FOLLOW-ON PROJECT RECOMMENDATIONS
FROM THE
HONDURAS HEALTH SECTOR I PROJECT
FINAL EVALUATION

AID CONTRACT No. PDC-1406-I-00-4064-00
WORK ORDER No. 81

Submitted to:
USAID/Honduras

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August 1986
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INTRODUCTION

This section of the evaluation report deals with matters to be considered in Health Sector II, which should begin in 1988.

Some of the contents have also been mentioned in the separately bound, main section of this report. In this section, a summary of the status of various components is included briefly to provide a basis on which to design the follow-on project. Also mentioned are three possible alternatives, along with some of the issues which could affect the progress of the new project.

This section does not address specifically those components which should be embraced in the new project. It is felt that this should be the prerogative of the MOH and USAID to decide. A review of this evaluation can serve as a discussion document for design groups as they develop the new project.

The team has also included some issues which could affect the implementation of the new project. This was done in the hope that it will avoid some implementation problems and provide better understanding of the constraints which will certainly arise. Some of these will have been recognized during Health Sector I and steps have begun in order to resolve them.

A. The Project

1. Structure and Components

Health Sector I had 17 active, identifiable sub-components in 1985. Its focus was on improving the administrative and management capacity of the MOH. Part I of this report describes these various elements that were combined into four broad categories: (1) health technology; (2) administrative support systems; (3) management and planning; and (4) human resource development.
2. Operations

The Project operated through a central coordinating unit that reported to USAID and the Director General (DG) of the MOH. Various MOH Divisions affected by Project activities and regions where the Project was operative also reported to the DG. The Project received technical assistance from various AID contracted institutions, the major one being MSH. AID financed commodities were valued at $4,960,000. Local costs were $3,000,000, including salaries, per-diem, and locally procured supplies.

Project monitoring was participatory, shared by AID and the MOH, the implementing agency. Construction was contracted by the GOH with AID support.

3. Project Outputs

Health Sector I at the time of the evaluation had witnessed the following major results.

Basic Health Care

1. Immunization coverage, with the exception of measles, had reduced disease morbidity in all immuno-preventable diseases to acceptable levels.

2. Malaria case detection, vector control methods, and treatment showed improvement.

3. Children less than five years of age suffering from severe diarrhea had access to ORS, both at home and in clinics.

4. Tuberculosis case detection and treatment showed significant increases.

5. Maternal and child health, including family planning, was operating at increased effectiveness.

Support Systems

1. Supply management showed progress in reducing costs of procurement, but considerable work was left undone in distribution of supplies within the health system.
2. Considerable progress was made in maintenance of cold chain equipment. Some impact was made on improving vehicle maintenance, while little gain was seen in building or medical equipment maintenance.

3. Management and planning systems had been established; a computer capacity had been attained for planning at the central level; a management information system was in early stages of development, administrative reforms not yet producing tangible results; cost per patient treated had been reduced during the years 1980-1985; a supervision system was in place in the regions; and in-service training had been carried out in some administrative aspects. Health Education, mostly using mass media, had been institutionalized; and techniques were developed and national coverage in MOH priority programs was operating. Formative evaluation was used to improve message content during the development of messages.

4. Project Impact

The impact on the health status of the population, in terms of morbidity and mortality of the target population, (children five and under) is difficult to measure in less than 8-10 year intervals. It can be predicted, however, with some certainty that the Project supported interventions such as increasing coverage of child immunization and diarrhea control are playing a major role in improving health status.

Cost containment in procurement practices is improved and had an impact on the MOH's ability to generate savings. The technical assistance component appears to have had a positive impact on the Ministry's capability to solve problems and manage complex issues. The other administrative and management concerns that the Project addresses are more difficult to measure in terms of impact. Some of them are in various stages of development and the interaction of the subsystems make a global impact statement virtually impossible. It can be said that progress has been slow over the 1982-1986 period. This is normal in a complex project stressing institutional development.

Health Sector I is probably the most complex AID supported health project in its current portfolio. The number of interventions within the Project's scope clearly have an impact on the implementation agencies' ability to focus on issues. It also reduces the "attention span" it can give to any one component.
3. Strengths and Weaknesses

1. Support Systems

   a. Management and Finance

   Strengths

   The strengthening of the MOH's management and planning capabilities is one of the key means through which the Project can achieve the objective of improving the effectiveness and efficiency of health management. The management and planning component, which was originally funded at 16% of total AID Project funding, consumed 29% of all AID expenditures as of June 30, 1986. This component is overstated due to the tendency, according to the Mission, to allocate many undefined costs to this component. The central focus of all this is still technical assistance, which has accounted for 77% of all AID funds spent in this category. While MSH has done an excellent job of providing information on management and cost, the transfer of these types of analytical skills to the MOH has been understandably slow. This has been due primarily to MOH staff turnover and other constraints outside the influence of the Project. In particular, in the area of recurrent cost analysis, MSH was the driving force behind a study which projected the future operating costs and sources of funds for hospitals. MSH also conducted an in-depth feasibility study of PANI, focusing on that institution's financial and managerial strengths and weaknesses. MSH technical specialists have also: analyzed pharmaceutical price data; analyzed MOH budget priorities; and conducted numerous case studies of health delivery units. In summary, a definite strength of the Project has been its ability to generate and analyze large amounts of data within a relatively short time period. The MOH staff has had more data to assess its priorities in public health than it has probably ever had before. Informed policy decisions cannot be made without this type of information.
Weaknesses

This strength though has begun to mirror an apparent weakness within the Ministry. The work that is being done by MSH in cost analysis does not appear to be being institutionalized with the MOH. At present, however, the directors of the relevant offices are fairly new and, thus far, have probably had other priorities.

It can be said, though, that the Ministry has taken a step in the right direction. In 1983 the MOH recognized that people were willing to pay for basic health services when they published "Health Services Financing Alternatives." At least this was an explicit recognition that the provision of primary health services is not necessarily a total government subsidy. Although this is a tendency prevalent in most countries, it still has to be based on the government's ability to support (subsidize) such activities. The team feels that the MOH is moving in the right direction on this point.

A weakness regarding cost recovery is the paucity of available data on which one can base such a unit cost analysis. Aggregate data is not kept on fees collected at the regional CESAMOs. Thus, it is impossible to compare unit costs with unit cost recovery.

A chronic problem in overall Project management is related to the rotating fund. Two or three months are lost (at least) each year so that the GOH can "close out" the fund. The inability to bond administrators of this fund further compounds this problem. A recent USAID/Honduras project, "Development Administration," made an unsuccessful attempt at dealing with this problem.

b. Logistics

Strengths

The formation of CONAME and the "Unidad de Medicamentos" within CONAME represents a permanent strengthening of the Ministry's logistics
capability. The organization of an inter-agency commission for the development of a national list indicates continued progress toward development by the government of permanent institutional structures to resolve supply problems.

The development of a national supply system for medicine including the basic medicines formulary, the medicines supply catalog, the basic medicines list by level, the register of suppliers, the control and quality norms, the supply system manual, supervision norms, and the extensive training in the revised supply procedures represent major administrative achievements.

Restructuring of drug purchasing policies has brought about a savings of up to 15% per year through the bulk purchase of medicines, now at 86% of all purchases. Consideration of the PAHO offer to purchase medicines at substantially reduced prices may significantly add to cost reductions.

The construction of the new central warehouse and malaria pesticide storage facilities will markedly strengthen the supply system. The new warehouse complex (storage, loading docks, offices) replaces a completely inadequate and inefficient physical plant.

The Ministry is developing a comprehensive approach to solving supply problems. One example of this approach is the Inter-agency Commission. A proposal has also been made to centrally control receipt of medications from foreign donors. A feasibility study for PANI was undertaken and decisions hopefully will be taken with regard to PANI's future status.

Weaknesses

One of the two primary weaknesses in the logistical system lies in the gap between the organized central administrative structure and the regions which have inadequate resources to carry out their supply system responsibilities. Those inadequate resources include: (1) insufficient numbers of trained personnel; (2) insufficient supervision; (3) insufficient transportation; (4) inadequate storage capacity; and (5) inadequate equipment.
The second primary weakness of the logistics component is the chronic lack of medicines. There are shortages of medications and delays in receiving shipments. This shortage of medicine is a result of a number of interacting factors including rigid and overly complex acquisition procedures at both the national and local levels, policies favoring the purchase of medicines from PANI even though PANI is unable to supply the Ministry's needs, and limited budgetary resources. One of the primary problems in developing a smooth supply system is the mismatch between the Ministry's ordering cycle and the Congressional appropriation cycle.

Reliance on PANI for a substantial portion of needed medications and preferential treatment given to PANI for the supply of those medications contributes significantly to the shortage of medicines experienced in the health centers.

In some regions, malarial insecticides are stored in heavily populated areas. They are not sealed from the public. Thus, heavy doses of fumes come into contact with the public. This is a clear and present public health danger.

c. Supervision

Strengths

The supervision component is fully operational at the area to health center to community level. In spite of certain constraints, which are noted under the components weaknesses, formal and regular supervision activities are conducted in all the health regions. Adherence to scheduled activities and supervision norms attest to the fact that the process is institutionalized at this operational level. It should be noted that most regional management teams rely heavily on the findings noted in supervision reports for decision-making in determining local priorities and needs, including those of training, logistics, and supplies. Also, of significant importance, as reported on field interventions, was the fact that, where supervision activities are conducted on a regular basis using a one-on-one or individualized
approach, new skills can be more readily introduced. This happens while sustaining both spirit and enthusiasm and, more importantly, lessening the need for formal classroom training.

Weaknesses

The major weakness in the supervision component is that supervision activities are not fully operational throughout the MOH. Supervision activities are only conducted in one of the three major program levels. The primary reason why supervision activities are not conducted at those two other levels is due to the lack of operational guides and reporting instruments. For over three years various groups have attempted to develop these materials, but changes in work priorities and assignments have caused repeated delays and postponements. At present, these materials are still in draft form.

The weaknesses noted at the level (area to health center to community) where supervision activities are being conducted mainly are due to a lack of adequate transportation and delays in reimbursement for per diem.

d. Maintenance

Strengths

The organization of a maintenance division within the Ministry of Health which reports directly to the Director General is a significant step toward institutionalizing the maintenance goals of Health Sector I.

The Maintenance Division has begun the process of developing norms, manuals, and reporting systems for various classes of equipment. While this process is not complete, it has progressed far enough to have set a pattern for future development as more adequate resources become available.
The Maintenance Division has a substantial centralized repair capability for medical/surgical equipment, laboratory equipment, and general industrial equipment in a modern repair facility in Tegucigalpa. The technicians in this facility represent a range of skills from helper through the Technician IV level.

The Ministry has developed a well-functioning cold chain reporting and maintenance system which keeps health center refrigerators operating above the 90% level.

Weaknesses

The maintenance of equipment not related to the cold chain has received little attention, mostly due to insufficient resources. Recent requests for additional professional and technical personnel have been denied. Only one region has a trained maintenance supervisor in charge of all regional maintenance efforts.

The maintenance program has problems in obtaining spare parts. Serviceable equipment deteriorates while waiting for parts, and is almost never repaired.

There is no organized building maintenance program for primary health care facilities in the Ministry. Preventive and minor maintenance is not routinely carried out.

e. Transportation

Strengths

The Transportation Unit is located organizationally under the Division of Administrative Services. It is staffed by a chief, an administrator and 29 mechanics at central and regional levels. The unit has developed norms relating to administration, reporting and supervision. A national vehicle inventory has been completed and computerized. Progress has been made in preventative maintenance through driver education and preparation of operator manuals for vehicles.
Weaknesses

There are at least two indicators of the incomplete institutionalization of this component into full Ministry operations. The first is the subordinate position the unit occupies within the Division of Administrative Services. This subordinate position denies the unit an independent operating budget and the administrative flexibility to react to problems and on-going needs. The second involves the budgeting of sufficient funds for the purchase of vehicles and spare parts. This operating expense must be better integrated into Ministry budgeting and into smoothly functioning acquisitions systems before this component will have achieved substantial institutionalization.

The Transportation Unit has not been provided with sufficient resources to meet the many needs facing this new administrative unit. Budget requests are routinely cut and resources provided below what is needed. The vital role of transportation in supporting primary health care and other support functions does not appear to be fully recognized in Ministry priorities. One of the key administrative functions which is stunted by the lack of resources is supervision, both from the national to the regional levels and, perhaps more importantly, at the regional level. There is no national policy requiring that the transportation function be managed in the regions by a competent, trained supervisor.

The most dramatic evidence of the administrative problems facing the unit is the loss in regional efficiency of all activities due to extended down-time for substantial numbers of vehicles. The down time is due primarily to the lack of a smoothly functioning spare parts system, and secondarily to the lack of effective supervision and leadership at the regional level. A shortage of trained mechanics, coupled with inadequate supervision, means that the program norms to keep vehicles operating cannot be met.
f. Planning

Strengths

Planning is a well recognized function within the MOH which is utilized by decision makers. An annual operational plan with annual targets is developed containing the policies, objectives and strategies to be followed each year. This plan is prepared through cooperation with normative divisions in the MOH and to some extent with the Regional Health Offices. The document is well organized and useful as an overview of MOH projected activities. With the available computer capacity, the Planning Division can do limited costs or staffing needs projections.

Weaknesses

The lack of up-to-date information necessary for short- and long-range planning is a problem. The current information system does not yet provide this information in a manner that can be quickly utilized.

The Director of Planning reports directly to the Minister and Vice Minister. The Planning Office has six departments and units under its control, although as yet there do not seem to be clear cut lines of responsibilities for the separate offices. Thus, the delegation of responsibilities is unclear.

The Director of Planning serves as a staff member to the Minister. Because of this, much time is spent providing information on immediate problems, at the expense of long-term planning objectives.

There still appears to be a "top down" planning approach as regards regional and local involvement. Local programming, while a prime target for regional inputs, is not yet functional to any extent. Local authorities complain that their inputs are sometimes ignored and that feedback is slow.
g. Training

Strengths

In developing the 1986 training plans, most of the regions began to use a systematic approach to determine their local training needs. Training needs were primarily based on deficiencies noted in supervision reports. Also, with the development of the self-instruction modules for the priority programs and support programs, another dimension was added to the continuing education component. Some of the more appealing features of this approach to learning are that an individual studies independently at his/her own pace, while supervision provides continuous feedback. The approach also allows for greater coverage at minimum costs.

Field-testing results were positive, but revealed a definite need to incorporate an incentive or merit system into the training package. This would counteract the loss of a paid annual training break of a week or two in an urban setting with per diem. Another significant improvement has been noted in training coverage and delivery for midwives with the development of instructional guides. Guides have also been developed for the community volunteers, health guardian and health representative components. The community volunteer guide has been field-tested and is in the process of distribution. Both the health guardian and the health representative guides are currently undergoing a field-test.

Although almost a year behind schedule due to the demand placed on the printing presses during the presidential campaign, the quarterly continuing education magazine "Salud para Todos" has been well-received. Designed for the MOH staff it provides current health information, including studies and results of local research efforts.

Project efforts have also been exerted in the establishment of the National Information and Documentation Center. The center has designed and installed an information network which provides the necessary linkage between the health regions, MOH, UNAH's Medical Library, and other medical resources. Requested information from any available source on
any subject is readily located, retrieved, reproduced and forwarded through the network channels. Once the regional information center becomes fully operational, training efforts are expected to be enhanced.

Weaknesses

Although the Continuing Education component has provided extensive and comprehensive training coverage, as well as developed appropriate training materials, serious weaknesses still hamper effective and efficient implementation. First and foremost is the fact that training plans have never been consistent. This is due to various constraints, including perennial, erratic funding practices. For the past three years training has had to be reprogrammed. At times courses have had to be cut short of the time normally allocated to ensure adherence to the training schedule.

Other constraints noted are that central normative divisions tend to develop training plans in isolation. Some tend to override programmed training activities. Examples include: (1) incorporating local programming into an already heavy training schedule; or (2) diverting limited resources to finance non-division initiated activities. An example of the latter was a PAHO sponsored survey of IHSS, pharmacies and medical personnel in the private sector using Project funds. This was done instead of the regularly programmed Permanent Registry activities. Another major obstacle may be encountered if the introduction of the self-instruction manuals meets with resistance. To gain acceptance, some form of incentive or merit system could be used to counteract the loss of a paid training break.

At the regional level, the information centers will never become fully operational until adequate facilities are located and another person is hired (at least part-time) to assist the Continuing Education Coordinator in maintaining the center.
Finally, there is a direct need for a training information system. Other than aggregate data provided by the Project Coordination Unit, there is no other source where substantial or complete training information is stored. In fact, there is no available data at either the central or regional levels to adequately analyze training efforts.

h. Operations Research (S&T)

Strengths

This newly formed function has a real potential to provide the decision makers with valid data on which to base policy and program decisions. The unit has participated in a total of nine studies, some of which were opinion gathering studies to define attitudes and practices on a national level. This has provided experience in developing protocols and processing of data. One member of the unit is receiving long-term training at Johns Hopkins University. A full-time technical advisor is working with the unit.

Weaknesses

- The S&T unit does not yet have a micro-computer which would facilitate rapid processing of data.
- The studies in which the unit has been involved are, for the most part, not of the small, quick feedback type of management studies which can be put to practical use by program administrators.
- There does not appear to be a clear understanding of who asks for studies, what criteria are used in selecting studies, or how they are used by decision makers.
- There is a lack of staff experienced in research, for research needs and analysis appropriate for management problem solving and decision making.

i. Mass Media and Health Education

Strengths

The Health Education Division, although a relatively new MOH activity, has demonstrated its ability to develop, field test and distribute
promotional and educational materials. It is permanently staffed by professionals well versed in educational techniques. The division is supporting five MOH priority programs. It serves these programs on a service-to-client basis. It has linkage with the regions through the Regional Coordinating Committees which are responsible for health education at that level. The activity is institutionalized, at least at the central level.

Weaknesses

The Health Education Division, partly because it is a newly expanded organization, suffers a slight identity problem. Although it is a technical staff division, having established regional capability, it should provide the regions with better direction in terms of technical guidance on a continuing basis.

Village volunteers, an important part of the MOH health care system, need more reinforcement in terms of promotional and motivational materials suited to complement their work. They should be mentioned in all mass media messages, and provided appropriate materials.

2. Technical Programs

a. Vector Control

Strengths

The Vector Control component has been responsive to its added responsibilities in moving from malaria control to include dengue fever and Chagas. It has a well organized structure with defined job descriptions. Great strides have been made in expanding community participation in case detection. The importance of giving attention to long-range measures to control malaria are constantly being carried out. It has made maximum use of resources, as demonstrated by the drawdown of AID funding provided.
Weaknesses

Due to its vertical structure there is limited coordination between the Vector Control Unit and other related offices within the MOH such as the Epidemiology Division and the Sanitation Division. This is especially true in terms of sharing information and resources.

The lack of equipment and supplies for permanent drainage of larvae breeding areas requires that costly temporary drainage be done each year.

b. Diarrhea Control

Strengths

The MOH has excellent management capability at the central level. ORT is widely known and accepted by the population, and there are adequate supplies of ORS packets within the country. Norms have been developed and distributed to MOH field staff.

Weaknesses

The central staff are unable to provide follow-up and supervision due to a lack of personnel and transport. Central staff have frequently been diverted to focus on immunization campaigns.

MOH field staff do not follow norms in diagnosis and treatment. There are frequent stock-outs at the VHW level. The system of monitoring diarrhea control activities is inadequate.

c. Immunization

Strengths

The PAI coverage has reached a point where immuno-preventable diseases in infants are under control in Honduras, with the possible exception of measles. This has been due to the MOH's intensive efforts to expand
coverage and provide necessary support functions. The effectiveness of the cold chain has been up-graded by constant attention to this critical support element.

Public awareness of the necessity of vaccination of children is high, and the semi-annual campaigns with the accompanying publicity keep this before the public. Vaccine supply and distribution are based on annual targets, which are adequate in most cases.

MOH workers in primary health care and VHW's combine efforts to ensure that children receive their immunizations. This activity is well integrated and institutionalized in the MOH.

Weaknesses

The data base for establishing coverage targets needs improvement. This is due to lack of valid population denominators. Local population surveys do not substitute for a population census.

A recent study has shown that infants in isolated areas are not as well covered as those living closer to the health facilities. Reaching this population will require special motivation and service methodology, perhaps mobile teams.

c. Maternal and Child Health/Family Planning

Strengths

Maternal and Child Health/Family Planning services have made considerable progress in those aspects which are AID priorities, namely breastfeeding and family planning. Policies and norms covering MOH service providers and more liberal distribution of contraceptives has been affected. Criteria for identifying high risk women have been established. Training has been provided, developed and distributed. Breastfeeding is encouraged and coordinated with PROALMA.
Weaknesses

Only in the past two years has family planning been a MOH priority. For that reason, manuals and training materials are scarce.

There is little motivation and promotion of family planning in the health centers. Most auxiliary nurses consider it to be another burden on their already busy schedule.

e. Tuberculosis

Strengths

The tuberculosis program has become stronger since 1985. It is believed that the program will be highly effective by the end of 1987. The program has become almost completely institutionalized, requiring little AID assistance. A revised tuberculosis management information system is in place. It involves notification by telegram by laboratories to appropriate MOH facilities confirming positive slides. Area offices then send medicine to the facility so that treatment can commence. Monthly laboratory reports are sent to the program director indicating the name of each positive patient. These lists are compared with monthly reports from the health centers to see if patients are logged as a follow-up measure. The client drop-out rate is reported to be 5.8%.

Weaknesses

Difficulty in supplying medicines to treat detected cases remains the major problem. Not only are the medications expensive and in short supply but GOH acquisition procedures are cumbersome and lengthy.

There is insufficient training of auxiliary nurses regarding signs, symptoms and supervision. Greater efforts are needed to ensure sputum collection.
f. Nutrition

Malnutrition, particularly in children, is seen by the MOH and the GOH as a problem. There have been several news articles on the subject in the local press. However, until the extent of the problem is verified by a national probability survey, the pockets of malnutrition remain unlocated. The Nutrition Division in the MOH is focusing most of its effort on nutrition education. PROALMA is promoting breastfeeding and some monitoring is done in at least one region, San Pedro Sula. CARE is providing foodstuffs in 245 MOH facilities. USAID is conducting a thorough survey that should provide the necessary data to address the problem.

Title II Food for Peace efforts could, as is done in some countries, be channeled through the entire basic health care system. At this time, however, it would be difficult to make such a decision. Factors affecting it would include the ability of the MOH to administer the foodstuffs and the relationship with PVOs currently doing food distribution. Having Title II commodities available at health centers attracts mothers and infants and allows the health workers to observe and treat other health conditions. Whether the MOH wishes to become involved to this extent, as well as the effectiveness of the PVOs currently carrying out food distribution, are two considerations on which this evaluation cannot make recommendations. USAID's role in providing resources for a national survey is correct and timely.

g. Other (ARI, STD, Rabies, etc.)

Acute respiratory infections have been identified as affecting infants. It is not a part of AID Child Survival Priorities, but it is a concern of the MOH.

The TB program, as currently being operated, is effective. Once the problem of available medicines is solved, and is expanded to include other respiratory infections, it will be even more effective. With
regard to transmission of sexual diseases and rabies control, it appears that these interventions are progressing well and little AID support is required.

AID's role should be to consider studies or other extra-budgetary items on a case-by-case basis, and not to fund directly regular operational expenses. PAHO and UNICEF may be better equipped to support these programs in terms of operational support.

C. Reassessment of the Health Sector

1. Major Problems in the Health Sector

The seven priority health programs currently addressed by the MOH should be continued. Considerable progress has been made that will require constant reinforcement. The locale of greatest need may change from the rural setting to the semi-urban or marginal urban areas. This is the result of population movements, especially rural to urban migration. In the urban marginal areas there is a further lack of adequate sanitary facilities and decent housing. This intensifies the danger of disease transmission.

2. Government Solutions

This Project is directed toward those child survival measures proven to reduce morbidity and mortality in the target populations. The causal factors of these problems go far beyond those that the Project has an impact upon. Higher incomes, better education and housing, and safe and adequate water supplies are issues that the GOH is addressing in order to deal with health problems.

Bureaucratic constraints affecting the ability of the various government and non-governmental agencies to improve health status must be dealt with at the highest political and executive levels. Health sector improvement in the near future will require that communities and individuals be encouraged to take a major share of the responsibility for their own health.
3. Problems the Project is Focusing On

Health Sector I directs its resources on improving the MOH's ability to support its basic health care programs. Specific problems are the lack of a management information system, the inability of the MOH to provide medicines and supplies to all of its facilities, and the maintenance of facilities and equipment.

The current Project has assisted in the successful implementation of activities related to medical technology. They are operating at acceptable levels of effectiveness. Their support systems are in various stages of development. Some such as mass media are institutionalized. With further decentralization more progress can be made in all priority areas. The management and planning activities are the furthest from being completed.

4. Other Organizations

AID, through Health Sector I, has been the major donor in the area of support systems assistance. Project Hope is providing support in medical equipment maintenance in hospitals. Other donors are directing their efforts mostly toward providing equipment and supplies to health services. The IDB has in the past, and probably will continue to assist in the future, the construction of facilities. The IDB is considering a proposal to support recurrent expenses related to opening of new hospitals. In terms of health care providers, IHHS has a well defined role in serving its subscribers but there appears to be little hope of future coordination between it and the MOH, especially concerning the sharing of facilities. Private and voluntary organizations provide care to displaced persons and operate a few health care facilities.

5. Persistent Gaps and Needs

The major needs which continue to plague the health system are lack of medicines at all levels, in-service training keyed to priority health programs, and timely replacement of ongoing equipment and vehicles.
Building maintenance and major renovations also need attention. Regional offices suffer from delayed releases of funds that thwart support program activities.

D. Current Priority Concerns

1. Government of Honduras

According to the 1986 Annual Plan of Operations published by the MOH, its policy will be to increase coverage of health services, particularly in the rural and semi-urban areas. This is to be done by providing basic health care services, by enlisting the active participation of communities in providing adequate health services to those ages at highest risk (especially women and children) and through preventive measures. Areas of priority MOH concern include diarrhea control, immunizations, respiratory diseases, tuberculosis, diseases transmitted by vectors, and nutrition.

2. AID Priorities

AID policy, stated in the Administrator's memorandum of June 6, 1986, is to focus on child survival measures. This is to be accomplished by developing a sustaining capacity in each country receiving health program support from AID, effectively providing ORT, immunizations and other child survival interventions in nutrition, and by birth spacing in high risk populations.

It is apparent that there are no significant differences between the host country's priorities and AID's.

AID primary strategies in child survival methodology are to institutionalize the services, to use modern communication strategies, and to generate collaboration among donors. With regard to institution building, AID is to assist in developing retail sales activities for ORS and contraceptives, using, when appropriate, social marketing techniques.
Mass media and the support of educational methods are to be used in promoting ORS and breastfeeding.

In the case of Health Sector I, the Mission and the host country have either applied the child survival strategy or are in the process of doing it.

The emphasis on support systems as major Project components ensures that primary health care interventions are institutionalized once they are firmly in place.

E. Alternative Strategies

This section offers a set of three alternative basic strategies for the project that will follow the expiration of Health Sector I. The alternatives, as outlined in Table 1 on the following page, are presented as sketches on which to base discussions by those who will plan and implement the project. We feel strongly that strategic and tactical design and planning should be primarily the responsibility of the MOH staff, working with knowledge of their needs and capabilities and in view of GOH and international donor interests. Donor agency and technical assistance staff should play participatory roles.

Each alternative presented assumes that the project goal will again be the improvement of the health status of the Honduran population. It also assumes that the primary objective will be the strengthening of individual and institutional capacity to implement and maintain activities and programs that are consistent with, and contribute directly to, the achievement of the goal.

Additionally, it is expected that the major thrust of the MOH will be directed at improving primary health care and other mechanisms intended to support the child survival strategies outlined by UNICEF, PAHO and USAID, and as recognized by the Government of Honduras. It is not overlooked that the priority programs of the Ministry are already very much consistent with the international child survival strategy and that the Ministry has gone far in institutionalizing these.
# TABLE 1

## ALTERNATIVE STRATEGIES

### Alternative A

<table>
<thead>
<tr>
<th>Operational Level</th>
<th>Subjects of Attention</th>
<th>Resource Allocation</th>
</tr>
</thead>
<tbody>
<tr>
<td>Concentrate on institutional development at the central level.</td>
<td>Focus on management and support systems with emphasis on needs of priority health programs.</td>
<td>Long-term TA works primarily at the central level and includes highly specialized persons.</td>
</tr>
<tr>
<td>Follow through on implementation of standardized techniques and systems in health regions.</td>
<td>Contain costs through improved purchasing procedures in hospitals and health centers.</td>
<td>Same TA advisors provide short-term assistance in regions on an &quot;as needed basis.&quot;</td>
</tr>
<tr>
<td></td>
<td>Advance central level administrative capability.</td>
<td>Short-term specialists assist with special problems at central level.</td>
</tr>
<tr>
<td></td>
<td>Expand maintenance to include medical equipment and facilities.</td>
<td>Equipment procurement and training of administrative staff is emphasized both in-country and third country.</td>
</tr>
<tr>
<td></td>
<td>Install a rapid feedback management information system.</td>
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</tr>
</tbody>
</table>
TABLE 1 (Cont.)

ALTERNATIVE STRATEGIES (Cont.)

Alternative A (Cont.)

<table>
<thead>
<tr>
<th>Assumptions</th>
<th>Advantages</th>
<th>Disadvantages</th>
</tr>
</thead>
<tbody>
<tr>
<td>MOH retains systems of centralized control.</td>
<td>Improvements in the system will be distributed more evenly throughout the country.</td>
<td>Does not assure institutionization of management capacity throughout the system.</td>
</tr>
<tr>
<td>MOH supports central level staff participation in intensive implementation and supervision in the regions.</td>
<td>Standardization of techniques assures consistent quality.</td>
<td>Concentration of capacity in a few persons means that changing them could disrupt the system seriously.</td>
</tr>
<tr>
<td>Transportation, per diem and human resources are available as necessary at the central level.</td>
<td>Management can have more control.</td>
<td>Will be weak on identifying problems early and less able to concentrate on problems that become serious.</td>
</tr>
<tr>
<td>- Concentration of resources at central level allows more flexibility in selecting problems for attack.</td>
<td>- Emergent problems can be dealt with from national perspectives.</td>
<td>Generally is less adaptable to local conditions, priorities and personnel capabilities.</td>
</tr>
<tr>
<td>Technical assistance personnel are easier to find to live in Tegucigalpa.</td>
<td>- Revised division of authority and responsibilities between central and regional levels is not required.</td>
<td>Does not profit from potential richness of trying different tactics of design and implementation.</td>
</tr>
<tr>
<td>Requires more coordination between central and regional levels than has been possible.</td>
<td>Make demands on central level staff, distracting them from other priorities.</td>
<td>Require more coordination between central and regional levels than has been possible.</td>
</tr>
<tr>
<td>Operational Level</td>
<td></td>
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<tr>
<td>-------------------</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Concentrate on development of regional capability.</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Focus attention at central level only in maintaining gains of HS-I and in dealing with special problems.</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Subjects of Attention</th>
</tr>
</thead>
<tbody>
<tr>
<td>Develop management and administrative capability of regional staff, with emphasis on maintaining priority programs.</td>
</tr>
<tr>
<td>Encourage cost recovery in hospitals and health centers.</td>
</tr>
<tr>
<td>Increase regional planning and resource utilization capacity.</td>
</tr>
<tr>
<td>Increase the level of supplies at CESARs and CESAMOs.</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Resource Allocation</th>
</tr>
</thead>
<tbody>
<tr>
<td>Most TA would involve persons of less specialized capability (health generalists) who would be stationed full-time in the regions.</td>
</tr>
<tr>
<td>TA at the central level would be limited to coordination of regional activities, and to identification of problems needing short-term, specialized attention at the central level.</td>
</tr>
<tr>
<td>Project funds would be directed to regions on a cost sharing basis.</td>
</tr>
<tr>
<td>Long-term training for key regional administrators and managers.</td>
</tr>
</tbody>
</table>
**TABLE 1 (Cont.)**

**ALTERNATIVE STRATEGIES (Cont.)**

**Alternative B (Cont.)**

<table>
<thead>
<tr>
<th>Assumptions</th>
<th>Advantages</th>
<th>Disadvantages</th>
</tr>
</thead>
<tbody>
<tr>
<td>- MOM deconcentrates control over service management and operations.</td>
<td>- Strategies and techniques will be better adapted to local conditions.</td>
<td>- Less standardization of experience, techniques and information.</td>
</tr>
<tr>
<td>- Regional personnel are capable of managing operations and independently adapting tactics to local needs (or can be made so).</td>
<td>- The system will have greater flexibility in focusing on problems and resolving them early.</td>
<td>- Less control, thus more difficult to monitor.</td>
</tr>
<tr>
<td>- Regions will have the equipment and facilities to allow for independent management, e.g. vehicles, office space, warehouses.</td>
<td>- Wider distribution of management capability within the Ministry is provided for; thus, generating richer experience for the Ministry as a whole.</td>
<td>- Does not assure additional institution building at the central level.</td>
</tr>
<tr>
<td>- Central staff have sufficient capability to manage basic operations and programs without more concentrated assistance.</td>
<td>- Less dependence on foreign, long-term technical assistance.</td>
<td>- Greater turnover of personnel exists at the regional level.</td>
</tr>
<tr>
<td></td>
<td>- Flexibility in deciding how to spend recovered funds.</td>
<td>- Is more difficult to find qualified advisors willing to live in regional centers.</td>
</tr>
<tr>
<td></td>
<td>- Central level can focus more resources on priority, country-wide problems.</td>
<td></td>
</tr>
</tbody>
</table>
TABLE 1 (Cont.)

ALTERNATIVE STRATEGIES (Cont.)

Alternative C

Operational Level

Concentrate on a fairly even division between central level and regions.

Subjects of Attention

- Develop strong central management capability for implementation of priority services, assuming follow-through on central plans and decisions.

- Focus on joint efforts between the central and regional level on ways to make the health system more financially sound; cost recovery and/or cost containment.

- Stress improvement of the logistical system, including maintenance, transportation, and a functioning information system at both levels.

Resource Allocation

- Specialists working at central level to reinforce that which has been started under HS-1.

- Specialists working over several regions to implement, on a phased basis, those elements decided upon.
TABLE 1 (Cont.)

ALTERNATIVE STRATEGIES (Cont.)

Alternative C (Cont.)

<table>
<thead>
<tr>
<th>Assumptions</th>
<th>Advantages</th>
<th>Disadvantages</th>
</tr>
</thead>
<tbody>
<tr>
<td>Central level can design systems appropriate for implementation in various regions.</td>
<td>Continued strengthening of central level management capability is assured.</td>
<td>Does not have as much flexibility in adapting to local conditions.</td>
</tr>
<tr>
<td>Central level personnel will be available to assist with implementation in the regions.</td>
<td>Greater standardization among regions permitted, both in content and in timing of implementation, since phasing follows from central level decisions.</td>
<td>Does not give regional personnel as much new experience in management.</td>
</tr>
<tr>
<td>Supervision and coordination from central level can be improved.</td>
<td>Less management experience in the regions is required.</td>
<td>Requires a relatively high concentration of specialized technical assistance.</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Continues to tax heavily management resources at central level.</td>
</tr>
</tbody>
</table>
Specific objectives should include: 1) improved resource allocations; 2) development of a functional management information system; 3) improved financial management in terms of budget support, cost containment and cost recovery measures; 4) improved administrative practices at central and operating levels, including personnel administration; 5) improved staff development (including volunteers) and utilization; 6) improved logistics, maintenance and transport capability; and 7) continued support to priority basic health care and child survival programs.

Whether the decision is to identify and analyze achievement of these objectives on a component and sub-component basis, or some other system, it is urged that not more than six or seven be addressed at any one time. This will allow a narrower focus and facilitate the setting of priorities leading to better utilization of project resources.

Regardless of the strategy selected to improve child survival activity, the MOH must give serious attention to controlling the costs of hospital care.

The rapid growth of urban populations will continue to place an increasing demand on hospital health care, regardless of how well primary care functions in rural areas. Given the economic constraints of Honduras, the country will not be able to afford both an expanded primary health care system, and increased levels of hospital services. Experience in Honduras and elsewhere has shown that when the limits of financial capability are reached, it is the primary health care system that suffers most immediately. This then negates the health and financial cost advantages which they are intended to generate. The Ministry of Health, therefore, (with or without external funding) must formally and forthrightly move to make hospitals operate more efficiently, thus reducing their drain on the health budget.

Cost recovery and the availability of discretionary funds at all service levels is another matter to which attention should be given. If even minor user fees can be collected and used at the point of collection this will markedly improve support to activities. They would allow greater flexibility and would assist
in overcoming obstacles that, while apparently minor, can hold up activities and demoralize both staff and patients. (It might be possible to establish a matching mechanism for locally generated funds with donated funds to encourage cost recovery.)

The present evaluation of Health Sector I has shown that management and administration support were addressed and improved under the Project but that serious weaknesses persist. Any sequel to HS-I must continue to address these as primary concerns if the child survival programs are to be fully institutionalized and sustained. The question involves the level at which attention should be focussed.

It has become evident during the implementation of Health Sector I that the central Ministry structure has been overextended in trying to manage the complex array of components and activities that formed the Project. The Ministry officials at the most senior levels recognize a need for some reorganization if management is to improve and be made more efficient. Even with changes that might be considered, however, it will be necessary to structure a project and make counterpart arrangements that are less complex and require less day-to-day attention at higher levels of the Ministry. This means that primary project attention should be focussed on fewer, but perhaps broader, components. It would also imply that making responsibilities regarding implementation would be distributed differently. Regardless of any overall organizational restructuring of the Ministry, primary operational responsibility for project implementation must reside with someone with line authority other than the Director General. This new Project Implementation Unit would both replace and expand upon the functions of the current PCU. This would include monitoring, coordination, and other implementation functions. The unit would have a direct line relationship with the Ministry offices involved in project activities.

In the area of project implementation, AID should seek to rectify the nagging problem posed by the annual delay in the release of monies to pay local expenditures from the rotating fund. A possible solution might be to have the MOH repay to AID the entire balance at the end of each year. Then, the following day, or week, AID could establish a new account for the upcoming year with one lump sum payment.
The MOH should be requested to assess the appropriateness of the location of existing health centers and the distribution of health workers. An assessment should be made with respect to efficiency, effectiveness and consistency with primary health care objectives. Roles of area personnel should also be reconsidered. This includes at least the area chief (who is sometimes also a hospital director), the area supervisor, and auxiliary nurses.

Irrespective of the design selected for the follow-on project, the Ministry will have to continue to address the problem of lack of warehouse and workshop facilities. These functions are critical to the operational maintenance of the widely disbursed service strategy of the MOH. Progress to date has been limited.

If construction cannot be completed and appropriate staff cannot be trained and retained, alternatives will have to be found.

F. Project Focus and Issues

1. Balance of Central and Regional Inputs

Health Sector I was primarily directed towards strengthening support system capacity at the Central level of the MOH. These efforts resulted in several structural changes in the MOH, such as establishment of a Division of Maintenance, a Transportation Section in the Division of Administration, a Service and Technology Division, and a Computer Unit. Although mostly normative, some of these new central responsibilities had similar structures at the Regional Level. Maintenance, warehousing, and distribution of supplies were strengthened by adding staff. Regional Health Education staff positions were created to coordinate Health Education activities. In the area of administration and management, the regions did not receive much direct Project support with the exception of an attempt to institute a local planning capability. One MSH advisor was assigned to assist in this responsibility. Training supervisors already in place were instructed on training techniques, and auxiliary nurses and Promotors were also given guidelines on working with parturas and villages volunteers. Other regional activities included cold chain maintenance, vehicle maintenance, and supervision.
In Health Sector II it is believed that more emphasis should be given to the lower levels of the primary health care system. Particularly in the administrative and support elements such as transport, logistics, and maintenance, there is a need to improve management practices. To a lesser extent the other support elements such as supervision and health education will need reinforcement.

The issue involved is whether the regions will be given more flexibility in developing these capacities in the current highly centralized organizational structure.

2. **Mix of Technical Programs and Support Systems Assistance**

AID funding of Health Sector I had the following proportions as of June 30, 1986; 521 person-months of technical assistance, at $6.5 million; commodities worth $5.0 million; local costs of $3.0 million; and various other costs totalling $1.9 million. This combination resulted in considerable progress towards Project objectives. The GOH has also applied funding of $2.4 million (as of 12/3/85) and countless personnel resources towards the Project. Total Project expenditures by both AID and the GOH were $15.9 million through 1985, according to the PCU.

Most of the AID Project funding was directed towards the support system; $11.3 million.

The aforementioned breakdown demonstrated various types of funding, depending on what was to be implemented. Therefore, the question arises, which one has been the most cost-effective in terms of establishing the objectives of the follow-on project? Cost effectiveness and cost-benefit analyses should be applied when appropriate in the design of this project in order to ensure the best use of scarce resources.

Technical assistance is a major part of project inputs and should be considered carefully in project design. The use of foreign consultants to assist host country entities, by its nature, carries the implication that the TA recipients need help. This team will not attempt to assess the TA
requirements other than to say that long and extensive negotiations are usually involved and that the MOH should analyze its needs carefully. Ample lead time should be planned.

Experience has shown that host country contracting in Honduras is difficult at best. Thus, all contracting should continue to be done by the Mission in the foreseeable future.

Any construction should be either done with easily constructed materials such as Butler Huts, or should not be considered at all unless the MOH assigns a full-time construction supervisor to monitor progress on a daily basis. CARE has had considerable experience in constructing pre-fabricated structures in Guatemala. This should be considered as a possibility.

Recurrent costs are a prime consideration and any local cost borne by AID must be in the amount and kind which the MOH can absorb into its own budget.

3. Community Education and Involvement

The MOH is a leader in Honduras in community education and use of volunteers, parteras, guardians and community health representatives. This began in the early 70s and has continued to date. It is recognized by the MOH as a priority strategy in the 1986 Plan of Operations. The number of active volunteers has been reduced somewhat during recent years due to a lack of basic medicines. An unknown number have received training from MOH staff. The volunteers however are active in the promotion and home distribution of ORS and in assisting in immunization campaigns.

In short, there exists a partially untapped potential of persons who can be instrumental in improving health conditions in their respective communities.

In Health Sector II a concentrated effort should be made to provide additional incentives to increase the capabilities of community volunteers to become even more involved in the health care system.
4. Sustainability

The sustainability of the Health Sector I Project, assuming a total withdrawal of AID funding, hinges on a number of factors. These factors are all of critical importance due to the size and complexity of this Project. Although financial sustainability is usually given prominence in any analysis, the nature of this Project warrants a broader perspective. Any analysis of the sustainability of the HS-I Project should specifically address the following factors:

- Financial/recurrent costs;
- Political/host country policies;
- Community participation;
- Program design;
- Resource allocation; and
- Information flows.

Financial Sustainability: The ability of the MOH to assume the financial burden of this Project is very questionable. The estimated annual cost would be about $2.4 million, without adjusting for inflation. Improved cost recovery mechanisms combined with cost containment programs, however, would improve the possibility of a continued effort in the areas of public health that the Project addresses. The estimated annual cost could be as low as $985,000 by 1992 with moderate gains on this front.

The follow-on project should make a stronger attempt to improve financial recovery for MOH services. This will be of greater importance due to the financial drain caused by the "Estatuto Medico." An AID matching fund for cost saving or cost recovery is a possible approach. The thrust of any effort at cost recovery, especially at the CESAMO level, should be based on the principle that these health centers are in urgent need of unrestricted funds which can be used for emergencies or when the MOH budget is stalled. Greater regional autonomy would result.

During the design of the Project Agreement for the follow-on project, agreements should be made with the MOH on a phased program for their absorption of recurrent costs.
**Political Sustainability:** Currently, an analysis of HS-I's political sustainability would bode well for the Project. The GOH in general and the MOH in particular seem very committed to the goals of this Project. Threats exist, however, that could derail the Project. Some of them are currently being addressed, although modestly. Oddly enough, the future of public health in Honduras might be threatened by the oncoming surplus of physicians. An open admissions policy for medical students will likely generate increased political pressure for more hospitals to accommodate their growing supply. How to reconcile this with the goals of the Project is an important issue to be addressed.

**Community Participation:** This issue is one of the Project's definite successes. The parteras and guardians have turned into a cohesive unit which has generated a renewed sense of community involvement. A follow-on project would do well to continue the policies started under HS-I.

**Program Design:** The complexity of the HS-I Project is a definite hinderance to total sustainability of the Project. The sustainability of a follow-on project would be greatly enhanced by focusing activities on a lessened number of priority components.

**Resource Allocation:** The allocation of resources appears to have been appropriate in areas of hoped for sustainability: training; per diem; commodities; and salaries. While the MOH would probably continue its support of personnel added through the Project, it is quite doubtful whether corresponding amounts would be allocated to commodities, if the MOH were to assume the total financial burden. Continued efforts by the technical assistance team in demonstrating the benefits of a well functioning transportation and maintenance system could enhance sustainability.

**Information Flows:** An ongoing goal of the HS-I Project has been the development of an effective system of information collection and use. To date, success has been very limited due to a number of factors: the heavy emphasis on a "top-down" centralized information flow; and a general misunderstanding throughout the MOH on exactly what benefits a well-working
information system can or should provide. Continued efforts should be made in a follow-on project to address this issue. Emphasis on regional information centers which feed up to central headquarters in a standardized format is a sensible basis for such a program.

5. Environmental Impact

Health Sector II will continue to address the environmental impact issue, particularly if Vector Control is included as one of the components.

As the Vector Control Program becomes more effective, the possibility of a negative impact on the environment lessens. A possible source of concern will be the type of adulticides and larvaecides to be used, particularly if their source and origin is not the U.S. As new technologies in vector control are discovered and applied, selected chemical, biological and physical control methods will require review.

The storage of insecticides and the safety precaution for their use should continue to be monitored.

Overall, the advantages to the environment of the reduction in disability due to vector borne diseases far outweigh any danger to health associated with control methodology.

Other health and management interventions of the project will not directly affect the environment.

6. Involvement and Effect on Women

Health Sector II should recognize that the major basic health care providers are the auxiliary nurses and graduate nurses, most of whom are women. The project, through the MOH, should address directly or indirectly the matter of incentives for auxiliary nurses.
More attention should be paid to the selection and training of female VHWS. Added consideration should be given to training couples, so that, when one is not available, the spouse can be called upon. This couples approach to volunteers has worked in other Latin American countries.

There is little doubt that women are the principal beneficiaries in MCH/FP and child survival programs. Continued efforts should be made in mass media campaign design and research aimed at making it more attractive for women to use basic health care services.

G. Implementation Considerations

Health Sector II should be implemented over a five year period. This should allow sufficient time to institutionalize the interventions and render the MOH able to effectively manage its resources. This should occur with a minimum amount of foreign assistance by the end of the project, given the progress made during Health Sector I.

A phased approach allows the Project to set priorities for the anticipated impacts. It would allow time for the additional external resources, if necessary, to be assimilated on an annual basis within the host country’s financial planning and implementation capabilities.

I. Time Frame and Phasing

This approach makes it necessary to clearly delineate those priority components in terms of the GOH and AID priorities. It also requires a close look at the health system in order to identify those parts which are critical to: improved quantity and quality of health care; adequate supplies; trained and dedicated staff; community education and participation; and equipment for diagnosis and treatment. This evaluation and previous ones should provide the necessary information to serve as baseline data. Given these needs and a close look at resources a time-phased approach can be applied.
2. Attainable Objectives

It is necessary for those designing and implementing national programs to recognize that there are limitations in terms of available resources and constraints when designing a health system. Objectives should be set accordingly. If the objectives are too difficult to attain, or too rigid, it can create problems in implementation. The ideal situation involves constant monitoring and the establishment of a time frame in the middle of the project so as to assess progress and establish new project objectives and targets if necessary. This was done in Health Sector I (P.P. Amendment No. 3, ProAg Amendment 12).

3. Maximum and Efficient Use of Resources

Health Sector II will have several advantages over a completely new project. The follow-on project will have a baseline against which it can measure achievements. It will also have experienced and trained MOH staff and a base of accomplishments on which to build. Certain cost indicators will have been identified and cost effectiveness standards should be established. Nevertheless, comparative costs of inputs should be thoroughly analyzed during the design of the new project. This is particularly applicable to technical assistance, a large portion of project inputs. A current analysis reveals that monthly costs for a short-term and long-term consultants are approximately the same. This raises the question of the length of time required for the transfer of the particular skill or technology. Is it more likely that the MOH can assume a person for a short, intensive period rather than for long periods of time? Is it better to allow the MOH staff to work on their own with a follow-up visit by the consultant who has assisted in developing an action plan?

The stated intent of Health Sector I was increased output by the MOH without additional staff and resources. In the follow-on project it will be necessary to analyze such things as: whether it is more cost-effective to encourage community participation than to train MOH staff; whether the facilities can produce more health care with the same resources; whether
shared transportation can be used to combine supervision and logistics in the health facilities; and whether in-service training costs could be reduced through use of self-training materials.

Can worker incentives be developed to increase production rather than more training courses? Which is more effective in maintenance of equipment, to contract out certain types or develop the capacity internally? These and other efficiency determinations lend themselves to small studies which can be done quickly and at a minimal cost. The S&T Unit, in addition to medically-oriented studies, should be prepared to work on administrative and management resource utilization issues.

4. Cost Factors and Funding Sources

a. Health Sector I Cost Estimates

During the design of Health Sector I there was an understatement of AID Project inputs ($15,391,000), requiring additional funding of $11,300,000. Part of the underestimation was due to the length of time (6 years in place of 4 years) required to implement a very complex project. Technical assistance needs and other start-up costs were also underestimated. Many of the operating costs involved in Project implementation also were not contemplated. The GOH's ability to repay loan requirements in the face of declining economic trends in the country resulted in a change in the AID loan-grant mix package (30 percent grant - 70 percent loan). Health Sector II should address this problem by means of a more detailed cost analysis, and by a careful analysis of recurrent costs, which the GOH would eventually have to absorb. Health expenditures in Honduras are 10 percent of the 1986 national budget, excluding international funds, and approximately 7 percent of the 1985 GDP. The recurrent costs should be identified and delineated in the financial analysis of the Project Paper. Furthermore, agreement on the GOH's acceptance of these additions to their budgets, or changes in budget line items, should be discussed. Political and economic realities should also be considered in the design phase.
b. Funding Sources

External funding has, for a number of years, been a significant portion of the total MOH budget (36% in 1986). This will probably continue, as Honduras receives attention as a struggling democracy in Central America and as temporary haven for displaced persons from neighboring countries.

It is vital that external funding be utilized as effectively as possible. The dividing of donor support should be a matter of priority to all concerned, not the least the recipient organization, the MOH. In particular, a better means of commodity inputs should be sought in order to prevent the malfunction and failure of several types of equipment. Duplication of efforts in project initiatives create hardships for the host country. The MOH should review needs annually and present to each donor the necessary items, after which a meeting should be called by the Vice Minister or other high official to coordinate support.

Cost recovery and private sector initiatives are part of AID's health priorities. Follow through on early efforts of Health Sector I in these directions should be a part of AID's continuing support strategy. One of the suggestions is that AID funds be provided on a matching-grant basis to those funds recovered by user fees or other similar means. Whenever possible, recognizing GOH problems in contracting, private sector involvement should be encouraged. If necessary, AID contracting methods should be utilized if GOH measures prove to be unworkable.

5. Human Resources

The human resources issue is a critical one which bears on successful project completion and institutionalization. The human factor transcends staff training in that the usually high staff turnover in the MOH directly relates to lack of work incentives, merit systems, and career ladder opportunities. These impediments certainly affect the MOH's ability to utilize the technology and resources available through the Project.
In sum, MOH has not instituted a long-term human resources development system which helps to attain personal goals of self-improvement, thereby enhancing aspirations and possibilities for upward progression within the organization.

6. Impact on Health Status

Part of this report indicated the problem in measuring Project health impact in terms of reducing mortality in infants and lengthening life spans. There are a number of indicators, however, that have a direct impact on health status. They are measurable and should be used as indicators. Morbidity reduction in children, reduced prevalence rates in communicable disease, and increased body weight of infants at various ages, are all good indicators which can be measured by survey methods or health facility reports. Surveys on general health status indicators at two year intervals, combined with a disease surveillance and information system, can provide sufficient data to adequately measure improvement of health status over an 8-10 year period.

7. Population Coverage

The coverage of population always poses a problem in definition. Accessibility to a health facility is sometimes measured in geographic terms. Utilization of health facilities is another factor. If utilization rates go up, people are using the facility more, although it may be return visits. Crude measurement is number of visits. Neither of these measurements is precise. When migration patterns are considered, it may be that the rural populations at risk are diminishing. Age structures change in rural areas as young people go to urban centers. Children and grandparents may be high risk populations in some areas. The cost-effectiveness of keeping CESARs open in certain areas would also be analyzed.

8. Technical Assistance Needs

The types and amount of technical assistance for Health Sector II will depend on the already acquired skills by MOH staff from Health Sector I. The strategy to be used, for example if TA is to be provided to regions by
resident consultants, will require generalists. If highly technical management skills are to be provided at the central level, specialists in these particular area of competence will be needed.

The technical assistance requirements can be spelled out at the design phase, but flexibility should be considered for short-term consultants so as to satisfy special situations which can arise during the implementation phase.

The continuity of long-term TA provided by MSH during Health Sector I has been beneficial to the Project according to AID and MOH officials. If possible under AID contracting regulations, this multi-year continuity principle should be followed when selecting a new contractor for Health Sector II.

9. Organizational and Policy Congruence

The goal of good organizational development is to develop structures which support the objectives of the project. Health Sector I has revealed same organizational problems within the MOE which should be pointed out.

The data processing of routine health statistics in the statistics unit, the special Operation Research Unit in the S&T Division, and management information in the Administration Division, should have their own data processing capabilities and action plans. Top management in the MOE can call on each of these organizational entities for information necessary for decision making.

Health Sector I, with its Project Coordination Unit within the MOH, performed a necessary function in an outstanding manner in tracking the Project. This necessary function should be expanded under Health Sector II to include implementation responsibilities. The chief of this unit should also be designated as the Project Director under the DG and should have authority to direct the project. These suggestions are made, not in the desire of recommending a restructuring within the MOE, but in the hope of defining responsibilities more clearly.
The MOH policy of supporting basic health care as a priority has been unwavering since 1974. Its translation of policy into action has followed a consistent pattern of child survival program emphasis with excellent results under Health Sector I. Honduras is far ahead of neighboring countries in this regard.

Although this policy needs constant reinforcement, there is no reason why the current impetus will not continue, assuming no negative external forces came into play.

AID's policy is not in conflict with the MOH program. It should perhaps consider the possibilities of new health cost recovery and cost sharing initiatives. This would help relieve the heavy strain on GOH financial resources.

Institutional development should receive stronger emphasis in Health Sector II.

10. Procurement Systems

The institutional constraints involved in host country procurement and contracting are well documented in Health Sector I in relation to construction and personnel contracts. AID has attempted to deal with GOH's anticipated and lengthy procedures at the highest level of Government. This is a continuing dialogue, affecting other AID projects as well.

It can be said that host country contracting is a means of providing experience to implementing institutions. Until some changes are made in the GOH procurement policy, however, it will be necessary for AID to conduct procurement of AID funded commodities.

The MOH and the government procurement agency should attempt to reach an arrangement on procurement lead time so that delays in delivery do not hamper supplies of needed products.