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EVALUATION OF
AID FINANCED INTEGRATED RURAL DEVELOPMENT PROJECT
MUNICIPALITY OF IXCHIGUAN, DEPARTMENT OF SAN MARCOS,
GUATEMALA

PROJECT No. 520-0272

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Washington, D. C., May, 1983

SUMMARY

The purpose of this evaluation is to analyze the first two and a half years of activities of an integrated rural development project (IRDP) being implemented in the Municipality of Ixchiguan, Department of San Marcos, Republic of Guatemala, by the People to People Health Foundation (Project Hope), under the auspices of the U. S. Agency for International Development.

As stated in the AID's Operational Program Grant (OPG), the Project's purpose was: "...to provide support to an integrated rural development program by providing technical assistance, training and financial resources for rural health and agricultural activities in the Municipio of Ixchiguan."

Initially designed to implement a "package" of 17 activities in Ixchiguan and 16 nearby villages (see Table 6), due to different constraints and problems, the IRDP had to redesign its activities as well as the geographical setting. Thus, as of April, 1983, work has been done in nine different municipalities that included 38 villages and hamlets.

The implementation of the project was partially successful in overcoming a too-ambitious project design, a lack of coordination between contributing sectors, and a deteriorating and unpredictable political situation that mushroomed to induce further constraints.

BACKGROUND

After two and one-half years of Project activity, the Integrated Rural Development Project (IRDP), funded by an Operational Program Grant (OPG) to the People to People Health Foundation (Project Hope) by AID is entering its last five months of implementation.

The idea for the Project began in July, 1979 when Eliseo Carrasco, Guatemala Mission Director for the Agency for International Development (AID), Jose Albizurez of Peace Corps in Guatemala and Dr. Alfonso Loarca, then with DIGESEPE (Direccion General de Servicios Pecuarios or General Direction of Animal Husbandry Services) of the Government of Guatemala (GOG) travelled to Ixchiguan, San Marcos to meet with the Mayor of the town. They were unexpectedly greeted by dozens of peasants who had heard of their coming and -- as it must have seemed to the visitors -- almost every peasant presented them with a request for help with a particular felt need.

To the visitors it was obvious that the people of Ixchiguan and the surrounding area were in desperate need of health, agricultural and social services that the Government of Guatemala could not provide. On the long drive back to Guatemala City a plan was developed to provide

a package of services for the people of Ixchiguan, a plan for an integrated project addressing basic needs in health and agriculture. This was to be the first attempt at integrated rural development on the micro level in the western highlands of Guatemala.

The idea behind the project plan was to afford a way to channel funds to the Peace Corps for use in providing materials and equipment to volunteers assigned, or to be assigned, to the Ixchiguan area. By law AID could not directly fund Peace Corps but had to work with a private voluntary agency (PVO). AID chose Project Hope as its conduit to the Peace Corps and as the implementing agent of the Project (Lyon 1980: 13).

Project Hope had been in Guatemala since 1976, working primarily in the western highlands on health related projects. The idea of integrated rural development was new to Project Hope and somewhat distant from its singular objective of promoting better health care.

In a meeting with Dr. E. Croft Long, Regional Field Director for Project Hope, David Edwards, Project Hope Administrator, Dr. Loarca and Eliseo Carrasco, the Project Hope personnel agreed to consider participating in the IRDP as the PVO for the project. A site visitation by Project Hope to Ixchiguan followed and the commitment was made and a multi-phased approach was agreed upon.

Phase I of the Project began in October of 1979 and lasted until January, 1980. Phase I was an agricultural, health and socio-anthropological study undertaken by Project Hope and outside consultants, funded by AID with the objective of gathering basic data on the micro-region of Ixchiguan. At about this time (November 1, 1979), Dr. Alfonso Loarca left DIGESEPE to become Coordinator of the IRDP for Project Hope.

At the same time as Phase I was in progress, an ad hoc National Committee was formed. Composed of representatives from AID, Peace Corps, Project Hope and DIGESEPE, the Committee was to coordinate Project activities and to provide general policy direction to the activities contemplated.

From primary source interviews and written material, the evaluation team was struck by the lack of coordination and communication between Committee members. It appears that jealousy and disension developed at an early stage.

Phase I was completed in February, 1980 and a well constructed comprehensive report was delivered regarding health, agricultural and socio-anthropological data of the Ixchiguan area. Phase II followed. This was a study to interpolate the information presented in Phase I and to relate it to potential activities to be developed. However, Phase II did not meet with AID's approval and it was rewritten as Phase III, the document which eventually formed the basis for the OPG.

At about the same time as the signing of the OPG document, a Regional Committee was created to handle matters at an operational level. Committee members were regional representatives of Project Hope, DIGESEPE and the Ministry of Health. A representative from AID/Guatemala generally participated. Contrary to the high-level bureaucracy that attended the meetings of the National Committee, the functioning of the Regional Committee was reported to be frictionless and productive.

Integrated rural development (IRD), as it is considered in this Project, strives to combine resources of development agencies concerned with health and agriculture with the resources of rural community members, the eventual beneficiaries in implementing rural development activities. It is based on the concept that the communities' problems and needs in health and agriculture are inter-related and that one problem or need should not be attacked while neglecting the others.

Essential to IRD is community participation, according to Project Hope, "Multi-sectorial development programs may be offered, but if there is no community participation, the project cannot be called 'integrated'." (Project Hope 1980b:5).

In the IRDP, community participation was to be catalyzed by local Comites Pro-Mejoramiento (Improvement Committees). These Committees were to be formed of representative community members who could generate common work for the common good among the rest of the community. They were to be organized and trained in cooperative and regional development and to undertake principal implementation of project activities. The importance of these Committees is stressed by Project Hope, "Without training and formation of community committees, forming the frame-work of administration and supervision, there is much doubt the project would succeed." (Project Hope 1980b:24).

The purpose of the IRDP grant: "...to provide support to an integrated rural development program by providing technical assistance, training and financial resources for rural health and agricultural activities in the Municipio of Ixchiguan," is unquantifiable and vague. If interpreting the purpose in the broadest sense, one can say that the Project has "provided technical assistance, training and financial resources for health and agricultural activities in the Municipio of Ixchiguan." However, integration among projects was lacking and dispersion of project activities away from the Ixchiguan area was evident.

Nevertheless, as an experiment in rural development the project has achieved certain desirable goals that will be discussed in the following pages.

The final project was the result of the distillation of overambitious Phases I, II, and III resulting in a vague and imprecise OPG document that lacks quantifiable evaluating indicators. (See Appendix, OPG attachment A).

During implementation, the project was redesigned to contain 49 sub-projects (some of which are stages of a same discrete sub-projects. Of these, 15 sub-projects were in the field of health care and 34 in agriculture. The whole IRDP was to have been implemented by a combined team of more than 40 full/part time personnel from Project Hope, Peace Corps and the GOG. However, as of April 1983, less than 15 persons were involved in the IRDP.

Due to various constraints and problems, the technical personnel considered it necessary to geographically disperse their activities. Thus, instead of concentrating in 16 villages of one Municipality, the evaluating team found different IRDP sub-projects in 38 villages and hamlets of 9 different Municipalities. The overriding and overwhelming reason for this dispersion was the critical subversive situation in the area which intermittantly cut-off certain villages from project activities.

INTRODUCTION

The town of Ixchiguan and its attendant villages are striking in their aspect of poverty and desolation. Located high (3,130 meters) in the Altiplano (highlands) of Guatemala in the Department of San Marcos, the area is a sullen denuded land of sparse sheep pasture and small plots of potatoes, wheat and corn which somehow manage to support the 10,473 people of the town and the surrounding villages (see Table 1). Ixchiguan is derived from the Mam word meaning 'Shepherds' Tree', a short bush of leafy scented flowers that once abounded in the area, but no more (Project Hope 1980a: 8).

The land was at one time rich in forests, but over the years has suffered from the need of its people for firewood and for grazing space for their animals. Classic examples of erosion abound and it is only recently that some of the barren land is being reclaimed by terrace planting of food production crops.

If the land has changed over the years, the people basically have not. By and large they continue with age-old agricultural methods, occasionally historically wise but more often soil depleting and wasteful. Except for the armed soldiers, military vehicles, a few public sector jeeps and an isolated bus, Ixchiguan appears as it must

have appeared a century ago, with the people leading pack animals through the streets, carrying heavy loads on their heads with a tumpline or scratching at the rocky hillside soil with primitive hoes.

With a sparse and basic diet of corn, potatoes, chile and coffee, many people of Ixchiguan suffer from malnutrition. It is not the shocking blatant malnutrition that one can witness in parts of India and Africa; it is more subtle and gradually debilitating, making most all who live there easy targets for tuberculosis, other respiratory and gastrointestinal diseases. Approximately 50 percent of deaths registered in 1979 were children under five years of age. One-half of these were associated with protein/calorie malnutrition. Infant mortality is officially charted as 58 per 1,000. More realistic estimates are 100 per 1,000, one village was 214 per 1,000. (Project Hope 1980a:103-104, 53).

In an effort to exist in a harsh land that disdains the development of food product agriculture, an estimated 80 percent of the able bodied men of Ixchiguan elect to migrate for more than six months per year to farms in the nearby Mexican State of Chiapas to harvest coffee or to the south coast of Guatemala to harvest coffee and plant cotton. The presence of Guatemalan border patrols and

the calamitous drop in the value of the Mexican Peso along with the lessening value of Guatemala's own coastland crops have reduced this migration somewhat, but have only heightened the poverty endemic in Ixchiguan.

It was precisely because of the depth of need in the Ixchiguan area that it was chosen by Peace Corps and AID as an ideal site for a rural integrated development project (IRDP). In the words of Clifford Sanders, Project Hope Administrator in Guatemala, "The IRDP is a pilot project. If it can work in Ixchiguan, it can work anywhere."

Table No. 1

PARTICIPATING MUNICIPALITIES AND VILLAGES AS OF APRIL, 1983

(Higher Lands)

<u>Municipality</u>	<u>Village</u>
Ixchiguan	Ixchiguan-Cabecera
	Bexoncan
	Calapte
	Choapequez
	Cieneguillas
	El Plan
	Julishin
	Las Flores
	Nuevo Porvenir
	Pajatz
	Pavitzalan
	San Andres
	San Antonio-Ixchiguan
	Tuichan
Tuiquinamble	
Yuinima	
San Jose de Ojetenam	Esquipulas
	San Fernando
	San Jose Ojetenam-Cabecera
Tacana	Tacana-Cabecera
	Toquila
Tejutla	Salanshac

SOURCE: Project Hope's IRDP

NOTE: Within each village's area of influence, we find several hamlets (caserios)

Table No. 2

PARTICIPATING MUNICIPALITIES AND VILLAGES AS OF APRIL, 1983

(Lower Lands)

<u>Municipality</u>	<u>Villages</u>
Comitancillo	Piedra de Fuego Shishal Tuilelen
Esquipulas-Palo Gordo	Tanil Villa Hermosa
San Antonio de Sacatepequez	San Ramon Santa Rita
San Marcos	San Jose Las Islas San Marcos-Cabecera
San Pedro de Sacatepequez	Agua Caliente La Grandeza Las Barrancas Mavil San Andres Chapil San Francisco Coche San Jose Caben

SOURCE: Project Hope's IRDP (April 1983)

NOTE: Within each village's area of influence, we find several hamlets (caserios)

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Table No. 3

IRDP's SUB-PROJECTS: AGRICULTURE

- | | | |
|-----|--|-----------------------------|
| 1. | Model Farm | January '81 - May '81 |
| 2. | Poultry Evaluation | March '81 - March '82 |
| 3. | Cattle Evaluation | February '81 - June '83 |
| 4. | Porcine Evaluation | February '81 - June '83 |
| 5. | Sheep Evaluation | February '81 - June '83 |
| 6. | Horse Evaluation | February '81 - June '82 |
| 7. | Presentation of Technical
"Crop Pack" (wheat, corn,
pastures, trees) | May '81 - December '82 |
| 8. | Cost/Benefit Analysis of such
"Crops Packs" | May '81 - December '82 |
| 9. | Installation of Appropriate
Technology | March '81 - June '81 |
| 10. | First Year Evaluation:
Appropriate Technology | June '82 - July '82 |
| 11. | Second Year Evaluation:
Appropriate Technology | June '83 - July '83 |
| 12. | Final Report and Recommendations:
Appropriate Technology | June '83 - July '83 |
| 13. | Research on Medical Plants | May '81 - June '81 |
| 14. | Implementation of a medicine
plant plots | May '81 - July '81 |
| 15. | Evaluation of the medicine
plant plots | September '81 - October '81 |
| 16. | Laboratory Evaluation of the
Medicine plants | September '81 - October '82 |
| 17. | Final Report and Recommendations:
Medicine Plants | July '83 - August '83 |

18. Organization of Veterinary Programs, First Year, four communities September '81 - October '81
19. Organization of Veterinary Programs, Second Year, 8 communities September '82 - October '82
20. Organization of Veterinary Programs, Third Year, 24 communities September '83 - August '83
21. Morbidity-Mortality Reduction of Corrale Animals: First Year September '81 - October '81
22. Morbidity-Mortality Reduction of Corrale Animals: Second Year September '82 - October '82
23. Morbidity-Mortality Reduction of Corrale Animals: third Year August '83 - September '83
24. In-training in Animal Production October '81 - September '83
25. Agriculturalists, Training: 32 Persons October '80 - September '81
26. Agriculturalists, Training: 64 Persons October '81 - September '82
27. Agriculturalists, Training: 128 Persons October '82 - August '83
28. Introduction of New Agricultural Techniques: 4 Communities October '80 - September '81
29. Introduction of New Agricultural Techniques: 8 Communities October '81 - September '82
30. Introduction of New Agricultural Techniques: 12 Communities October '82 - August '83
31. Project Design: Pasture Management March '81 - April '81
32. Project Evaluation: Pasture Management September '81 - October '81

- | | | |
|-----|---|-----------------------------|
| 33. | Listing of Resources:
Pasture Management | November '82 - December '82 |
| 34. | Program Elaboration, Pasture
Management | July '83 - August '83 |

SOURCE: Project Hope's IRDP

Table No. 4

IRDP's SUB-PROJECTS: HEALTH

<u>Name</u>	<u>Programmed Date</u>
1. Training of Improvement Committees	October '79 - March '80
2. Training of Auxiliary Nurses and Rural Health Technicians	July '80 - March '81
3. Training of Rural Health Promoters	August '80 - November '81
4. Training of Mid-Wives	June '81 - November '81
5. Development and Implementation of Minimum Health Units	January '81 - December '82
6. Environmental Sanitation	February '82 - January '83
7. Laboratory Installation	January '81 - May '81
8. Designing of Zoonosis Control	January '81 - March '81
9. Zoonotical Research	March '81 - July '81
10. Zoonosis' Analysis	July '81 - December '81
11. Implementation of Zoonosis Control Program	December '81 - February '82
12. Tuberculosis Research Among Humans and Animals	March '81 - June '81
13. Implementation of TBC Control Programs	December '81 - September '83
14. Dental Health and Training for School Children	February '81 - September '83

SOURCE: Project Hope's IRDP

TERMS OF REFERENCE

1. Identify and discuss mayor changes in the project setting, including socio-economic conditions and host government priorities, which have an impact on the project.
2. Analyze committee structure and PVO role in carrying out the project. Identify any changes needed to achieve the project goal. How critical is the participation of all identified agencies to the realization of the project purpose? How effective are the coordinating mechanisms in place in assuring timely inputs and participation of all agencies in the project?
What are PVO-government relations?
3. Measure actual progress against the following output targets:
 - a. Improvement committees in Ixchiguan and 16 surrounding villages upgraded.
 - b. Demonstration farm carrying out agricultural activities and environmental sanitation activities on a pilot basis.
 - c. Youth clubs carrying out programs in agriculture, natural resource conservation, livestock production, and small industries.
 - d. Rural health promoters and health personnel providing maternal child health, nutrition, and fam-

ily planning services in each village.

- e. Early identification and treatment of dental problems among the school-age population.
4. Discuss management experiences. Does fragmentation of project activities into discrete sub-projects with separate objectives and measurements diminish achievement of the project purpose? What is the target population's perception of project activities? Have interventions introduced responded to community priorities? Did committees exist prior to the project? How are committee members designated and what was their leadership role prior to selection? What is the role of the improvement committee in the selection of project sub-activities? To what social level do improvement committee members belong?
 5. Estimate when achievement of the project purpose "to provide support to an integral rural development program by providing technical assistance, training and financial resources for rural health and agricultural activities in the Municipio of Ixchiguan" can be expected. Cite progress toward each of the following end of project status conditions:
 - a. Local improvement committees undertaking development activities in their village.
 - b. Improved agricultural and livestock practices

being employed by area farmers.

- c. Minimal health care being provided to the populace by village health practitioners.

Discuss the causes of any shortfalls in terms of causal linkage between outputs and purpose or external factors. Have area farmers learned improved practices at demonstration farms and/or plots? Are health practitioners the ones trained under the project? Are certain aspects of training more apt to be picked up by non-participants than others? What was the extent of adoption of techniques among non-participants through the demonstration effect?

6. Identify the direct and indirect beneficiaries of this project in terms of:
 - a. Increased small farmer agricultural productivity.
 - b. Reduced infant mortality and controlled population growth.
 - c. Reduced rates of underemployment.
 - d. Improved income.

Prepare data on the nature of the benefits and identify the number of those benefitting in the Municipio of Ixchiguan. Both project participants and non-participants should be interviewed. What was the difference between adopters and non-adopters in terms of income, occupation, sex and landholding status?

7. Identify any unexpected results or impact, such as changes in social structure, environment, health, technical or economic situation. Are these effects advantageous or not? Do they require any change in project design or execution?
8. Based on the above analyses, make recommendations as to the viability of the project, implementation strategy to continue the project, relationship of concerned agencies in carrying out project activities, and anticipated importance of the project in the region.

EVALUATION METHODOLOGY

The purpose of this evaluation was to assess the first years of Project activity, measure progress and clarify project design.

In an effort to compare induced changes in the area of Ixchiguan to the planned targets and objectives of the Project, it was originally considered that case study samplings in five villages within the Municipality of Ixchiguan would be the methodology used. However, the evaluation team found itself constrained by severe socio-political considerations and time limitations, however, the time constraint proved to be subordinate to the volatile political situation that persists in that area of the Guatemalan highlands.

The first three days were spent in Guatemala City reading background files and papers and waiting for a salvoconducto (safe conduct pass) to allow travel to the region. The evaluation team spent the equivalent of one work day in interviews with military and civilian officials in Quetzaltenango, San Marcos and Ixchiguan. These interviews were necessary to announce the team's presence and intent and to request official sanction for safe passage. All military officials encountered advised caution. While in San Marcos before departing for Ixchiguan, the team met with the Commanding Colonel of

the Military in the Department of San Marcos. He advised the evaluators to shun the Tejutla area (south and east of Ixchiguan) which two days earlier had been occupied by guerrilla forces for a period of 'some hours' but was once again in control of the Army. He also strongly advised that the villages in the Barrancas (mountainous areas with deep valleys) in the western part of the area of Ixchiguan be avoided as they were still the sites of most guerrilla activity.

On the afternoon of the day of arrival in Ixchiguan the evaluation team was inspecting a seedling nursery of INAFOR (Instituto Nacional Forestal or the National Institute of Forestation), on the outskirts of town when heavy mortar fire erupted some three kilometers away. This, plus the presence of some 200 heavily armed soldiers in the town--many crouched behind makeshift barricades--convinced the evaluators that they had entered a combat zone.

That same afternoon in an interview with Guillermo Nowell, Project Hope nurse and well known in the communities that he attends near Ixchiguan, recounted that just hours before, he requested and was granted permission to enter the village of Pavitzalán (less than two kilometers south of Ixchiguan) by an Army group just outside the village. He proceeded some distance but was ordered to stop by

warning gunfire from another group of soldiers seeking an inspection.

In the morning of the second day, the evaluation team joined Project Hope technical personnel in a meeting about three kilometers outside of the town of Ixchiguan with 50 peasants from Ixchiguan and surrounding villages. This meeting had the knowledge and approval of the military commander of Ixchiguan. There on a high grassy knoll the meeting began. Less than an hour had passed when an airplane and helicopter could be heard through the fog that had encircled the nearby mountains. The first four bombs dropped seemed to fall about three kilometers away. The fifth bomb exploded only one kilometer distant. The villagers became edgy at the first sound of the plane and helicopter. The first bombs concerned the Project Hope personnel and the evaluation team as well. The fifth bomb caused a unanimous decision to adjourn the meeting to another site closer to the town.

In the afternoon the evaluators sought the counsel of Father Juan Maria Boxus, the Roman Catholic Pastor of the villages in the area. Father Boxus, a Belgian has been serving the people of his parishes for years and is known and liked by the villagers and military alike. After hearing of the recent events, he advised the team to leave because the apparent resurgence of anti-guerrilla activity

heightened the chances of two outsiders being in the right place at the wrong time.

Despite these events all reports before and after the bombing indicated that the situation in the immediate Ixchiguan area was relatively calm.

After two days in the Ixchiguan area, the evaluation team returned to San Marcos after having visited the town of Ixchiguan and three villages, and interviewed more than twenty individuals.

Case studies in the Ixchiguan area having proven impossible, the structure of the evaluation was constructed from primary and secondary source literature (noted in the bibliography), direct observation and personal interviews.

In the area of Ixchiguan the evaluation team visited three villages (Calopté, San Antonio and Choapequez) plus the town of Ixchiguan. These visits included three demonstration sites for soil conservation and appropriate technology and Sherchil, the animal husbandry station.

Personal interviews in the Ixchiguan area included the Military Commander of Ixchiguan, the Roman Catholic Pastor, three members of the Project Hope technical team, the Mayor and Vice Mayor of Ixchiguan, two midwives, one auxiliary nurse, one TSR, two promoters and twenty-three peasants.

In the San Marcos/San Pedro Sacatepequez area the evaluators inspected the demonstration farm (and subsequently spent three days there writing this evaluation so were able to become familiar with the activities there), and two hamlets of the village of San Andres Chapil. Personal interviews there were with: The Governor of San Marcos, the Military Commander of the Department of San Marcos, the Regional Director of the Ministry of Health, the Regional Chief of Nurses, the Regional Directors of DIGESEPE and DIGESA, a fifth member of Project Hope's technical team, the demonstration farm tenant manager, and twelve peasants.

In Quetzaltenango, the evaluation team had personal interviews with: The IRDP coordinator, Dr. Alfonso Loarca, the Project Hope administrator, Clifford Sanders, and the Military Commander of Quetzaltenango.

In Guatemala City personal interviews were with: Clara Carr, Richard McLaughlin, Roberto Perdomo and John Garney of AID; José Albizurez of Peace Corps; Dr. Francisco Rodriguez of DIGESEPE.

In the Washington, D.C. area the evaluators interviewed Roma Knee of AID; Eliseo Carrasco of Peace Corps and Dr. E. Croft Long of Project Hope.

The evaluation team spent a total of twenty-one days in Guatemala in researching and observing the Project and in writing this evaluation. The interviews obtained and

the visits to Project sites proved to be valuable experiences that allowed the team to obtain an inside view of the IRDP's philosophy, achievements and limitations.

I. MAJOR CHANGES IN PROJECT SETTING

There were a multitude of major changes in the project setting which when individually considered seriously impeded progress of project activities, and when taken cumulatively, brought the Project dangerously close to a standstill.

Before the Project's start, the political situation, i.e., the armed strife between the anti-Government guerrilla movement and the Guatemalan Army and Police, had been in a condition of relative calm. Pressures were developing, however, that were to prove not only restrictive to Project activities, but physically dangerous as well to IRDP personnel.

The previous guerrilla activity of a scope to mount international alarm was concentrated in the eastern part of the country during the late 1960's, specifically in the Departments of Zacapa and Izabal. By 1970, the situation was improving year by year, and through the years immediately following the 1976 earthquake up until 1979, although guerrilla groups were active, armed conflict was sporadic and Guatemala was blessed with comparative civil peace.

In 1979, however, the western Departments of El Quiché, Huehuetenango, Quetzaltenango, Chimaltenango and San Marcos became an area of guerrilla activity that would eventually eclipse that of the late 1960's. Up until this writing, the years of 1981 and 1982 are considered

the worst in Guatemala's modern history of civil strife.

It was indeed unfortunate that this guerrilla activity coincided with the development activity of the IRDP. The adverse political situation was to be the cause of a series of events that would grossly inhibit the progress of the project.

Probably the most severe result of the violence in the highlands was the deterioration of local village Improvement Committees. For decades, Improvement Committees were a part of village life in the more stable and organized villages throughout Guatemala. A Committee was usually formed by community members to work toward a specific and concrete task, e.g., the construction of a school or water system. After the project's completion, the Committee disbanded until a new community need was felt.

In 1981, the GOG, suspicious of the intent of any organized group, did not encourage their organization and meetings. Of the 16 village Committees that Project Hope was to form or strengthen, only five were fully organized, and these five gradually fell into a disorganized state. Thus ended the possibility of real community participation and the greatest hope for the Project's unqualified success. According to Peace Corps/Guatemala Assistant Director, Howard Lyon, 'It is their (the people of Ixchiguan) participation and involvement

and their willingness to continue on their own at the end of three short years that will gauge the measure of the goals achieved.' (Lyon 1980: 5). Unfortunately, this community participation has been thwarted by an extremely difficult and tense socio-political situation.

A second result of the political conflict, and hardly less demeaning to Project progress, was the evacuation of Peace Corps personnel from the highlands beginning in August, 1981. Although this was almost a year after the Project's official start, only one Volunteer had been really integrated into Project activities.

The Peace Corps Volunteers, according to the Project Plan, were to have been an integral part of the Project and as such were to have much responsibility for its success.

A third untoward outcome of the violent situation in the area was the decision to establish the demonstration farm, not in the Municipality of Ixchiguan, as was originally planned, but in the more distant, but safer, confines of the Town of San Marcos.

The purpose of the demonstration farm was to successfully display sound agricultural and appropriate technology practices adaptable to highland farming and living. Moreover, most agricultural activities to be practiced in the village farms were to originate from the demonstration farm. In the light of the uneasy political situation

existing at that time and persisting today, it was considered expedient to move the farm to a safe location and to bring the villagers to it rather than to establish the farm closer to the villagers.

Concomitant with the political situation, must be considered the difficult state of the Guatemalan economy at the time of Project initiation. Inflation affected all areas of the economy (as it does now) and particularly adversely affected the subsistence farmer, the intended beneficiary of the IRDP. This inflation coupled with curtailed national purchasing power and a national and international dip in prices for basic Guatemalan crops further penalized the villagers of Ixchiguan.

From personal interviews and direct observation of the evaluators it appears that the GOG public sectors did not share the same level of commitment to the Project as did the representatives of Project Hope. National plans and budgets of both the Ministries of Health and Agriculture did not specifically include collaboration in the IRDP. At best, these sectors could provide help when and where they might, this help always subservient to prior national commitments. As an extreme example of this lack of commitment--or even interest--the present Supervisor for DIGESEPE in the Department of San Marcos told the evaluators that he knows nothing about the IRDP and doesn't care to.

While not a major change in the project setting, it is incumbent on the evaluators to point out what they considers another obstacle to Project success, i.e., the lack of a Project Hope Headquarters in San Marcos Town.

The offices of Project Hope have been located in Quetzaltenango since 1976 to attend to development programs in the Guatemalan highlands, but not specifically Ixchiguan and its surrounding area. At the time of the start of the IRDP, Project Hope had no other development activities of a similar size or nature. Considering the size and complexity of the IRDP, the evaluators believe that it would have been wise and logical for Project Hope to have relocated its headquarters in San Marcos, thus maintaining its base of operations closer to the nucleus of Project activity while at the same time retaining access to communications and a modest but comfortable life style for its personnel.

Another major change in the project setting is the existence of the ad hoc strategy Committee on the national level and the operational Committee on the regional (San Marcos) level. Neither Committee was considered in the OPG document. These Committees will be dealt within Section number two.

Figure 1

THE INTEGRATED RURAL DEVELOPMENT PROJECT:

TECHNICAL TEAM MEMBERS
AS OF APRIL, 1983

- A. INITIAL TEAM (since September, 1980):
- Coordinator
Dr. Alfonso Loarca
Veterinarian
 - Educador Agrícola (Agricultural Trainer)
Mr. Fidel Martínez
Técnico Agrícola (Agricultural Technician)
 - Enfermero-Sanitario (Nurse-Sanitation Technician)
Mr. Guillermo Nowell
Enfermero Graduado (Registered Nurse)
- B. MEMBERS INCORPORATED IN 1982:
- Agricultural Engineer
Ing. Oscar Castañeda
 - Animal Husbandry Trainer
Juan Daniel Villatoro
Técnico de Producción Pecuaria (Animal Husbandry Technician)
 - Medical Doctor (Part-Time: Two days per week)
César López, M.D.
- C. UNIVERSITY STUDENTS UNDER "EJERCICIO PROFESIONAL SUPERVISADO" PROGRAM (i.e., Senior year community service program)
- Mr. Gerardo Anzueto
Senior year, Universidad Nacional de San Carlos
Zootecnia (i.e., animal husbandry)

SOURCE: Dr. Alfonso Loarca, IRDP Coordinator
(April, 1983)

Figure 2

PROPOSED PERSONNEL REQUIREMENTS

PROJECT HOPE (AUGUST, 1980)

I. Health Sector

- 1 Nurse, midwife, full-time
- 1 Rural nurse educator, full-time
- 1 Nutritionist, full-time

II. Agriculture Sector

- 1 Agronomist, full-time
- 1 Pasture land management specialist, part-time
- 1 Crop production specialist, part-time
- 1 Demonstration farm manager, full-time
- 3 Assistants (farm manager), part-time

III. Administration

- 1 Project director, part-time
- 1 Field coordinator, full-time (DVM, Veterinary Medicine)
- 1 Project administrative assistant, full-time (Master, Public Health)
- 1 Accountant, part-time
- 2 Drivers, full-time
- 1 Bilingual secretary, full-time
- 1 Office Assistant, full-time
- 1 Evaluation specialist, part-time

IV. Ministry of Health

- 1 District nurse supervisor, part-time
- 1 Environmental health engineer, part-time
- 1 District medical supervisor, part-time
- 1 Regional medical director, part-time
- 1 Regional nurse supervisor, part-time
- 3 Rural auxiliary nurses, full-time
- 2 Rural health technicians, full-time
- 40 Rural health promoters, full-time

V. Ministry of Agriculture

- 1 Veterinarian, part-time
- 1 Agronomist, part-time
- 1 Regional Supervisor, part-time
- 3 Agricultural promoters, part-time
- + Services of the Director and Deputy Director of DIGESEPE, part-time
- + Services of the Director of programming for LIGESEPE

VI. Ministry of Education

- 1 Primary school director, part-time
- 5 Rural primary school teachers, part-time

PEACE CORPS

I. Health Sector

- 1 Nurse Supervisor, part-time
- 3 PCV nurses, part-time

II. Agriculture Sector

- 1 Agriculture engineer, part-time
- 1 PCV in reforestation and land resources advisor, part-time
- 3 PCV in agriculture and animal husbandry, part-time

III. Social Sector (Youth Clubs)

- 2 PCV (with experience in 4-H), full-time

IV. Administrative Support

- + Part-time administrative support, including use of vehicles, gasoline, oil and necessary per diems

SOURCE: Project Hope's Phase III, August, 1980

NOTE: As explained in this evaluation, due to different circumstances, few of these people participated in the IRDP

II. COMMITTEE STRUCTURE AND THE PVO ROLE

The ad hoc strategy Committee at the national level was formed to coordinate project activities as well as to provide general policy direction. Rather than providing direction, the National Committee became a bureaucratic impediment to Project implementation. The Committee was composed of representatives of the GOG, AID, Peace Corps and Project Hope.

According to the procedural manual of the National Committee, the DIGESEPE representative was the President of the Committee. Project Hope was recognized as the coordinating institution and program administrator. The evaluation team believes that since Hope was coordinator of the IRDP, it should have also been named President of the Committee. Interviews with involved personnel force the evaluators to conclude that the Committee's operations were governed de facto by AID and Peace Corps representatives. The fact that Peace Corps sustained representation at all is peculiar given that only one volunteer took active part in the Project's implementation and for only the first eight months of Project life.

DIGESEPE was named representative for all GOG sectors by the Minister of Agriculture (MOA). What might be considered as an usurpation of authority was evidently borne

of necessity since the Ministry of Health (MOH) declined to participate on the National Committee level. This apparent lack of interest on the part of the MOH is even more peculiar since Project Hope entered the Country by virtue of a contract signed with that Ministry. Normally Project Hope and the MOH would be considered as working partners. It was reported (no evidence available) that personality difficulties between a project Hope representative and a senior MOH officer strained the one-time warm relations between these two organizations. At any rate, one can hardly imagine decisions relating to the area of health and sanitation being undertaken by a representative of a branch of the MOA. This situation certainly did not bode well for accelerating Project activity.

The National Committee is now defunct; it has not functioned since August, 1982. The evaluation team recommends that the National Committee be officially dissolved and that its functions be absorbed by the Regional Committee in San Marcos. See Section eight.

The Regional or operational Committee is composed of a representative from Project Hope, AID, the MOH and DIGESEPE. The Committee has had six meetings since it was formed but it is now moribund due to lack of participation by DIGESEPE. The Project Hope representative continues to

meet informally with the regional representative of the MOH to plan activities.

When the Regional Committee was functioning, it did a creditable job of putting into effect the decisions of the National Committee. The Regional Committee found its work being duplicated to some extent by the recent formation of the Coordinadora Departamental (Departmental Coordinator). This is an assembly of all agencies, public and private, working toward development of the region.

Recommended changes for the Regional Committee can be found in item number eight, but are reported here as well:

1. The Regional Committee should have basic decision-making authority.
2. It should include active participation of all involved in the IRDP.
3. Regional Committee members should participate in the meetings of the GOG's Departmental Coordinator to keep that assembly apprised of IRDP activities.

There has been a delay of inputs from Project Hope and from the MOH and DIGESEPE. Although reports have been made of delays in Customs at the Port of Santo Tomas, this appears to be only part of the problem. The bulk of medical laboratory equipment originally destined for Ixchiguan but redirected to the San Marcos Health Center is still in port awaiting Customs clearance, but this equipment was

ordered from the United States in 1981! Perhaps one of the IRDP's major implementation constraints is the fact that Project Hope, after ending a previous project in the Quetzaltenango area, decided to keep that office, with its existing staff, as the IRDP headquarters. Thus, the Ixchiguan IRDP was supervised from Project Hope's Quetzaltenango office by a staff of five persons who supervised/ supported the work of five technical workers, but four hours distant from the main Project site and three hours distant from Guatemala City.

The courses for midwife and promotor training were long delayed because the MOH had to first study them and then included subjects which Project Hope considered irrelevant or not pertinent to be basic scope of training meant to be offered. This caused months of lost time before an agreement could be reached as to the curricula of the sub-projects.

The TSRs (Técnicos de Salud Rural or Rural Health Technicians) have been detached from duty on the IRDP by the Ministry of Health when they are needed for other programs that the Ministry feels more important, e.g., a vaccination program, five month long census taking.

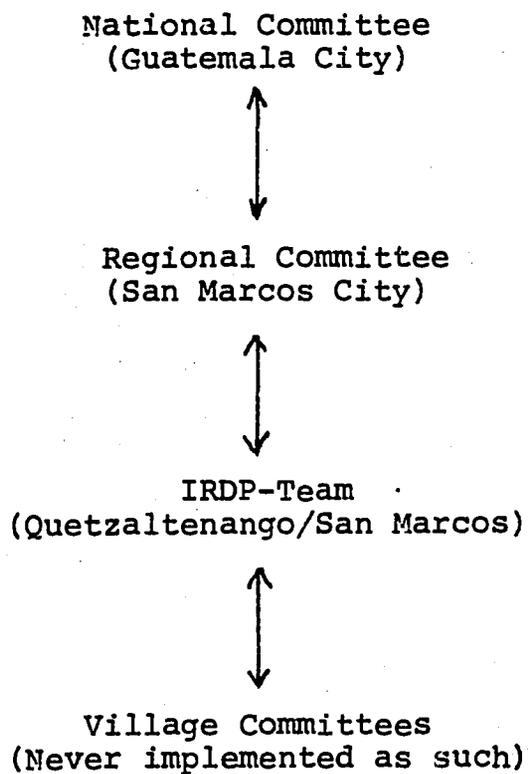
Mention has been made of the lack of participatory interest on the part of the MOH in the working of the National Committee. The IRDP attempts to address two

main areas of activity--health and agriculture. Without the input of the Health Ministry at the national level it is not surprising that inputs are found wanting on the regional level. But we have seen, in the case of DIGESEPE, that active participation on the national level does not automatically presume the same level of participation on all levels by all agencies involved, multi-sectorial contract is suggested in Section eight.

Project Hope's relations with the GOG agencies are generally good and are improving as these agencies become aware of the value of the Project. Project Hope's technical team works well with those individuals of Government who are disposed to cooperate. A major difficulty encountered by Project Hope in this regard is the inability to exert pressure to develop full participation of all the Government sectors involved. On the other hand, GOG personnel and financial resources are limited and obligated to performance first in the Government's national plan.

Figure 3

ORGANIZATIONAL STRUCTURE OF THE
INTEGRATED RURAL DEVELOPMENT PROJECT



Source: Project Hope's IRDP (April, 1983)

Figure 4

THE NATIONAL COMMITTEE OF THE
INTEGRATED RURAL DEVELOPMENT PROJECT

President: Sub-Director General de Servicios Pecuarios
(Sub-Director General of Animal Husbandry
Services)
Ministry of Agriculture

Secretary: Coordinator of IRDP

Members: - Agency for International Development
- Peace Corps
- Project Hope

SOURCE: Project Hope's IRDP (April, 1983)

NOTES:

- a) The National Committee was organized at Guatemala City September 5, 1980.
- b) DIGESEPE represented the Government of Guatemala in this Committee.
- c) Between September 1980 - mid 1982, USAID was represented in this Committee by its Mission Director.

TABLE 5

THE MUNICIPALITY OF IXCHIGUAN:

ITS VILLAGES AND HAMLETS

<u>Name</u>	<u>Elevation in Meters</u>	<u>Estimated Population (1980)</u>
1) Ixchiguán-Cabecera (i.e., capital)	3,130	907
2) Benoncán	3,400	430
3) Calapté	2,600	378
4) Choapequez	2,700	936
5) Cieneguillas	n.d.	156
6) El Plan	2,650	508
7) Horizonte	n.d.	n.d.
8) Julischín	2,500	296
9) Las Manzanas	n.d.	n.d.
10) La Trinidad	n.d.	n.d.
11) Las Flores	2,700	320
12) Nuevo Porvenir	2,900	n.d.
13) Pajatz	2,600	295
14) Pavitzalan	2,600	192
15) San Andrés	2,400	577
16) San Antonio-Ixchiguán	2,800	1,157
17) Tuichán	2,700	967
18) Tuiladrillo	2,750	n.d.
19) Tuiquinamble	2,700	640
20) Yuinimá	2,450	356

SOURCE: - The Secretary of the Municipality of Ixchiguán (April, 1983)
- Project Hope's Phase I (Tables 2-I, 2-2).

NOTE: - Within the area there is a distinction between "Aldeas" (i.e., the largest villages), that include Calapté, Choapequez, San Antonio and Tuichán; "Caseríos" (i.e., the intermediate size areas) and "Cantones" or "Parajes" (i.e., the smallest centers) such as Horizonte, Las Manzanas and La Trinidad.

- The Municipality of Ixchiguán, according to the 1981 GOG Census, had a population of 10,473 inhabitants (5,351 men and 5,122 women) (Cf. GOG Censos Nacionales 1981).

Table No. 6

CORRELATION OF PLANNED AND IMPLEMENTED ACTIVITIES

<u>Planned Activity Per OPG Document</u>	<u>Activity Implemented</u>
1. Strengthening or creation of 16 Community Improvement Committees	Five committees formed
2. Organization of 4-S Clubs	None organized
3. Crop diversification	Various (see tables 7 & 8)
4. Improved livestock production techniques	"
5. Veterinary Medicine	"
6. Zoonosis control	"
7. Environmental sanitation	"
8. Soil conservation	"
9. Grasslands managements	"
10. One demonstration farm	One established
11. Training of three auxiliary nurses	12 trained.
12. Training of two rural health technicians	Three trained
13. Training of approximately 40 rural health promoters	42 trained
14. Midwife training	87 trained
15. Construction of five minimum health units	One constructed
16. Xelac, Serchil and Ixchiguan laboratories upgraded	Xelac, Serchil laboratories upgraded. Ixchiguan laboratory transferred

17. Dental clinic in Ixchiguan
school

Dental equipment
transferred to
San Marcos

Table No. 7

IRDP's ACTIVITIES IN THE DEPARTMENT OF SAN MARCOS

(Coordinator's list)

<u>Village</u>	<u>Sub-Project Implemented</u>
<u>Municipality of Ixchiquan</u>	
Ixchiquan-Cabecera	<ul style="list-style-type: none">-Rural Health Promoters-Midwives Training-Training of GOG personnel (Auxiliary Nurses and TSR's)-Maternal-Child care activities-Zoonosis research-TBC Evaluation-Lorena stoves-Latrines-Veterinary programs-Training in animal production-Training of agriculturalists-Evaluation: pasture management-Evaluation: sheeps and rabbits
Bexoncan	<ul style="list-style-type: none">-Veterinary programs-with PVO Caritas: design of a community road
Calapte	<ul style="list-style-type: none">-Rural health promoters-Midwives-Lorena stoves-Veterinary programs-Training of agriculturalists-Demonstration plots
Choapequez	<ul style="list-style-type: none">-Rural health promoters-Midwives-Lorena stoves-Veterinary programs-Training of Agriculturalists-Demonstration plots-Minimal health unit
Cieneguilla	<ul style="list-style-type: none">-Training of agriculturalists

El Plan	<ul style="list-style-type: none">-Training of Agriculturalists-Demonstration plots-Training in animal production-Rabbit farms
Las Flores	<ul style="list-style-type: none">-Demonstration plot
Nuevo Porvenir	<ul style="list-style-type: none">-Training of Agriculturalists-Demonstration plot
Pavitzalan	<ul style="list-style-type: none">-Rural health promoters-Veterinary program-Support school building (CONIDE funds, GOG)
San Andres	<ul style="list-style-type: none">-Demonstration plots-Assistance in bridge building (with AID funds)
San Antonio- Ixchiguan	<ul style="list-style-type: none">-Rural health promoters-Midwives training-Lorena stoves-Veterinary program-Training of Agriculturalists-Demonstration plots
Tuichan	<ul style="list-style-type: none">-Midwives training-Training of Agriculturalists
Tuiquinamble	<ul style="list-style-type: none">-Demonstration plots-Veterinary program-Assistance in building of road (with PVO Caritas)
Yuinima	<ul style="list-style-type: none">-Demonstration plots
<u>Municipality of San Jose de Ojetenam</u>	
San Jose de Ojetenam	<ul style="list-style-type: none">-Rural health promoters-Lorena stoves-Veterinary programs-Training of agriculturalists-Demonstration plots

- | | |
|---------------------|---|
| Mavil | -Agriculture
-Demonstration plots
-Training of Agriculturalists |
| San Andres Chapil | -Veterinary programs
-Training of Agriculturalists
-Demonstration plots
-Porcine program
-Water heaters |
| San Francisco Soche | -Porcine program |
| San Jose Caben | -Cattle evaluation
-Artificial insemination sub-project
-Porcine program
-Demonstration plots |

Municipality of Tacona

- | | |
|-----------|---------------------|
| Tzanabaja | -Veterinary program |
|-----------|---------------------|

Municipality of Comitancillo

- | | |
|-----------------|----------------|
| Piedra de Fuego | -Lorena stoves |
| Shishal | -Lorena stoves |

OTHER SUB-PROJECTS

A. Technical Support

1. XELAC LABORATORY (Quetzaltenango)
 - Preparation of Zoonosis samples
 - Training and implementation of lab technicians
 - Evaluation of crops and pasture samples
 - Inoculation of leguminouses
2. San Nicolas Sheep Station
 - Pasture Evaluation
 - Sheep Evaluation
3. Rafael Landivar University
 - Lectures twice a year in national courses to rural promoters

4. Municipality of Quetzaltenango -Assistance in preparing a pasture catalogue
-Support in organizing the rural development library
5. HEIFER Project -Assistance in Heifer's activities at Guatemala' southwest region (programs and courses)

SOURCE: Manuscript prepared by Dr. Loarca (IRDP Coordinator) at the request of Evaluating Team, April, 1983.

NOTE: The contents of this Table does not necessarily coincide with Table No. 8, perhaps due to lack of coordination between IRDP's Coordinator and Project Hope's Administrator.

Table No. 8

SUB-PROJECTS IMPLEMENTED BY THE IRDP AT THE DEPARTMENT OF SAN MARCOS
(ADMINISTRATOR'S LIST)

Communities	Committees	Aux. Nurse Training	T.S.R. Training	Rural Health Promoters	Mid-Wives	Min. Health Units	Laboratory	Zoonosis Control	Dental Hygiene	Model Farm & Demo. Plots	Tech. Crop Pack.	Approp. Tech.	Persons Trained in Veterinary Program	Persons Trained in Animal Prod.	New Tech. Agric.	Pasture Land
Ixchiguan	1	1	1		9		Planned but changed			9	x	x	x 8		x	x
Bexoncan																
Yunima					2	Planned										
S. Andres						Planned										
Calapte	1	1	1		6					4	x	x	x 12	x 13	x	x
Pavitzalan					3	Planned										
El Plan					1											
Cieneguillas						Planned										
S. Antonio	1	1			10					4	x	x	x 10	x 14	x	x
Pajatz					5											
N. Porvenir					2											
Las Flores					1											
Choapequez	1				9	In Const				4	x	x	x 7	x 8	x	x
Tuichan					12											
Tuquinamble					4											
Julischin					1											
CHHBB					1											
Fabolaj		1														
San Jose Ojetenam	1	1	1							4		x				
San Jacinto																
San Fernando S. J. O.																

Table No. 8 Con'd

Communities	Committees	Aux. Nurse Training	T. S. R. Training	Rural Health Promotors	Mid-Wives	Min. Health Units	Laboratory	Zoonosis Control	Dental Hygiene	Model Farm & Demo. Plots	Tech. Crop Pack.	Approp. Tech.	Persons Trained in Veterinary Program	Persons Trained in Animal Prod.	in New Tech. 'Agric.	Pasture Land
Salasnac																
Tejutla																
Tojninchum																
Tajumulco																
San Marcos							Improve Ex. Fac.		Clinic Inst.	Model Farm						
Mavil S.P.S.										2	x	x	12		x	x
San Jose Caben										2	x	x	12		x	x
San Jose Las Islas										3	x	x	4		x	x
San Andres Chapil										3	x	x	10		x	x
La Grandeza										2	x	x	10		x	x
Tacana		1														

SOURCE: Project Hope's Clifford Sanders (Administrator) - April, 1983
 NOTE: The contents of this Table does not necessarily coincide with Table No. 7, perhaps due to the lack of coordination between IRDP; Coordinator and Project Hope's Administrator.

III. PROJECT'S ACTUAL PROGRESS

3.1 Improvement Committees

One of the basic premises of the Integrated Rural Development Program (IRDP) was that it would be based on active community involvement through the assistance, advice and support of the traditional Comités Pro-Mejoramiento (Improvement Committees).

An Improvement Committee is a community based ad hoc group of persons (usually 8 to 10) organized either at the aldea, caserío or cantón (village or hamlet) level for a specific purpose or activity. Traditionally village members, upon determining a problem or need, would elect an Improvement Committee, and delegate to its members the responsibility of solving the problem or satisfying the need.

Once nominated or elected at a village level, the new Improvement Committee had to report to the Departmental Governor (the highest political authority in the area) through its Municipal Mayor. The Governor usually authorizes the Committee's ad hoc activities.

An example of the variety of activities in which these committees engage is found in the village of Calapté, municipality of Ixchiguán. In 1974 the villagers organized a nine-person committee and assigned them the following lobbying responsibilities: Build a new community building, ask PVO CARE to help build a health center, ask the GOG to help the community to improve the existing access road,

ask the GOG to include the village in their rural electricity program, establish a village pharmacy.

Thus, it is not a surprise that Project Hope assigned a pivotal role to the Improvement Committee within the IRDP. Moreover, in the first year of activities, as reported by the evaluation made by the School of Social Work of the Rafael Landívar University (March, 1982), the program was already working with Improvement Committees within the municipality of Ixchiguán and its neighboring municipalities (see Table 9).

Discussing one of the difficulties reported by the Landívar University team, i.e., that the members of the improvement committees with whom IRDP worked were not community leaders nor had they influence within the village, IRDP's Dr. Loarca commented as follows:

- a) During the Project's first months, Project Hope had a registered nurse stationed at Ixchiguán, Ms. Ana María Hanlon, who among her diverse activities, trained the three GOG's Técnicos de Salud Rural (TSR or Rural Health Technicians) stationed in the area, i.e. Ixchiguán, San José Ojetenam and Calapté, and supervised the IRDP health activities. Thus, in an effort to begin working with Improvement Committees, Ms. Hanlon asked the TSRs for their help. In the following weeks the TSRs met with villagers

Table 9

IMPROVEMENT COMMITTEES ORGANIZED OR DEVELOPED
DURING THE PROJECT'S FIRST YEAR

	<u>Village</u>	<u>Members</u>
1)	Ixchiguán-Cabecera	7
2)	Calapté	8
3)	Choapequez	4
4)	San Antonio	6
5)	San José Ojetenán-Cabecera	6
6)	San José Cabén (S. Pedro Sac.)	5

SOURCE: CAP Evaluation, March, 1982.

Note: - Other sources report the initial organization of ten Committees, only five of which were authorized by the Governor of San Marcos (See Section 5a of this evaluation).

of the aforementioned communities and 'organized' the committees according to their criteria, i.e., most outspoken members, young and literate. Thus, the TSR Committee members were not popularly elected by villagers nor did they necessarily represent their problems or needs.

- b) A few months after the IRDP began working in the area, the highlands of the Department of San Marcos became a 'hot' guerrilla area. Due to its relative proximity to the international border with Mexico, Ixchiguán became a pathway for the guerrillas, who after working in lower areas, went northward to seek refuge in Mexican territory. As a result of these problems, the GOG Army took the area under control and severely restricted all meetings and training activities outside of its own purview. Under these circumstances, IRDP's National Committee decided that all improvement committee's activities should be postponed until things cooled down.

Currently, all Project activities with Improvement Committees have been cancelled. However, it is worth commenting that according to GOG's PAAC (Plan de Asistencia a Areas en Conflicto, i.e. Program to Assist Conflict Areas) Coordinadoras Institucionales (Institutional Coordinators) are being organized at Departmental, Municipal

and Comunal levels. These organizations, chaired by the highest area authority, and integrated by representatives of all public and private sector agencies working in the area are to seek the integrated development of the region. At a comunal level, the GOG has included the Improvement Committees as part of the Coordinadora de Desarrollo Comunal (Community Development Coordinating Committee).

3.2 Demonstration Farm

The IRDP's demonstration farm activities began on March 13, 1981. Due to the political situation in Ixchiguán and neighboring villages, again the National Committee advised the IRDP team to establish the demonstration farm in a site near the Town of San Marcos. The IRDP team succeeded in obtaining on a three year loan basis, a plot of land situated on the outskirts of San Marcos Town on 6a. Avenida, Zona 2, next door to the Roman Catholic "Colegio San Marcos".

The plot has an estimated area of 10 "cuerdas", which is the size of an average peasant's plot of land. Each cuerda is estimated to be around 400 mts². Thus, the area of the entire demonstration farm is slightly less than an acre.

As stated in the OPG document:

"Most agricultural activities will be organized around the demonstration farm. Housing as well as other construction activities within this farm will be used as models using locally available materials. The demonstration farm will also be used as a model for environmental sanitation activities (using appropriate technology)." (OPG document, page 3).

The IRDP has completed this target in its totality. The farm is in full production and the house as well as the planned environmental sanitation techniques have been installed.

The implementation of the entire activity, i.e. building of the house with all its appropriate technology accouterments plus the working of an abandoned plot of land had a total cost of Q6,389.21 of which Q1,862.70 represented labor costs (29.15 percent) and Q4,526.51 represented material costs (70.84 percent). The whole process demanded only twelve months.

The "model house" is a one story building constructed of cement-block, cement floor and corrugated tin roof. The entire building occupies 20 percent of the plot of land and comprises a living room (presently used by Project Hope), two bedrooms, a kitchen equipped with a Lorena stove, a solar waterheater with a shower, and a Viet Nam fertilizing latrine. The house is currently occupied by a peasant family of five members, whose head is also the farm's tenant manager.

The demonstration farm is also equipped with a relatively small and rustic greenhouse, well suited to the cultivation of vegetables during the frosty winter season. The greenhouse is a simple wooden structure sectioned into

wood frame panels which are covered with thick plastic sheeting. These frames can be easily removed to avoid over-heating. Currently, a wide variety of vegetables is being cultivated: Onions, carrots, beets, cucumbers, radishes, celery, tomatoes, and some lowland plants such as chiles.

Very close to the greenhouse, is a row of small rabbit hutches. As of this writing the project has five does, three bucks and 15 young rabbits. The animals are kept in clean cages and fed with greens grown on the farm. Their solid waste is used as organic manure. According to Fidel Martínez, farm supervisor, during 1982 the project sold over 120 young animals to local farmers at local prices (Q2.00 to a three-month old rabbit). However, in some cases the IRDP gives a doe or buck free of charge under the condition that the receiver will return to the Project a doe from the first litter.

Regarding agricultural products, since this evaluation was made at the end of the winter season, when local farmers were waiting the early spring rains to begin planting, most of the land on the demonstration farm was being worked with a small 8 HP Roto-Tiller (the only in the whole area!).

Efrain Orozco Fuentes, the demonstration farm tenant manager, commented that due to its purpose, the eight cuerdas that are cultivated have been divided in many small

plots of land each of which has also been subdivided in small rows. Thus, in this way IRDP can experiment simultaneously with many different varieties and sub-varieties of plants and allow easy comparison of yields.

We asked Mr. Orozco about the plants cultivated last year. He explained that currently the farm has 30 peach trees of different varieties, of which 25 were planted previously by the owner of the land. He also stated that at the moment three small rows are planted with radishes and carrots; two with beets; one with carrots and one with lettuce.

As one of the local food staples corn has received priority attention. Almost three cuerdas are devoted annually to cultivate seven different varieties of corn, in an effort to compare the merits of native varieties. During 1982 the following varieties were experimented with: Zapalote, Guateyan-Xela, San Andrés, Mosqueado, Yellow-Creole, White-Creole, and San Marceño.

Potatoes and beans, being semi-annual crops within the area, share almost three cuerdas. Also with these crops experiments were made with different varieties. Three varieties of potatoes were planted: Loma, Ataimba and Toyoca. After the July potatoe harvest, different varieties of beans were planted on the same land including frijoles ('breve-de-ejote' and 'breve-molinillo' varieties); habas; soya beans; and also three varieties of wheat (Chi-

vito, Sara and Sarraceno).

A smaller area of the demonstration farm was devoted to raising a vegetable garden. Here more than ten different species were planted, some for the first time in the area. Among them we find 'nabo amarillo', 'nabo blanco', lettuce, cabbage, acelga, radishes, beets, broccoli and Brussels sprouts.

Forage plants also received special attention, considering the fact that the highlands of San Marcos have been overpasturized and have lost most of their valuable species. More than eight different species were experimented within a two-cuerda area: Alfalfa, Vicia, Dactilo, Festuca, Lolio, Lolio-perenne, Napier and Trebol Blanco.

Discussing the farm's demonstration activities with the Project Coordinator as well as with the tenant manager, both agreed that due to the political circumstances that severely restrict mobilization of middle size groups, the IRDP has been unable to invite groups of peasants to visit its farm installation. However, despite restrictions, they estimate that during the year 1982 a total of 200 people visited the farm, including peasants, university students, government officials and foreign visitors.

An important decision made by the IRDP was not to

erect a sign or generate any kind of propaganda related with the Project or demonstration farm. This decision was to protect the Project from any kind of destructive effort by guerrilla groups that had visited the area in the last two years. Thus, many Marquenses (people of San Marcos) who have their children in the school next door (the largest in town) are unaware of the existence of the farm and think that another peasant family lives behind its white fence.

3.3 Youth Clubs

One of the most important activities included in the initial design of the IRDP was the organization of Youth Clubs, regionally known as the 4-S Clubs (Saber, Salud, Solidaridad, Servicio or, knowledge, health, solidarity and service).

The idea behind this activity was to teach children between ages of seven to sixteen who live in the different villages and hamlets of the Municipality of Ixchiguán, the proper utilization and conservation of natural resources and the improvement of crops and livestock to increase their income. (Project Hope 1980b:12-22).

The sub-project was designed with the assumption that the Peace Corps would provide the services of a married couple. The husband was to work with the male group, the wife with the female group. The volunteer couple was to be selected from those already working with similar programs in Guatemala and, among their other responsibilities, they would also train local promoters to insure continuation of the program in the project area.

However, due to the problems that began to develop in the altiplano area, the Ambassador of the United States in Guatemala initially ordered the Peace Corps not to begin any new program in the highlands and, since February 1982, ordered all the volunteers to leave that area. Thus, this program was never implemented.

3.4 Rural Health Activities

Another important sub-project within the IRDP was the one related to health issues. This was due to the coincidence of many factors. In San Marcos, Dr. Rudy de León, Regional Director of the Ministry of Health, welcomed the project since its beginning and offered full support. In Ixchiguán, Project Hope had a resident Registered Nurse, Ms. Ana Maria Hanlon (1980-81), who had developed close contacts with both the local técnicos de salud rural (TSR: rural health technicians) and the auxiliares de enfermería (non-registered nurse's aides). Finally the project succeeded in hiring a registered male nurse, who had been a student of Ms. Hanlon and who had ample experience working with rural health issues.

Dr. de León, Regional Director of the Ministry of Health, commented that the GOG lacks human and material resources to provide health care to the whole Department of San Marcos. Thus, he welcomed any PVO who would volunteer in helping his Regional Office in providing health care. For him IRDP has been successful in the area because it has already trained three TSRs, 12 auxiliares de enfermería (auxiliary nurses), 42 rural health promoters, 87 midwives and has also been useful in supporting some vaccination and de-parasitation campaigns.

Dr. de León commented that the presence of the IRDP in Ixchiguán was very useful due to the fact that the nearest physicians in the area were those in the Town of San Marcos (42 Kms. away) or at the Centro de Salud B of Tacaná (health center, category B of Tacaná). He added that within the area he already had three TSRs working (one at Ixchiguán, one at San José Ojetenam, and one at Calapté) plus 12 auxiliary nurses. Also he emphasized that prior to the Project, within the Municipality of Ixchiguán three Puestos de Salud (paramedical posts) already existed in the villages of Calapté, Ixchiguán and San Antonio. However, despite all the GOG personnel working in the area, there was an urgent need to train some and re-train others.

3.4.1 Rural Health Promoters

The idea of working with rural health promoters is a recent one in the Department of San Marcos. According to Dr. Rudy de León, Regional Health Director, it was only in the early 1970's when the first GOG-sponsored rural health promoter courses began in the area. He speculates that currently the San Marcos area has about 400 promoters, 42 of which were trained by Project Hope's IRDP. The rest were either trained under a UNESCO program or with direct support from interested villages.

Table 10

GOG PARAMEDICAL PERSONNEL STATIONED IN THE AREA

AND TRAINED BY IRDP

(1980 - 1982)

A. Rural Health Technicians (TSR)

1. Ixchiguán - Cabecera
2. Calapté (Ixchiguán)
3. San José Ojetenam - Cabecera

B. Nurse Aides (Non-Registered)

1. Ixchiguán - Cabecera
2. Calapté (Ixchiguán)
3. San Antonio (Ixchiguán)
4. San José Ojetenam - Cabecera
5. San José Ojetenam - Cabecera
6. San José Ojetenam - Cabecera
7. Pavola (San José Ojetenam)
8. Tacaná - Cabecera
9. Toquiá (Tacaná)
10. Church Health Center at San José Ojetenam
11. Church Health Center at San José Ojetenam
12. Church Health Center at San José Ojetenam

SOURCE: Coordinator, IRDP (April 18, 1983)

- NOTE:
- These courses were given as a service to the GOG's personnel who had been working in the project's area of influence, many of whom lacked formal training.
 - Ms. Ana Maria Hanlon (Project Hope) was head instructor.

Table 11

RURAL HEALTH PROMOTERS TRAINED BY THE IRDP

<u>Course</u>	<u>Location</u>	<u>Participants</u>
I	Choapequez (Ixchiguán)	7
II	Calapté (Ixchiguán)	14
III	San Antonio (Ixchiguán)	10
IV	San José Ojetenam	<u>11</u>
	TOTAL	42

SOURCE: CAP Evaluation, Universidad R. Landivar,
March, 1982.

Rural health promoters are basically peasants who volunteer to participate in a one-day per week, six-month training program of lectures. As their peers, all promoters work their land, raise their animals and migrate seasonally to the coffee fincas of Southern Mexico or to those situated in the lowlands of San Marcos.

The lectures to the rural health promoters were given mostly by Project Hope's Ana María Hanlon, who was assisted by IRDP's Guillermo Nowell and by GOG's RSRs in four locations throughout 1981. It is worth commenting that some disagreements were raised between the TSRs and the IRDP personnel, regarding the level of sophistication of the syllabus. Thus while the TSRs emphasized the need to raise the level of the anatomy and physiology lectures, the IRDP personnel emphasized the need to teach the basics of those fields and concentrate more on first aid practices and related issues.

Project Hope's contributions to the program were its personnel as well as the provision of Q3.00 per lecture day to each participant as a per diem, to cover transportation and food. At the end of the program, Project Hope offered each participant a kit equipped with medications and basic equipment, due to arrive in the near future.

Twenty-five kits arrived in early 1983 (two years later), and IRDP's Nowell called the promoters to distribute them. Only 20 attended. Once distributed, when the rural health promoters were walking home, some GOG soldiers who were controlling the Ixchiguán roads stopped five promoters to check the contents of the bags and confiscated them with the explanation that they contained medications that could be used to aid the guerrillas, despite the fact that the kits had obvious Project Hope identification. A few weeks later, after IRDP had protested, the Army returned the bags that had been confiscated earlier, but without their contents.

Currently (1983), the IRDP is beginning a re-training program for the rural health promoters. Guillermo Nowell is in charge and is combining that activity with his current vaccinator and de-parasitation programs.

3.4.2 Maternal-Child Care Programs

As a result of the scarcity of physicians and health personnel in the rural areas of Guatemala, most of the maternal-child health programs relied on the TSRs as well as in the auxiliary nurses. In the specific case of the Municipality of Ixchiguán, these para-medics worked in the GOG's Puesto de Salud (paramedical post) under the jurisdiction of the health center, situated in the municipality of Tacaná. While the Ixchiguán post was staffed by

a TSR and two auxiliary nurses, the Tacaná Center was staffed by a physician but was extremely distant to the native Ixchiguán population, given the lack of transportation.

Since the Project's inception the IRDP gave a high priority to retrain the GOG personnel stationed in the area. As has already been indicated, the project received full support from the Ministry of Health's Regional Director. Thus, all the para-medical personnel working both at Ixchiguán as well as in the neighboring villages participated in periodic training courses throughout 1981.

A second important program was the training and working together with the local midwives. Nobody really knows how many midwives work in the villages that comprise the Municipality of Ixchiguán. The IRDP personnel, after reviewing the public registers, where it is mandatory to include the name of the person who assisted in the delivery of a child, built a list of 87 names.

Guillermo Nowell, the Project's male nurse, thus organized six courses for midwives in six different sites. Each course consisted of daily lectures of four-and-one-half hours for a full month. In it, the midwives discussed with Nowell issues related to pregnancy and delivery such as the need of pregnant women to undergo periodic health examinations at health centers, some physiological aspects

of pregnancy, how to handle difficult cases and when to refer a pregnant woman to a physician.

It is worth noting that some of the midwives have been delivering children for the last thirty years. The evaluation team had the opportunity to interview two of them at the village of Calapté. When asked how many she assisted in delivering in the last month, one of the midwives named 10 babies she had delivered since the beginning of April. Then she speculated that throughout her career she must have delivered at least 1,000 babies, all of them in Calapté or its neighboring villages. Asked what they had learned in the course, both midwives commented that they had had an opportunity of interchanging ideas among themselves, learning new techniques and learning new ways of working together with the GOG personnel stationed both at Ixchiguán and the neighboring villages as well as in the San Marcos hospital. They also commented that they were proud of the diploma issued by the Ministry of Health.

Talking about midwives, Dr. Rudy de León speculated that in his whole jurisdiction there must be about 1,000, 50 percent of which have participated in some kind of training course. He commented that upon conclusion of these courses, usually the trained midwife receives a certificate of completion plus a basic kit. However, he commented that

Table 12

MIDWIVES TRAINED BY THE IRDP: BY VILLAGE

		<u>Midwives Trained</u>
A.	<u>Municipality of Ixchiguán</u>	
1.	Ixchiguán - Cabecera	9
2.	Bexoncán	-
3.	Calapté	8
4.	Choapequez	9
5.	Cieneguillas	-
6.	El Plan	1
7.	Horizonte	-
8.	Julischin	1
9.	Las Manzanas	-
10.	La Trinidad	-
11.	Las Flores	1
12.	Nuevo Porvenir	2
13.	Pajatz	5
14.	Pavitzalan	3
15.	San Andrés	2
16.	San Antonio Ixchiguán	10
17.	Tuichán	12
18.	Tuiladrillo	-
19.	Tuiquinamble	4
20.	Yuinima	2
	SUB-TOTAL	69
B.	<u>Nearby Villages</u>	
1.	Laguna Grande	1
2.	San José Ojetenam (Municipality)	13
	SUB-TOTAL	14
	TOTAL	83

SOURCE: IRDP (April, 1983)

NOTE: Some villages are underestimated.

See list of courses given where 87 midwives are reported.

Table 13

MIDWIVES TRAINED BY IRDP: BY COURSE LOCATION

<u>Course</u>	<u>Location</u>	<u>Attendants</u>
I	Calapté	18
II	San Antonio	18
III	Choapequez	11
IV	Ixchiguán	13
V	San José Ojetenam	13 plus audits
VI	Tuichán	<u>14</u>
	TOTAL	87

SOURCE: IRDP's Guillermo Nowell (April 21, 1983)

NOTE: - Upon graduation, each midwife received a GOG certificate.

as yet, those trained by Project Hope had not received their equipment. The whole idea of these courses, according to Dr. de León, is to develop a closer relationship between the health personnel and the midwives so each can be able to work closer together in the future.

3.4.3 De-parasitation Sub-Project

Since the beginning of the 1983 school year, the IRDP has begun a de-parasitation campaign oriented to ease the situation of school children affected by parasites. As of this writing, the program has distributed children's doses of Mintesol to 255 students of the elementary schools of the Town of Ixchiguán and the villages of Pajatz and San Antonio.

Also related to the visits to these and other area elementary schools, a campaign has been launched with the assistance of school teachers to raise the health standard of the students. Classes have had lectures on the importance of cleanliness and some work has been done in order to treat cases of those students affected by lice. However, considering the lack of a proper lotion to treat patients, little improvement has been demonstrated.

3.4.4 Tuberculosis Search Sub-Project

One of the basic assumptions stated in the initial project was that a high percentage of the

population of Ixchiguán and neighboring villages suffered from tuberculosis. Based on information provided by Quetzaltenango's Rodolfo Robles Hospital, 65 percent of cases came from the municipalities of the highlands of San Marcos (Project Hope 1980a:64), the IRDP last year hired on a part-time basis (two days) the services of Dr. Cesar López, a young physician, to make an overall evaluation of the tuberculosis problem in the area by the extensive use of: Tuberculine tests, BCG vaccine, saliva analysis and the eventual use of X-rays on suspicious cases.

The whole tuberculosis search program has been restricted to the elementary school students of the Municipality of Ixchiguán. In discussing the project, Dr. López commented that it was still premature to suggest results but he speculated that there were not so many cases of tuberculosis in the area as he had suspected at the beginning of his campaign. However, he emphasized that the lack of more 'positive cases' (only 8 percent of his sample is "suspicious") on the tuberculine test could be due to the fact that the BCG vaccine as well as the tuberculine test might have lost strength before they reached the school population due to the many fluctuations of temperature. More research is needed and is underway.

3.4.5 Nutrition Sub-Project

Of the many reasons given why Ixchiguán was chosen as the Project area, one of those most commonly reported was the speculation that 70 percent of Ixchiguán's children suffered from malnutrition. This was due not only to the absence of an adequate diet, but also to the presence of a variety of parasites among the population.

The project has not embarked specifically on a nutrition program that would include lectures on adequate diets, the distribution of free food samples, or the organization of kitchen clubs.

The IRDP approach has been different. On the one hand a strong effort has been made to raise the agricultural and animal husbandry yields of the area through the selection of the best native varieties of plants and animals given the fact that they are the most available to the local population and also are the most resistant to local diseases and climatic conditions, and on the other hand the IRDP has worked through an integrated health training program to raise the level of the local health practitioners. All this has been complemented with intensive zoonosis research aimed at discovering which local diseases are transmitted to the population through animals.

3.4.6 Family Planning Services

The evaluation team asked Dr. Rudy de León, Regional Director of the Ministry of Health, why his office had suspended all family planning activities in the Department of San Marcos.

Dr. de León explained that during the 1970's the Ministry of Health had authorized its rural posts to provide comprehensive information and family planning services to rural women. However, in the early 1980's, he received instructions from national headquarters to cease all programs that were not headed directly by a physician. Thus, due to this regulation, and considering that the Ixchiguán health post lacks a physician, he asked the IRDP Coordinator to stop any kind of programs related to family planning. However, he clarified that GOG auxiliary nurses are authorized to discuss these issues with those women who take the initiative and seek their advice. Nevertheless, only physicians are authorized to promote family planning programs.

Thus, within the IRDP no activity has been undertaken in this area.

3.5 Dental Care

According to initial evaluations in the San Marcos highlands its rural population has been suffering dental problems such as caries and alveolar periodontitis (Project Hope 1980b:108). Thus at the time of designing the IRDP, Project Hope placed a very strong emphasis on dental education in schools and offered to install a complete dental clinic in the Ixchiguán school. This clinic was to have been managed by a visiting MOH dentist.

When asked why the clinic was never installed at Ixchiguán and why it had been installed in the San Marcos Medical Center, the IRDP Coordinator stated that that decision was made by the IRDP's Regional Committee after hearing the arguments offered by Dr. Rudy de León. Two days later, we asked the same question of Dr. de León.

Dr. de León said that between private practice and public practice the neighboring towns of San Marcos and San Pedro Sacatepequez only have five dentists. Moreover, at the health centers of San Marcos as well as the bordering town of San Pedro Sacatepéquez, there is only one dentist who works four hours per day. Thus there is a scarcity of dentists at the headquarters of the Health Region. Regarding available EPS (Ejercicio Profesional Supervisado or graduate students in medicine or dentistry that are assigned to work for six months in the rural

areas) students, the whole Region has only three. Thus he emphasized that it would be very unrealistic to be able to provide a dentist or even an EPS graduate to attend the Ixchiguán clinic.

Regarding dental equipment and an X-ray machine donated by Project Hope, Dr. de León commented that the machine had arrived in August, 1982 and was a used one that had to be repaired by the MOH (the motor had to be overhauled). However, considering that it was a similar machine to the only one in existence at the San Marcos Medical Center, the Center reached an agreement with the IRDP. The machine would remain in San Marcos but the MOH would organize 'periodic' visits to Ixchiguán. Dr. de León emphasized that it would be impossible for his office to organize such periodic visits to each of the twenty-nine Municipalities of San Marcos, but MOH assumed the commitment to visit Ixchiguán considering that IRDP had donated a dental and X-ray equipment to the Center.

The first of these visits only took place in April, 1983. All 130 children of Ixchiguán's elementary school were screened and 147 extractions were made. The Municipality of Ixchiguán now awaits the time when the other schools of its villages and hamlets will be visited.

IV. MANAGEMENT EXPERIENCES

The first thing that Project Hope learned about program management in the area of Ixchiguán was that the political situation was a severe deterrent to all Project activity. What Project Hope didn't realize at the outset was that this deterrent effect would persist so long.

Probably the second thing management learned was although the peasants were accustomed to receiving material help free of charge, that this was not the way to implement an integrated rural development project. In Ixchiguán, before the Project's start, according to reports, the Peace Corps nurse stationed in San José Ojetenam was very popular with the people, largely, it is adjudged, because she gave medicines gratis. Then when the IRDP began the people were expected to pay for medicines. There was resentment at first that caused the work to proceed at a slower pace than was anticipated. This lesson was reinforced when early in the IRDP, Project Hope gave 200 fruit trees to the villagers of Ixchiguán without cost and with little information as to how to plant and cultivate them. Today, the status of those trees is unknown. It is expected that in May of this year a study will be completed and will identify the best variety of fruit trees for each area so the next attempt at planting will have a good chance of success. The next time also adequate instructions will be given to the peasants as to the proper

care of the trees.

The evaluation team had an opportunity to attend a meeting with Project Hope technical team members and 18 peasants in the City Hall of Ixchiguán. There the evaluators learned first hand some of the management difficulties that face the technical team of Project Hope. The main reason of the meeting was to arrange for the delivery of rabbit breeding stock to the peasants. They had already learned that rabbits were comparatively easy to raise, required no expensive feed and were not so plagued by disease as are chickens. Four of the 18 peasants had already constructed rabbit hutches and the others pledged to do so before the delivery date of May 3. And as a second condition of the project, all agreed to return one rabbit from the first litter to Project Hope and one other to another interested peasant family.

The meeting was about over when one peasant asked about the possibility of obtaining sheep under the same general conditions. The Project Coordinator answered, "Yes, but..." and went on to explain that it was best to take one project at a time and that with a sheep project each peasant must construct a letrine so that the sheep would not become contaminated with human feces. The peasants seemed to listen but there was a unmistakable shadow of doubt that spread over their faces. Truly, they did

not believe that letrines had a significant relation to their raising of sheep.

From this one example, perhaps the difficulty of Project Hope's last task can be more easily understood and appreciated. A three year project even under the best conditions cannot be expected to erase years of traditional practices.

The need to diversify activities was explained as being caused by different needs of the diverse communities. This is an acceptable explanation in the case of the villages in the vicinity of San Marcos where some efforts were transferred because of the violence occurring in the Ixchiguán area. But in the case of Ixchiguán, why are there so many sub-projects with such a small team to effect them?

There are 22 activities identified in Phase I. Some of the activities are directed to 31 different villages, one agricultural and veterinary laboratory, one animal husbandry station and one municipal health center. So we have 22 activities spread out to 34 separate locations. These numbers suggest the need for a fairly large and experienced team of technical experts with adequate transport at their disposal. In actuality, the team is composed of five people, one of whom is part-time at two days per week. There is supposed to be a sixth person,

an expert in animal husbandry, but he is working on his thesis and not on the Project.

Regarding transport for these five experts, we find that there are two Jeeps, one pickup truck and two motorcycles, and these are not always available at the Project location.

It must be acknowledged that only a few activities take place at any one place and some activities are not of a continuing nature. Nevertheless, it is the opinion of the evaluators that both the activities and the locations should be restricted. If it is not possible to work in a particular area because of the political situation, then Project Hope should move all operations to a place where it can, not by adding more locations, but by eliminating those in the area where the work is dangerous to the team and/or the peasants. The peasants above all would understand the need for the move.

In fact, two other locations were researched for IRDP activity precisely with the idea of transference in mind should the political situation in Ixchiguán warrant it. One was the eastern part of the Country in Quiriguá in the Department of Izabal and the other, in San Carlos Sija in the Department of Quetzaltenango. But according to Clifford Sanders, Project Hope Administrator, Project Hope never seriously considered transferring the Project, partly because of the difficulties presented at both alternative

sites. In Quiriguá, many of the people there were employed by Exmibal, a Canadian owned mining company or by the United Fruit Company and were already receiving medical and social services. The other possible site, that of San Carlos Sija was rejected because the majority of the people there had above average size landholdings and were sufficiently advanced in agricultural techniques.

The target population perceives the activities generated by the IRDP to be needed and timely and generally responding to their own priorities. This information was gathered from personal interviews with peasants from five villages plus the Town of Ixchiguán. However, the evaluators question the advisability of Project Hope's not concentrating heavily on reforestation and potable water development. Erosion is the number one problem with the land in Ixchiguán and reforestation was identified in Project Hope's Phase I as a top priority (the rate of deforestation being 98 percent). Peace Corps participation was planned for this intervention, but in its absence an arrangement might have been made with INAFOR or CARE (another PVO) to replace the planned Peace Corps participation. Apparently INAFOR was contacted with negative results. CARE/INAFOR have an ongoing reforestation effort both in the western highlands and in the eastern part of the country but their efforts in Ixchiguán seem to leave

plenty of room for cooperation with Project Hope. CARE acknowledges that it has not been contacted by Project Hope in this regard.

In the area of Ixchiguán and its villages 66 percent of the population does not have access to potable water (Project Hope 1980a:86). Clean, potable water is of prime importance in contemplating an integrated health project. Water-borne parasites will reappear no matter how many times an anti-parasite campaign is launched if the source of the people's drinking water is contaminated. Most of the scabies and skin rashes so prevalent with the children of the Ixchiguán area, could be eliminated with a weekly bath.

Phases I and II of Project Hope discussed the need for potable water systems and the relative availability of potable water sources in the area. Yet potable water intervention does not appear in Phase III on which the OPG document was based. The explanation received was that potable water systems were too expensive to fit in the budget. Project Hope personnel did contact Agua del Pueblo (Water for the People, a PVC based in Guatemala and specializing in water projects) but this agency could not help with funding or materials. And the Ministry of Health sought the same aid with similar results, from

Saneamiento Ambiental (Public Sanitation) of the GOG. The evaluators were told that this activity is planned should the Project be extended.

Community or village level committees did exist in most villages before the Project, but they were ad hoc committees created to respond to a specific need such as a school building, community center, etc. They were not formed to administer a package of health or agricultural activities.

Committee members usually are elected by the community. In the case of the five committees formed for the IRDP, the TSRs named the vocales (coordinators) and other committee members. These were not necessarily the ones with leadership qualities or ones whom had gained the respect of the community. They were more often those who were most articulate and of a higher social class than the majority of the community. This at times could not be avoided in that many of the poorer able bodied men were harvesting crops in Mexico or the south coastal area of Guatemala at the time of the selection of committee members. There is some merit to this, however. It was explained that by choosing people who did not migrate, the IRDP would have a permanent committee with which to develop activities.

V. PROJECT STATUS

5.1 Local Improvement Committees

The organization and training of rural community committees within the villages of the Municipality of Ixchiguán, was considered as sub-project 1 of the Health Sector. The whole idea was to form committees in each aldea (village), whose members would be the natural leaders of the communities. The IRDP personnel would train committee members as to their functions and responsibilities so that together they could find solutions to the problems that affect the well-being of each community. The final aim was that each committee would serve as the administrative force for each sector of the program.

This sub-project was to begin in March 1981 and included a series of meetings between Ixchiguán's Mayor, the Deputy Mayors of each of the villages and the TSRs. These meetings took place in early March. Later that same month, the TSRs participated in ten village meetings where ten Improvement Committees were organized. Their names were presented--as required by law--to the Governor of the Department of San Marcos who initially approved the organization of only five of these committees; the other five were never authorized. The reason for this hiatus was due to a strong guerrilla movement that was developing

in the highlands of the Department of San Marcos and the GOG decided to exert a closer control of any kind of organizational activity that might eventually be used by the subversive forces. Village Improvement Committees, thus, were not stimulated nor their organization encouraged.

However, during early 1981, the Committees that had been organized by the TSRs each held periodic meetings with IRDP's male nurse. Attendance at these meetings was poor and by late 1981 all future meetings were canceled. Today, only five 'nominal', i.e., GOG authorized IRDP-organized Improvement Committees, exist in the whole Municipality of Ixchiguán.

In considering the causes of the shortfalls in Committee organization, we believe as stated earlier in Section 3a that the guerrilla problems did play an important role but there were other factors. The TSRs, in a demonstration of over-enthusiasm, organized in 'record time' ten 'nominal' Improvement Committees. Due to their urge to fulfill this Project objective, they lacked the patience necessary to study the internal organization of each village where they worked, its social structure, its problems and needs. Their knowledge of each village was based exclusively on their conversations with the villages Deputy Mayors and with those peasants who attended the meetings with them. Experience shows that it is impossible

to discover authentic village leaders in a few hours, especially when there are major cultural, e.g., Ladino-Indian and linguistic, e.g., Spanish-Mam differences. Obviously, from a superficial point of view, these differences are irrelevant, but when an in depth analysis is made, they are critically important.

Thus, it is no surprise to read in the CAP's Evaluation (Cf. Encuesta 6 and 7; pages 42-56) that both those who initially 'organized' the Committees, as well as their members, felt that this sub-project had major deficiencies. They acknowledged that the community as a whole had little to do with the whole effort, and that Committee members were chosen from among the most literate, outspoken, '...honest, responsible, collaborating, leaders.' We ask ourselves, can all these personal qualifications be discovered by a Spanish-speaking ladino TSR in two or three, two-hour public meetings?

Other issues that hindered more active participation in this sub-project were of a more economic nature. Agricultural and livestock practices are very demanding and offer small economic rewards. Thus, peasants must devote many long hours to till their lands and most of them must migrate seasonally to Southern Mexico or Western Guatemala to earn hard cash. Obviously, few are interested in

suspending their working hours to attend mid-morning meetings chaired by a TSR to organize a little understood Committee.

If to the above we add the distinct possibility that the GOG Army might confuse local leaders with guerrilla leaders, and eventually arrest or harrass them, it is no surprise that the authentic village leaders were not 'elected' to participate in these Improvement Committees. As of April, 1983, none of the Committees were active.

5.2 Improved Agricultural and Livestock Practices

5.2.1 Overall View

The main problem in elevating and improving agricultural and livestock production in the Ixchiguán area, as stated in Project Hope's Phase I document lies in the low productivity of the soils, inefficient use of natural resources, low level of technology, low level of human resources and few available infrastructure services (Cf. Project Hope 1980a: 145).

Regarding the potential soil capacity of the area, following Project Hope's Phase I document, we find that 87 percent of the land is reported as non-arable, only appropriate for forest products, i.e. Categories VI and VII and only 5 percent is considered agricultural with limitations, i.e. Category III (Project Hope, 1980a: 148-151).

The same document reports that only 12 percent of the total land is devoted to annual crops, 9 percent for sheep pasture and 6 percent for forests (Ibid).

On the agricultural side, the Project has installed one demonstration farm in the outskirts of the town of San Marcos that has been experimenting with different varieties of plants. Initial emphasis was placed on adapting local technological practices as well as in selecting

the best local varieties (i.e., variedades criollas).

However, in April, 1983, an 8 HP Roto-Tiller was introduced and is the only one available in the area. Obviously, the cost of motorized equipment such as this exceeds all the economic possibilities of the area's poverty stricken peasants.

Most of the demonstration techniques for improved agricultural practices were concentrated in the vicinity of San Marcos where the demonstration farm is located and where the agricultural technician is stationed on a more permanent basis. However, in mid-1982 the IRDP hired two additional persons to work mainly in the Ixchiguán area: A university-trained agricultural engineer and a livestock technician.

Fidel Martinez, the IRDP agricultural technician, stated that most of his work in the San Marcos area is devoted to the demonstration farm where he has succeeded in raising simultaneously a large variety of local crops, each of which is represented on the farm with many sub-varieties, and where he demonstrates to visitors the different yields of each variety. Also, twice a week he visits alternatively the 12 or more neighboring villages where he has been working in appropriate technological practices as well as in vaccination and deparasitation

Table 14

CATEGORIES OF SOIL CAPACITY IN THE PROJECT AREA

<u>Categories of Capacities</u>	<u>Use</u>	<u>Percent of the Total</u>
III	Agricultural: Arable lands subject to some limitations, appropriate for highly profitable crops... barely adequate for mechanized agriculture	5
IV	Livestock: Arable lands with severe limitations, good for pastures and permanent crops. Requires intensive farming, productivity is fair to low	3
V	Livestock: Non-arable lands, mainly good for pasture, woods or wild life	3
VI	Livestock-Forest: Non-arable lands except for crops and trees, mainly forests and pastures	60
VII	Non-arable lands appropriate only for forest products	27
VIII	Lands inappropriate for any kind of cultivation. Should be left in parks, recreation and wildlife preserves	<u>2</u>
TOTAL		100 percent

SOURCE: Project Hope's Phase I (1980a: 148-151).

campaigns for animals. (For a list of the villages and hamlets in the San Marcos area where the Project has been active, see Tables 15, 16 and 17.)

Regarding Martinez' extension work in the neighboring villages of San Marcos, he has succeeded in working closely with five communities, in each of which he has promoted demonstration pastures, a vegetable garden and an experimental forest. However, he continues to support only the pasture-demonstration plot because two GOG agencies began working with vegetable gardens (i.e. DIGESA and ICTA) and a third (INAFOR), in reforestation.

Regarding the Municipality of Ixchiguán, the IRDP Coordinator commented that the IRDP has reached an agreement with the GOG's DIGESA and INAFOR. Thus, while DIGESA (MOA's General Agricultural Services Agency) will advise the peasants on better agricultural techniques, INAFOR (MOA's forestry department) will work in reforestation projects, and Project Hope will concentrate on improving pastures.

Commenting on the total number of demonstration plots of land, Dr. Loarca said that in 1982 the IRDP had a total of 12. As it is not the the planting season, this year none has yet been organized. Usually each demonstration plot has a total area of one cuerda (about 0.1 acre) and its specific site is chosen by the villagers.

Table 15

APPROPRIATE TECHNOLOGY ACTIVITIES AT THE

DEPARTMENT OF SAN MARCOS

(Implemented as of April 23, 1983)

a) Latrines (i.e., Viet Nam fertilizing latrine model):

Three: (1) Demonstration farm at San Marcos
(2) Public baths at San Andrés Chapil
(3) Ixchiguán

b) Lorena Stoves (i.e., 'lodo', mud and 'arena', sand kitchen stoves):

Fifty, more or less:

- (a) Thirty, at the Municipality of Comitancillo
- (b) Fifteen, at the Municipality of San Lorenzo
- (c) Ten, at the Municipality of San Marcos
- (d) Two, at the Municipality of Ixchiguán

c) Solar Water Heaters:

Four: (1) Demonstration farm at San Marcos
(2-4) Municipality of San Andrés Chapil

d) Potato Rustic Silos:

One: (1) Demonstration farm at San Marcos

e) Fodder Rustic Silos:

Two: None continues (initially at Ixchiguán and San José Cabén)

f) Greenhouse:

One: (1) Demonstration farm at San Marcos

SOURCE: Mr. Fidel Martínez, Agricultural Trainer IRDP,
in charge of Appropriate Technological Programs.
(April 23, 1983)

Table 16

VILLAGES WORKED IN THE VICINITY OF THE
TOWN OF SAN MARCOS

(Agricultural Extension and Animal Vaccination)

a) Municipality of San Marcos:

- San José Las Islas

b) Municipality of San Pedro Sacatepéquez:

- Agua Caliente
- La Grandeza
- Las Barrancas
- San Andrés Chapil
- San Francisco
- San José Cabén

c) Municipality of San Antonio:

- San Ramón
- Santa Rita

d) Municipality of Comitancillo:

- Tuilelen

e) Municipality of Palo Gordo:

- Tanil
- Villa Hermosa

SOURCE: Mr. Fidel Martínez, Agricultural Trainer IRDP.
April 23, 1983.

NOTE: See attached listing of villages and hamlets of
San Andrés Chapil (Table 10).

Table 17

HAMLETS OF THE ALDEA OF SAN ANDRES CHAPIL

(Municipality of San Pedro Sacatepequez)

- El Carmen
- El Centro
- Esquipulas
- Ixcá
- Las Escobas
- Las Lagunas
- Ojo de Agua
- Oratorio
- San Lorenzo
- San Pedrito
- Xinij

SOURCE: Mariano García, Promoter of the Village of San Andres Chapil (April, 1983)

NOTE: These hamlets have benefitted from IRDP's vaccination/deparasitation subproject.

In 1980 the Project experimented in trying to introduce fruit trees (apples, peaches and cherries) in the area. Project Hope bought and donated to the peasants more than 200 small trees. However, IRDP lost control of the situation and currently there is not much available information about them. Thus, Dr. Loarca considers this experience as a lesson of limiting the IRDP activities to provide technical advice, but never to donate in large quantities. In the future, the IRDP personnel will provide technical advice to those peasants interested in buying seedlings or improving existing fruit trees.

In the Town area of Ixchiguán, the Project has succeeded in developing a relatively large demonstration plot of land owned by the community. In previous years the villagers have cultivated a total of four hectares, two of which were devoted to a reforestation project, one to experimental pastures and one as a vegetable garden. But this experience should be considered as an exception.

Other agricultural practices being implemented in the highland area have included a recent project devoted to building terraces on five hectares of the highly eroded mountain slopes of Ixchiguán. Here a group of peasants have been diligently working to finish the terraces before the early spring rains being. This project, receiving indirect technical assistance from the IRDP, is being

implemented by CARE/INAFOR - DIGESA through a Food-for-Work program. Pastures, vegetables and some trees will be planted there.

During the visit to Ixchiguán, the evaluating team had an opportunity to attend one of the monthly peasant gatherings organized by the IRDP people to discuss with the farmers about their achievements and difficulties. In this opportunity, fifty peasants attended, one-half of them from Ixchiguán-Cabecera, and the rest from its different villages and hamlets. Discussing improved agricultural practices with those from Ixchiguán, five peasants voiced approving remarks for the Project's teaching them how to make furrows and terraces, especially on the eroded slopes where they cultivate their crops. This way, they explained, it is possible to stop erosion and improve the quality of the soil through the use of organic fertilizers that would otherwise be washed away.

Regarding improved livestock practices, the IRDP has worked basically at four levels. First, an important sub-project has been implemented in the field of preventive veterinary medicine. A second program has been oriented towards pastureland management. A third program has been directed towards the development of small poultry or rabbit production, and finally a fourth program has been oriented

to the selection of local breeds of sheep.

5.2.2 Preventive Veterinary Medicine

In an effort to reduce livestock mortality through improved techniques, the IRDP began the implementation of preventive veterinary medicine. An asset to this sub-project was that the IRDP Coordinator, Dr. Alfonso Loarca, is a respected Veterinarian with ample experience in Guatemala's highlands.

As reported in Project Hope's Phase II, the most common diseases affecting livestock in the Ixchiguán area are:

Poultry: Newcastle and cholera

Porcine: Cholera and internal and external parasitosis

Bovine: Internal and external parasitosis

Ovine: Internal and external parasitosis

Canine: Rabies

Thus, IRDP, working closely with DIGESEPE's Sub-Regional Office of San Marcos, began an intensive animal vaccination and de-parasitation campaign in ten communities: Four located within the Municipality of Ixchiguán, and six in the neighborhood of San Marcos (see Table 18).

According to an agreement with the GOG, Project Hope personnel would do the field work, vaccinating if possible all the animals in a village (including its hamlets) and

training veterinary promoters so that eventually DIGESEPE would be able to replace the IRDP personnel; and the GOG, through DIGESEPE, would provide the vaccines free of charge. Project Hope succeeded in obtaining vaccines from private organizations such as Guatemala's AGROVET to supplement those of DIGESEPE. Thus, it is possible to speculate that 80 percent of the animals of the 10 communities where work was done were vaccinated or deparasitated.

Discussing this sub-project with the two García brothers at the village of San Andrés Chapil, in the municipality of San Pedro Sacatepéquez, they commented that before the IRDP began, due to the scarcity of personnel, DIGESEPE would visit them occasionally, only for a few hours, and would offer annual vaccines or injections at only one site within the whole village. It was assumed that the people from all the surrounding hamlets would bring their animals to the chosen vaccination/deparasitation site. Since the IRDP began, things have changed. Thanks to the intensive work of Fidel Martínez (agricultural technician), three peasants have been trained in vaccination/deparasitation techniques and throughout a year they themselves organize vaccination/deparasitation campaigns at four or five village sites. Regarding the acceptability of the program, the García brothers commented, "... at the beginning few people participated... now they all come. Why? Before our chickens and pigs went away, now they do not die."

A potential problem was discussed with the García brothers. When asked about the costs of vaccinating animals, they commented that DIGESEPE has been providing the medications free-of-charge but only through Project Hope. One of the brothers stated that he had been commissioned by his Community to visit DIGESEPE to request the seasonal vaccines and was told: 'You should ask Fidel Martinez for your vaccines; he's in charge of your village.'

Table 18

PEASANTS TRAINED AS ANIMAL VACCINATORS

<u>Village</u>	<u>Persons Attended Courses</u>
Ixchiguán-Cabecera	8
Calapté (Ixchiguán)	12
Choapequez (Ixchiguán)	8
San Antonio (Ixchiguán)	10
San José Ojetenam (Cabecera)	10
San José las Islas (San Marcos)	4
San José Cabén (S.F.S.)	12
La Grandez (S.P.S.)	10
San Andrés Chapil (S.P.S.)	10
Mavil (S.P.S.)	<u>12</u>
TOTAL	96

SOURCE: PROJECT HOPF'S IRDP (April, 1983)

NOTE: The number of persons that attended the courses does not necessarily coincide with those who actually work as vaccinators. There is an unreported number of drop-outs.

5.2.3 Improvement of Native Breeds of Sheep

Closely associated with the previous sub-project is the one oriented towards the improvement of native breeds of sheep.

In order to have a better understanding of the IRDP's activities in this sub-project, it is worth making a brief summary of Dr. Loarca's previous experience as a GOG officer in charge of an ovine improvement program in Guatemala's Occidente region (Department of San Marcos and Huehuetenango).

In the early 1970's, the MOA, working closely with a FAO (Food and Agriculture Organization of the United Nations) mission, began an intensive program designed to improve the local sheep breeds. Foreign breeds, such as Suffolk, Finnish-Landrace, Corridale and Dorset, were imported to the region and cross-breeding experiments were made, to improve native sheep (ovejas criollas). However, the results of these experiments, i.e. the F-1 first cross breeding, were similar to those of the native breeds.

A few years later, in 1977, the region was visited by Professor Jack Ruttle, of the University of New Mexico. Professor Ruttle visited the local MOA Project sites and commented on similar findings in the U.S. after more than 30 years of research in New Mexico with native animals.

As a result of both of these experiments, the regional animal husbandry division of the MOA decided to concentrate all its efforts on sheep by trying to improve existing native breeds. Two model sheep herds were organized in the area: One at the Serchil station between San Marcos and Ixchiguán; and the second at San Nicolás, near Huehuetenango. Thanks to their better management conditions, to supervised cross-breeding, as well as improved sanitation, the animals soon gained up to 25 pounds (from a previous average of 55 pounds up to 75 pounds) and their wool yields improved from 1.5 pounds/year to 3 pounds/year.

In September, 1980, Dr. Loarca, now IRDPs Coordinator, introduced his past experience to the Ixchiguán area. In the Municipality of Ixchiguán he found between 60-90 herds of native sheep totalling more than 4,000 animals. Of these, the largest and most important were those owned by the peasants of the Town of Ixchiguán.

At Ixchiguán, Dr. Loarca in early 1981 succeeded in convincing one of the most influential herdsman to organize a model herd of 200 animals. The animals were kept in corrals and twice a year were deparasited. The herd owner was taught the scientific basics of how to raise sheep properly (e.g., best time periods for mating, castration, and the use of balanced foods). Soon, it was obvious that the animals raised at this model herd gained

weight, were healthier and produced more wool.

Thus, by early 1982 the experiment was such a success that other herdsmen requested the same help with their sheep. Three other large herds were given the same treatment as above with similar results. It is estimated that thanks to these campaigns, the IRDP has succeeded in controlling all the gastrointestinal and hepatic sheep parasites of the Ixchiguán herds except the locally known 'nose germ' (Oestrus Ovis), due to the absence of available medication.

The side-effects of this sub-project are very important: (a) From a nutritional point of view, considering that every week 40-50 animals are slaughtered for local meat consumption, a 25 percent weight increase in each animal is an important increase in the local diet; (b) from an economic point of view, the 10 percent increase of wool per animal has resulted in higher sales to the Momostenango (Department of Totonicapán) wool merchants who visit the area twice a year to shear the animals and buy their wool. Closely related with this has been the opportunity to sell more adult hides to the neighboring village of Tejutla, where a large hide cottage industry has developed.

However, the IRDP personnel believe that the next

step in this sub-project is, considering the lack of pastureland and given the poor and eroded quality of the soil, to continue improving the native breeds in such a way that the available herds will not increase in number but rather improve in quality and weight. Closely related to this, is the pasture management project described in the following section.

5.2.4 Pastureland Management

The purpose of this sub-project was to establish an ecological balance through the proper use of natural resources and the improvement of the area's economy by better management of pasturelands. Thus, considering that the majority of Ixchiguán's lands are adequate only for forests and pastures, the IRDP developed the pasture management sub-project. Its general purpose was to increase grazing lands without destroying the existing trees nor changing the ecological balance.

The implementation of this sub-project also began at the San Marcos demonstration farm, where almost 20 percent of the farm was devoted to the experimentation of eight different forage plant species. Soon afterwards, five small pasture demonstration plots began to be implemented in the communities near San Marcos, and four at Ixchiguán's villages and San José Ojetenam. This sub-

project has not yet been accepted by the majority of the population.

In July, 1982, Project Hope hired Juan Daniel Villatoro, an animal husbandry technician, to pursue this project in the Ixchiguán area. In the last six months, Villatoro has been advising peasants from the highlands in the best ways to work their lands (through furrows and terraces) in order to achieve maximum yields and, especially, in the advantages of planting forage to feed animals. Emphasis has also been placed on the advantage of building corrals for the animals, not only to prevent them from eating new plants and trees, but also to concentrate organic fertilizer in one area. However, no major achievements have yet been obtained from this long-term program. Currently a comparative study of the yields of the different varieties of improved pasture in Ixchiguán's highlands is underway, and its results will be published by IRDP in October, 1983.

5.2.5 Poultry and Rabbit Farms

In an effort to improve the local diet with animal proteins, the IRDP decided--working closely with MOA's DIGESEPE--to build small animal family corrals in the area, to provide peasants with an initial group of small animals, to teach them how to build inexpensive corrals and how to raise healthy animals.

The sub-project began in early 1981 with the donation by DIGESEPE of about 140 bolsas pecuarias familiares (animal packages for families). Each 'package' consisted of 10 hens and two roosters. Unfortunately the animals had not been previously selected (some had been bought at chicken farm sales) and a few weeks after their distribution among the peasants, a New Castle epidemic decimated them.

Given this experience, plus the fact that the regional commercial feed for chickens is both expensive and of low quality, the IRDP personnel have begun a program to train people to raise their own native poultry using their local resources exclusively.

Almost simultaneously with this program came the idea of producing rabbits at the demonstration farm. This is a relatively new program of only 12 months, but has been successful enough to have allowed the IRDP to sell more than 120 three-month old animals to the local people.

As of April, 1983, the personnel at the San Marcos demonstration farm have begun to prepare a small area where they plan to begin raising goats. They expect the goat project to begin in the next two or three months and to develop in a similar way as the ongoing rabbit project. They plan to launch this new project with three females and one male.

5.2.6 Zoonosis Control

In an effort to control the principal zoonotic diseases, that is, those diseases that animals transmit to man and viceversa, the IRDP decided to build a zoonosis control inventory that could eventually be used to instruct the population on the rules of basic hygiene.

This sub-project is in its initial stage. Since the beginning of the project, IRDP has been working closely with Dr. Julio Cabrera Valverde, Chief of the Immunology Laboratories of the MOH at Guatemala City. Regarding the zoonotic inventory, a review has already been made of the available literature and archives of the MOH's rural posts. However, the conclusions of this review have not been published.

The sampling to determine zoonosis has already begun. Three hundred samples of serum (50 percent human and 50 percent animal) have already been sent from the area to Guatemala City. The human serum was collected by IRDP's Nowell, and the animal serum by IRDP's Villatoro. Neither sampling has been completed nor has the analysis been made.

According to the IRDP Coordinator, the serum would be analyzed in order to determine the recurrence of the following diseases:

- Cysticercosis, among porcines.
- Rabies, among dogs.
- TBC, among sheep and humans.
- Rubella virus.
- Citomegalovirus.
- Herpes simplex.
- Toxoplasmosis.
- Fasciola hepatica.
- Leptopirosis.

Project Hope has helped the beginning of this sub-project thanks to the donation of laboratory reactivities.

5.2.7 Reinforcement of Laboratories

In order to guarantee a rapid and correct diagnosis that would enable local personnel to determine pathological problems, Project Hope elaborated a sub-project that considered the reinforcing of an existing laboratory and the installation of a new one.

The Xelac Cooperative, at Quetzaltenango, has perhaps the best regional laboratory offering services in soil sampling, Rhizobium production on leguminous plants, vegetal pathology, animal parasitology, analysis of mineral fertilizers and water contaminations. Thus, Project Hope signed an agreement with the Xelac Cooperative that provided the donation of an additional set of laboratory

equipment that included reactives, laboratory test tubes and graduates, other laboratory equipment and a variety of other materials.

This assistance was also supplemented by the work of a Project Hope Pathologist, Dr. Williamson, who trained local personnel on the analysis of the bacteria existing in milk (1979-1982), and by the work of Professor Ricardo Dysli, a Project Hope consultant from San Carlos University, who has designed laboratory equipment using local resources.

When IRDP's Coordinator was asked how all this work benefits the people of Ixchiguán, he commented that the benefits are indirect. Guatemala's Occidente (western part) where San Marcos and Ixchiguán are located, needed a reliable agricultural and veterinary laboratory and, thanks to the equipment donated by Project Hope, as well as by the professional services donated by DIGESEPE and by a local Cooperative, ICADA-CHOQUI, the Xelac laboratories can now be considered among the best in the nation. The IRDP occasionally seeks their professional services.

Project Hope had also proposed the opening of a second veterinary pathology laboratory, this time, at the DIGESEPE Ovine Station or Semil, on the road from San Marcos to Ixchiguán. The general idea here was to relieve the Xelac

laboratories of the need to do certain kind of analyses. Project Hope sent the promised laboratory equipment to the Project area, but both the IRDP's National Committee as well as the Regional Committee consulted and concurred that all the equipment should be added to that already installed in the San Marcos offices of DIGESEPE.

5.2.8 Training of Promoters

The purpose of this sub-project was to train promoters in animal husbandry by using a complete curriculum that would enable them, eventually, to become the instructors of their peers.

This sub-project began its implementation in March, 1981 and as of July, 1981, was transformed to a less formal structure. Thus, seven 'formal' courses were given in the first semester of 1981 (see Table 19). Five of these were given outside the area to take better advantage of existing facilities. Of these, two took place at the Rafael Landivar School of Social Promoters in Guatemala City.

Table 19

COURSES GIVEN TO TRAIN PROMOTERS IN AGRICULTURE AND ANIMAL HUSBANDRY
(1981)

<u>Date</u>	<u>Site</u>	<u>Number Participants</u>	<u>Time Period</u>	<u>Title</u>
March 21-23	San Cristobal-Totonicapán	36	4 days	Animal Production
April 2	San Cristobal-Totonicapán	44	6 hrs.	Porcine Vaccination
May 4-8	CAPS-Rafael Landivar Univ.	31	5 days	Basics in Agriculture and Animal Husbandry
May 20	Mavil (S. Pedro Sacatepequez)	19	6 hrs.	The Planning of Work
June 17	Calapté (Ixchiguán)	12	4 hrs.	Parasite Control in Animals
June 18	San Antonio (Ixchiguán)	22	4 hrs.	Parasite Control in Animals
June 19	Mavil (S. Pedro Sacatepequez)	41	4 hrs.	Animal Nutrition
June 22-26	CAPS-Rafael Landivar Univ.	30	5 days	Basics in Agriculture and Animal Husbandry
July 15-17	San Cristobal-Totonicapán	57	3 days	Small Animals
<hr/>				
TOTAL:	SEVEN COURSES	293	296 lecture/practice hours	
<hr/>				

SOURCE: CAPS Evaluation (August, 1982)

5.3 Minimal Health Care

The purpose of this sub-project was to train 40 rural health promoters who would provide minimal health care to the peasants living in the 16 villages that comprise the Municipality of Ixchiguán. By providing minimal health care to these villages a reduction of the mortality and morbidity rates, an increase in the referral system of difficult cases and a greater motivation to participate in other areas of the IRDP was expected (Project Hope 1980b:54).

The sub-project was intended to provide four weeks of initial intensive training supplemented with monthly retraining meetings. Each trained promoter would be equipped with a basic paramedical kit donated by Project Hope, and, during the sub-project's duration, efforts would be made to build five minimal health units (Unidades Mínimas de Salud).

As commented earlier in Section 3, the first part of this sub-project was implemented in the first trimester of 1981, when Project Hope's Ana Maria Hanlon, assisted by the three GOG TSRs, trained a total of 42 rural health promoters in four different training sites: Seven at Choa-pequez (Ixchiguán), 14 at Calapté (Ixchiguán), 10 at San Antonio (Ixchiguán), and 11 at the neighboring muni-

cipality of San José Ojetenam. All participants passed the MOH mandatory evaluation, and they all received a GOG diploma.

The monthly retraining activities were not followed up nor did Project Hope fulfill its commitment to donate paramedical kits at the end of the course. Only 25 paramedical kits arrived two years later, and some of them were confiscated by the GOG Army for containing medications that could eventually be of use to the guerrillas. Regarding the minimal health units, only one was built (Choapequez) but has not yet been equipped.

Considering the problems and difficulties encountered, and following again the CAPS Evaluation, we find that the TSRs played an important role in selecting the health promoters. Their criteria for selection was that the potential candidate should speak Spanish, know how to read and write, and be over 18. Villagers did not play any role in their selection.

Here we find a similar problem to that encountered when trying to organize the village's Improvement Committees. The TSRs, in an effort to fulfill this sub-project's goal, arbitrarily chose 42 individuals, many of whom had had no previous health care experience. In discussing this with local people, a few of those interviewed commented

that some of the course participants attended the course thinking that they would eventually become 'professionals', receive a paramedical kit, and earn a GOG diploma. A few, more cynical, did it for the opportunity to earn the Q1.00 per diem plus a solid meal.

Thus, it is the consensus in the area that very little was achieved through this first course. Discussing this point with the IRDP personnel, it was expressed that a common difficulty found was the rigidity of the course structure, as imposed by the MOH. One of the observers related in a cynical tone that: "...when the TSRs lectured, they felt they were giving a lecture at a medical graduate school." Thus, few efforts were made to teach the peasants paramedical basics, e.g., practical exercises in vaccination; first aid.

Another difficulty was that the two programmed Registered Nurses who were to support the program left the area, the Peace Corps nurse stationed at San José Ojetenam as well as Project Hope's Hanlon. Currently the entire health program has been restricted to the work of Mr. Nowell, the IRDP's male nurse. We asked Mr. Nowell his opinion on the current situation of the health promoters and he admitted that there was an urgent need to retrain them but that according to administrative procedures, the MOH has

first to approve any kind of syllabus. Also, there are other additional problems such as that most of the IRDP-trained TSRs had been transferred by the MOH or had resigned. In the case of the trained Auxiliary Nurses, it is reported that the Army replaced them with its own selected individuals, pointing out the military's concern that paramedical training could indirectly aid the medical needs of the guerrillas who wander through the San Marcos highlands.

Currently the inhabitants of the Municipality of Ixchiguán have two choices when in need of a health practitioner: Either to make use of the traditional 'folk' medical practitioner, e.g., huesero, herbolario, brujo or comadrona, or to visit an MOH facility either a paramedical post in Ixchiguán, Calapté or San Antonio, or the more remote San Marcos Medical Center. There is no evidence that traditional trends have changed. Obviously a major qualitative change in the field of health attitudes demand time and this project has had only three 'highly accidented' years since its beginnings. Quantitatively there is no available data, however, there is the feeling that the 15 or 20 health promoters who now offer 'stand-by' health support to their peers are responsible for an increase in referrals to the TSR-administered paramedical posts.

VI. DIRECT AND INDIRECT BENEFICIARIES

6.1 Increased Small Farmer Agriculture Productivity

Theoretically, the beneficiaries of the IRDP would be the 10,473 inhabitants of the Municipality of Ixchiguán, who only represent 2.2 percent of the population of the Department of San Marcos and only 0.17 percent of the population of the Republic of Guatemala (Censos Nacionales, 1981).

However, given the fact that Ixchiguán is considered among the poorest, highest (in terms of altitude above sea level), and most land-eroded peasant communities of Central America, any effort to improve its standard of living represented a great challenge and demanded a great amount of creativity and patience. All social change programs are known to demand many years and to go by steps, from the initial innovative period, through a series of trial stages, until the final acceptance or rejection stage.

The approach that the IRDP took was new to the area, and, thus, required many trial-and-error experiences. It was the first time that Project Hope worked outside the health area, and also it was the first time in the region that a PVO tried to implement a teamwork approach with two GOG agencies: MOH and MOA.

Initially the IRDP applied two approaches. Thus,

between March and July, 1981, nine formal workshops were organized to train 293 peasants on different agricultural and animal husbandry subjects outside of the area, in places such as the Rafael Landivar University, Guatemala City, or the Biblical Institute in San Cristobal de Totonicapán. After evaluating the results of this first approach, it was decided to work if possible with smaller, less formal groups within each community placing more emphasis on practical issues rather than theory. Thus, it is estimated that more than 60 of such gatherings have been organized throughout the area of influence of the project, i.e., the higher elevations of Ixchiguán and the lower elevations of San Marcos. The gatherings had an average participation of 40 peasants, many of whom attended all the informal lectures given at their respective villages.

A second initial approach that failed and that was rapidly corrected by the IRDP personnel was the donation of plants and animals. During the spring of 1981 the IRDP team, in an effort to develop fruit orchards in the highlands, distributed free of charge more than 200 fruit trees and also 40 bolsas pecuarias familiares, each containing ten hens and two roosters. Both programs failed. The IRDP lost control of the fruit trees, and a New Castle plague plus family food demands rapidly diminished the poultry.

As a result of these experiments, the IRDP decided to try a new approach that so far has been successful: No more gifts nor paternalistic attitudes; instead, lots of technical advice. Experience proved that it is better to move slower, changing attitudes, than to move faster in an effort to gain 'external symbols' of progress that would likely disappear as soon as Project Hope leaves the area.

From a strictly quantitative point of view there is no way to present data on productivity increase among small farmers, especially when given the fact that most of the techniques taught are under the initial experimentation stage and adopted by only a few peasant-innovators. This applies especially to the construction of terraces and to the furrowing of the ground by hoe in such a way that would slow the flow of water and impede erosion of the sloping land in the Ixchiguán area. If we say that only ten families of Ixchiguán's 2,094 have spontaneously accepted this approach and are now highly concerned about erosion prevention, we can consider this sub-project a success, especially considering that its demonstration phase only began during the 1981 agricultural season.

In reference to the development of improved pasturelands, when the project began most of the families fed

their sheep and cows with the native heno (a native word for Dactilo, a variety of forage) planted in a broadcast fashion. During the 1981-1982 agricultural years, the IRDP worked patiently in planting different varieties of forage plant seeds interring them in furrows and later harvesting the plants and storing them in silos. As of April, 1983, the IRDP has been approached by more than 100 peasants willing to buy such seed. Thus, it is possible that at the end of this agricultural year, more than 100 plots of land will show improved forage planted in a more technical way.

The vaccination and deparasitation programs already under way have also been a success. Since late 1980 the IRDP personnel began an intensive vaccination/deparasitation campaign both in the Ixchiguán highlands as well as San Marcos' neighboring communities. This campaign received the support of DIGESEPE, which provided free vaccines (when available) and was implemented by the IRDP personnel who also trained local villagers. As reported earlier, during the first two years, few villagers came to the vaccination sites. However, since late 1982, and as a result of internal village agreements, within each village different sites have been created in order to guarantee the vaccination of all the existing animals in the area. Thus, it is possible to estimate that an

average of 500 families are benefitting from this sub-project by following the vaccination calendar for each species.

On the broader issue of increased agricultural productivity, it is difficult to judge what agency has been responsible for the increase in productivity per cuerva in such products as corn, wheat or potatoes. This is because the whole area (highlands and lowlands) has been the site of many agricultural extension programs since the late 1960's, such as the Catholic Church's sponsored Movimiento Campesino (in the village of Tejutla), the Rafael Landivar University and MOA through DIGESA. Thus, the presence of the IRDP in the area helped to supplement or to continue and improve the work of these organizations, especially in the Municipality of Ixchiguán and in some villages near San Marcos.

In treating this theme with local farmers, they commented that in some cases the yield per cuerva had improved in many areas in the past 10 years as follows: Corn, from 30-40 pounds to 300 pounds; wheat, from 25-40 pounds to 300-400 pounds; potatoes, from 5 quintales to 20-25 quintales. This was the result of a slow process of training that emphasized the use of organic fertilizers combined with the selection of the best local varieties of plants, plus the intensive use of leguminous plants to enrich

the soil. Little use was made of scarce and overpriced chemical fertilizers.

A typical example of the adequate use of this biological agriculture can be found in San Antonio (Ixchiguán), Pajatz (Ixchiguán) and Nuevo Porvenir (Ixchiguán) communities that have specialized in producing potatoes and whose yields can be considered among the highest in Guatemala (paradoxically situated in the same Municipality as some of the Nation's poorest villages).

However, and to conclude this section, it is worth commenting that the IRDP has concentrated all its efforts in applying the concepts of biological agriculture in the developing of small family plots that could provide self-support to each individual peasant family. Emphasis has been placed on increasing the awareness of soil preservation, especially in the cases of those families whose only land is on highly eroded slopes. IRDP has successfully introduced some new vegetables such as broccoli and an improved variety of cabbage. But, the overall success of the agricultural sub-projects will be achieved only when the totality of the Ixchiguán population understands and participates in soil preservation and biological agriculture, a goal that is likely to take five to ten more years.

6.2 Reduced Infant Mortality and Controlled Population Growth

Reviewing the Project Hope's Phase I document, especially its chapter on health, we find that the mortality rate in the municipality of Ixchiguán (108 deaths per 10,000) was far superior to the national average (67.8 deaths per 10,000). Later, in the same chapter it was reported that a careful study of a sample of 102 deaths (abstracted from official records) revealed that 44 percent of the deaths occur in the population under two years of age, that influenza and fever accounted for 73.6 percent of all deaths, and that they all took place at home and the patients had been previously attended by people with no knowledge of medicine (Project Hope 1980a:50-53).

As stated in previous sections of this evaluation, in almost all its efforts in the field of health, the IRDP concentrated on the training of paramedical personnel. Initially the project worked closely with the MOH by re-training those TSRs working in the area, as well as by mostly training the two auxiliary nurses assigned to the paramedical posts. Thus, the first strong effort was made to improve the quality of the existing MOH services in the area.

A second program oriented to increase the health services in the area was one designed to train 42 local health promoters and 87 midwives. While there were many irregularities in the selection and training of the rural health promoters, the midwives were chosen among women who effectively practiced such activity, some of whom had attended over 1,000 deliveries.

The direct and indirect beneficiaries of the training of the TSRs and non-registered nurses aides were the communities that had paramedical health posts installed and that offered the only 'modern' medical practice available in the area. Complementing this sub-project was the intended donation by Project Hope of a modern medical laboratory to the Ixchiguán paramedical post, a donation that received a veto from IRDP Regional Committee that argued that the MOH paramedical personnel assigned to that post were not qualified to make adequate use of it. It has been agreed that the donated lab (currently awaiting Customs clearance at the port of Santo Tomás) will be installed at the San Marcos Medical Center. As stated earlier, a recent problem has arisen due to the routine-- and not so routine--transference of most of these trained/retrained personnel to other MOH posts.

In the case of the trained midwives, perhaps the most

successful IRDP sub-project, we speculate that the beneficiaries are the totality of women of child-bearing age. Almost all the deliveries in the area have been and continue to be assisted by the trained midwives. Many of these receive the highest respect and constitute the highest medical authority to the expectant mothers. Thus, it is no surprise that as a result of these courses, the number of referrals of pregnant women to the paramedical posts has increased (no available statistics). In discussing this issue with two midwives, both agreed that it was in the best interest of both the midwife as well as of the expectant mother, that she visit the paramedical post at least twice for a routine check-up. Later, in talking with the MOH personnel, they agreed that there has been a substantial increase in the number of visits of pregnant women who had been referred to them.

In the case of the rural health promoters, the available data is much more vague. Since the early training provided by Project Hope's Nurse (Ms. Hanlon) in early 1981, practically no formal 'follow-up' program has been implemented. Also none of the minimal health units programmed has been opened (only one has been completed but not yet furnished). In discussing this point with the IRDP male nurse, he argued that between 15 to 20 promoters are

currently working as such, by combining their agricultural activities with informal medical advice/assistance. Health promoters, he insists, were never expected to hold 'office hours' at the minimal health unit, but were to be available to the local population when needed. Moreover, a few of them have been of great assistance to the MOH personnel during their periodic child vaccination campaigns.

Thus, it is the feeling that while the direct and indirect beneficiaries of the midwife sub-project were of the entire population from all socio-economic levels, we speculate that the beneficiaries of the health promoters, i.e., only those who continue to work as such, basically include only the poorest people of these villages. Those with more resources, it 's our feeling, will seek para-medical help at the rural health posts or will eventually travel to the San Marcos Health Center for assistance.

As stated earlier, all programs of controlling population growth were cancelled by order of the MOH. Thus, considering that only medical doctors are authorized by the GOG to implement and closely supervise such programs and considering that the IRDP does not have a full-time physician, all these activities were suspended definitively.

6.3 Reduced Rates of Underemployment

Seasonal labor migration has traditionally provided the necessary cash supplement to the peasants of the San Marcos highlands, including those who live in the Municipality of Ixchiguán. The evaluating team asked all of its interviewees if they had ever worked at the large farms either in Mexico or in the Guatemalan lowlands, and all, without exception, answered affirmatively.

Most people migrate between August-December to tapiscar (harvest) coffee in Southern Mexico or in the large coastal farms and between January-March to plant cotton on the Guatemalan farms.

This seasonal labor migration is the result of the extreme poverty of the area (exception is made of a few 'rich' potato communities) and of the inability of the peasants to increase their agricultural yields in such a way to provide them with the necessary supplemental income.

Ixchiguán's underemployment is the combined result of very poor soil, past unscrupulous deforestation, terrible erosion and high altitude plus the expected consequences of poor crops and low-quality animals. All this is combined with the lack of cottage industries and

any other major local income generating activity.

The IRDP approach has been in certain ways similar to the one worked out a few years earlier by the Catholic Church's Movimiento Campesino (peasant movement), i.e., to develop a conscious-awareness program in which the Project would work closely with the peasants analyzing their current problems and helping them, through appropriate technology, to reach a solution. Emphasis was placed on low-cost local resources as well as unsophisticated but efficient sub-projects. Thus, the IRDP fundamentally became a technical training program oriented exclusively to poor peasants living in Guatemala's most economically depressed area.

Given the above, no major change has occurred regarding underemployment. People continue to migrate seasonally, perhaps no longer to Mexico due to GOG's Army border controls (to avoid the international flight of Guatemalan guerrillas) as well as the recent devaluation of the Mexican Peso, but Ixchiguán peasants continue to some extent to seek seasonal jobs in the coastal Guatemalan plantations.

However, if the current soil conservation, reforestation and improved animal husbandry sub-projects continue, it is possible that adequate progress will be made in the

next five to ten years that would produce enough local surpluses to make labor migration unnecessary.

6.4 Improved Income

No official data is available regarding the income level for the Municipality of Ixchiguán. The only estimated reference is the one provided by Project Hope's Phase III document where it is stated that "...the income for each family in this area is between Q200.00 and Q300.00 per year." (Project Hope 1980c: 7).

Considering all that has been stated in the previous pages, that the IRDP has been fundamentally a slow, long term, training and conscientization program, no major progress has been made in improved income. The agricultural yields have not yet been improved substantially. The improved animal husbandry breeding sub-project is still under way. The soil conservation sub-project has practically just begun. All this must be considered as well as the lack of cottage industries or any other major economic activity. Thus, as a whole Ixchiguán peasant families continue living in the area primarily at a subsistence level that requires some of its members to migrate seasonally to obtain the necessary cash to cover their major expenses. This trend has not changed as yet and is not likely to alter in the near future.

VII. UNEXPECTED RESULTS OR IMPACT

There have been no unexpected results in social structure and environment except those caused by the political and economic situation. In the area of health it is too early to measure results, expected or unexpected.

As might be surmised, the greatest unexpected change has been the deterioration of a normal calm, almost placid socio-political environment into one of sporadic violence and tension. This situation precipitated other changes already noted, none of which were beneficial to the people of the communities the IRDP was attempting to serve, e.g., the discouragement of community organization, the trepidation felt by the peasants in gathering together.

The economic situation in Guatemala has worsened along with the political. In the parameters of this Project, it has negatively affected the peasants' earnings from market crops and has resulted in less cash earnings for the migratory work of the peasants in coastal Guatemala.

The unexpected and perilous economic situation in Mexico--far worse than in Guatemala--and the corresponding drop in the value of the Mexican Peso vis a vis the Guatemalan Quetzal, has significantly reduced the northward seasonal migration of the peasants of Ixchiguán.

Regarding the technical elements of the Project, the

fairly rapid and successful impact of the veterinary sub-projects were unexpected, but welcomed. Veterinary medicine was one area that the peasants did not highly prioritize but they were greatly impressed with the results they observed among their animals after treatment. It might be said that the success of the vaccination sub-project in many cases proved to be a 'foot-in-the-door', a way of winning the confidence of the peasants and of generating their enthusiasm to proceed with other sub-projects.

CONCLUSIONS

The Integrated Rural Development Project (IRDP), signed as the first experimental attempt to pursue development through integrated GOG/PVO/Community activity, has entered its last semester of project implementation after two and one-half years of work in the area.

Conceived as a pilot project in one of Central America's poorest and most difficult areas, the PVO directing its implementation had to face many unexpected situations.

From an administrative point of view, its autonomy was curtailed by the increasingly powerful National and Regional ad hoc committees.

At a local level the overenthusiasm of the Ladino TSRs working under close PVO supervision made a poor start of two of the most critical IRDP sub-projects: The pivotal Village Improvement Committees and the Rural Health Promoters.

Finally, a few months after receiving the OPG, the PVO had to adhere to military restriction of movement due

the increased activity of a guerrilla organization that used the Municipality of Ixchiguán as a pathway between its working areas in Guatemala and the guerrilla's refuge in Chiapas, Southern Mexico.

Added to the above was the PVO's lack of previous experience in integrated development projects and in maintaining headquarters in the City of Quetzaltenango, four hours distant by vehicle from Ixchiguán, making commuting an unnecessary characteristic of the whole IRDP. No office or locale was ever opened in Ixchiguán nor in San Marcos, other than occasional sleeping quarters for those project members who stayed overnight.

The IRDP has been a qualified success as an experiment. Much has been learned through sometimes very difficult experiences. The first obvious lesson perhaps has been that integrated rural development is the result of the hard work of a team of persons who should be willing to live at the project's site, to learn the local ways of life, to discuss with the target population the rationale of their traditional technologies and problems, and only later, to suggest major changes. Short-cuts always resulted in failure such as the TSR's organization of the committees or the intended development of fruit orchards through the donation of trees.

A second lesson learned through the past two and one-half years is that all Project personnel willing to work in areas such as Ixchiguán, have to have the necessary flexibility to adopt to changing circumstances, and to freely consider activities as trial-and-error experiences that allow opportunities for change and not as rigid paths that must be followed for fear of failure.

As expected, the multi-sectorial coordination attempts with the GOG were extremely difficult when they aimed at policy implementation or the allocation of human and material resources. Active participation at IRDP meetings was conditioned more by past friendship and personal affinity, than by a conviction of the need for official cooperation. An example is the active role that the San Marcos DIGESEPE office played during the early 1980's with its past administrator, vis-a-vis the current lack of interest in the IRDP by its new Departmental Director.

At a sub-project level, it was found that those activities perceived as timely and necessary by the target population were the ones more rapidly accepted and became the 'footholds' for other IRDP projects. Simultaneously, IRDP sub-projects conceived as having the highest priority by the PVO, were received with apathy and lack of interest by the people. An example here is the success of the vaccination and deparasitation campaigns vis-a-vis the slow

initial impact of the demonstration pastures that began to be accepted only after the vaccinated and deparasitated animals started to gain weight and to appear healthier.

Also, at a sub-project level, but this time in the field of health, it was found that it was more productive to gain rapport and to train existing local health practitioners (midwives or native healers), than investing time and resources in training 'transitory' MOH paramedical personnel stationed in the area, or young and inexperienced villagers who would eventually aspire to become rural health promoters. An example here is the success of the midwife sub-project contrasted to the failure of the rural health promoter sub-project.

Regarding IRDP's methodological approach, the PVO learned through experience that the best results were achieved when advising or training the target population in the field, working through small groups, using unsophisticated language, and appropriate technology. An example here is the current success of the furrowing system within the pasture management sub-project, vis-a-vis the failure of the initial 'formal' lectures given out of town.

A second methodological point derived from the PVO's two years of activities in the area is the fact that any experimental integrated development project demands the concentration of human and material resources in only one

microregion (in this evaluation, a municipality). Given the aforementioned circumstances, the PVO, instead of relocating the whole project, dispersed its sub-projects in more than thirty villages (many of which with hamlets also included) situated in more than six different municipalities located in the vicinity of both Ixchiguán and San Marcos.

The donation of sophisticated equipment proved not to be useful to the target population. Of the three donated laboratories, only one will be installed in its original site (Xelac Cooperative, Quetzaltenango), and the other two, designed to serve more directly the target population, have been relocated to San Marcos. Also, the complete dental equipment intended to be installed at the Ixchiguán school, ended up at the San Marcos Medical Center.

Regarding motor vehicles, the most useful ones became the three motorcycles (one was stolen) used by the extension personnel. The two Jeeps, while essential during the rainy season to visit villages, were mostly used to commute between Quetzaltenango and Ixchiguán, each twice a week. Finally, the recently donated motorized Roto-Tiller which arrived in April, 1983, can disorient peasant visitors to the demonstration farm by suggesting that the farm's success is owed to the motorized tiller and not to the efficient work of its personnel.

The evaluating team considers that despite all the Project difficulties and limitations, the IRDP has succeeded as Guatemala's first experiment in integrated rural development. Most of the initial difficulties as well as the mistakes made, have been discovered, solved or their solutions or corrections are being sought. The technical team has painfully learned how to work more efficiently in a transcultural (Ladino-Indian) environment and is beginning to gain full acceptance from the target population. Finally, most of the sub-projects are at the initial experimental stage.

Thus, the evaluating team considers that the IRDP should continue its activities but in a restricted way, both at the Ixchiguán area as well as in the vicinity of the town of San Marcos, making certain project modifications as suggested in the recommendations.

RECOMMENDATIONS

I. Administrative

1.1 The technical headquarters of all PVO activities related with the IRDP should be based in the Town of San Marcos. No IRDP activity should continue at Quetzaltenango.

At San Marcos' demonstration farm, the two existing rooms currently reserved by the PVO at the 'model house' should become IRDP's permanent headquarters. Given the Project's structure, no additional office space should be needed. However, should such space be required, it should be located in the vicinity of the demonstration farm.

1.2 For the remaining months of the IRDP, a realistic redesign of its activities should be made. This redesign should take into consideration the number of actual technical personnel and should incorporate itineraries and time tables.

1.3 The IRDP National Committee should be dissolved. USAID committee activities as well as Peace Corps current participation within the IRDP should be restricted to provide advice to the PVO when sought. This would provide the PVO with the necessary autonomy of action essential to guarantee the success of an OPG.

1.4 For the remaining six months of the current OPG, no efforts should be made to reactivate the San Marcos' Regional Committee.

1.5 A PVO Representative should try to participate in the newly created GOG Coordinadora Institucional Departamental chaired by the Governor of San Marcos and comprised of all local and regional authorities of both public and private development sectors. This would strengthen coordination of effort, avoid possible duplication of activities, and heighten visibility of the IRDP.

1.6 All project vehicles should be restricted to IRDP activities at the San Marcos-Ixchiguan area.

During a work week, at least a Jeep and a motorcycle should be permanently stationed in the Ixchiguan area for the use of the personnel assigned to that area. Other vehicles should be stationed in project areas that the IRDP Coordinator might consider adequate.

Only under exceptional circumstances should project

vehicles leave the IRDP area and these cases should be authorized in writing, by the PVO administrator.

II. Technical

2.1 All IRDP's technical work at the Department of San Marcos should be restricted to only two Municipalities, Ixchiguán being one of them if the political situation so warrants, and perhaps San Pedro Sacatepequez the other (only one distant kilometer from San Marcos and generally recognized as being in the San Marcos area) (see Table 17).

Considering all existing limitations and difficulties, IRDP's activities in each Municipality, for the remaining period of time, should be restricted to at the most ten villages or hamlets. This would reduce geographical dispersion and travel time.

2.2 In the field of health, high priority should be given to the training, retraining and follow-up activities of the local health practitioners of the Ixchiguán area: Health promoters and midwives.

Meetings should be periodic, should be held at participating communities, and should only include a small number of trainees. The PVO should prioritize the reception and eventual replacement of the paramedical kits.

2.3 In the agricultural field, the San Marcos demonstration farm should continue at its present site.

Making intensive use of Project vehicles or public transportation, peasant representatives from participating communities should be invited to visit the demonstration farm. Thus, every week at least two groups should be invited to visit the farm, one from the Ixchiguan area and the second from the San Marcos/San Pedro Sacatepequez area.

At the demonstration farm a visitor's log should be maintained. The log should include information of the visitor's name, village or community, date, time spent, purpose of visit and information presented.

2.4 In the Municipality of Ixchiguan, efforts should be made to build within each participating community a small demonstration terrace, where pastures, vegetables and trees could be planted.

PVO should try to reach an agreement with another PVO working in the area to coordinate Food-for-Work participation that would ease the implementation of this sub-project.

2.5 Existing animal husbandry and related sub-projects should continue in the participating villages. Emphasis

should be placed on the training, retraining and follow-up activities of vaccinators and herders.

2.6 All endeavors to organize Improvement Committees should be suspended. Integrated activity should take place only with those peasants with interest to participate.

III. Recommendations for FY-83 Activities

NOTE: All future activities suggested are predicated on the amelioration or status quo of the present political situation.

The evaluating team considers that an effort should be made to continue the IRDP activities in the Department of San Marcos for an additional three year period but under the following conditions:

- a. Project sites should be selected among the current ones served and should never include more than two Municipalities nor more than twenty villages/hamlets.
- b. Current sub-projects should be reduced by 25 percent and efforts should be made to continue the follow-up of current sub-projects.
- c. Technical personnel should continue in their

present number of five full-time technicians and one part-time physician.

- d. The PVO should contract a written multi-sectorial agreement with the GOG at the Ministry level, in which the GOG assumes the commitment to fully support IRDP activities in the Department of San Marcos and includes its goals as part of the regional goals of the MOA and MOH.
- e. Considering the investment of time and capital made at the San Marcos demonstration farm, an effort should be made to buy or lease the land (current market value reported to be Q15,000.00).
- f. A Departmental Advisory Committee should be installed at the town of San Marcos. Chaired by the PVO administrator, its members should include the Departmental Directors of the Ministries of Agriculture and Health. This Committee should report its activities to the Coordinadora Institucional Departamental.
- g. Serious consideration should be given to a major sub-project (perhaps incorporating a Food-For-Work component with CARE) that would install potable drinking water in participating

communities. An agreement should be researched with Aqua del Pueblo for technical advice and implementation.

- h. A reforestation effort with MOA's INAFOR should be considered, perhaps in coordination with other PVOs utilizing Food-for-Work.

ABBREVIATIONS AND ACRONYMS

AID	The U.S. Agency for International Development
CARE	Cooperative for American Relief Everywhere
DIGESA	Dirección General de Servicios Agrícolas: The General Agricultural Services Agency
DIGESEPE	Dirección General de Servicios Pecuarios: The General Livestock Services Agency
FAO	The Food and Agriculture Organization of the United Nations
FY	The U.S. Government fiscal year
GOG	The Government of Guatemala
INAFOR	The National Institute of Forestation
ICTA	Instituto de Ciencia y Tecnología Agrícola: The Institute of Agricultural Science and Technology
IRDP	Project Hope's Integrated Rural Development Project
MOA	The Guatemalan Ministry of Agriculture
MOH	The Guatemalan Ministry of Health
OPG	AID's Operational Program Grant
PVO	Private Voluntary Organization
TSR	Técnico de Salud Rural: Rural Health Technician

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ATTACHMENT "A"

PROGRAM DESCRIPTION

A. Purpose of the Grant

The purpose of this grant is to provide support to an integrated rural development program by providing technical assistance, training and financial resources for rural health and agricultural activities in the Municipio of Ixchiguán.

B. Specific Objectives

The Municipio of Ixchiguán in the Department of San Marcos, in the northwestern part of Guatemala, is inhabited by about 9,500 rural people (largely of Mam and Quiché extraction) whose principal source of livelihood is farming -- supplemented by seasonal migration to participate in the harvest activities in the southern coastal regions of Guatemala or in the haciendas in the State of Chiapas, Mexico. The area has traditionally been poverty-stricken, neglected and isolated.

By contractual agreement with the Government of Guatemala (GOG), Project HOPE has been involved in development programs in the Guatemalan Highlands (Altiplano) since 1973. Since that time an office has been in operation in Quetzaltenango to administer these programs in health and related fields.

Under this integrated rural development (IRD) program, Project Hope will focus its project activities in the Municipio of Ixchiguán. Most of these activities will be largely of a demonstration type, both in health and in agriculture. To better reach the target population, Project Hope has designed an integrated rural development approach based on active community involvement in support of a variety of activities identified and selected by the community and targeted in Ixchiguán and the 16 villages which comprise it. By working closely with existing Improvements Committees (Comités Pro-mejoramiento) -- or creating them where they do not exist -- Project Hope will develop activities in agriculture, including crop diversification, improved techniques of livestock production, veterinary medicine, rural extension

trol and environmental sanitation. Under a soil conservation program, local communities will develop a program for the production of firewood, lumber and Christmas trees. A grasslands management (manejo de praderas) plan will also be developed toward the end of the OPG.

Similarly, Project Hope will also upgrade the equipment of local laboratories and develop a program to improve the diagnostic skills of para-medical personnel working in these laboratories. In conjunction with the local schools, Project Hope will also develop a dental hygiene program for school children of the target population.

The Peace Corps will be an active collaborator in Project Hope's IRD program, assisting in various health activities as well as in the development of 4-S youth program for boys and girls.

C. Implementation

Project Hope proposes to strengthen and upgrade the ~~Improvement Committees~~ in Ixchiguán as well as in each of the 16 aldeas which comprises the Municipality of Ixchiguán.

Each committee will be organized and trained individually with periodic inter-committee (inter-village) symposiums stressing cooperative regional development.

These local organizations will undertake principal implementation responsibilities for each of the sub-projects.

Project Hope will work through the Improvement Committees by assigning a vocal from each committee, major responsibilities in their own geographic area. This person will become the coordinator between his/her community and the technical personnel from Project Hope, Peace Corps, Government of Guatemala and others. Local communities will be assisted to develop their own links to the outside world so that they can acquire the necessary resources and technical assistance for self-development.

Organizational skills and self-sufficiency will be developed to continue long after the termination of the present OPG.

The field coordinator and the agronomo educador will work together in delineating agricultural projects in Tachiguana on the basis of the needs assessment already carried out or as new projects are identified by the vocales of each of the aldeas.

Most agricultural activities will be organized around the ~~"demonstration farm"~~ Housing as well as other construction activities within this farm will be used as models using locally available materials. The demonstration farm will also be used as a model for environmental sanitation activities (using appropriate technology).

The field coordinator will be in charge of establishing general policy guidelines and monitoring their implementation. He will also be in charge of overall administration of the demonstration and related activities, but the day-to-day operations at the demonstration farm will be carried out by a ~~farm manager (full-time)~~. The manager will be assisted by three other persons on a part-time-as-needed basis.

Other activities which will be organized around the demonstration farm include: a crop diversification activity to test new varieties; livestock production; zoonosis control; and, environmental sanitation. The pasture land expert specialist and the reforestation and land resource advisor from Project Hope will participate in a small soil conservation program and in the production of firewood, lumber and Christmas trees activities.

Four part-time ~~Peace Corps Volunteers~~ (PCVs) will initially provide agricultural technical expertise for these programs, and the field coordinator will take an active part in organizing activities in veterinary medicine. Two full-time PCVs will be assigned to work on the establishment of Youth Clubs in the area.

The boys' clubs will deal with experimentation and the teaching of new techniques in agriculture, livestock production, small industries and conservation and natural resources. The girls' clubs will teach new techniques in child health, nutrition, improved utilization of small animals such as chickens, ducks, rabbits, etc. as well as small industries.

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In the ~~health sector~~, the rural health educator and the PCV registered nurse will have access to three auxiliary nurses and two rural health technicians provided by the Ministry of Public Health and Social Assistance. The rural health educator will design a one-day per week in-service course to upgrade the auxiliary nurses and rural health technicians.

The rural health educator will also train approximately 40 rural health promoters who will be selected on a voluntary basis by the Improvement Committees in each aldea.

The trained rural health promoters will organize small health units, together with midwives, in each of the respective aldeas.

The health personnel mentioned above will develop a training program for midwives. This project activity will attempt to gather information and to provide in-service training to those existing midwives who desire to participate, while at the same time identifying and training new midwives in the techniques of safe deliveries while addressing the nutritional status of the mothers and the infants.

Upon completion of the training, the health educator will organize the auxiliary nurses, the promoters and the midwives to deliver maternal child health, nutrition and family planning services. These services will be carried out through the ~~unidades de salud~~. These unidades will have basic equipment provided by Project Hope and will serve to provide ante-natal services, nutrition education and family planning information and assistance.

The ~~Laboratorio de Diagnóstico y Referencia Epidemiológica~~ will be upgraded with laboratory equipment and with the part-time services of a laboratory pathologist and technician to train existing para-medical personnel.

Project Hope will organize and stock a ~~ambulatorio dental~~ ~~ambulatorio dental~~ which will be attended by a MOH dentist, for an early identification and treatment of dental problems among school-age population.

D. Reports

The Grantee shall submit the following reports in either English or Spanish:

1. Quarterly progress reports on each activity. Two copies of these reports will be provided to USAID/Guatemala.

2. An annual evaluation report. The first report will be due in July 1981. The second will be due August 1982. Two copies of these evaluation reports will be provided to USAID/Guatemala.

3. A final evaluation report, including an evaluation of the socio-economic impact of the project on the target communities. Four copies to be provided to USAID/Guatemala not later than one month after the termination date of the project.

4. A copy of the report of expenditures, as required by paragraph "A" of Attachment "C", Payment Provisions, to the Director, USAID/Guatemala.

E. Budget (AID Contribution)

This budget is illustrative. Amounts of line items may be adjusted upward or downward up to 15% without prior AID authorization, provided total amount budgeted is not exceeded.

I. Personnel - Long Term

1. Administrative Assistant (5 months at \$1,083.34 ea.)	\$ 5,417.00
2. Nurse/Midwife (5 months at \$666.67 ea.)	3,333.35
3. Field Coordinator (5 months at \$1,334.00 ea.)	6,670.00
4. Accountant (5 months at \$500.00 ea.)	2,500.00

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5. Bilingual Secretary (5 months at \$250.00 ea.)	\$ 1,250
6. 2 Drivers (5 months at \$200.00 ea.)	2,000
7. Office Assistant (5 months at \$175.00 ea.)	875
8. Agronomist (5 months at \$425.00 ea.)	2,125
9. Nutritionist (5 months at \$666.67 ea.)	3,333
Sub-Total	27,720
Employee Benefits and Payroll Taxes*	3,100
Total Long-Term Personnel	\$30,820
<u>Personnel - Short Term</u>	
Rural Health Educator (5 months at \$1,500 ea.)	\$ 7,500
II. <u>Commodities</u>	.
1. Fixed Assets (Vehicles, etc.)	\$5,000
2. Supplies (Seeds, Fertilizers, Office, Medical)	1,080
Total Commodities	\$6,080
III. <u>Operational Expenses</u>	
Rent, telephone, insurance, travel, etc.	\$ 9,000

* Actual benefits are calculated at the rate of 18% of salaries for local national personnel and 20% of salaries for U.S. personnel (13% benefits and 7% workmen's compensation, etc.). However, benefits to be paid under this increment of the grant are based on the actual benefits expected to be paid during the five-month period financed and therefore, exclude such items as severance pay.

IV. <u>USAID Contribution to Institutional Overhead*</u>	<u>\$10,300</u>
GRAND TOTAL	<u>\$91,000</u>

(a) Source and Origin of Goods and Services

Goods and services, except for ocean shipping, financed by AID under this Project shall have their source and origin in the Central American Common Market or in the United States, except as AID may otherwise agree in writing.

(b) Ocean shipping financing by AID under this Project shall, except as AID may otherwise agree in writing, be financed only on flag vessels of the United States.

(c) Prior to any disbursement, or the issuance of any commitment documents under this Project to finance personnel costs of the Administrative Assistant, the Rural Health Educator and the Field Coordinator, Project HOPE shall furnish in form and substance satisfactory to AID scopes of work and descriptions of the qualifications of these persons.

(d) Prior to any disbursement, or the issuance of any commitment documents under this Project to finance the budget item "Commodities", Project HOPE shall furnish for AID approval a list of fixed assets to be purchased with AID funds, and shall discuss with AID the method of procurement.

(e) Procurement undertaken by the Grantee under this Grant will be governed by the Basic Guide for the Acquisition and Contracting of Goods and Services under Project Financed by AID, attached herewith.

* Overhead will be based on 90% of direct salaries and wages. The AID contribution to overhead indicated in this budget is calculated on the basis of 32% of the total overhead and represents a maximum contribution by AID to this line item, subject to downward revision only.