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MAP International

Matching Grant

Second Year Report

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D R A F T

EVALUATION REPORT

OPG - 518-022 RURAL COMMUNITY HEALTH

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INTRODUCTION

Purpose of Consultation: This assignment is for the purpose of evaluating OPG 518-022 with MAP International in Ecuador. The evaluation was undertaken at the request of MAP International and Vozandes Hospital, the primary subcontractor and program coordinator, because of their interest in obtaining suppor for a fourthyear of project operations.

Summary of Project Purpose and Background: The OPG project was planned to provide resident of selected rural populations in five provinces with primary health care services with the purpose of improving their health status. The target populations consist primarily of Quichua and Shuar speaking people who are geographically and cult-rally isolated from the mainstream of Ecuadorean society and, as a result, have not had access to health care and information provided by goverment agencies. Limited non-governmental health care has been afforded to these populations by expatriate missionary groups working in the areas. In the past this care has been largely curative in character.

While accurate and precise information regarding morbility and mortality levels in these population has not been available it is widely believed that their levels have been intolerably elevated and that traditional practices of hygiene and curing have not been able to improve or maintain health conditions for the people as their settlement, behavioral, economic and contact patterns have changed. In order to improve this situation, the project was designed to train persons from communities that were to be served. Such persons have been trained in the provision of basic promotive, preventive and curative health care services. These promoters are, in turn, supervised and coordianted by persons with more sophisticated training in medical and health care, i.e. physicians and nurses.

MAP International has been the primary grantee and has had responsibility for overseeing the coordination functions of Vozandes Hospital, the primary contractor. Vozandes Hospital staff have provided the overall direction of training, placement, suppluing and supervision in the provinces in which the program has been operating.

The project was not designed to be a permanently independent health care system. From the beginning Vozandes and provincial level administrators of the project have coordinated their efforts with those of the MOH and the local governmental health systems. It was expected that the OPC project would compliment the government's work and that it would provide an experimental outreach system that could be used to test feasibility and effectiveness of particular techniques of health care provisions. Prior to project implementation a seminar was held to inform government officials of the plans of the project and they have been kept up to date through informal consultations and sharing of project reports by project staff. Government officials have received many invitations to observe the project in operation.

The initial plan of the project called for the training and placement of health workers in a total of 141 communities with a total population that was estimated to be 43,700 persons. These were distributed as follows:*

Chimborazo Province:	50 communities with	30,000 people
Bolivar Province:	30 communities with	4,000 people
M. Santiago Province:	26 communities with	2,700 people
Pastaza Province:	12 communities with	2,000 people
Loja Province:	20 communities with	5,000 people

* Revised estimates based on health worker assessments of their catchment area suggest that populations of communities that will be served is somewhat high than anticipated. It is now expected that a smaller number of communities will be covered. Project plans for Loja Province have been cancelled.

The actual number of promoters to be trained was not stated in the initial project statement.

The total three-year costs for the project were budgeted at $581,800. AID's contribution to this total was budgeted at $278,000. MAP International, The Brethen Mission, Free Will Baptists, Gospel Missionary Union, OMS Internatio Berean Mission and the GOE.

Evaluation Procedures and Limitations: While an attempt was made to get as much information as possible about the program and its relations and the com munities during field observations, interviews and documentation review this report does not attempt to present a complete description of the project. Those who have been working with the project over a long period of time are much better able to provide such description than could one who has had such a hurried, fragmentary view of its development and operations. The report then focuses on those aspects of the program that were found to be novel, or at least different from many strategies for introducing primary health care i developing countries, methods that have tended to capture the fancy of nation health planners. It seeks to identify characteristics that show evidence of promise in the planning and development of successful primary care programs that would be useful for others who will be responsible for programs elsewher It takes the perspective that evaluation of an experimental program such as this can contribute most by identifying what the program is doing and suggesting means by which it might do better.

The evaluation of the project was done on an informal basis with the consultan makin observations at various training and operational sites in the four provinces in which the project has been implemented. He was accompanied on these

visits by personnel from the Vozandes and MAP International staffs as well as by local program supervisors.

The consultant also met with AID/Ecuador Health office personnel, provincial health directors in Riobamba, Guaranda, Pastaza and Bolivar provinces and with the Director of the National Division of Community Development in the Ministry of Health.

Project staff at all levels were interviewed both in the field and in the Quito offices. Discussions were also carried out with some health workers and with community residents. Contacts with various other persons are noted on a list apended to this document.

Project documents including the initial proposal, a statistical summary from 1980, a 1979 Project Evaluation Summary (PES) and various other reports were also consulted.

It was possible to obtain only a very limited view of activities and personnel at each of the training and promotor sites visited due to the wide dispersement of locations and the fact that cycles of activities are necessarily spread over a great deal of time. Community health programs dependent upon part time workers where communication is severely restricted are difficult to observe in a short period of time. This is such a highly varied program tailored to needs of individual promotors, regional and community interests and health characteristics that it is probably not possible to obtain a clear, detailed picture of all activities and procedures without spending several months in the project areas. As noted later in this document, the ability of the project staff to adapt training, supervision and operations to highly variable conditions, while making summary statements difficult, is one of the projects major assets.

PROJECT STATUS

Operations: The project is currently operating in four provinces, Bolivar, Chimborazo, Pastaza and Morona Santiago. Because medical personnel who would provide training were not available in Loja Province plans to implement the project there were cancelled. The Statistical Summary produced in 1980 (attached) at the conclusion of two years operation reports that 133 persons have received some promotor training and that 101 of those were active in 93 communities. The total population of those communities then being served was estimated to be 47,600 persons. The training of new promotors by programs operated by anyone other than the government itself has been restricted since 1980, but there has been approval trianing six persons who had already been selected in Bolivar province. Training to upgrade those promotors already in place has been allowed and is continuing in all provinces.

Provincial coordination in Chimborazo, Pastaza and Morona Santiago is provided by physicians with the help of other trained medical persons. In Bolivar province there is a registered nurse who coordinates training and supervision for the 11 existing promotors and the six who are in training.

The program has altered its primary focus from that of providing primarily personal health services to that of community development centering on health. While program personnel still feel that personal care and referral services are important for the health of the client, populations and the credibility of the project there has been more emphasis placed on community education, the promotion of latrine contribution and proper use, the promotion of home garden with varied produce, and improved water supplies. This means that training programs had to be adapted to the changing focus and health promotors have alloted their time in ways different than was first anticipated.

Health workers are still in the process of obtaining concensuses of their are that will include counts of population and assessments of the availability of appropriate latrines and water sources.

The number of health committees that were functioning when the 1980 statistical summary was produced was only nine. This number has been considerably augmented since then, but the total number was not known (By September 1980 there were 11 committees in Pastaza province aleng).

Experimental gardens are being developed in all provinces and families are encouraged to develop their own. Again, the total number of is not known, but there were 20 experimental gardens begun in different communities in Chimborazo during 1980.

While latrire construction and use is far from ubiquitous there is evidence that they are being accepted in communities where they never existed before. Communities are constructing them and the project has been developing inexpensive means of producing appropriate slabs to cover the pits.

Training programs to upgrade promotors in place are being continued in all provinces. During 1980 every promotor recieved at least several days of additional instruction in training centers.

Several of the promotors first identified and trained by the project have been further trained MOH programs and have been incorporated into the government system. These have included health auxiliaries and, more recently, nurses aides. The supervisory staff of the Vozandes project has been providing supervision to these now in the government system as well as those who have not. Vozandes' promotors in Chimborazo province have been invited to participate in monthly training sessions offered by the government program.

Both the Vozandes and the MAP International staff continue to be fully involved in the coordination and supervision of the project and they take part in staff development and promotor training as well. They, along with regional supervisory staff, have insured that provincial and national level government health officials have been regularly informed of project activities.

Program Impact: There has been no attempt to assess the changing levels of population health resulting from this program effort. Given the small sizes of populations with which the project deals and the lack of data collection sophistication of the field workers this is appropriate. It is doubtful that health measures would be sufficiently sensitive to changes that could be expected (in the short run at least) as a result of program efforts. To burden most of these health workers with additional data gathering responsibilities at this point would probably distract them from gaining and applying knowledge regarding appropriate health behavior.

Changes in the communities have, however, been observed by those participating in the project. While statistics may not yield a picture of very dramatic change in the communities the fact that there are more people in each of them who are better informed about health care and hygiene and there is an increased interest in providing sanitary latrines, care of children, represents a notable difference between present circumstances and those that characterized them prior to program implementation.

It is clear that members of the communities being served do feel that they have a closer linkage to the services (of many kinds) offered by their government and they are beginning to recognize that they can make additional demands on those service providers.

OBSERVATIONS AND RECOMMENDATIONS

Since it was not possible to get a complete, integrated view of this small but complex and widely dispersed project during the brief visit the evaluation work tried to focus on selected aspects about which questions had been raised during the preliminary briefings and some that emerged from reading project documents. It should be mentioned again that observations were fragmentary; Not all project persons were asked about all aspects and full cycles of training and work were not seen. It should be useful to the project staff, AID personnel and relevant government officials if they could meet and discuss the findings of the report to clarify points taken and recommendations made. It may be that some of the comments are made on the basis of such limited observation that they are misleading. It may also happen that a recommended course of action has already been tried and found to be unsatisfactory.

Any limitation in the observation was not due to the program personnel who managed the size visits with great efficiency and who were always completely open in their presentation of information and in answering specific questions. Time constraints, the cross-ectional nature of observations and problems of transportation and communication among people spread over great distance and characterized by considerable cultural variation made it difficult to grasp everything that the project has done and is doing.

The following statements cover a specific set of project aspects. For each project aspect there is a statement of observation followed by a recommendation for action.

A. Selection of health promoters:

Observations: Promoters participating in the project have generally been selected in some manner by the community itself. Some of the health workers in Pastaza and Morona Santiago had already had some connection with the missionary health workers in the area and thad some training in curative practices.

In selecting participants the missionary groups have tended to work through the Indigenous Evangelical Associations operating in the area. The Association, in turn works with the community to identify candidates for the program. In many cases it appears that the churches and associations may represent the only coherent means of working with the communities as wholes. This is probably more true in mountain areas where the dissolution of the hacienda system left an organizational void into which the Associations have moved. It may be that in the provinces of Pastaza and Morona Santiago the Association is trying to replace existing forms of organization.

During the observation and questioning it was not possible to determine if there were any conflicts within communities regarding the selection of promoters nor was there any indication that some groups were systematically excluded from participating either as promoters or as recipients of services as a result of the means of promoter selection. Not all promoters were members of Christian church groups.

Comment and recommendations: It would be well worth while to investigate more closely the means by which health workers are selected by their communities and the relationship between the project and communities. It may be that the methods represent a most satisfactory and nondisruptive means of linking isolated communities with salubrious, adaptive influences. If certain segments of the population are not covered by services or brought into the participatory process, this should be known as well.

B. Recognition of indigenous health practices and traditional curers.

Observations: Project supervisory personnel have taken note of some traditional health practices that they have observed, but they do not seem to have tried to cover them in their training. There seemed to be a tendency to treat traditional beliefs and practices as inappropriate or detrimental and there was little awareness of any research done on traditional medicine in Ecuador.

The evaluator was informed by medical people in Pastaza and Morona Santiago that delivery is a family affair and that there were no traditional midwives. It was reported that in the Sierra there are traditional midwives, but that the family did participate in the delivery. It appeared that there has been no attempt to bring traditional midwives into the training program nor has there been an effort to educate others regarding delivery and care of mothers and the new born. In fact, because most of the promoters are men, it is argued that they have a hard time communicating with women other than their own family members regarding the birth process. There has been little success in attempts to creat mothers's clubs in any of the provinces.

Comment and Recommendations: A major purpose in taking community members into the health care system is that they will be able to provide a means of translating modern health into practices and recommendations that are acceptable to the local populations. Failure of trainers to take traditional beliefs and practices into account in their training programs represents a serious deficiency. The project personnel should make an effort to understand local beliefs so that they can promote the incorporation of traditional categories and practices into their training practices. They should also have knowledge of practices that are particularly inappropriate so that they can be displaced.

Since it is estimated that over 80% of Ecuadorean births take place apart from any modern facility and close to 100% of the births in the project area occur without attendance by any trained health worker it would be most appropriate to study traditional delivery practices and to take steps to train local midwives (or family members in the most proper procedures regarding delivery and care of mothers and the new born.

C. Training

Observations: Training of promoters has taken longer than expected. Strict, didactic methods have not worked and more informal means of training have been adopted. The project has called for technical assistance from specialists in non-formal education to advise them on their training procedures.

The project has found that promoters need more time to assimilate materials than was anticipated. They have also found that short periods of training, a few days to three weeks, repeated several times with new material being added after old material is reviewed is a more satisfactory than offering completely new material during each session. Promoters return to their training centers several times each year in order to receive additional training. This project also depends heavily on field supervision for upgrading of promoter skills and review of procedures. This field supervision also brings the medical personnel into closer contact with the community in which the promoters are working.

Comments and recommendations: It is a decidedly positive thing that the project operators have been able to tailor the training to meet the needs and abilities of the promoters. This flexibility may be essential for successful training of community health promoters and it would be advisable for them to document more closely just what their experience has been providing this kind of training and supervision is time consuming and expensive. If it works where less expensive methods do not this should be clearly demonstrated and documented.

With the exception of Dr. Naula, who is located in Colta, Chimborazo province, the training is provided almost exclusively by expatriates from the United States. And almost all of the training is done by medical persons although increasing attention is being given to community development.

The project should seek to obtain the assistance of more Ecuadorean personnel in the training of promoters. Additionally, persons with experience in community development and community participation should be involved in this training.

D. Responsibilities and activities of the promoters

The promoters are trained in health promotion and preventive and curative care on both the community and individual levels. It is believed by most program supervisors that the health workers are best able to gain credibility through their curative efforts and are more able to introduce changes in beliefs and practices once this credibility is established. In Pastaza Province, however, promoters have been discouraged from providing such curative care and they are not now allowed to offer even the most simple drugs to patients. An important part of all the promoters work is considered to be the referral of patients to health centers.

Promotive efforts dealing with such things as home gardens, well drilling hygiene seem to be undertaken on an ad hoc basis as a result of interest shown by the community (generally encouraged by the promoter and supervisors). Once interest is demonstrated, steps are taken to stimulate even more interest and understanding throughout the community and to offer information and assistance in carrying out specific projects.

Health promoters are non-paid workers who have responsibilities other than those linked to their health work, therefore, they do not dedicate full time

to this work.. The manner in which they do divide their time among health and non-health activities is not known.

Recommendations: While sophisticated task analyses or time studies would be wholly inappropriate for promoters working in this project it would be desirable to know more about the time they do dedicate to their various activity categories and to determine if they can handle the responsibilities they are assumed to have in the time they have available. It is important to know if they do have time necessary to provide services they are trained to offer at least to the theoretical extent necessary to have any impact.

E. Supervision

Observations: Supervision is a primary means of influencing health workers, checking and upgrading their knowledge and encouraging them in their work. It is treated as an essential component of the project. Supervision is carried out site visits and in the centralized training locations, where promoters are brought for additional training and refreshment.

While attention is given to promoters written reports that provide information regarding some of their activities most supervision is based on first hand contact with the workers. Supervisors discuss problems that the workers encounter and observe them in work situations in order to assist them im improving procedures. The supervisors also meet with other community representatives in order to learn whether their percieved needs are being met. These contacts serve not only as a basis for improving the effectiveness of the individual promoters, but information obtained is also used in the design of additional training efforts for all promoters.

Comments and recommendations: The supervisory component of the project is expensive. It consumes valuable time of highly trained medical personnel and

requires costly means of transportation. In the Sierra provinces, the supervisors have dual transmission vehicles. In the Oriente many communities are accessible only by small plane. In both areas there are communities that can be reached only by walking several hours from a motor road.

While supervisors semm to be able to handle their responsibilities now, it is doubtful that they can be stretched much further if the program were to be expanded. It should be noted that the program could be expanded de facto if the supervisory staff are asked to take more responsibility for working with government trained community health workers in their areas and they could easily become over extended.

In presenting this project as a model the cost of the supervision must be considered. Not, these costs appear quite low because they are borne by outside funding agencies and include persons from the missionary groups who are willing to work for very low salaries.

Because supervision is expensive, the project would do well to experiment with different patterns and to determine if supervision can be reduced as the promoters obtain additional training. Utilization of persons with intermediate level training should also be tested as a means for reducing costs.

F. Cooperation with government health systems

Observations: From the beginning the Vozandes group has taken stps to inform provincial health chiefs and MOH personnel of their project plans and accomplishments. They have taken steps to make sure that there is integration and cooperation between government provided services and personnel and those offered by the project.

Some project promoters have been selected for further training withing the governments auxiliary health worker program and have been functioning under con-

tinuing supervisions of Vozandes medical workers. Four additional workers hav recently completed a seven month government sponsored training program for nurse auxiliaries. It is assumed that these people will have supervisory as well as promotive and curative responsibilities in the Vozandes project area. While they will be responsible to the provincial health office they will also oversee project promoter work.

The Vozandes staff seem to have no expectation that their own project will remain independent. Rather they see it as filling an existing gap and as providing an experimental laboratory from which communities and future government programs can benefit.

Comments and recommendations: Government officials have not taken full advantage of the opportunity to observe conditions and activities in the project area. While the project personnel have kept the government officials informed and they have responded to requests for cooperation and coordination, this has benn largely informal. There has been no formal presentation of project plans and progress since the first year when a workship held with representatives from Vozandes, government and USAID personnel.

The project staff should plan to have annual workship at which provincial and national level health officials would participate with them. The purpose of such workshops would be to present findings regarding project experimentation and development and to provide technical advice to that would be useful in future operations and planning for all Ecuadorean health care programs.

It would also be useful for the project to develop a brief overview presentation that could be used to inform new officials, interested outsiders, and funding agency representatives. It should be expected that as knowledge of the program is broadcast more widely there will be more persons who are interested

in knowing about its operations. Unless there is a prepared, brief presentation that could be used to keep such persons up to date the project could easily be overwhelmed trying to provide a comprehensive tour of projects areas.

G. Data collection and reporting

Observations: Little systematic data on the activities of health workers, client utilization of services and local health problems has been collected by the project. While generally significant health problems and service needs are recognized and addressed it is difficult to determine if some problems are emerging as more critical and if others are declining in importance. It is impossible to determine if some portions of the population are, for whatever reasons, excluded from service coverage.

Efforts were made to conduct population censuses and health assessments of the communities prior to project implementation. These proved unsuccessful, because of heavy resistance from the communities. One of the responsibilities of the health workers has been to map their communities, (catchment areas) and to obtain censuses and age and sex distributions of their populations.

Patterns and levels of morbidity in the communities are still assessed through largely informal means in consultation with community residents in consultation with supervisors and health workers.

Comments and recommendations: It was probably wise to have avoided burdening health workers who have limited awareness of community health, epidemiology, the use of systematically obtained data and medical categories before they have a grasp of their own functions. Some important problems, i.e. diarrhea, respiratory problems, parasites, are sufficiently well known so that a reasonable beginning can be made in planning a rural primary health care program.

Given the limited training and back-up that must characterize these programs, direct impact on difficult-to-measure health problems will be slight in any case. Measuring such impact in small populations, may be impossible. Epidemiological investigations that could be appropriate for a few large, experimental projects operated with aid from research staffs are simply not reasonable for most others. They are simply too costly and there is not sufficient talent available. Still, there is more that can and should be done in this project now that it is well underway.

Project staff should try to learn more about how health workers spend their time in the community. They should also find out what portions of communites are using the services offered by health workers and are participating in other health and development activities. In order to rationally revise program design it is important to know who is not using its services and why.

It is also time that the project began to note more precisely the levels of morbidity and mortality within the populations in order to make judgements about the adequacy of promoters training to deal with problems that do exist and to reestablish priorities for training and services.

Project personnel must make greater effort to provide a clear description of the project as it exists. While statistical summaries provide some useful information and should be repeated at least annually the great variety in procedures, organization and supervisory patterns and training is itself an important aspect of this project and will require more narrative description of procedures and progress.

Without such descriptive and analytic materials, much of what the program has learned and experienced will be lost.

II. Coordination:

Observations: Vozandes and MAP International personnel seem to have a good

handle on what is happening in the several project areas. They make frequent visits and participate in supervisory and training activities at all levels. They act as trouble shooters and facilitators as well as working with field staff and with government officials. They are also responsible for providing summary reports to funding agencies and government offices.

Recommendations: While, as noted above, the great variation of form and content among the different project areas requires that accurate description be something other than overall summary statistics there should be some effort to standardize reporting formats among the provinces as well as providing certain statistical information these should offer detail regarding problems, experiences, system changes and needs so that areas can be compared and generalizations can be drawn.

It would be useful for the supervisory staff from the four provinces to meet regularly as a group with the coordinating staff in order to develop more useful reporting mechanisms that will allow for better comparison among areas. Such meetings could also be used to share experiences and knowledge with one another with the aim of improving the overall project.

CONCLUSIONS

This is an important project. It represents dedicated efforts to provide basic health services and health and development education to a segment of the Ecuadorean population that has been isolated and underserved. It is the result of serious planning and rational coordination of previously fragmented health activities carried out by a number of missionary groups in four provinces of Ecuador. The project is designed to provide trials of varied means of training, supervision, service provision, and community participation in different cultural, geographical and organizational conditions. The experiences of this

intensively supervised and closely monitored project should be of great utility to the government in their efforts to provide effective primary health care to large portions of the Ecuadorean population.

There is no doubt that the pay off to the people in the service areas has already been important. If the project is viewed by the government, and there is evidence that it is, as an experimental activity, the results of which can contribute to improved government sponsored programs there is no doubt that it will be even more valuable.

This project has many advantages that would be difficult to replicate in a government sponsored project. Among these are its flexibility and the closeness of supervision by trained health professionals who are willing to live and work in rural areas and who can be expected to stay with the project over a long period of time. Also, given political and bureaucratic conditions that constraint government planning and programming efforts it is doubtful that it could operate with the same flexibility and experimental orientation as can private voluntary organizations.

Continued funding of this project by A.I.D. is recommended. While there is no doubt that provision of health services by the groups involved in the Vozandes project would continue even without US A.I.D. funding for an additional year, many potentially useful findings from the project would be lost, because there would be less coordination and documentation of the experiences. Funding for an additional year should cover additional documentation and wide distribution of the findings of the project within the government of Ecuador.

1980 Annual Report

of the

Community Health Program at Nyankunde

Northeast Zaire

(Translated from French)

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REPORT OF THE WORK BY OBJECTIVES

Objective 1

Following the three pilot villages we conducted during the first year, 1980, a check on the estate of the health of the following villages: Ngombe Nyama about 1,000 inhabitants in three villages; Manzobe about 1,000 inhabitants in three villages; Songolo about 1,500 inhabitants with six villages.

Songolo is the only center where there was previously PMI clinics. The work started at Kagaba (about 4,000 people and we anticipate four health centers). And at Mandro (about 2,000 people for four health centers). In each of these villages there were meetings with the population, a CSV (village health committee) and ASV (village health agents) were chosen. The visits to the houses have not been finished.

Objective 2

A maternity nurse from Nyankunde followed a training program of six weeks at Kinshasa for planned motherhood. She is working full-time in the work of public health. The training of women in the PMI mobile clinics, the training of personnel for CME, the training of traditional midwives and the training of village health agents (a seminar from February 9-14, 1981). In February and March of 1981 three health centers will begin their PMI clinic and we will go only to give vaccinations and for supervision.

Objective 3

The pilot program showed us that the village health committee and the populations understood a subject at the time of the teaching and then rapidly forgot others. We therefore changed the approach of the teaching and are trying to adapt to a rhythm of the population.

During the first period of time we require that each house has a good latrine. Our training of one or two days per month during this period is based on the importance of these latrines, worm treatment, diarrhea and rehydration.

For the health committees and the population this is the longest and most difficult period but we see that that reinforces the spirit of the team of the health committee. When we are firm and strict in what we are doing they respect us and finally the work is more solid. If the village health committees survives this phase one can have a lot of hope for what follows. Our role is above all that of support during this period. When everyone has a good latrine, one can give the worm medicines then begin another subject. It seems that malaria must be the second priority and also the PMI clinics. As the villagers understand the teaching we go on and teach a new subject. This is very difficult for the program but its very effective for the population.

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Objective 4

We hope to begin forums in the villages during this year, with slides, with films and cassettes.

Objective 5

Sanitary systems. Sanitary conditions are among the most difficult and the problems are due above all to the proximity of the water table and of the very little land that is usable. We are awaiting someone from Nairobi, who has already helped a number of hospitals with their sanitary systems and he is in agreement to come to us and counsel us.

Dispensaries

There are some of these in the state but they don't have anything. The idea of Dr. Fountain of Vanga, to recycle the nurses from the government interests us. But we have not started anything about this because its necessary to first establish what has already been started.

Nursing School

Six students are regularly doing their stage in PMI and community health and are discovering the aspects of this work.

Nutrition Center

It's inactive at the moment. One Swiss nurse is interested in this department and will be able to help as soon as she has some knowledge of Swahili. The nutritionist that we had counted on has decided against it.

Buildings

Each village possesses a building for a health center. Often before the latrines are finished.

Page Two of the Report Is:

THE REPORT ON THE HEALTH CENTERS: FOR ECE

Ndoya I

This health center is developing thanks to the efforts of the village health agents who encourage each other in their service. The health committee seemed to be making some progress thanks to the new village chief. With his participation in the committee there will be a good influence because he himself is interested in the program of community health. This is one of the centers where the agents are very devoted to the work. One of them had gone through a period of discouragement but he has taken up his work again. The health agents themselves are beginning to do the monthly "kilo" (pre-school consultations) in their center during February and March. The Nyankunde team will go only to give vaccinations.

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Kilimani

A loan health agent with a large number of inhabitants continues to help the population in the teaching of hygiene and latrines and he consults the sick. It's the only center who had a flag and an agent receive his certificate.

The baboons and the monkeys tear up their gardens. A team of hunters of Nyankunde was authorized by the authorities of that zone to go there two times but had very little success. The local midwife after a very short course has already performed ten deliveries and the mothers are very happy.

Muke

This center separated from Batinde under the pretext that there was a misunderstanding between them. Unhappily enough Muke has made no progress since the separation. The committee no longer convenes and the health agent is discouraged because he receives no aid from the inhabitants and he has taken up his old work. We asked all the population of the village to come together on the 26th of January so that we might know if we should start the work again in this village with the new committee. It seems that a great part of the difficulties was due to a lack of understanding between the health committees, the inhabitants and the health worker.

Ngombe Nyama

This is one of the centers that gave certificates to its agents. It continues slowly. The members of the committee are beginning to organize and it is no longer the voice of one person but of the majority that makes the decisions. One of the three agents was revoked from his service because of disciplinary reasons. He might have stolen medicine. Two, one of which is certainly faithful, continues to serve the inhabitants.

Mont-Hoyo

All three of these centers were mentioned in our report of May 19, 1980. The health agents were trained together at Manzobe. They continue their work among the inhabitants in their village respectively--training of the population and control of toilets without any medication. We appreciate their initiative. We propose to encourage them with some medicines. First the worm medicines if the latrines are constructed and finished then they will have chloratine and aspirin like in the other centers.

Manzobe

This center had its difficulties and was closed two months but has reopened its work with only two health agents of which one is faithful and devoted and the other is irregular in his service. As far as two others, one was sent away because of the theft of medicine and the other is considered as a deserter and irregular in the village. He carries out his own commerce and does not help the people. The problem of this village as in certain others is a certain inhabitants can

leave the village to install themselves in the fields because of the animals and the birds that hurt their gardens. That can last even six months. The house in the village during this time stays uninhabited.

Songolo

This is a populous center, with a tribe that works very hard. The have constructed two large buildings for the center but they still have the idea to one day have a dispensary. The committee is strong and functions well. We began the teaching of health workers. These give health education to the population and do a good work of controlling the latrines. We hope beginning in March that the health workers will commence to do their pre-school clinics at Songolo.

Kagaba

The health agents had training for examining stools under the microscope. They examine the stools of all the population there. We organized that because of the long distances and the poor conditions of the roads. We cannot go there every week as we do in other places.

Mandro

We follow the same procedure for this health center of Mandro as that of Kagaba. The health workers did the examination of stools themselves.

Statistics on the Above Health Centers

In the four centers who had medications during the year 1980 there were 2,022 consultations since the month of April. These consultations do not include the results of examination of stools and the diagnoses done by the personnel from CME but were only those done by the village health workers themselves.

Malaria 60%
Digestive Tract-Gastroenteritis 15%
Infections-Respiratory 13%
Skin Diseases 5%
General Pain without Fever 4%
Gynecology 1%
Eye Infections 1%
Ear Problems 1%

Work that is Anticipated for the Next Few Months

1. To do another evaluation of the health center of Ndoya I, Muke, Kilimani, Ngombe Nyama, Manzobe.

2. Do an initial evaluation of Bwanamuzuri, Amehanga, Mont-Hoyo, Songolo.

3. Begin the work of Mandro and Kagaba.

4. To improve the administrative work (statistics, evaluations, reports, financial reports) at Nyankunde and in the health centers.

5. Begin PMI clinics at the village level in Ndoya I and Songola by the health workers themselves and anticipate the days for vaccinations by the mobile team from Nyankunde.

6. Include and establish a program of teaching and motivation for planned parenthood.

7. Establish a precise map of the region and begin new health centers in the near areas around Nyankunde before going further out.

8. Begin to encourage all the places where there are PMI mobile clinics to begin health centers.

9. To better integrate the nursing students to the programs of community health.

10. To improve the supervision of health centers by (1) passing a complete day instead of half day, (2) examine on each visit certain aspects of the work of the village and not only of the health center, (3) encourage the work of the local churches.

11. Have a seminar on family planning and planned parenthood. One week for the leaders of the teams in public health of CME at Nyankunde and the nursing students that are doing their stage in public health and one week in a village for all of the village health workers and the nursing students that are doing their stage in public health.

12. Expand and develop our relations with the local authorities, local chiefs and chiefs of regions in order to encourage them to have health centers in their villages and establish good relations of mutual confidence.

13. Begin the elaboration of a brochure for the teaching of village health workers.

14. Begin the training of health matrons.

Teams

1. Resident. The leader is Citizen Uringi. Always takes care of sick children in the morning and school clinics in the afternoon. Citizen Uringi will be able to help in the teaching of fathers for family planning.

2. Mobile Team. The leader is Citizen Obhiza. We are being asked for new clinics but we prefer to have more health centers seeing that the aid would be greater and better integrated.

3. Community Health. The leader is Citizen Omini. Will supervise the health centers throughout the area and begin the work of PMI at Ndoya I and Songolo. Citizen Ambimani will take care of the teaching of women, the training of health matrons and motivation of family planning and planned parenthood. Mdm. Marie Jeanne will help in the formation of village health workers, the evaluation of work (with students and personnel that are part-time), and administrative work while waiting for someone who can help with this aspect of the work and new project.

4. Resume. Our team has grown. Citizen Omini and Mdm. Marie Jeanne are working full-time in this work. Citizen Ambemani has strengthened the team after a training at CNND at Kinshasa in September and October of 1980.

Report of the Visit of Dr. J. M. Kyle to the
MAP Workshop "Health in Community Development" Held At
Wheaton, Illinois July 23 - August 2, 1980

The conference was attended by 49 delegates representing 18 different countries including Pakistan, Middle East, Far East, North and South America. Most but not all were working in medical situations and about 10 were doctors. All were involved with "people" and each was seeking to know how best he could serve people and help them to meet their own needs and solve their own problems. A summary of the idea of the week together is Health--total well-being, Through--as a result of, Community--people living together with a sense of belonging, Development--accepting responsibility for their own well-being (Health Through Community Development).

Drs. Don Miller, Jack Robinson, David Hilton and Nurses Jeannie Thiessen and Jean Moorhead were the main participants for the conference, but there was ample time for discussion and problem-solving together in a group, and many real examples were taken and discussed in detail. There were many "hand-outs" which have been very informative.

Help was looked at in different aspects. From the point of view of the poor village person with little motivation, the wealthy for whom change will introduce a threatening situation with perhaps loss of income. Those actually involved in helping in the forming of programs, finding out the real needs of the people and coming to an agreement with the people as to how they can best be helped, and lately through the eyes of a funding agency who are often unaware of many of the problems involved in implementing some of the programs. The self-respect of the individual must always be recognized, and built upon leading to an increased quality of life, physical and mental as well as an improved standard of living. Improving agricultural techniques and water supplies can also be used to meet these challenges. Various different health services were discussed. I had the opportunity of presenting the Nyankunde Community Health Program one evening and we discussed it together.

I would like to express my sincere thanks to the EZE for their part in my expenses to visit this conference which would not otherwise have been possible.

Nyankunde - Nairobi, return	$ 340		
Nairobi - Illinois, return	1515		
Workshop Fees	140		
			$1995
MAP Assistance		$1140	
EZE Assistance		855	
TOTAL		$1995	$1995

Additional travel and lodging expenses were met by myself as it was necessary to remain in the U.S.A. for two weeks to claim the cheap return flight.

Expenditures on Foreign Currency (Dollars)

Comparison—Expense Budget and Actual Expenditures

Situation According To The Expense Budget	Expense Budget D.M.	Expense Budget Dollars	During the Period of Reference Foreign Currency (Dollars)	During the Period of Reference Accumulated	Observations
1. Cost Investments:					
Autoclave	110.000	56,352.46			The accounts are not identical with those of the annual report because I personally paid a part of my trip and of my expenses during the trip. Those figures do not appear in the annual report of CMEC (Nyankunde).
Sanitary System	48.000	24,590.16			
Incinerator	14.000	7,172.13			
Vehicles	171.000	87,602.46	3,059.58		
Garage	25.000	12,807.37			
Office Equipment	18.000	9,221.31			
Medical Instruments	42.000	21,516.39			
2. Costs: Operating					
Salaries	21.600	11,065.57			
" "	9.900	5,071.72			
Permanent Education	19.500	9,989.75			
			686.50		
Visits to Other Projects	41.000	21,004.09	1,404.50		
Medicines	56.000	28,688.52	4,387.45		
	576.000	295,081.93	9,538.03		

HEED KAMALGANJ RURAL DEVELOPMENT PROJECT

FINAL REPORT

June 1976 - December 1980

W. Meredith Long
Project Director, Kamalganj
MAP / HEED Representative

Submitted to : United States Agency for International Development.
December, 1980.

Abbreviations Used in the Report

BARI : Bangladesh Agriculture Research Institute
BDG : Bangladesh government
BRAC : Bangladesh Rural Advancement Committee
BRRI : Bangladesh Rice Research Institute
C.O. : HEED's Community Organization Sector
F.E. : Functional Education
FPA : Family Planning Assistant, male union level BDG family planning extension worker
FWA : Family Welfare Assistant, female word level BDG family planning extension worker
FWC : Family Welfare Centre, union level maternal and child health and family planning clinic complex
FWV : Family Welfare Visitor, medically trained female M.CH./ family planning worker who runs the F.W.C.
HYV : high yielding variety
IRDP : Integrated Rural Development Program, BDG institution for cooperative development
KSS : A farmers cooperative of the IRDP
MCC : Mennonite Central Committee
MCH : Maternal and child health
PHE : Public Health Engineer, has responsibility for UNICEF assisted BDG program.
PMW : HEED paramedical worker
RHC : Rural Health Center, thana level hospital complex
TFPO : Thana Family Planning Officer
TMO : Thana Medical Officer
VHW : HEED Village Health Worker

Final Report on MAP / HEED Kamalganj Project

U.S. Agency for International Development

Grant No. AID / ASIA - 6 - 1170

June 1976 - December 1979.

I. Background Information

A. Implementing Organization

MAP International, the grantee, is one of a number of sponsoring organizations of HEED (Health, Education, Economic Development) Bangladesh, a Christian development agency active in Bangladesh. Actual management, funding, project implementation, and operating policy were functions of HEED Bangladesh. MAP personnel were involved in project planning and regular evaluations and, during the time of the grant, the position of Project Director, Kamalganj was held by a MAP supported staff member seconded to HEED Bangladesh.

B. Project Location

The project area is located in the Kamalganj Thana of the Sylhet District in northeastern Bangladesh. The southern and south eastern parts of Kamalganj Thana border on Tripura State, India. The project is based on a 191 acre site owned by the Ministry of Health and Population Control of the Government of Bangladesh but made over to HEED as a base for a leprosy hospital and work as well as the project activities covered by the terms of the grant. The project site is centered in Kamalganj Thana about 1 mile west of the rail station of Bhanugach and about 2 miles from the Thana offices.

C. Description of Project Area

Kamalganj Thana covers an area of about 188 sq.miles. The eastern, western, and southern borders are hilly areas covered by forests and tea gardens. The area on either side of the Doloi River, flowing northward through the center of the Thana, provides the best agricultural land.

The total population of the Thana is estimated at about 180,000. Of this number approximately 60% are Bengali living in villages throughout the Thana. 20% are tribal laborers working in the tea gardens, and the remaining 20% are tribal people, predominantly Monipuri, living in villages with a small number of Khashis living in the reserve forest.

Of the population not living in the tea gardens, approximately 30% are landless, half are small farmers owning less than three acres of land, and the remaining 20% rather larger landowners owning 3 acres or more.

II. Program Goal and Purpose

At this point we will only recall the original goal and purpose of the program as indicated in the logical framwork, so that it will be in mind for the bulk of the report. After a presentation of project strategy and accomplishments, a summary statement will be made in specific references to the log frame.

A. Programe Goal

Replication of proven institutional approaches in other thanas of the Sylhet District.

B. Project Purpose

To establish a functioning, replicable institutional infrastructure at thana level capable of providing services and inputs to rural inhabitants and to motivate inhabitants to assess their own needs, do their own planning and request for services/inputs from appropriate thana and union authorities.

III. Project Strategy

Original Strategy

1. Integrated programme : The original project strategy called for on integrated programme at village level. Project personnel from the community organization office were to make contact with the villagers, work with them to discover their problems, and help then to find solutions. The other sectors, health and agriculture were to serve primarily as programme resources for the overall process providing specific expertise, training, and inputs.

2. Village groups : The vehicle by which the programmes were to be introduced to village level was intended to be a Village Development Committee. This committee, to be formed through the efforts of community organization staff,was to be representative of the entire village, especially giving an opportunity to the small landowners and landless to have a significant voice in village affairs.

3. Target areas : Realising early in the process the futility of spreading work too thinly over the entire thana, management decided to concentrate efforts on a union by union basis selecting model villages within each union in which to introduce the integrated programme.

B. Problems experienced in original strategy

1. Integration

a. Growth of organization / Timeframe

A truly village based programme of need identification, organization, and programme planning requires a long time.

In fact project management felt under considerable pressure from many areas to initiate "substantive" programs quickly. External pressure came from funding agencies, the Bangladesh government, and villagers themselves, all of whom expected visible assistance of an organization as large and visible as HEED without the time necessary for a truly community based personal and organizational development process.

Organizational pressures included the rapid personnel expansion in which trained agricultural and health specialists became available long before an effective community organization programme could be established. Finally there exists a strong personal desire to "do something" to meet needs which are so pressing. This pressure was even more intensified since the programme was built primarily upon young expatriate staff on two and three year assignments.

b. Multi-sectoral activity

The original purpose in having health and agriculture together in an integrated program was to be able to respond to a wide range of needs at village level. The actual effect was more to fragment the overall programme into various sub-programs based on the interests, needs, and resources of various beneficiary groups. (i.e. To work with fish, there must be a place to put them. Since only a sub-group of individuals within a village will have ponds or access to them, a fish programme is going to be unlikely to be introduced, at least for quite a long time, in an integrated village program.)

Secondly, in order to work in Bangladesh, each seperate sector had to relate to different government ministries. Since it is HEED's policy not to set up groups which would basically parrallel functions of government, both the goals of the various programmes as well as the means of implementing those goals are tied very closely to government goals and programmes. While this has proved to be a productive and helpful policy, it made an integrated program virtually impossible.

Finally, the leprosy program, which was not funded by U.S.AID but which nevertheless was a part of the total HEED work in Kamalganj, simply could not operate on the same basis as the other programs. By its very nature it is a top-down, institutionally based, curative program.

c. Relative sectoral strength

The Community Organization sector, which was designed to carry out initial village organization, motivation, and form the basis for the integrated aspects of the other program inputs was actually the weakest in expertise, personnel, and growth. The other stronger and better staffed sectors naturally tended to overshadow it.

2. Village groups

It also proved impossible to form a single representative village group through which to direct programs. A major problem is that the village itself is not a social structure giving identity to a group. Rather than geographically contiguous households a village is comprised of widely scattered baris' Secondly the nature of the programs and of government relationships made work through a single group almost impossible. Lastly, the very social structure with well defined social roles dependent upon wealth, family, education, and land holding prevented formation of effective Village Development Committees.

3. Target areas

For most of the project period the strategy of moving together from one union to the next remained the operating procedure.

In later stages, though, as sub-programmes became more defined, different programs began to move to areas throughout the thana that offered opportunity. The majority of HEED's work is still in three unions with growing involvement three more and at least minimal involvement in all nine.

C. Present strategy

Though we expended considerable time and energy in attempting to bring about an integrated programme, we finally resigned to the inevitable given our own set of circumstances, and developed a number of different programs with specific goals, beneficiary sub-groups, and implementational strategies. The remainder of the report will be structured around these various programs. HEED Kamalganj then must be regarded not as a project but rather as a base from which various programs are conducted which, taken together, give scope for quite comprehensive rural development, but which nevertheless retain identies of their own.

While we in effect then gave up the idea of integration (indeed, even coordination has remained elusive), we are not uncomfortable with the present strategy. The programs themselves are well targeted and appropriate to real needs. There is now a framework of experience and learning providing significant and helpful direction, which is particularly important when there is a rapid turnover of staff. In many ways this approach is more appropriate to the actual situations in the villages, is easier to administer, evaluate, and fund, and organizationally makes it easier to relate to the various services and institutions of the Bangladesh government.

IV. Project Programs : Activities and Accomplishments

A. Community Organization

1. Overview

a. Of all the sectors, the Community Organization sector has had the most difficult time finding its place. As mentioned above its first assignment was to be the cutting edge of HEED's village involvement. That assignment was compromised at the beginning by the prior involvement of HEED in clinics, general health, and agricultural work.

b. Shifting its emphasis, the C.O. sector worked side by side with the Integrated Rural Development Program (I.R.D.P.) which came into Kamalganj Thana at HEED's request to start K.S.S. farmers coops. The first I.R.D.P. Project Officer was designated as a HEED counterpart. The I.R.D.P. program however, quickly outgrew the scope of the C.O. sector.

c. At that time, almost by accident, the C.O. sector conducted a functional education course in response to a need voiced by tea garden laborers. This work expanded into numerous groups using the Bangladesh Rural Advancement Committee (BRAC) materials for functional education. Most of these groups subsequently became non-formal co-operatives participating in a plan for savings matched by HEED. In response to needs expressed by parents, 7 primary education centers were formed in the tea gardens. At the time the grant period ended a decision had been made to concentrate efforts among tea garden laborers.

d. Also at the request of villagers, the C.O.sector became involved in clean water and sanitation. An early program in a tea garden line to motivate people to dig and use latines failed. Though 15 latrines were dug, there was inadequate motivation for proper use, and they were improperly sited.

The C.O. sector motivated 41 village groups to apply the P.H.E. / UNICEF program for tubewells. After a year of chasing paper, 39 were finally sunk but many fell into disrepair quickly. A more promising technique appeared to be the sinking of 7 protected ring wells topped with a pump in tea garden lines. While these wells provided better and more convenient water sources than before, a laboratory analysis of the water from the wells showed a high bacterial count, above the levels of safety.

2. Program summary

A summary statement regarding the C.O. program is given below :

PROGRAMS	BENEFICIARY GROUP	ACTIVITIES	ACCOMPLISHMENTS	COMMENTS
a. Establishment of Village Development Committees b. Need assessment	Villagers	a. Initial surveys in 2 areas. b. Verbal and written reports on local situation	Provided important information for HEED's beginning.	Integrated strategy abandoned, 1978
IRDP Co-operatives	Village farmers	a. Invited I.R.D.P. to Kamalganj b. Assisted in establishment of first KSS groups c. Continued monitoring and HEED linkage during IRDP infancy.	a. Provided the stimulus for bringing a viable government institution to area. b. KSS groups now form the major vehicle for the agricultural program. c. Established permanent, non-HEED source of credit, agricultural assistance.	a. Coordination with IRDP turned over to Ag sector in 1978 b. Over 130 KSS groups in Dec 1980
Functional Education	Landless poor. Village women. Tea garden laborers	a. Conduct teacher training b. Conduct F.E. classes	a. 45 village teachers trained b. 35 classes involving about 339 students conducted.	Programme continues in December 1980 with 6 classes now meeting.
Non-formal co-operatives	Same as F.E.	a. Establish co-ops b. Set up savings programs c. Encourage projects d. Encourage independence from HEED	a. Grew to 22 co-ops involving 320 members and savings in excess of Tk 30,000. b. 16 co-ops took up projects	a. Due to work stoppage in tea gardens, only 12 coops continue in Dec. 1980 involving 181 member and savings of about Tk 21,000 b. Investments are often of a passive, non-productive nature. c. One co-op became registered KSS group
Primary Education Centers	Tea garden laborer's children	a. Organize groups and train teachers b. Provide access to supplies c. Try to set up independently	Grew to 7 groups involving about 150 children who received instruction in basic literacy and math.	Four operated independently for a short period following HEED's ending tea garden involvement. All finally stopped functioning.

PROGRAMME	BENEFICIARY GROUP	ACTIVITIES	ACCOMPLISHMENTS	COMMENTS
Latrine building	Tea garden laborers of Adamtilla	a. Motivated people dig latrines b. Provided needed bamboo covers.	15 latrines completed	a. Poor educational preparation an inadequate follow-up prevented expansion of program and proper b. Subsequent study showed that so latrines had been dug too close water supply.
Tubewells	Villagers	a. Motivated villagers to apply for UNICEF/PHE tubewell program. b. Pursued applications through administrative processes. c. Provided on-going maintenance for wells	39 tube wells dug under UNICEF/PHE program	a. From submission of applications sinking of wells took almost one b. Wells sometimes sited in areas benefit the more wealthy and influential villagers. c. Continual maintenance problems w wells quickly rendered many inop d. Program now part of community he work.
Protected ring wells	Tea garden laborers	a. Developed relatively inexpensive design for protected ring wells topped with pumps. b. Villagers provided necessary labor. HEED necessary bricks, cement, and masons, and UNICEF pumps and pipes. c. Maintained wells after digging.	7 protected ring wells placed in tea garden lines.	a. Wells were greatly used and appreciated by laborers, water w preferred over that of open or unprotected wells, and also over tubewells because of high iron content in water. b. Good example of cooperation betw beneficiaries, volag, and outsid resource. c. Water from wells taken in almost worst case conditions (immediato after very heavy rain) proved to "unfit for human consumption" tho probably still better than open nearby. d. Problems existed with maintenanc and theft of pumps e. Program not continued.

3. Work since Dec. 1979 and future work

a. At the end of the grant period, plans were to expand the work of C.O. within the tea garden areas. A growing concern of tea garden management in regard to labor dissatisfaction, however, forced HEED to close all work in the tea gardens except for leprosy. There is no apparent scope at this time to expand this type of work in the tea gardens.

b. The departure of the C.O. sector head and the lack of anybody qualified to fill that position resulted in a very low level of activity for most of 1980.

c. Because of the change in the scope of the C.O. work and the lack of qualified personnel, the C.O. sector was dissolved half way into 1980. Most of the staff were reorganized into a new section under Project Services titled the Community Education Office. The most important functions of C.O. have been retained in this office now under a well qualified and highly motivated senior national Community Education Officer. The Education Office will conduct non-formal educational programs among interested village groups, and provide resource services to the other sectors in the development of non-formal educational materials. The office also coordinates sectoral activity and training in the formal educational structures within Kamalganj.

d. The functional education groups are now being integrated far more closely with the community health program and a mutual dependency is developing. The overall BRAC approach and materials are being adopted to fit more closely into HEED's overall program efforts.

e. Of the non-formal cooperatives formed during the old program 12 are still meeting regularly, and several are now active in productive activity. (i.e. Chitlia Monipuri women rented land and produced a rice crop themselves)

f. The clean water and sanitation activities have been transferred to the Health Sector as an integral part of the community health program. Contacts with UNICEF which had been largely ignored during 1980

are being rebuilt, and a cooperative program is now taking shape.

B. Agriculture

1. Overview

a. Agriculture is a term widely defined in HEED. It inc agronomy, engineering, fisheries, livestock, and poultry sections, each with their own range of program activities

b. The 191 acre project site, which includes some good c land, functions as a direct support to the extension prog not as a farm for basic research. Most needed research a demonstrations are conducted in the farmer's fields, tho some presenting an extremely high risk or needing tight controls are conducted on site.

c. The farm also serves as a production and support unit for most inputs required in the extension programs of fisheries, livestock, and poultry. Most agronomic inputs are procured through government or private channels.

d. HEED has sought to facilatate credit facilities throu KSS cooperatives of the IRDP rather than establishing its as a loan giving institution (though HEED has had to give some loans at times)

e. HEED has not sought to establish farmers co-operative under HEED sponsership. Much work is conducted through existing KSS groups. When HEED has brought a group of farmers together for a certain project for work in a particular village, the farmers have been urged to form a KSS co-operative under government registration.

2. Program summary

The different aspects of the agricultural program are quite complex and lengthy reports have been submitted annually presenting the work in great detail. This section will only attempt to summarize the program over the last years in relationship to program goals and objectives. While attempts have been made to be comprehensive, this summary neither includes the entire scope of work performed nor can it present the implications of HEED's experience in terms of specific recommendations for farming practices.

AGRONOMY AND ENGINEERING

OBJECTIVES	ACTIVITIES		ACCOMPLISHMENTS	COMMENTS
For all these the primary beneficiary group is farmers with less than two acres of land.	1976 - Sept. 1979	Oct 1979 - Dec 1980		
1. To demonstrate new varieties of rice, proper fertilizer application, and assistance to farmers in acquiring inputs.	1. 33 high yielding variety (HYV) rice trials performed in village areas (10,77-78;23,78-79) 2. 8 variety/fertilizer trials on farm (2,77-78;6,78-79) 3. General training in HYV rice cultivation to BDG worker and farmers.(11 BDG, 77-78; 19 BDG, 78-79;21 farmers, 78-79) 4. Specialized training. a. Fertilizer application (40 farmers,77-78) b. Pesticide application 3 day course (20 farmers, BDG, 78-79)	1. 86 HYV village demonstration plots (50 HEED; 36 HEED/BDG) 2. 51 fertilizer village demonstration plots. (33 HEED, 18 BDG) 3. 178 mds of HYV seed distributed. 4. Aus rice seminar (91 farmers, 11 BDG) 5. Amon rice seminar (14 farmers-Not publicized by IRDPas promised) 6. Pesticide application by sprayer training (28 farmers owning sprayers) 7. Crop management and planning training for 15 HEED field staff from other sectors. 8. HYV seed multiplications (3 acres, farm; 3 acres, village) 9. Variety trial (1, farm)	1. Farmers have been exposed through demonstration to numerous HYV's with increasing understanding and acceptance. 2. Increased awareness of overall cropping systems and patterns now being done by farmers and formulation of some recommendations. 3. Increased farmer skill in pesticide application. 4. Strong links to IRDP program and KSS groups developed. 5. Cadre of strong and well trained national staff.	1. This aspect of the overall progra has grown in importance and will continue to have priority. 2. The wheat and engineering program are linked inseperatly with this in the attempt to devise optimum cropping practices and patterns f Kamalganj Thana. 3. We now have a good and constantly improving information base from which to work. 4. Activity has moved increasingly from project farm to the village. 5. This summary includes only projec farm activities directly related to the program. Production for hospital or on share-cropping system not recorded. 6. Cropping system research linked with B.R.R.I. to obtain good field data for programme.

AGRONOMY AND ENGINEERING

OBJECTIVES	ACTIVITIES		ACCOMPLISHMENTS	COMMENTS
	1976 - Sept. 1979	Oct 1979 - Dec. 1980		
	5. HYV seed multiplication (3/4 acre, project farm,) 77-78 6. Collected and published soil survey data on Kamalganj Thana from BDG and FAO sources.(77-78 report) 7. Very detailed survey of cropping patterns and practices. (13 farmers, 78-79) 8. 51 HYV seed kits distributed to flood affected farmers.(1978-79) 9. 27 HYV variety trial kits provided to BDG extension workers (1978-79)	10. Detailed study of rice yields. (150 crop cuts performed throughout thana) 11. 5 year round cropping pattern studies started. 12. 2 village zinc / sulfer deficiency trials. 13. HEED agricultural newspaper published regularly in Bangla including training on all aspects of ag. programme. (5 issues to date)		
2. To develop awareness of the nutritional value of vegetables and develop the concept of year-round gardening.	1. Winter vegetable programme a. 1976:- HEED staff to MCC for vegetable course -2 demonstration plots -800 seed kits and cultivation guide distributed. b. 1977:- Vegetable cultivation survey 5 villagers, 177 interviews -Training to 38 at seminar. -25 kits distributed with extensive follow-up	1. Winter vegetable programme: 1979 -45 seperate training sessions (no total number of people known) -1,010 seed kits distributed. 2. Summer vegetable programme: 1980 -16 village training sessions -1,000 seed kits sold 3. Sweet potatoes -9 demonstration plots -86,000 cuttings sold to villagers.	1. Increased to some extent the growth of summer and winter vegetables. 2. Increased awareness of the need for nutritious vegetables and better cultivation practices.	1. Potato progra dro after 1978-79 as H inputs would not significantly chan a well-established practice for the b 2. While vegetables w the first extensio priority in 1976-7 the entire program has shifted its overall emphasis t grain crops and cropping systems while still increas involvement in vegetables. 3. Sweet potato cutti distributed in lat 1979 and supplied MCC were not the h carotine variety t requested. Yields and potato quality was poor.

OBJECTIVES	ACTIVITIES		ACCOMPLISHMENTS	COMMENTS
	1976 - Sept. 1979	Oct 1979 - Dec 1980		
3. To popularise wheat as a winter crop.	1976 - 77 1. Seed distributed to 57 farmers sufficient for 40 acres. (1976) 2. Wheat variety trial on farm (77) 1978 1. Training to 62 farmers in wheat cultivation 2. Distribution of 109 seed kits. (35 to BDG, 37 to IRDP, 37 to HEED model farmers) 3. Extensive follow-up HEED farmers 4. Variety / planting method trials (1 farm, 1 village)	1979 1. 24 acre wheat block scheme involving 50 farmers in cooperative effort under close supervision. 2. 14 wheat demonstration plots planted throughout thana 3. 18 seed kits distributed through BDG 4. Training to 100 BDG youth trainees, Thana, Ag.Officer, and Union Ag Assistants 5. Wheat variety trials (2 farm, 2 village) 6. Additional wheat seed sold to farmers without follow-up supervision.	1. After false start in 1976 (wheat distributed with no training or follow-up), wheat is seriously considered as a winter crop by many farmers. 2. Demonstrated the effectiveness of cooperative effort in wheat block scheme. 3. Have started to discover problems involved in a 3 crop cropping system and formulating some improved methods to solve them.	1. The wheat programme w continue to expand, as shows significant potential. 2. Experience in the win of 1980 shows that interest in wheat dec when there have been good rice harvests in same year.
4. To evaluate the potential of other crops in the cropping pattern.	Trials performed either in village or on farm for peanuts (1977), soybean (1977,78), sunflower (1977), sorghum, (1978)	Soybean (1979,1980) and sugar cane (1980) trials and demonstrations.	Work continuing	Sufficient information a not available as to viab of one of these as an alternate crop for Kamal Work continues particula on soybean and sugarcane
5. To evaluate and promote nutritious fruits.	Improved varieties of banana, guava, and papaya purchased from BADC and planted on project farm for multiplication.(1977-78)	1 acre of hill land cleared to be planted with variety of fruit and timber trees, and crops.	Work continuing	A low priority. Followin the initial planting of in 1977-78, no work has done until this year. In the light of BDG priorities and the amoun unused hill land in the we are now doing some ve modest testing as to how land could be utilized.

OBJECTIVES	ACTIVITIES		ACCOMPLISHMENTS	COMMENTS
	1976 - Sept 1979	Oct 1979 - Dec 1980		
6. To provide necessary irrigation services in support of agronomy programme.	1. Water resource survey of Kamalganj Thana involving 10 national and expat scientists performed by BDC at request of HEED. Results available for study. 2. Two test borings done to check suitability for shallow tubewells	Irrigation provided for wheat using crossdam for 25 acre block and hand tubewells or surface water for smaller plots.	Only that in direct support of other programs.	Engineer did not arri early 1979, and has additional responsibi which has curtailed engineering involveme
7. To minimize losses and maximize quality of grain in threshing, drying, and storage operations, and realize increased production through improved mechanical operations.	1. Eight items of equipment manufactured in Bangladesh or appropriate to area collected. 2. Jute reinforced silos for rice or wheat purchased for evaluation. 3. Simple rice solar drying test performed.	1. Additional implements purchased and tested. 2. Fuel fired and solar grain and food dryers tested. (In village) 3. Cooperation with BARI in evaluation of natural draft and forced air dryers. 4. Established workshop for fabrication and repair of simple implements.	Organizational infra-structure in place and sufficient information gathered to serve as a firm base for future, more extension oriented work.	Agricultural engineer had additional respon as sector head in an staffed sector. Natio engineer only recenti recruited though atte had been made for ove

FISHERIES

Target beneficiaries are small farmers (less than 2 acres) with access to fish ponds. Later work may involve large ponds, cooperativel

OBJECTIVES	ACTIVITIES		ACCOMPLISHMENTS	COMMENTS
	1976 - Sept 1979	Oct 1979 - Dec 1980		
1. To establish the resource base on project site to supply needed inputs.	1. Model fish breeding pond (½ bigha) constructed for breeding Nilotica fry. (1976-77)	1. One project site pond used for nilotica breeding taken out of service since breeding has increased in village ponds.	1. Sufficient base facilities established to sustain village programme.	1. Carp fry and initial supply of (fry obtained from BDG.
	2. Pond completed for temporary holding and growth of carp species (rui, katla, mrigal) (1977)	2. Additional pond excavated for induced spawning of carp and needed equipment purchased	2. Increased variety of fish fry available for village pond development.	2. Nilotica fry bred in HEED ponds.
	3. Nursery facilities expanded by construction of one large and six small brick/cement tanks to provide for induced spawning of carp species. (1978)	3. New pond excavated for production of carp fry.		3. First attempt at induced spawnir failed due to high water tempers
2. To develop small village ponds for farming of local and exotic varieties.	1. 12,620 Nilotica fry distributed to 136 fish pond owners. (76-77)	1. 14 new ponds developed	1. Concept of fish farming introduced and accepted.	1. Efforts of 1976 - 77 proved ineff with no lasting results.
	2. 40 village ponds developed	2. Continued advice on first 40 ponds.	2. Nilotica now established in local ponds and growing	2. In 1978, HEED shifted to a compre pond development plan.
			3. Several trained fisheries workers resident in Thana.	3. Comprehensive pond development in a. Initial and on-going training owner. b. Securing of credit for pond de through banks, IRDP, or HEED. c. Sale of inputs required for po development from HEED to farme d. Continued consultations with p for 2-3 years after initial dev

LIVESTOCK AND POULTRY

OBJECTIVES	ACTIVITIES		ACCOMPLISHMENTS	COMMENTS
	1976 - Sept 1979	Oct 1979- Dec 1980		
1. To establish a base on the project site sufficient to support extension activities.	1. Poultry farm facilities* consisting of seven kutcha poultry houses constructed.	1. Bull house constructed	Project facilities adequate to maintain and execute planned programme.	
	2. Cow and buffalo housing constructed.			
	3. Sufficient acreage planted in grasses for feed and extension.			
2. To genetically upbreed local cattle.	Calf breeding programme 1) Breeding nucleaus of good cows from Faridpur obtained. 4 calves born subsequently.	Artificial insemination programme and natural servicing 1) Two high quality bulls obtained from BDG. 2) Limited natural servicing done in area. 3) HEED staff trained at Savar in artificial insemination.	Initial work continuing. No substantial benefit to date.	1) The calf breeding p is under careful st this point and will probably be dropped the cost of upkeep stock will not equ benefit. 2) The artificial ins program is planned start in 1981 as p the nationwide BDG
3. To protect local cattle from disease through vaccinations, and to provide limited curative care.	1. 16,604 Anthrax, H.S., or GTV vaccinations done.	1) Approximately 6,500 vaccinations to be given.	1) Excellent HEED / BDG cooperation.	Programme will con as in the past.
	2. 9 villagers trained in poultry and cattle vaccination.	2) 6 village vaccinators trained.	2) Low input and cost with high benefit in terms of protection.	
	3. 58 villagers received wider training in livestock care.	3) About 100 cattle treated.	3) With training of village poultry vaccinators, steps have been taken to end dependency upon HEED.	
	4. 198 livestock treated for sickness or injury.			

*Mud, bamboo, and thatch construction with mud or concrete floors.

LIVESTOCK AND POULTRY

OBJECTIVES	ACTIVITIES		ACCOMPLISHMENTS	COMMENTS
	1976 - Sept 1979	Oct 1979 - Dec 1980		
4. To promote fodder grasses as source of nutrition for local cattle.	1. Ten napier grass demonstration plots in villages. (77-78) 2. 1½ acres planted in tea garden and local air force base on fallow land. (77-78) 3. 7,000 seedlings and 255 sds. of grass sold in the local bazars (78-79) 4. Fodder grass variety trial on farm.(77-78)	1. Project site acreage increased to 6.83 acres with trial of inter-cropping grass with other crops. 2. 500 seedlings sold in local bazars. 3. 15 napier demonstration plots set up in villages.	1. Napier grass, an HYV variety obtained from SAVAR introduced in project area as a cultivated fodder for cattle. 2. Fodder grass production found to work well on now fallow hill land.	1. Extension efforts had to be curtailed because of a lack of stai and increased grass demand of project cattle. 2. Fits well with BDG priorities.
5. To genetically upbreed local poultry	3 cockerel exchange programs in 3 villages involving training of bird owners and sale of 44 improved cocks.	1. 4 cockerel exchange programs in 4 villages involving training of bird owners and sale of 60 birds. 2. 402 fertile eggs sold to 42 farmers for production of pure breed birds.	Improved purebred birds introduced in 7 villages. A close monitoring of the first program (1978) indicates increase in size of offspring of purebreed/ deshi cross, and increased egg size.	1. Program will accelerate to some extent since time lag in building breeding stock now over. 2. High mortality of Rhode Island Red (RIR) and White Leghorn cross used in first program necessitated change to purebred RIR. Village mortality rates of purebred birds now considerably improved. 3. Breeding stock originally secured from EDG poultry farms.
6. To protect local poultry against disease.	1) 13,449 poultry vaccinations given throughout Kamalganj Thana 2) 27 village volunteers trained to give vaccinations.	1) About 8,000 poultry vaccinations throughout Kamalganj Thana 2) 6 village volunteers trained to give vaccinations.	1) Good HEED / BDG program, 2) Low input and cost with high benefit. 3) Trained vaccinators now in villages.	15 of the village vaccinators also were trained for cattle. Village volunteers will now be trained to give both cattle and poultry vaccinations.

3. General Evaluative Comments and Future Work

The agricultural program has matured considerably from its start less than five years ago. The program has evidenced strength in the following ways :

- A broad base of knowledge has been obtained concerning agricultural practices and problems in Kamalganj Thana, and of the resources available nation-wide which may be called upon for assistance and advice.
- Programs are well targeted in terms of areas of need expressed by the farmers.
- Good relationships have developed locally with appropriate BDG officials, particularly the I R D P. HEED efforts reflect the priorities of the BDG and are directly supportive of their programs.
- The program moved from initially having wide distribution of commodities with little supervision, follow up, or training to one in which any commodity distribution is associated with training and consultation. Training efforts through trained extension staff in the villages, the agricultural newspaper, and training inputs through IRDP groups have resulted in a wider distribution of knowledge than of actual inputs.
- The role of the project farm in relationship to the village program has been defined and the farm now serves as more of a valuable support than as a drain on personnel and financial resources.
- A capable but relatively small staff of national specialists and village extentionists have been recruited and carry the bulk of the program.
- HEED has gained the confidence of many of the local farmers in whose areas we are working.

There have also been significant problems which have prevented the work from proceeding as well as it could have:

- Recruitement of both expatriate and specialist level national staff has proved difficult . At present only two of the seven expatriate consultant posts are filled, and several key national positions are also vacant.

The result has been frustration on the part of the expatriates who are landed with many responsibilities outside their own fields thus limiting their involvement where it is potentially most valuable, and a general limitation on program efforts. The national staffing is still uncomfortably shallow in terms of specialist areas so that the departure of one or two key staff members would have a very large detrimental effect on program.

- While the BDG has been generally supportive at the local levels, and in terms of direct implementational assistance, there has not been the same cooperation in terms of assistance in clearances for expatriate staff, in facilitating acceptance of agreements, or in import of needed supplies. HEED's Dacca officials have not established the same kind of facilitative relationships with top BDG officials in agriculturally related areas as they have in family planning or handicrafts.

  BDG shifts in methods of relating to agriculturally related volags have been seemingly numerous and confusing.

- The timely supply of required inputs both through government and non - government channels has been a problem.

- While HEED has desired to remain out of the loan-giving business, accessibility of rural credit to smaller farmers through official channels is a continuing problem.

- The slow growth of the community organization effort, the general shortage of agricultural staff, and the problems involved in working with resource impoverished people has prevented the identification and implementation of agriculturally related programs of significant benefit to landless people.

In the future, the trend toward increasing training and consultation is likely to continue. Hopefully, there will be the opportunity to take a better and more complete measurement of actual benefits resulting at village level, and to develop some additional aspects of program efforts with landless groups.

C. Health Sector

1. Overview

a. Program Objectives

From a clinical curatively oriented start in 1976, the health sector has progressed into a role which is far more oriented toward training and village education than toward service delivery. Though initially not by design, a close complementary working relationship has developed with the BDG program in the area, particularly in work through the Family Planning and Population Control side of the ministry.

To receive a clear picture of health sector activities it is best to think of them in terms of three seperate areas. The first represents HEED's direct relationship to the BDG, and can be best expressed in terms of an objective "to facilitate the establishment and implementation of health related programs of the BDG, particularly as they relate to maternal and child care". Included in this category would be training of BDG workers, establishment of MCH and general clinics, and assistance in sterilization programs at the Rural Health Center (RHC).

A second goal of the overall program is "to improve the health of mothers and children in the villages of Kamalganj through health education, identification and improvement of environmental factors detrimental to health, and improved access to simple curative care". This level of work involves the Village Health Worker(VHW) program, school and home health education, and clean water and sanitation activities. While generally not directly tied to BDG programs, these activities complement BDG efforts and do not compete with functional and viable BDG village efforts.

The third goal could be stated as " to provide health and medical services in areas not now possible to the BDG." The major components of this effort would be the TB and leprosy programs. Since the leprosy program, while an extensive part of HEED's overall effort, was not included under the terms of the grant, it will not be included in this report.

b. Sectoral Organization

Unlike the agricultural sector in which each section (fisheries, livestock, etc) represents a seperate field of specialization, the three areas of health work have considerably more overlap both in organization and in practice. Different aspects of the overall program are performed by multi-purpose workers at village level.

c. Beneficiary groups

Most health sector activities are targeted primarily to effect beneficial changes in maternal and child health, rather than in general village health. This overall emphasis was developed early in the program and is appropriate for several reasons.

1) Need : The health needs of mothers and children are particularly critical. The under 5 death rate was found to be 1 in 4 in one area of Kamalganj Thana surveyed, not significantly different from that in Bangladesh as a whole. Because of the male dominance in Bengali society, the health needs of women and children are most likely to go unmet. Private, BDG, and traditional curative health services are most likely to be utilized by men.

2) BDG Responsiveness : The Directorate of Family Planning and Population Control has been more responsive at every level to cooperative effort than has the health side of the ministry. Unlike HEED's program in Dacope Thana in which HEED constructed the RHC and had direct involvement in its operation, the Kamalganj program has not become deeply involved in general health.

3) HEED Resources : Personnel and financial resources available to HEED, even in the absence of other more positive indicators, would have had the effect to force a disciplined and targeted program rather than an expensive curatively oriented one.

2. Program Summary

Although this presentation is divided into three major areas headed by program objectives, it must be again emphasized that in actual operation there is often significant overlap between the different activities.

HEED / BDG Programs

Goal : To facilitate the establishment and implementation of health related programs of the BDC, particularly as they relate to maternal and child health.

Program Activities	Accomplishments	Comments
1. Training of BDG staff		
a. Thana MCH / FP staff		
Since 1977, MCH / FP government staff assigned to Kamalganj Thana have received regular in-service training through clinic work involving training sessions, special seminars, and field visits. Regular and special training has been given to the Family Welfare Assistants, (FWA's) their ayahs, Family Welfare Visitors (FWV's), Family Planning Assistants (FPA's) , and others.	1. Better trained more knowledgable BDG staff working in thana. 2. Higher responsiveness and better clinical services available to mothers and children than would otherwise be possible. 3. Accelerated assignment of BDG staff to Kamalganj Thana. 4. Continuing cooperative relationships with Thana Family Planning Officer (TFPO) and Thana Medical Officer (TMO).	1. Training has been both at the initiation of the BDG with HEED assistance and at HEED's initiation with BDG assistance. 2. Training tends to emphasize practical clinical, administrative, and communication skills. 3. Training has been so continual and pervasive that a detailed statistical presentation would tend to be either too complex to invite close attention or too general to be meaningful. If a detailed description is required the reader is referred to previous reports
b. FWV trainees from Sylhet Institute		
In the first half of each year since April 1978, HEED has conducted two, three month residential field courses of FWV trainees from the Sylhet FWV Training Institute as part of their 18 month training course. April - June 1978: 13 trainees Jan - March1979: 14 trainees April - June 1979: 11 trainees Jan - March1980: 15 trainees april - June 1980: 13 trainees Total 66 trainees	1. 66 FWV's received a high quality of practical field training giving a sound basis for future assignments throughout Bangladesh. 2. HEED developed training materials and methods have received favorable attention at national level. While impossible to measure the actual effect it would have on the development of materials and curriculum at that level, it is reasonable to assume that some contribution has been made. 3. Demonstrated a model for volag-BDG cooperation which has been also effected at the International Voluntary Service (IVS) project in Sylhet and HEED's Dacope project.	1. FWV field performance subsequent to training is likely more dependent upon the location and circumstance of her assignment, level of supervision and support from superior officers, and access to needed supplies and equipment than upon the quality of her field training. 2. Field training has developed to increasingly emphasize practical skills, setting up a clinic service, and health education and communication skills. 3. Program will continue.

Program Activities	Accomplishments	Comments
c. Traditional Birth Attendent training Assisted in the selection and training of 5 TBA's, February-April, 1980.	Program not successful. As of this report none of the TBA's selected and trained are known to be active in their villages. HEED declined to participate in a new round of TBA training in Dec., 1980.	1. Selection was haphazard and depended more upo a short interview with the TFPO (since then transferred) than upon village participation 2. On many days training was canceled because of responsibilities of the supervising FWV. HEED contribution was hampered by lack of organiza and continuity of BDG. 3. HEED attempted some village follow-up but TBA were hard to locate and seemingly inactive. 4. Plans to combine HEED's VHW program with TBA training have been scrapped at least for the present.
2. Clinics a. Shamshernagar and Adampur general clinics HEED established and conducted general clinics in Shamshernagar and Adampur unions. The Shamshernagar clinic was started in June, 1977 and ran until December 1978. The Adampur clinic opened in April, 1977 and was turned over to the BDG in April, 1978.	1. During operation of clinics, medical care was provided to about 500-700 patients per month per clinic. 2. BDG general clinic now established and in continued operation in Adampur. Staffed by a BDG compounder with adequate drug supply, it continues to services to service 20-30 patients daily,	1. HEED pulled out of the general clinics becaus they represented a constant drain on personne financial resource with little return in term improved health. 2. While the BDG clinic was established in Adamp private doctors practicing in Shamshernagar t provide the bulk of general care there. Some general patients referred by VHW's continue t treated in the Shamshernagar MCH clinic.
b. Shamshernagar and Adampur MCH Clinics. Both of these clinics were started in late 1976 and have continued. operation to the present. Meeting twice weekly, they not only provide health care to mothers and children of the area but also serves as training centers for FP / MCH workers assigned to Kamalganj and the FWV trainees doing their field training with HEED.	1. Provides clinical health care to 200 - 400 mothers and children per month per clinic (depending upon the season of the year) 2. Serves as a Training center for HEED and BDG staff. 3. Serves as basis for later government services.	1. While established by HEED and continuing to r under HEED's supervision, FP / MCH workers (F and FWV's) assigned to Kamalganj Thana help t staff and operate the clinics. This not only assures continuing training input, but also serves as the basis for later BDG full control 2. In Adampur, the MCH clinic will move into the newly completed Family Welfare Center.(FWC)

Project Activities	Accomplishments	Comments
c. Kamalganj and Munshibazar MCH Clinics HEED assisted the BDG in establishing its own MCH clinics in two additional unions. The Kamalganj MCH clinic, located at the RHC, was established in January 1979, and the Munshibazar MCH clinic in mid - 1980. HEED assisted local BDG staff in securing the necessary equipment and drugs to establish the clinic, consulted during initial clinic operation and assisted in the training of BDG clinic personnel.	Establishment and operation of the BDG - MCH clinics on a much accelerated timetable from what normally would have been the case.	Both clinics operate regularly. The Kamalganj clinic located at the RHC is more consistent in its service and bet attended than the more isolated Munshibazar MCH clinic.
3. Sterilization and Family Planning Programs a. HEED health staff received training from the BDG to become qualified for sterilization operations. b. HEED assists regularly in vasectomy and tubectomy operations at the RHC. (6 programs in 1980) c. From time to time HEED has conducted special clinics for the removal of IUD's when complications made it difficult, also providing training for FWV's .	BDG sterilization programs have been conducted under more sterile conditions and with better standards of patient care than would have been likely without HEED participation.	1. There has not yet been a serious complication as a result of the operations. 2. HEED is now seeking to clarify the BDG understanding of our role, and we have suggested a standard operat procedure for the programme.

Community Health Programs

Goal : To improve the health of mothers and children in the villages of Kamalganj Thana through health education, identificatior improvement of environmental factors detrimental to health, and access to simple curative care.

Project Activities	Accomplishments	Comments
1. Village Health Workers a. The goal of this program was to have a representative village group choose a well-respected village lady who would be trained by HEED to provide health education, monitoring of children's growth and nutrition, prenatal, delivery, and postnatal care, and simple curative service for common diseases. Each VHW should be supported by the Village selecting her. b. HEED health staff visited Village Health Worker projects in India in June, 1977, and February, 1979, for observation and consultation. c. 18 VHW's selected and trained in an initial training course of 6 weeks followed by continuing training course weekly or fortnightly. 7 from Shamshernagar, Oct - Nov., 1977 4 from Shamshernagar, Sept., 1978 7 from Alinagar, Munshibazar April 1979 d. 4 Community Health Assistants (CHA's) trained to help supervise and support VHW's and provide a first medical referral point. e. Attempts made through village groups (MSS's, mosque committees, village health committees) to provide for local support of VHW's.	Of 18 VHW's originally trained, eleven are still functional in their villages. Of that number 6 can be said to be very good in provision of health education and medical services, and 3 are receiving village support.	1. It has become increasingly obvious that meaningful grass roots health work signifi involving villagers does not proceed on a schedule. Original plans for expansion of program were wholly unrealistic. 2. We have learned much about village health, village group dynamics, and methods of vil work through this program, and have consta adopted our overall approaches without significantly altering our goal. 3. Provision of village financial support for the VHW's has proven to be extremely diffi At the present time all VHW's receive trai allowance of Tk 15 for each weekly training session which they attend. In villages wh there is also village support there is no to the villagers for drugs. In villages wl do not contribute directly to the support the VHW, drugs are charged. 4. A baseline health survey was made in Alinag villages selecting a VHW in March-April, 19 but no follow-up survey has yet been done. We are in the process now of preparing a ba of data in VHW and non-VHW villages to try and have some indication of results. 5. We have now shifted to a more project orien approach at village level in which VHW role and training can be more exactly defined.

Program Activities	Accomplishments	Comments
2. Paramedic Training An intensive 21 week course was given to 5 men and women Oct., 1976 to Feb., 1977. Their initial role was to run the HEED clinics, diagnosing and treating common diseases and providing health education.	Of the 5 originally trained, 3 are still working with HEED as multi-purpose workers. They still work in the MCH clinics but also do the TB clinics. They provide some health education to FP / MCH workers visiting or working in the clinics, and help to facilitate the community health programs in their areas.	1. Of the two female PMW's no longe HEED, one left to get married an other to take FWV training at th Sylhet institute. 2. It is unlikely that any addition general paramedics will be train the overall program has changed a curative to an education and consulting emphasis. Program will have renewed emphas as it represents a critical heal
3. Clean Water and Sanitation In June, 1980, responsibility for this area was handed over to the Health Sector from Community Organization. Since that time the following activities have taken place : a) Program evaluation and revision. b) Renewed cooperation with UNICEF building upon their BDG program through the Public Health Engineer and their Non-Gov't Organization (NGO) program. c) Renewed village contacts d) Sinking of 3 additional tubewells.	See Community Organization / Education Office section.	
4. School Program In January, 1980, HEED started a series of 12 lesson health education in six primary schools in Kamalganj.	No formal assessment has yet been done but the programs held the interest of the children and won the support of most teachers. On successive visits there was some improvement noted in personal cleanliness among some students.	1. Various methods utilized include p shows, flashcards, poster, flannel demonstrations, slide shows, and q answer sessions. 2. Lesson evaluation and syllabus rev now underway based on experience t date. Now taking 4 schools at a t on union by union basis.

Supplementary Programs

Goal : To provide selected health and medical services not now possible to the BDG.

Program Activities	Accomplishments	Comments
Leprosy program Not covered by grant.	Not covered by grant.	Until February, 1980, the leprosy program was administratively integrated with the health program. While the activities of the leprosy programme received no USAID funding, it is important to note that it required significant levels of staff time and effort during the period of the grant.
TB program a. Clinics TB has been treated since the beginning of the HEED program, but when the general clinics in Shambhornagar and Adampur were closed, TB clinics continued at those locations and at the project site.	In June, 1980, 274 patients were under treatment. The default rate had been significantly lowered from a very high percentage to the early period of the program to 52% in 1978/79. The 1979/80 rate will show further improvement.	1. An increasing emphasis has been placed on defaulter follow-up and health education utilizing various techniques including prepared cassette tapes. 2. Certain control aspects of TB may be combined with the leprosy work depending upon the results of incidence surveys in both TB and leprosy.
b. Control Since 1980, new emphasis has been placed on the TB program. The following activities have taken place : 1) Contacts and consultation with TB specialists in the BDG and other involved volags. 2) Training of support staff including a lab technician and qualified male nurse. 3) Design of a statistically valid survey to give reliable prevalence figures.	A firm foundation in terms of experience, trained staff, and medical knowledge has been built for an effective, expanded TB program with BDG cooperation and support.	3. Both BDG and volag health officials concerned with TB have proven to be both helpful and supportive.
Emergency care Though not an "official " part of HEED's program, the health staff do provide some emergency services, particularly in difficult pregnancy, delivery and post-natal cases. No records are regularly kept of these calls, but they were monitored for a short period of time. Over about a three week period two the medical staff answered 24 emergency calls. Of the calls 16 were in regard to delivery or post-natal cases. The total length of time spent on the calls was 41 hours or an average of about 1 3/4 hours per call. There is no reason to believe that this period deviated from normal patterns.	Emergency care which would not otherwise be available to those needing it.	1. There is no well equipped and responsive referral point for difficult cases in the local area and many times we are the only place to go. 2. The tension between the very heavy regular work schedule and the urgent, "life and death" nature of emergencies becomes a heavy emotional burden for health staff from time to time.

General Evaluative Comments

The health program's main accomplishment has been the relationship of training, consultation, and assistance which has developed with the BDG in the Directorate of Population Control and Family Planning. As a result of HEED's work there are now four functioning MCH clinics and one general clinic in Kamalganj Thana some of which would not have been likely to have been established without HEED's involvement. Beyond Kamalganj Thana the contribution of HEED to the BDG training program both at implementational and planning levels has been significant. The role HEED has developed as a volag in relationship to the BDG is one which can be creatively and helpfully replicated in other circumstances.

The community health program has developed quite slowly as we have been constantly learning about work at village level. While some progress has been made we still do not feel as if we have found the key which will allow expansion with confidence. There are several constructive aspects of this process. Much has been learned about the problems at village level, good and effective but still improving health education methods and materials have been developed.

We have failed to build an information base which would allow us to evaluate and demonstrate progress in improved health at village level. While we are still working on this problem, we have not yet arrived at a satisfactory method given our overall program activities and staff level.

The training emphasis of the health work and close relationship with the BDG is likely to continue. Depending upon the results of the TB survey, that curative program may expand. We also hope to be making an increasing impact in the area of clean water, and continue to learn how to do an effective community health program.

IV. Personnel

As with many young organizations the personnel situation has been marked by rapid growth and quick turnover of expatriate staff. The growth of the level of expertise and management of national staff, the number of expatriate staff coming for longer terms or returning for second assignments, and most importantly the backlog of experience and more highly defined programs should help prevent disruptive and sudden shifts in program with staff changes.

Expatriate Staff

	Staff : Dec 1980	Staff: July 1976-Dec 1980
Administrative		
Project Director	1 W.M. Long	1 Vince A. Rutherford
P.D.Personal Assistant	0 Post nationalized	2 Ferne Rutherford, Nancy Clark
Program Office		
Program Planning, Design Officer	0 Post dropped	1 Sue Kramer
Instructional Design Officer	0 Post dropped	1 W.M. Long
Support Services		
Building, Maintenance Officer	1 Henk Hinneman	2 Tom Winrda, Dirk Frans
Workshop Consultant	1 Arie Den Toom	1 Peter Lundie
Electrical consultant	0 Post dropped	1 Pavio Latvus
Guest House Manager	0 Post dropped	2 Louise Wiarda, Betty Clark
Community Organization		
Sector Head	0 Post nationalized	1 George Whetham
Agriculture		
Sector Head, Agronomy, Engineering	1 Ken Turner (4 posts vacant)	4 Robin Nicholl, Eloi Raymakers, Bill Egan, Noel Magor*
Fisheries Officer	1 Bob Hansford	1 Ken Diehn
Livestock Officer	0 Vacant	1 Rob Start
Health (Excluding leprosy)		
Doctors	1 Steve Brown	3 Don Clunas, Diana Padfield, Barry Evans
Community Nurses	3 Biddy Denlow, Margaret Hurst Anke Minneman	5 Bryony Potter, Chris Smith, Helen Lundie, Janneke Veugt, Nel Frans
TOTALS	9	26

Average turnover per year is about 8.

*Returning March, 1981.

B. National Staff

	June, 1977	August, 1978	Nov. 1979	Dec. 1980.
Administration and Support Services	32	30	45	50
Officer level	5	5	7	5
Support level	27	25	38[1]	45[3]
Community Organization / Education Office	3	4	13	10
Officer level	3	1	1	2
Village Extension and Support	0	3	12	8
Agriculture	22	17	25	28
Officer level	3	3	5	7
Village extension and support (excluding farm labour)	19	14	20	21
Health (excluding leprosy)	8	8	16	20
Officer level	0	0	1	4
Village extension and support	8	8	15[2]	16[2]
TOTAL	65	59	99	108
EXPATRIATE	14	19	12	9
GRAND TOTAL	79	78	101	117

[1]New residential area opened necessitating additional security staff. Some daily staff regularized. Additional vehicles for program use necessitated additional drivers.

[2]Excludes VHW's

[3]Reflects addition of Workshop Training Program

V. Finance

Detailed financial statements have been submitted quarterly. Only a summary statement will be given below. The grant was accidently de-obligated after the first year. Subsequently there is no entry for June, 1977.

	TOTAL EXPENDITURE(1)			U.S. AID CONTRIBUTION			
	Capital	Operating	Total	In country	% of Total (2)	Expat. related	Total USAID
1976	$1,11,493.13	$33,481.87	$1,44,955.00	$780.00(3)	1%	7,565.00 (3)	$8,345.00 (3)
1977	$1,22,993.06	$75,238.67	$1,98,231.73	$13,077.49(4)	7%	35,048.96(4)	$48,126.45(4)
1978	$ 79,606.87	$85,432.20	$1,65,039.07	$50,132.28	30%	20,572.44	$70,704.72
1979	$ 67,170.80	$1,25,216.66	$1,92,387.46	$47,069.94	24%	$ 26,746.25	$2,00,992.36
TOTAL	$3,81,263.86	$3,19,369.40	$7,00,613.26	$1,11,059.71	16%	$ 89,932.65	

15 Tk = $U.S.

(1) Excludes leprosy and handicraft related expenditure, and all costs associated with expatriate staff, their salaries, travel, and support, as these costs are handed by the sending agencies rather than by HEED. Also excludes depreciation on assests. Also not included is the value for the 191 acres of land and 39 buildings made over to HEED free of charge by the BDG to serve as a project site.

(2) Total figure specifically excluding those items under footnote (1)

(3) July - November, 1976 only.

(4) 1 Dec 1976 - 31 Dec 1977.

PROJECT DESIGN SUMMARY

LOGICAL FRAMEWORK

Project Title:-Kamalganj Rural Development Project

NARRATIVE SUMMARY	OBJECTIVELY VERIFIABLE INDICATORS	MEANS OF VERIFICATION	IMPORTANT ASSUMPTIONS
Program or Sector Goal:- The broader objective to which this project contributes :- Identification and development of institutional approaches to equitable rural social and economic well being that may be replicated in other Thanas of Sylhet District.	Measures of Goal Achievement:- Infrastructure development projects started in 3 additional thanas. 1. 2. 3.	Review Projects started in other thanas	Assumptions for achieving Goals :- BDG willing to adopt and implement proven approaches throughout Sylhet District.
Project purpose :- To establish a functioning, replicable institutional infrastructure at thana level capable of providing services and inputs to rural inhabitants; and to motivate inhabitants to assess their own needs, do their own planning, and request for services/inputs from appropriate thana and union authorities.	Conditions that will indicate purpose has been achieved; (End of project status) 1. Income levels 10% higher than in other thanas of the country. 2. Increased number of programs jointly agreed to by rural inhabitants and local government officials. 3. Disease levels reduced by 30%	1. Baseline surveys to check income before and after Project. 2. Review Project proposals and check minutes of meetings. 3. Check health complex records and interview villagers.	Assumptions for achieving purpose :- HEED and thana capacity concentrating and coordinating resources toward Project purpose which is fully accepted to thana officials and inhabitants.
Outputs :- 1. Trained and motivated persons in agriculture, health, family planning, nutrition, community leadership and other fields as required. 2. Agriculture inputs planning and distribution system. 3. Health delivery system with sanitation and nutrition programs. 4. Organized community action groups.	Magnitude of Outputs:- 1. A program in place which can provide training on a broad range of developmental subjects. 2. An equitable inputs delivery system established. 3. A functioning integrated health delivery system with F.P.,MCH, nutrition and sanitation components. 4. Organized action groups in all unions and 1/3 villages of thana.	1. Review training materials and interview trainees. 2. Check availability of inputs. 3. Check staff and services. 4. Review adopted use of technologies. 5. Interview action groups.	Assumptions for outputs:- 1. District and thana officials will support rural development. 2. HEED personnel capable of motivating the union officials. 3. Application of Intermediate Technology will be considered in all sectoral activities as is appropriate.
Inputs:- 1. Technical assistance. 2. Training assistance/. 3. Agricultural inputs. 4. Medical inputs.	Implementation Target :-(Type and Quantity) 6.1.1976 - 7.1.1977- 6.30.1977 / 6.30. 1978 / 1978 HEED $60,000 / $ 315,936 AID $35,000 / $ 74,000 Other Donor $55,000 BDG $10,000 / # 10,000	1. Check HEED records 2. Check AID disbursement levels. 3. Check BDG allocations for Kamalganj Thana.	Assumptions for provision of inputs :- BDG will maintain or increase allocations for development activities in Kamalganj Thana.

C O M M E N T S

1. In most cases, HEED has utilized BDG institutions as a vehicle for program implementation (i.e., IRDP, Thana agricultural services, MCH clinics). In instances where HEED has sought to identify or establish village institutional structures for development, the process has been long and difficult with mixed levels of success, (VHW's Functional Education).

2. Time scale for expansion has proven to be entirely unrealistic given the newness and scale of the project, nature of the problems encountered, and slow pace of village development. At the end of the project period, expansion had still not been made in a meaningful way into all of Kamalganj Thana. Whether or not meaningful expansion will ever be made beyond Kamalganj will depend upon whether the overall program becomes more of training effort using Kamalganj activities as a base for training, or if the overall program expands geographically, seeking to extend the project services . A good basis has been laid for either approach.

3. Replicability :- 1) Replicable portions of the program include: a) Training methods and materials developed for use in program activities, b) The close village - BDG working relationship in program and training .

2) Where BDG village institutions are utilized for HEED inputs, institutions themselves are obviously being replicated nationwide.

3) The level of inputs and staffing of the Kamalganj project taken as an entity would effectively preclude widespread replication. Individual programs within the overall project structure could be replicated, however, without the heavy support costs made necessary by the large project site and the aggregation of many programs on a centralized basis.

4. An inadequate data base makes meaningful measurement of changes in incomes or disease level impossible. There has been increasing HEED-BDG-village cooperation as evidenced in the increased number of joint program and training efforts.

5. Significant training efforts have taken place in all sectors.

6. BDG inputs have been somewhat more accessable because of HEED intervention. HEED has supplemented BDG inputs when necessary.

7. If BDG institutions are included there has been a significant increase in number of institutions at village level. These are not multi-purpose, however, and level of HEED involvement in their establishment and operation varies widely.

8. For input records, please see report summaries.

Appendix

HEED KAMALGANJ

LEPROSY AND HEED HANDICRAFTS

MARCH 1976 - DECEMBER 1980

W. Meredith Long
Project Director
Jan., 1981.

MARCH 1976 - DECEMBER 1980.

In order to make this report a complete account of the project activities to date, this section is appended. As HEED Handicrafts and the leprosy programs were specifically excluded from the US AID funding, this section does not appear in the main body of the paper which was specifically designed to meet the requirements of that funding agency.

I. LEPROSY PROGRAM

The reason for HEED's presence in Kamalganj at all can be traced to the request of the BDG that HEED take over buildings originally constructed by Pakistan as a leprosy treatment center. It was on that basis that HEED was able to build a wider involvement and begin its other programs.

A. Program Summary

1. Origins

When the BDG approached HEED in early 1975 concerning the Kamalganj site and work, Dr. Malcom Dunjey almost immediately contacted the Leprosy Mission (TLM) requesting their assistance. In May 1975 , Dr. R.H. Thangaraj, then Ag. Medical Consultant for TLM in Southern Asia made a trip to Bangladesh to examine the situation. After meeting with both national and local level BDG health officials and personally visiting the project site, he issued a report which formed the basis for the beginning of HEED's work here.

In July, 1975, TLM approved a grant to HEED for construction of a 20 bed hospital, transport, equipment, and maintenance costs. TLM has continued since that time in their support of the leprosy program both financially and also in terms of personnel and consultive services.

After a delay, the project site and buildings were made over to HEED by the BDG in March 1976 and construction and refurbishing work began.

2. The Hospital

a. Hospital Construction

The earliest date ever mentioned for the completion of the 20 bed hospital for treatment of complications and ulcers, and reconstructive surgery was Jan., 1976. Actually there were numerous delays in taking over the site and in construction.

The hospital building was first occupied in March, 1979 with an official opening somewhat later. The hospital provides beds for twenty patients in two wards, two surgical theaters, a physiotherapy department, and space for support services such as storage, cooking, shoe-making, and offices.

Prior to the opening of the hospital, in-patients were accomodated from May, 1977 in two of the residential buildings on site particularly adapted for that purpose. From the time that in-patients were first admitted to the make-shift hospital facilities in 1977 until the opening of the new hospital, there were usually 10-15 in-patients at a time. Recently, however, as the control program has expanded, the hospital has often been filled close to capacity and, in some instances. beyond capacity. As of this writing, construction has started on an additional building to accomodate the additional patient load.

b. Reconstructive Surgery

The slowness that characterized the construction of the hospital also resulted in a late beginning to the surgical program. Some minor surgical procedures on ulcers began in mid-1978 in the make-shift hospital and minor surgery has continued regularly since then. The first major reconstructive surgical program took place in October 1980 by Dr.Grace Warren who visited specifically for that purpose.

Thus far the surgical procedures have been performed in the smaller of the two operating rooms. Numerous problems in design and equipment installation have prevented the larger theater from becoming operational. The problems should be finally solved this year, and the room become usable.

c. Staff training

In order to put the hospital into operation HEED has conducted specialized training in leprosy for hospital support staff, or sponsered them for training with other institutions. Among those trained are a hospital nurse, four nursing assistants, a physiotherapy technician,

a lab technologist, and a shoe-maker. Expatriate staff coming to work in the leprosy program without prior experience in leprosy also received specialized training at TLM institutions in India.

3. Control Program

a. Survey work

The survey aspects of the control program have actually had two seperate beginnings. The first three paramedical workers (PMW's) received training in India, completing it in early 1977. They were joined by one PMW who did not qualify for training in India but received local instruction, and a male expatriate nurse, Mr. Walter Narasek, also trained for leprosy work in India. Initial work was begun by them in early 1977. Between that time and June, 1979, they conducted surveys in ten tea estates, and opened several clinics to support the work.

By June, 1977, however, Mr. Narasek left the project and 3 of the 4 PMW's had also left HEED's employment leaving only a single PMW on the control side of the work. In the late summer of 1979, then, HEED conducted a local training course for six additional PMW's utilizing its own staff and visiting lecturers from TLM, India. To avoid the turn-over problem experienced among the first group of PMW's, this second group were selected from the local area and received their training at HEED rather than in India.

Since they completed their training toward the end of 1979, survey work began again spreading out from Kamalganj Thana to other tea gardens in Sylhet District. The number of patients registered climbed from 38 in April, 1977, to 191 in June 1979 when the control work was curtailed while new PMW's were trained. Since they began their work in 1980, however, the total number of registered patients has climbed to over 500. At the time of this report there are 26 clinics which provide support to the control and out-patient treatment.

b. Prevalence

In his initial report on the situation in Kamalganj written in May, 1975, Dr. Thangaraj expressed doubt that the prevalence rate for leprosy would be even 1% in this overall geographical area. His initial misgivings in this regard have proven to be quite correct. In the Bengali villages in the area, the prevalence of leprosy does not even reach .5%. It is somewhat higher in the tea estates where HEED is now concentrating its efforts, and is found to be upto approximately 1.5% in some tea estates. A more accurate indication of findings to date will be available in March, 1981, when a report on prevalence of TB and leprosy will be made to a Expert Committee set up by HEED's Board of Director's to advise on the feasibility of combining certain control and treatment aspects of the leprosy and TB programs.

c. Health Education

While health education has been considered important since the beginning of the program, the newly trained PMW's have received considerable support and encouragement in utilizing media creatively in promoting the control of leprosy among the tea garden workers and villagers, and care of leprosy among patients. Slide and puppet shows are used regularly to communicate information in regard to leprosy.

Personnel

1. Expatriate

	Dec 1980	June 1976 - Dec 1980.
Doctor in charge	1 Dr.Ian Cochrane	2 Dr.Don Clunas,(1) Dr.Urban Fachlatko
Hospital Nurses	0 Position vacant(2)	2 Sisters Dot McFaul, Judy Cutforth
Control Program	0 Position vacant	2 Walter Narasek, Stephen Swanson(3)
Physiotherapist	0 Position nationalized	2 Ann Burt, Marian Kaplan
Lab technician	0 Position nationalized	1 Stephen Swanson (3)
TOTALS	1	8

(1) Also had health sector responsibilities,
(2) Mrs. Marion Cochrane "unofficially" occupies this position
(3) Part-time

2. National

	June, 1977	June 1978	Nov, 1979	Dec. 1980
a. Hospital support	0	1	12	15
b. Control	3	3	1	7
c. TOTAL	3	4	13	22

	1976	1977	1978	1979	Jan - Sept., 1980
Capital	$16,002	$25,365	$50,728	$10,576	$ 1,451
Operating	$ 5,489	$14,012	$ 7,837	$20,104	$21,864
TOTAL	$21,491	$39,377	$58,565	$30,680	$23,315

*Excludes depreciation.

II. HEED HANDICRAFTS

A. Overview

In October, 1977, the HEED Board of Directors authorized HEED's involvement in a program of cottage industry or handicrafts. The goal of the program is to give those trained as producers an opportunity to raise their overall income levels. A decision was made early in the program to concentrate on handicrafts rather than local cottage industries. Because of the need to fit into a marketing pattern based primarily upon export, overall direction to the Kamalganj program has been given in the context of the entire HEED Handicrafts program rather than at project level.

Work in handicrafts at Kamalganj did not really get underway until early 1978, and until June, 1978, there were no full-time workers assigned to the program. Work began in two areas, blockprinting and weaving. The blockprinting program, begun initially as a rehabilitation program for leprosy patients, later grew to include individuals without leprosy as well. The weaving program has been conducted among Monipuri women who have a traditional skill of weaving utilizing a backstrap loom. A program for training in cane and bamboo work was conducted during 1979. Continuation of that effort beyond 1979 was not feasible based upon the overall market for cane and bamboo and the problems that arose locally in regard to that phase of the program.

The overall goal of each of the sections of handicrafts at Kamalganj has been to set up independent production units. Significant progress has been made in this direction. Because of the nature, cost, and quantity of goods produced, however, the producers will continue to be dependent upon the marketing services of HEED Handicrafts or a similar organization. It is highly unlikely that at any time in the near future, the producers will develop an independent marketing capacity sufficient to absorb even the present level of production.

Program Summary

Monipuri Weaving

Because of the fact that this program has utilized a traditional skill among the Monipuri women, the training did not have to take place at a basic level. HEED's inputs have been primarily in areas of organization, design, quality control, and marketing. Work started in late summer 1978 among 30 weavers in a single village and has expanded to include 100 weavers in four villages. The constraints upon expansion of the program are external ones based upon the marketability of the products and program capacity rather than upon local involvement and interest.

Initially HEED provided all the inputs and services necessary to the establishment of the program. Recently, however, HEED has been gradually pulling back to occupy the role of only a marketing agent, especially in the village of our first involvement. The producers of that village are now required to purchase their cotton from HEED rather than have it extended on credit, nd to pay their own village worker. While apparently not big steps in themselves these beginnings of an independent relationship to HEED are nonetheless significant in signaling to the producers what HEED's continuing role will be.

The primary objectives of the first phase of the program were to introduce designs and products which could be sold outside of the traditional economy, to provide for the organization required to relate to HEED, and to introduce the concept of quality control. While accomplishing these steps with the first group of weavers moved slowly, subsequent groups have been able to move more quickly through these initial stages.

The focus of the program, then, has moved from establishment of a trade to independence as mentioned above, and to more technical areas of involvement. The expatriate weaving consultant and her Monipuri counterpart are now able to spend a larger proportion of time in areas of design and experimentation. Design work has involved not only the creation of new designs but the examination and documentation of traditional designs, incorporating them in new and traditional products. The technical details of Monipuri weaving using the backstrap loom has also be documented by the weaving consultant.

The product range now includes nine items on a regular production basis (table mats, napkins, tablecloths, bedspreads, table runners, bags, shawls, cushion covers, and curtains). Most of these items are available in different sizes and patterns. Production figures are given below.

Monipuri Weaving Production

	1978 Oct-Dec	1979 Jan-June	1979 July-Dec	1980 Jan-June	TOTAL
Number of pieces	1844	10,306	16,006	17,562	45,718
Approximate sq.yards	568	2,895	5,082	5,604	14,149

2. Block-printing

The blockprinting program was the first of the handicraft programs to start in Kamalganj. In early 1978 two leprosy patients were selected to receive training in blockprinting from an independent producer in Srimangal. After five months of training there they returned to the project site in June, 1978, to set up a training and production center. A blockmaker, tailor, and ironer were added at various times during the program to serve as support. (The tailor was one of two people selected from the tea gardens and sent to Dacca for training at a time when we were considering starting a tailoring training program at Kamalganj. One trainee dropped out, and when it was decided not to be involved in such a program at Kamalganj, the other tailor became involved in this program.)

After this initial training period in Srimongal, the first priority was to get the production level and quality to a high enough level to be marketed. Additional training for the first six months, then, was minimal. A 14 year old leprosy patient received some training in September, 1978, but a full-time trainee was not really added until December, 1978, again a leprosy patient.

When it became apparent that the leprosy program would not provide a sufficient number of patients from among whom trainees could be selected, it was decided to open the program to others in the area as well. Two training programs have been subsequently conducted. One from September, 1979 to April, 1980 involved three trainees, and another, from June to December, 1980 involved four trainees.

Immediate plans now call for setting up the two trainers, the seven more recent trainees, and the support personnel as a cooperative and independent production unit. This will be the priority of the program in 1981. There are not now any plans to train additional people in blockprinting. The range of block printed goods now include tablecloths, napkins, tablemats, bedsheets, and pillowcovers. In addition, special orders for saris or other items are sometimes produced.

Block Printing Production

	1979 Jan - June	1979 July - Dec	1980 Jan - June
Pieces	1,440	2,807	3,761
Approximate sq.yards	Not available	1,985	2,311

3. Cane and Bamboo

As a result of the growing program of HEED Handicrafts and the early involvement of the Kamalganj project in the tea gardens, two tea estate workers were selected in the third quarter of 1978 to go to Dacca for training in cane and bamboo work. Of the two, one completed training and returned in February, 1979. After an assessment of the overall situation a decision was made to set up a training program in Shamshernagar among tea garden workers.

The bamboo trainer working for HEED Handicrafts, Dacca, was transferred to Shamshernagar in April, 1979, and training began for six trainees from the local tea gardens. Five trainees completed the program of instruction in December, 1979. A decision was made to discontinue the program because of problems associated the production and marketing of cane items as a craft, and the strained relationships at that time with tea garden management.

Because of these tensions three of the five trainees were given appointment to jobs within the tea garden which they preferred to an independent producer status. The other two were encouraged to set themselves up as suppliers to the local market and to HEED. By the end of 1980 they were involved on a very small scale in providing some goods to HEED. The trainer and assistant trainees were returned to their own home areas and assisted in setting up an independent business.

C. Personnel

1. Expatriate

	Dec. 1980	Jan. 1978-Dec 1980
Sector Head	0 position nationalized	1 Rose Magor*
Weaving Consultant	1 Eva Pettigrew	1 Inkeri Latvus*
Block-printing Consultant	1 Tineke VandeDouro	1 Ann Burt*
TOTAL	2	3

*Part-time

2. National[1].

	Feb. 1979	Nov. 1979	Dec. 1980
Service Center and support	1	3	4[2]
Monipuri Weaving	0	3	6[3]
Block printing	2	4	4[4]
Cane and Bamboo	1	3	0
TOTAL	4	13	14

[1] Excludes producers, trainees [2] In Jan. 1981, two positions terminated due to program retrenchment [3] Includes 4 village workers to be later paid by weavers. [4] In Jan. 1981, all block-printing personnel were terminated from regular employment as preparation to set them up as a production unit.

D. Expenditure

Tk = $U.S.

		Service Center	Monipuri	Block printing	Cane	TOTAL
1978	Capital	(1)	(1)	(1)	(1)	$702
	Working Capital[2]	↓	↓	↓	↓	(1)
	Operating					$7,434
	Income					$1,403
	TOTAL					$6,733
1979	Capital	$ 2,728	$ 65	$826	$62	$3,681
	Working Capital[2]	$ 55	$15,984	$1,810	$5,564	$23,413
	Operating	$ 6,078	$ 9,120	$2,818	$ 2,107	$20,123
	Income	(1)	(1)	(1)	(1)	$(1,401)[3]
	TOTAL	$ 8,861	$25,169	$5,454	$ 7,733	$45,816
Jan-Sept 1980	Capital	$ 218	-	$ 532	-	$750
	Working Capital[2]	-	$17,912	$7,450	$ 350	$25,712
	Operating	$12,373	$197	$852	$ 257	$13,679
	Income	-	$(13,662)	$(662)	$(115)	$(14,439)[4]
	TOTAL	$12,591	$4,447	$8,172	$ 492	$25,702

[1] Not reported seperately.

[2] Includes raw materials and finished products buying fund, labor applied to production.

[3] Includes only items sold on project site, not items transferred to HEED marketing center in Dacca.

[4] Transfers of income from Dacca will not be complete until the final 1980 statement.

AN EVALUATION REVIEW OF THE PACHELPAM WATER PROJECT

Cubulco, Baja Verapaz

Guatemala

Now that the main inputs have been laid down, and more specifically, the physical task has been completed, the present review seeks to take a retrospective look at the PachelPam Project. To be sure, some of the questions should have been answered while the project was being carried out. However, we feel it is worthwhile to pursue answers at this time because there is need to know how this ambitious project was carried to completion.

The Data:

1. To what extent were the communities organized at the commencement of the project?

After the earthquake of 1976 a group of 40 to 50 families in the mountain village of El Sitio lost their water sources due to the cracking of the underground reservoir in the mountains. The community organized itself in an attempt to divert a small creek seven miles away through a ditch to their village. It took them a year of work because they had no resources other than their own free labor. However, they were unaware that in places the ground was permeable to water, became soaked and created landslides. Also, the water ditch attracted pigs and cattle and became a thoroughfare for farm animals. People outside the community began breaking the edge of the ditch and taking the water to irrigate their own fields. Eventually the concerned villagers of El Sitio consulted with MAP. After visiting the site, the MAP engineers informed them that the usefulness of the water ditch would always be limited by avalanche and filtration activity.

2. How did the villagers learn about MAP?

MAP had been involved in reconstruction since the earthquake and had also started other projects around the area. As MAP served the villages of Cubulco people came to know the MAP project director as a person who could help in various situations.

3. How receptive were the local villagers to MAP's offer of assistance?

Originally there was a fear that foreigners were evil and would cause harm to the indigenous people. However, as they observed the different types of help provided by MAP, the indigenous people approached the agency seeking a solution to their water problem. Their frustration over their futile efforts to channel water to their community led them to be willing to start fresh with a new approach using MAP's resources.

SV

4. What was the government's attitude toward this water project?

On a cost/benefit basis, this project was too small for the federal water agency. As it was located in a rural area high in the mountains, it was not worth consideration.

5. How was the project organized?

The director for MAP in Guatemala visited the Universidad de San Carlos (USAC) and the School of Engineering where he was offered technical assistance by senior year engineering students who were in need of field experience. The major outline of the project was completed by two students who lived with the villagers and studied the area during the process of mapping the sites for pipe and storage tank installation. Originally it was intended to have both of the students place a major role in the actual construction of the water line, but the political situation deteriorated to the point that there was no guarantee of safety for them or for any other qualified personnel to work in the Cubulco mountains.

6. How many people participated directly in the water project?

MAP had a small team that was directly involved in the development of the projects: the director, who took time to supervise the project, located funds, purchased materials, established contact with collaborating agencie gave "pep" talks to the communities and the administrative committee, wrot narrative and financial reports to the different agencies, and obtained permits and legal procedures for the projects; a supervisor who was in charge of the "on site" execution of the project, controlled the materials and maintained the rhythm of the work, made home visits and conveyed information necessary for the project; and two masons who laid the pipe as well as constructed the major tank, the distribution tank, and the collecting tanks from the three water springs. When the engineering students were unable to supervise the work, one of these masons had to use his ingenuity and common sense to overcome problems that required technical aid. One person supervised storage and distribution of materials. There were other short-term helpers such as two mason helpers and one person in charge of payroll.

7. What role did the villages play in the construction of the project?

As mentioned previously, the people in El Sitio were the first promoters of the project. However, springs of pure water were located higher in the mountains and the creek was abandoned. In order to obtain permission to use the pure water, other villages in the area of Choven became involved. After the initial conversations between both areas, a committee was formed to be in charge of the promotion of the project. It was identified as PACHELPAM (Proyecto de Agua Choven El Sitio Proyecto de Ayuda Mutua). The members were elected from among the local leaders. The positions of president and vice-president were given to the people of El Sitio, and secretary and treasurer to Choven. The other four positions as representatives were distributed one among each community affected. At this point, the main purpose for the committee was to organize and distribute the labor among those who were to receive benefit from the water. Upon completion of the project, the committee was to administrate the project under the terms stated in the agreement made with the people of Choven and El Sitio.

8. How did the committee communicate with MAP?

For three years the committee held work sessions at MAP's headquarters every Saturday. In the beginning the sessions covered the organization of the project as it pertained to helping the people understand their participation in the task. Permission sheets had to be prepared and signed by hundreds of landowners so ditches could be opened and pipes laid over the entire 30 kilometers of the projects of the PachelPam Committee.

9. Who gave instructions for the different tasks to be done?

The MAP director was responsible for the entire project, and when possible, went to the site to check on progress. The supervisor traveled to the project site on an average of every three weeks to see what materials were needed, how the volunteer workers were responding, and how the work was progressing. The local water committee did much to motivate the villagers and decided what work they should do.

10. What training and experience existed among the personnel conducting the project?

Basically none related to an enterprise of this order. However, the ability to make decisions at a given moment was developed by the committee and the workers.

11. How did the original planning relate to the actual work performed by the participants in the project?

The project followed the plan outlined by the engineers as closely as possible. A few alternatives were implemented, but no substitutions were made for the original plan. There has been no follow up on the implementation of the plan from a technical point of view as the engineers were unable to return to check on the completion of the project. The actual time necessary to complete the project varied greatly from the original estimate. Many unforeseen factors occurred such as shortage and delayed delivery of funds, the interruption of the work by the rainy season, avalanches, slow transportation due to poor road conditions, loss of cement due to humidity and the limited existence on the local market of plumbing accessories made in Nicaragua, which were not manufactured because of political changes in that country during that period. Additional factors included the agricultural calendar which did not coincide with the working period, improper sand for the concrete mixture, irregular topography and soil consistency, and the transporation of some 300 tons of material to the construction site. The overall political situation of the country affected availability of technical assistance from qualified personnel.

The entire project took 36 months to complete (November 1977 to December 1980). The beginning of the project is calculated from the time the villagers began to think seriously about introducing the water by means of piping it from the Choven springs down to El Sitio. It can be calculated that it took a year to convince the villagers of the validity of the project, another year to obtain the necessary

funds and complete planning process, and another year to complete the physical work. Festivities mean a great deal to the villagers but this factor was not brought to the attention of MAP at the time of planning and programming activities. In several cases the work had to wait until the fiesta period was over. If the materials and funding had been available, and the finances issued on schedule, the physical work could have been reduced to a time frame of no more than seven months.

12. It is quite clear that the villagers did not know the scope of the total work to be performed by them. Otherwise, they might have been reluctant to commit themselves. Throughout the life of the project there were ups and downs, apathy as well as enthusiasm. It was evident that people began to participate strongly as the project crystallized into something visible to all of them. An incentive to conclude the project was the participation of COGAAT, an organization which furnishes food in exchange for labor. Also, from time to time there were newcomers into the project which added to the labor force. As the project was drawing to an end, there were "latecomers" who had not shown interest in the initial steps of the project who now had to pay for their own plumbing and ditching.

The committee suffered from the lack of collaboration of two of its main leaders. One in particular participated enthusiastically during the formative stage of the committee, but later changed his mind and went to work for another agency. The committee subsequently placed the responsibilities on less experienced people who showed willingness to accept the responsibilities.

13. How about the finances?

The cost of the project increased with every delay. Canadian dollars (funds provided by CIDA) suffered a devaluation that undermined the funding before they reached the project level. The original estimate of the cost of materials, transporation, fees and other expenses was $43,000. The need for additional funding became evident, putting the cost at $53,000. A tremendous upsurge of enthusiasm at the end of construction by the local people, however, shortened the work schedule and resulted in MAP's sending back over $5,000 to the donors! Administration, shipping and travel expenses are not included in this total. A small fee of 15¢ per month will be paid by each villager for the maintenance of the water system.

14. What agencies participated in the project?

CIDA from Canada (funding)
Food for the Hungry International (funding)
COGAAT (food for labor)
MAP International (administration of the project)
USAC (technical consultant)
Planning Assistance, Inc. (motivation and management training of local committee)

15. Which local authorities were involved in the project?

A set of regulations were drawn up by a general attorney and were approved by the local mayor (alcalde municipal) and the governor of the State of Baja Verapaz which provide for permission to use the water springs and permission to install the PVC underground through the small farms benefiting from the project. The regulations also limit the use of the water to sanitation and private home use.

16. In what way were the villagers exposed to education inputs through the projects?

The PachelPam project proved to be a rich educational experience for everyone that played a role in it, no matter how small it was. For the villagers, the following experiences were significant:

community organization
long and short term planning
distribution of tasks
problem solving
risking investment of time and resources
inventory and storage of materials
leadership training
record keeping and financial transactions
recognizing and utilizing available resources
maintenance of water system
plumbing and masonry.

17. Are there any "side effects" from the realization of the project?

The villages have developed a stronger sense of cooperation between them. Their pride and self-respect have been increased by accomplishing the water project. There are already "spin-offs" from the project: agricultural projects, fish ponds, concern for the environment and natural resources plus increased community participation. Some 9,000 trees have been planted around the water spring area for protection of the soil's water-retention capability.

18. What is the present feeling among the beneficiaries of the project?

Currently there is a buoyant happiness due to the completion of the task. The villagers as well as the leaders feel that they have accomplished something worthwhile for themselves and for future generations.

19. What foreseen problems may the people encounter in the near future?

We have anticipated a few problems which in time could throw the project off balance. For example, lack of discipline as far as the individual use of the water, such as diverting the water at night for irrigation purposes. As yet, no serious violations have occurred, and the force of the agreed written regulations has yet to be tested. In one way or another, the committee is a representative organism of the region, having acquired certain recognition as policymakers. The committee

also has control over finances. No specific procedure has been agreed upon in order to hold elections for the committee. If a voting system is used, based upon population, the balance of power will move toward Choven because their population is greater than El Sitio. This could precipitate political stress.

It is still uncertain how failure to keep the regulations is going to be punished. Authorities backing the committee are the governor, the local mayor and the local judge. Nevertheless, they need to have a document which delineates the history of the project in order to have a basis for future arbitration.

20. Is there any follow-up program or plan for the committee?

Yes, but at the present time it covers only minor technical aspects. There is no institution responsible to look after continuation or expansion of the project. Planning Assistance will be winding up their participation as of June 1981.

Conclusions:

1. There is clear evidence that the villagers know about the functioning of the water distribution systems. As a result of the on-the-job training approach, the basic maintenance and supervision of the water systems is guaranteed.

2. The administrative apparatus has the basic know-how about management. Regulations have been established that will carry through the initial period of time until additional financing is needed. Since the monthly fees are minimal, there is a possibility that they may be revised and increased. The main problem is how to justify the raise to the villagers without losing the people's trust.

3. The educational experience has resulted positively in exposing and forming local leaders. Based on their previous experience, it could be assumed that they are ready for subsequent projects.

4. The local government officials are elected for four-year terms. Future officials will lack knowledge of the project's history and regulations. Therefore, a document that defines the role of each member of the administrative committee as well as the nature of the project needs to be prepared so the basic principles of the project will be clearly defined.

5. The project was finished on time thanks to the strong leadership of the committee and the support of MAP personnel, even though funds were sometimes delayed.

6. The committee has gained leadership stature and to some degree political power. There is a strong need to assist in the training of new leaders that with time may be elected to office. It is very important to carry on with weekly committee meetings.

Recommendations:

1. That an agency such as "Asesoria Gerencial" should continue on a programmed basis visiting the site of the project and meeting with the committee until complete training in basic management is achieved. Also it should seek to start other projects using the physical and community infrastructure which was formed and utilized during the water project.

2. A basic document should be composed which contains the most important regulations necessary for the administration of the water system. It must be recognized by all parties that in one way or another played a vital role in the construction of the project such as: members of the committee, the governor, the mayor, the MAP project director, a local registered attorney and witnesses.

3. A supervisor should remain at large in order to review periodically the performance of the committee and the use of the water.

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