Ahuachapán	70,237	45,107	64	5
6.	San Vicente	54,352	34,187	62	4
7.	La Libertad	93,646	54,141	58	5
8.	Cuscatlán	56,003	29,234	52	2
9.	Santa Ana	99,106	47,597	48	4
10.	San Salvador	88,532	39,085	44	2

The mix is good on both counts. The highest populations also have the highest numbers of centers, except Santa Ana and San Salvador which are replaced by Sonsonate, whose illiteracy rate is nearly double that of Santa Ana and San Salvador and ten points above second-place San Miguel. For each department a number of clusters of cantones have been selected as possible sites for centers. In each case we have tried to form clusters within a 3 kilometer radius of a given canton. We attempted to avoid immediate proximity to Urban Centers or to Municipios of more than 2000 population. In each department more clusters have been selected than there are rural centers allocated. Further direct studies will have to be employed to narrow down the choices - and obviously other clusters could be formed. The clusters are not presented in any priority order, but the first name in each cluster is the central canton and an obvious candidate for the location of a center.

Ahuachapán (5 centers)

1. San José/El Limo/La Montaña/La Margarita
2. El Conacaste/El Portilio/La Guascota/El Jicaral
3. El Tortuguero/Tepacún/La Esperanza/Rincon Grande
4. Tihulcha/El Diamante/Las Mesas/San José El Naranjo/San Antonio
5. Canta Abajo/Canta Arriba/El Rosario/San Martín
6. El Cortez/El Escalón/Texipulco/Pululapa/La Esperanza

Sonsonate (5 centers)

1. El Zope/El Zarzal/El Zarzal* (In Ahuachapán)
2. Las Joyas/Agua Santa/Las Tablas/Cuyuapa Abajo

* A number of names, such as El Zarzal, Apancoyo, La Esperanza, occur twice (or more in close propinquity; however, this should cause no difficulty if one begins with the first name in the cluster and stays on the roads within 3 kilometers.

Sonsonate (Continued)

3. El Castaño/Cuyuapa Arriba/El Carrizal/Sabana Grande
4. Coquiama/San Lucas/Apancoyo*
5. Atiluya/Agua Shuca/El Achiotal
6. El Balsamar/Los Gramales/Peña Blanca
7. Las Higueras/La Quebrada Española/Joya/Piedras Pachas/S. Luis/Las Marías
8. El Canelo/Sabana San Juan Arriba/Sabana San Juan Abajo/Los Apantes
9. San Isidro/El Guayabo/Los Mangos/Valle Nuevo

Santa Ana (4 centers)

1. San Vicente/Paraje Galan/Monte Verde/Piedras Azules/Tierra Blanca
2. Santa Cruz/El Flor/Las Piletas
3. Guacamayas/La Danta/Los Chilamates
4. San Jerónimo/La Parada/Pinalón
5. El Durasnillo/El Arado/Zacamil
6. Cantarana/Chupaderos/Flor Amarillo Abajo/Calzontes Abajo
7. Junquillo/Coatepeque/Conacaste/El Cerro/Aldea de la Cruz/El Congo
8. El Guineo/La Laguna/San José de las Flores/Zacatal
9. Los pinos/ Montebello/El Rodeo/La Presa
10. San Felipe/Resbaladero/Mogotes (in La Libertad)

La Libertad (5 centers)

The number of cantones in small clusters, connected by roads is so large in La Libertad that literally scores of combinations could be effected. We have simply selected five clusters far removed from the urban centers. Much study should precede the final selection.

1. Pitichoro/El Castillo/San Antonio/Las Acosta
2. Las Anonas/Obraje Nuevo/El Angel Talcualuya/San Pedro Las Flores
3. El Transito/La Labor/San Jose de los Sitios
4. San Antonio/Buena Vista/Los Laureles/El Guano
5. Santa María Mizota/Sihuapilapa/Mizata

San Salvador (2 centers)

1. Cerco de Piedra/Melara/Plan de Mango
2. Atiocoyo/Los dos Cerros/Natividad
3. Calle Nueva/Guazapa*/Nance Verde/Loma de Ramos
4. El Divisadero/San Isidro/Los Pajales/Panchimalquito

Cuscatlán (2 centers)

1. Buena Vista/San Lucas/Mirandita
2. Consolación/Corozal/Delicias/Haciendita
3. Aguacaya/El Platanar/Estanzuelas
4. El Salitre/La Cruz/Piedra Labrada
5. Tacanagua/El Triunfo/Istagua
6. Rosario Tablón/Jiñuco/Corral Viejo
7. Soledad/El Amatillo/El Espinal/Copinol
8. San José la Ceiba/Concepción/El Rosario/San Antonio

* As noted, the location of centers in Municipios was avoided in order to maintain rural focus.

San Vicente (4 centers)

1. Amatitán Arriba/Cerros de San Pedro/ San Jacinto La Burrera
2. Concepción Cañas/ Las Animas/Talpetates
3. El Caracol/La Soledad/San Bartolo Ichamnico/ San Juan Buena Vista
4. Campanario/San Francisco/San Benito
5. El Porrillito/Barrio Nuevo/Santa Cruz
6. El Area/Leon de piedra/San Jacinto

Usulután (5 centers)

1. El Amatillo/San Jose/Azacuapía del Gualcho
2. El Corozal/La Unión/Las Piletas
3. Santa Cruz/San Felipe/San Isidro
4. Concepción/San Francisco/San José Montañita
5. El Marquesado/Las Flores/La Peña/Quebracho
(This one lends itself to several other combinations)
6. Los Charcos/La Caridad/Los Espinos
7. Llano del Chilamate/Loma de la Cruz/Los Batres
8. Joya Ancha Abajo/Joya Ancha Arriba/Las Cruces
9. Moropala(in San Miguel)/San Antonio/La Anchita/San Felipe
10. San Juan del Gozo/San Antonio Potrerillos/La Canóa/La Tirana*

* This cluster has been drawn in violation of the 3 kilometers radius because of the area's general isolation. This should be a high priority site.

San Miguel (5 centers)

1. See Usulután, ninth cluster
2. Altamiro/Concepción Corozal/El Divisadero
3. El Hormiguero/Candelaria/El Colorado
4. Oromontique/San Antonio/Ojo de Agua
5. Candelaria/Jocote Dulce/Joya de Ventura
6. San Pedro Arendes/La Peña/Plan Grande
7. El Roble/Rodeo de Piedrón/Santa Clara
8. San Pedro/Nueva Concepción/Chilanguera or
9. La Canoa/Chilanguera/El Brazo

La Unión (3 centers - South of Bolivar, San José)

1. El Carao/Chichipate/San José Gualazo (in San Miguel)
2. Bananera/Llano las Patas/Loma Larga
3. El Cipres/Los Angeles/Piedra Rayada
4. El Gavilán/Alto El Roble/Las Pitas
5. San Gerónimo/Centeno/Las Marías
6. Ciricuario/El Tizote/Santa Lucia
7. Nueva Guadalupe/Guadalupe/Los Hatillos
8. San Felipe/Barrancones/Piedras Blancas/El Tablón*

* Once again we abandon the 3 kilometer limit in order to provide service to this isolated area. High Priority.

IV. MOBILE UNITS

The use of the five Mobile Units has been recommended. In reaching this decision the consultants considered the following areas:

1. History of Mobile Unit use in other countries.
2. The transportation network in El Salvador.
3. The number and needs of the potential client/audience in El Salvador.
4. The cost.
5. etc.

Practically every state in the United States has a successful history of Mobile Unit use for educational purposes. Projects in preparation in Bolivia, Paraguay and other Latin American countries envision the use of such units. The existence of some 24 firms dedicated to constructing and outfitting these units attests to their popularity, and there is little argument that they can or can not function well as classrooms. The major question or concern is, are they feasible alternatives here in El Salvador.

Obviously the system of roads is a major consideration, because our client is located in the rural areas where roads are traditionally bad or sub-standard and at times either preclude the use of these vehicles or add serious design problems to their construction. The 1973 map prepared by the National Geographic Institute of the Ministry of Public Works, indicates good road systems at the levels of the cantones selected tentatively as those to be served by the centers. Roads between large cities are excellent. In conclusion, there appears to be no difficulty in reaching the target group with Mobile Units.

The question of cost requires a value decision. Estimations of cost in the Urban project indicate them to be nearly that of a center constructed under the specifications recommended in this study. Thus, a van unit servicing from 30 to 150 people per day costs roughly the same as a building which serves up to 500 people per day. This equality of costs is somewhat misleading because of the difference in cost of equipment and supplies and in the number of personnel employed in the center. Also, the Urban estimate may be a bit high, considering that power equipment will not be used in this unit. The difference in cost per person contacted is nevertheless significant. Because of this our original numbers were cut by one half to the current five. They were not eliminated; however, in total, because it was our feeling that though the number of people contacted per dollar and cost might be lower the need of those people would be higher and the service greater. These people will be, of course, the most isolated groups which might still be accessible by road. Another consideration for use of the vans was their assistance to the centers in providing manpower and tools for new programs or for over-loaded programs.

The general requirement is that these be small, rugged, four-wheel drive, all weather vans, capable of carrying an assortment of tools, supplies, kits for teaching, or audio-visual equipment, sleeping accommodations for the teacher-driver, a gas-powered utility generator and spare parts for the vehicle. These vans would provide the same instructional program as those taught in the centers except that they would be limited to what might be selected as manageable for one trip out.

Estimated costs for vehicles and supplies are found in the equipment lists and figures seen previously in this chapter.